Risk-Based Closure Report

Klamath Falls Chevron 1
3730 Highway 97, Klamath Falls, OR
Oregon LUST ID: 18-22-0172
HydroCon Project Number: 2022-001

Prepared for:

Ed Staub & Sons
1819 S 1st Street
Redmond, OR

May 11, 2022

Prepared by:

HydroCon, LLC
314 W 15th Street, Suite 300 Vancouver, Washington 98660
p: (360) 703-6079
www.hydroconllc.net

Table of Contents

List of Figures

List of Tables

Appendices

1.0 INTRODUCTION

HydroCon Environmental, LLC (HydroCon) prepared this risk-based closure report for the facility located at 3730 Highway 97 in Klamath Falls, Oregon (the Site; Figures 1 through 3). The facility is operated as a commercial Chevron fueling station and is owned by Ed Staub and Sons (ES&S; the Client). The information in this report is based on a baseline site investigation completed by HydroCon on January 12, 2022.

Contamination at the Site is limited to residual petroleum hydrocarbons from historical activities and no unacceptable human or ecological risks have been identified at the Site. Additionally, no odors or other nuisance conditions have been identified.

On January 12, 2022, Hydrocon completed a baseline site investigation (SI) to assess soil and groundwater conditions at the Site. Eleven soil borings (HC01 through HC08) were advanced at the site to depths ranging between 4- and 20-feet bgs using direct-push drilling methods.

This report presents the results of the SI. A request for a no further action (NFA) determination is provided at the conclusion of the report.

1.1 Property Description and History

The 3.4-acre Site is located at 3730 Highway 97 in Klamath Falls, Oregon (Figures 1 and 2). The Site includes three underground storage tank (USTs) including:

1. One 6,000-gallon diesel UST;
2. One 6,000-gallon gasoline UST; and
3. One 12,000-gallon gasoline UST.

All tanks are single-walled fiberglass and leak detection and tightness testing are conducted regularly.

Based on a previous Phase I Environmental Site Assessment[1], the Site was historically undeveloped land as early as 1956, then developed as a fueling station and parking lot between 1956 and 1975.

Based on topography, groundwater flow is expected to be towards the west.

2.0 SITE ASSESSMENT ACTIVITIES

On January 12, 2022, Hydrocon completed a baseline site investigation to assess soil and groundwater conditions at the Site. The following sections describe the investigation activities.

[1] 2021, AEI. *Phase I Environmental Site Assessment.* 5800 South 6th Street, Klamath Falls, Klamath County, Oregon 97603. September 13.

2.1 Health and Safety Plan

HydroCon prepared a site-specific health and safety plan (HASP) to govern health and safety protocols used during the investigation. The HASP was maintained onsite during field activities. 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. Additionally, a private locator conducted a survey for underground utilities prior to commencing drilling.

2.3 Drilling and Sampling Activities

On January 12, 2022, eight soil borings (HC01-HC08) were advanced at the Site to depths ranging between 4- and 20-feet bgs using direct-push drilling methods for the purpose of soil and groundwater sampling. Boring locations were selected in order to assess baseline soil and groundwater conditions and to identify any potential contamination. Drilling and sampling locations are shown on Figures 2 and 3.

Field screening. Soil from each boring core was continuously field screened for the presence of contamination. Screening consisted of measuring volatile organic compounds (VOCs) using a photoionization detector (PID), sheen testing, as well as olfactory/ visual observations (staining, odor, etc.). Field screening was conducted consistent with SOP 2 (Appendix A). The PID was calibrated before use to a test gas standard consisting of 100 ppm isobutylene. A portion of each soil sample was placed in a sealable plastic bag. The tip of the PID was inserted into the plastic bag in the airspace above the soil sample and the PID measurement was recorded on lithologic boring logs. Sheen testing consisted of placing a small portion of soil in clear water and observing the water for the presence of hydrocarbon sheen.

Field screening by visual/olfactory observation and PID showed evidence of petroleum (>5 parts per million [ppm]) in two soil borings (24.8 ppm at HC01 at 5.5-feet bgs; 33.7 ppm in HC08 at 5-feet bgs) located in the far north of the Site (HC01 and to the southeast of the UST basin (Figure 2). No free product was observed. Boring logs are included in Appendix B.

Soil sampling. One soil sample per boring was submitted to the laboratory based on field screening results, lithologic composition, and depth. In the absence of contamination, samples were collected at the soil-water interface (SWI). Samples were collected at depths ranging from 4- to 20-feet bgs. The selected soil samples were removed from the polyethylene tubing using a new pair of disposable gloves and placed directly into labeled laboratory prepared jars and sealed with Teflon-lined lids. Sampling was consistent with SOP 5 (Appendix A).

Grab groundwater sampling. Groundwater samples (HC01-W, HC04-W, and HC06-W through HC08-W) were collected from each boring using temporary well casing consisting of new 1-inch diameter PVC blank riser pipe attached to a 5-foot length of slotted well screen. Groundwater in the borings ranged from 3.5 to 18.5-feet bgs. The well screen was positioned in the borehole to straddle the water bearing zone. A new length of low-density polyethylene (LDPE) tubing was placed down the temporary well and attached to a peristaltic pump. Water was purged from each respective boring until no further improvement in water clarity is observed. Samples were placed directly into the laboratory-prepared sample jars and stored in a chilled cooler along with chain-of-custody documentation. Sampling was consistent with SOP 11 (Appendix A).

2.4 Boring Abandonment

After completing the sampling activities, PVC casing was removed from the borings which were properly abandoned with hydrated bentonite from the bottom of each borehole to the surface. The surface of each location was made to match the surroundings. Abandonment was conducted consistent with Oregon Water Resource Department (OWRD) requirements.

2.5 Management of Investigation Derived Waste

Investigation derived waste (IDW) in the form or soil and water was containerized in labeled 55-gallon drums and temporarily stored onsite prior to profiling and proper disposal. Solid waste, (used gloves, garbage, disposable equipment, etc.) was placed in plastic garbage bags and disposed of in a dumpster.

3.0 ANALYTICAL PROGRAM AND RESULTS

The soil and groundwater analytical program and results are described in the following sections. Analytical results are summarized on Tables 1 and 2. Sample locations and results are shown on Figures 2 and 3. Laboratory analytical reports are included in Appendix C.

3.1 Analytical Program

The sections below describe soil and groundwater analytical program.

Soil analytical program. Soil samples were initially analyzed for the following:

- Gasoline-range petroleum hydrocarbons (GRPH) using Method NWTPH-Gx 5035A;
- Diesel- and oil-range petroleum hydrocarbons (DRPH and ORPH) using Method NWTPH-Dx; and/or
- Benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEX+N) by EPA Method 8260.

Based on initial results one soil sample was also analyzed for:

- Full suite VOCs by EPA Method 8260; and
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270.

Groundwater analytical program. Groundwater samples were initially analyzed for the following:

- GRPH using Method NWTPH-Gx; and
- DRPH and ORPH using Method NWTPH-Dx; and
- BTEX+N by EPA Method 8260.

Based on initial results one groundwater sample was also analyzed for:

- Full suite VOCs by EPA Method 8260D
- PAHs by EPA Method 8270; and/or
- Lead by EPA Method 6010.

3.2 Analytical Results

The sections below describe soil and groundwater analytical results.

Soil analytical Results. Boring logs are included in Appendix B. Soil analytical results show concentrations of GRPH, DRPH, and/or ORPH and in five of the nine samples that were collected. One of the samples (HC01-5.0) also contains low concentrations VOCs and select PAHs. Analytical results are shown on Table 1 and laboratory analytical reports are included as Appendix C.

Groundwater analytical results. Groundwater analytical results show a concentration of GRPH and/or DRPH in four of the five samples that were collected. Samples HC01-W and HC08-W also contain low concentrations of VOCs and/or PAHs. HC08-W was also contained 23.1 ppm of lead. Analytical results are shown on Table 2 and laboratory analytical reports are included as Appendix C.

4.0 CONCEPTUAL SITE MODEL AND RISK SCREENING

A site-specific Conceptual Site Model (CSM) is a site-specific evaluation of potential contaminant sources, exposure pathways, and receptors applicable to the site based on the distribution of constituents, and current and reasonably likely future land and water uses. Exposure pathways, based on DEQ's RBDM guidance document (DEQ, 2017), were assessed for the site utilizing soil and groundwater data, hydrogeologic data, and current and potential future land and water uses.

The Site is zoned General Commercial (GC). The Site is slated to continue to be used as a commercial fueling facility in the future. No future groundwater uses are likely.

A review of the OWRD well log database shows the nearest water well (KLAM 11481) is located approximately 1,500-feet to the north of the Site. The well is reportedly used as a domestic well. Due to the distance and cross-gradient location, this well is not likely to be affected by the Site. Groundwater at and near the Site is not currently, or reasonably likely to be used for beneficial purposes in the future.

Therefore, related groundwater pathways are not considered complete.

Because the Site includes a building, the vapor intrusion pathway as well as volatilization to outdoor air pathway are considered potentially complete. The groundwater in excavation pathway is also considered potentially complete.

Analytical results were compared to following DEQ Risk-Based Concentrations (RBCs), which are based on exposure pathways that are potentially complete for occupational, construction, and/or excavation worker receptors.

Soil:

- *Soil Ingestion, Dermal Contact, and Inhalation* (occupational, construction, and excavation)
- *Volatilization to Outdoor Air* (occupational)
- *Vapor Intrusion into Buildings* (occupational)

Groundwater:

- *Groundwater in Excavations* (construction and excavation)
- *Volatilization to Outdoor Air* (occupational)
- *Vapor Intrusion into Buildings* (occupational)

The DEQ RBCs for the applicable exposure pathways are included in Tables 1 and 2. None of the detected concentrations exceed the relevant RBCs with the exception of one concentration of GRPH (17,400 ppm) in groundwater sample HC08-W which exceeded the groundwater in excavations pathway by 1.2-times.

5.0 SUMMARY AND CONCLUSIONS

On January 12, 2022, eleven soil borings (HC01-HC08) were advanced at the site to depths ranging between 4- and 20-feet bgs using direct-push drilling methods for the purpose of soil and groundwater sampling. Boring locations were selected in order to assess baseline soil and groundwater conditions and to identify any potential contamination. While GRPH and ORPH were detected in soil, the detections were low and the concentrations do not exceed relevant DEQ RBCs. For the five groundwater samples that were collected, while GRPH, DRPH, VOCs, and PAHs were detected, the concentrations were below the relevant DEQ RBCs with the exception of GRPH (17,400 ppm) in groundwater sample HC08-W which exceeded the groundwater in excavations pathway by 1.2-times. HC08-W is located south of the dispenser islands.

Based on the analytical results, as well as station leak detection and other records, the residual detections are most likely the result of historical overfill, surface spillage, or similar events and do not represent a current or on-going release. Because the facility will remain in use as a commercial fueling facility, and only one detected soil concentration slightly exceeded an RBC, we request that DEQ consider issuing a

6.0 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.

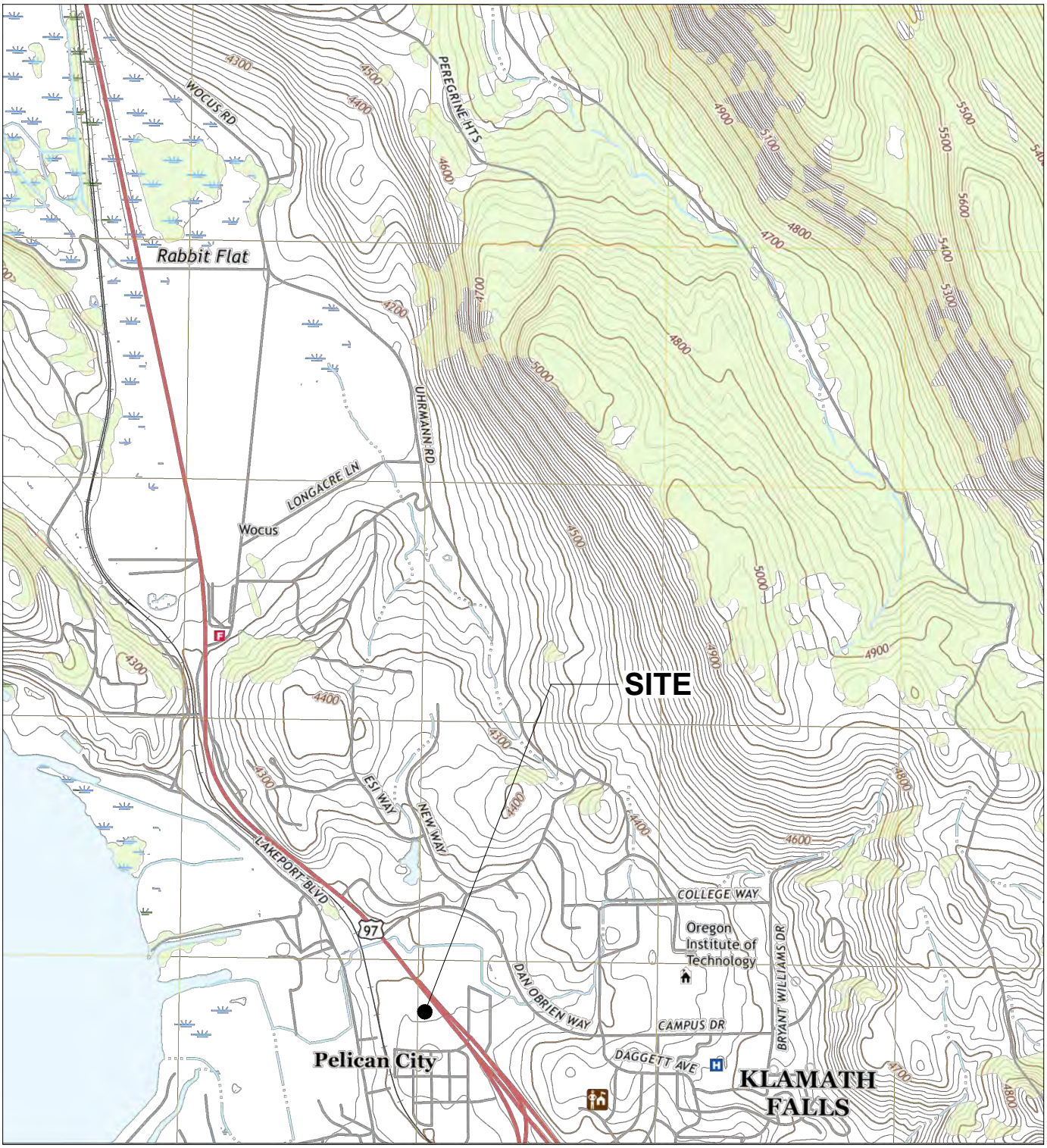
The conclusions presented in this report are, in part, based upon subsurface sampling performed at selected locations and depths. There may be conditions between borings or samples that differ significantly from those presented in this report and which cannot be predicted by this study.

Signature:

Report Prepared By:

Chris Sheridan, RG
Senior Hydrogeologist

FIGURES



NOTE(S):
USGS, WOCUS QUADRANGLE,
OREGON - KLAMATH COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)

0 2000 4000
SCALE IN FEET
1" = 2000'

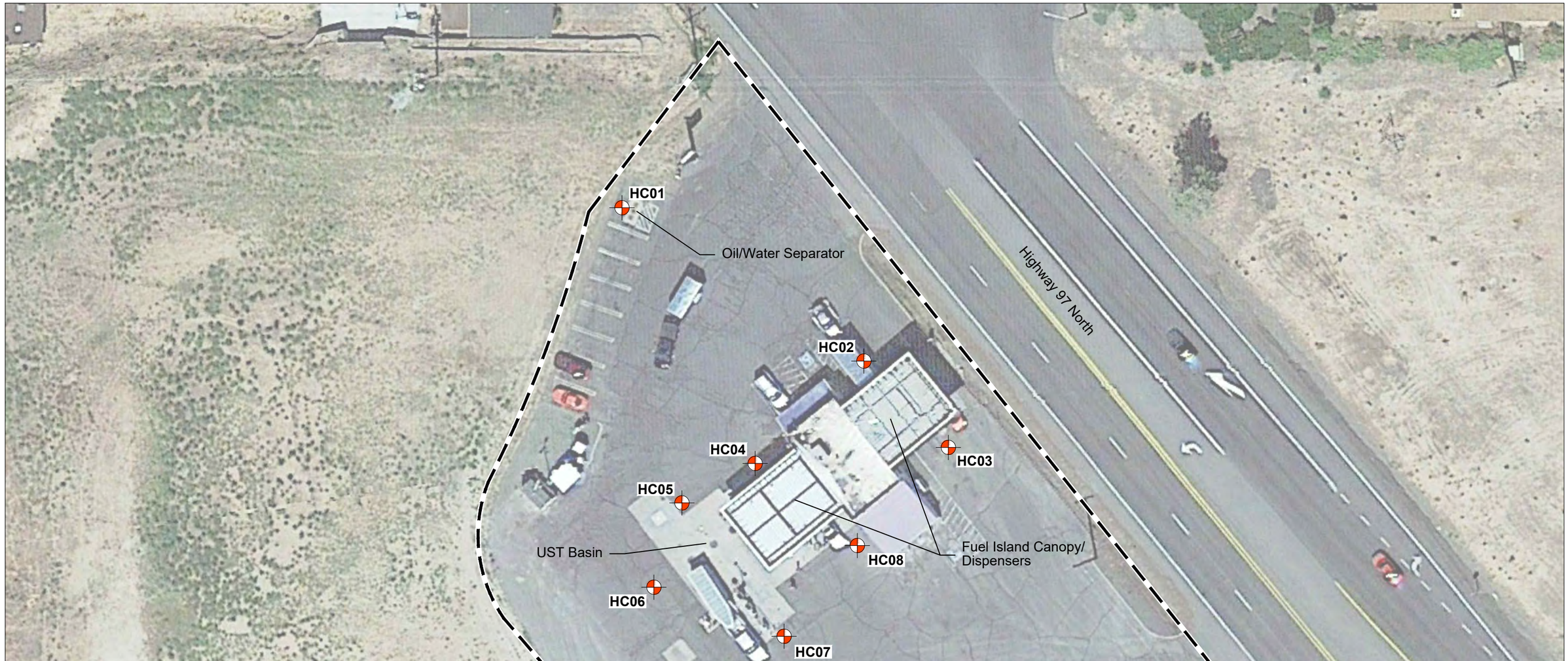
N
W E
S

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

DATE: 1-28-2022
DWN: LC
CHK: DB
APPROVED: DB
PRJ. MGR: DB
PROJECT NO: 2022-001

FIGURE 1
SITE LOCATION MAP
PHASE II ENVIRONMENTAL SITE ASSESSMENT
ED STAUB AND SONS
3730 HIGHWAY 97 NORTH
KLAMATH FALLS, OREGON

C:\Users\Lindsey\Desktop\HydroCon\TEMP\PHASE I Figures\Ed Staub Phase II\Hwy 97 North, Klamath Falls, OR\Hwy 97 N.dwg



Sample Identification	Sample Depth (feet bgs)	Sample Date	Soil Analytical Results in mg/kg																				
			GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	MTBE	Napthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Fluoranthene	Fluorene	1-Methylnaphthalene	Phenanthrene	Pyrene	Dibenzofuran	Remaining PAHs
HC01-5.0	5.0	01/12/22	231	3370	<63.3	<0.0231	<0.116	<0.0578	<0.173	<0.116	<0.491	<0.116	<0.0578	<0.116	<0.116	<0.116	0.102	1.4	1.02	0.691	0.779	0.479	ND
HC01-10	10.0	01/12/22	<22.9	80.4	<93.5	<0.0459	<0.229	<0.115	<0.344	-	<0.459	-	-	-	-	-	-	-	-	-	-	-	-
HC02-4.0	4.0	01/12/22	191	<25.0	<50.0	<0.0143	<0.0715	<0.0358	<0.107	-	<0.143	-	-	-	-	-	-	-	-	-	-	-	-
HC03-4.0	4.0	01/12/22	<7.37	<25.0	<50.0	<0.0147	<0.0737	<0.0368	<0.111	-	<0.147	-	-	-	-	-	-	-	-	-	-	-	-
HC04-10.0	10.0	01/12/22	<23.9	<43.0	<86.0	<0.0477	<0.239	<0.119	<0.358	-	<0.477	-	-	-	-	-	-	-	-	-	-	-	-
HC05-20	20.0	01/12/22	<16.8	<39.8	<79.6	<0.0336	<0.168	<0.0839	<0.252	-	<0.336	-	-	-	-	-	-	-	-	-	-	-	-
HC06-15.0	15.0	01/13/22	<17.9	<43.9	<87.7	<0.0358	<0.179	<0.0896	<0.269	-	<0.358	-	-	-	-	-	-	-	-	-	-	-	-
HC07-10.0	10.0	01/13/22	18	64.4	89.6	<0.0303	<0.152	<0.0758	<0.227	-	<0.303	-	-	-	-	-	-	-	-	-	-	-	-
HC08-5.0	5	01/13/22	11	<25.2	167	<0.0120	<0.0598	<0.0299	<0.0897	<0.0598	0.122	<0.0598	<0.0299	<0.0598	<0.0598	<0.0598	-	-	-	-	-	-	-

Legend

— — Subject Site Property Boundary (Approximate)

HC01 Soil and Groundwater Sample Location

N W E

0 40 80

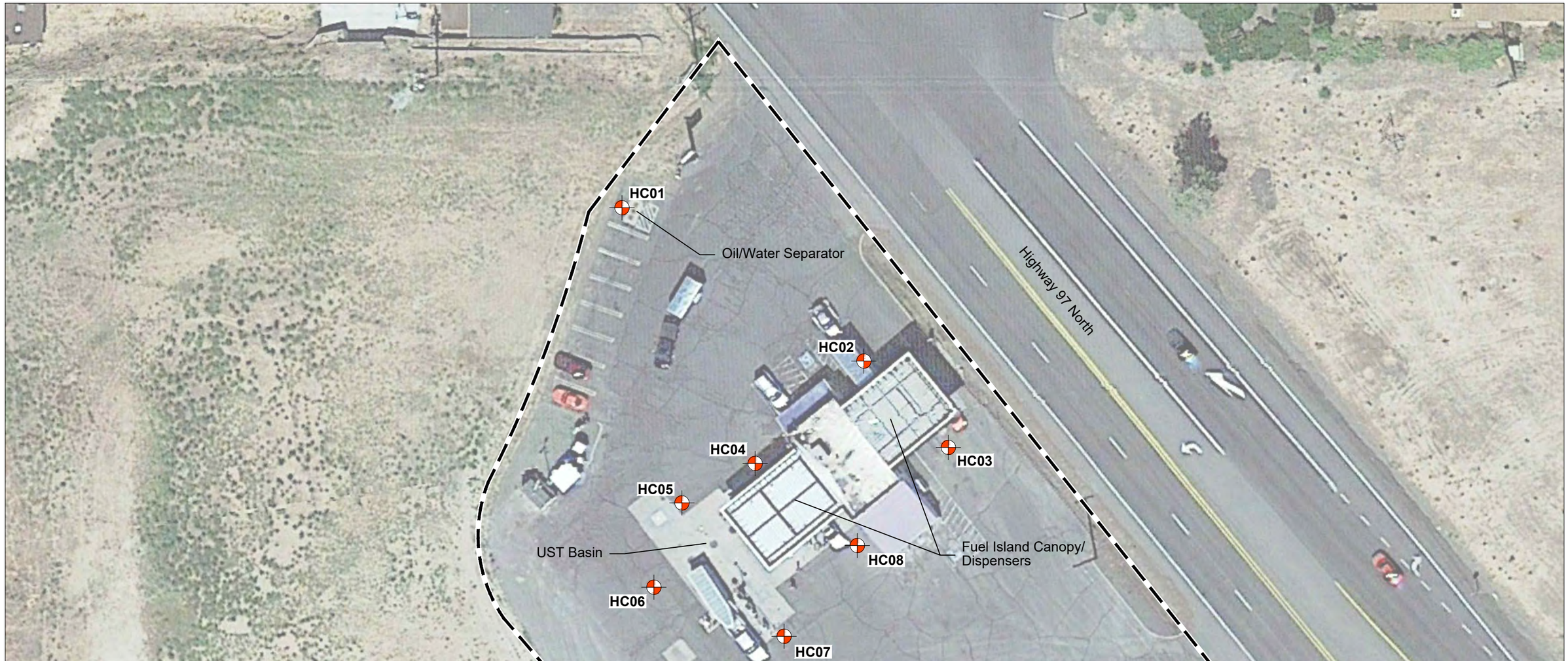
SCALE IN FEET
1" = 40'

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

DATE: 1-28-2022
DWN: LC
CHK: DB
APPROVED: DB
PRJ. MGR: DB
PROJECT NO: 2022-001

FIGURE 2
SOIL SAMPLING LOCATIONS
PHASE II ENVIRONMENTAL SITE ASSESSMENT
ED STAUB AND SONS
3730 HIGHWAY 97 NORTH
KLAMATH FALLS, OREGON

S:\2022 Projects\2022-001 Ed Staub and Sons Multiple Phase II ESAs\Figures\3730 Hwy 97 North, Klamath Falls, OR\Hwy 97 Nmw.dwg



Groundwater Analytical Results in µg/L

Well Identification	Sample Date	GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	MTBE	Napthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acenaphthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Pyrene	Dibenzofuran	Remaining PAHs	Lead
HC01-W	01/15/22	771	5,450	<162	3.94	22.30	2.11	23.30	<1.00	<4.0	<0.500	<0.500	<1.00	3.41	1.82	<1.49	2.82	6.49	<0.851	0.984	0.613	1.21	<1.49	-
HC04-W	01/15/22	<100	129	<151	<0.200	<1.0	<0.500	<1.50		<2.00														-
HC06-W	01/15/22	<100	<87.0	<174	<0.200	<1.0	<0.500	<1.50		<2.00														-
HC07-W	01/15/22	408	3,230	<151	<0.200	<1.0	<0.500	<1.50		<2.00														-
HC08-W	01/15/22	**17,400**	2,330	<163	202	48	910	581	1.52	181.0	<0.500	<0.500	<87.4	584	144									23.1

Legend

— — Subject Site Property Boundary (Approximate)

HC01 Soil and Groundwater Sample Location

N W E

0 40 80

SCALE IN FEET
1" = 40'

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

DATE: 1-28-2022
DWN: LC
CHK: DB
APPROVED: DB
PRJ. MGR: DB
PROJECT NO: 2022-001

FIGURE 3
GROUNDWATER SAMPLE LOCATIONS
PHASE II ENVIRONMENTAL SITE ASSESSMENT
ED STAUB AND SONS
3730 HIGHWAY 97 NORTH
KLAMATH FALLS, OREGON

S:\2022 Projects\2022-001 Ed Staub and Sons Multiple Phase II ESAs\Figures\3730 Hwy 97 North, Klamath Falls, OR\Hwy 97 Nmw.dwg

TABLES

Table 1
Summary of Phase II ESA Soil Analytical Results
3730 Hwy 97, Klamath Falls, Oregon

Sample Identification	Sample Depth (feet bgs)	Sample Date	Soil Analytical Results in mg/kg																			
			GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	MTBE	Napthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Fluoranthene	Fluorene	1-Methylnaphthalene	Phenanthrene	Pyrene	Dibenzofuran	Remaining PAHs
HC01-5.0	5.0	01/12/22	**231**	**3370**	<63.3	<0.0231	<0.116	<0.0578	<0.173	<0.116	<0.491	<0.116	<0.0578	<0.116	<0.116	<0.116	0.102	**1.4**	**1.02**	**0.691**	**0.779**	**0.479**	ND
HC01-10	10.0	01/12/22	<22.9	**80.4**	<93.5	<0.0459	<0.229	<0.115	<0.344	-	<0.459	-	-	-	-	-	-	-	-	-	-	-	-
HC02-4.0	4.0	01/12/22	**191**	<25.0	<50.0	<0.0143	<0.0715	<0.0358	<0.107	-	<0.143	-	-	-	-	-	-	-	-	-	-	-	-
HC03-4.0	4.0	01/12/22	<7.37	<25.0	<50.0	<0.0147	<0.0737	<0.0368	<0.111	-	<0.147	-	-	-	-	-	-	-	-	-	-	-	-
HC04-10.0	10.0	01/12/22	<23.9	<43.0	<86.0	<0.0477	<0.239	<0.119	<0.358	-	<0.477	-	-	-	-	-	-	-	-	-	-	-	-
HC05-20	20.0	01/12/22	<16.8	<39.8	<79.6	<0.0336	<0.168	<0.0839	<0.252	-	<0.336	-	-	-	-	-	-	-	-	-	-	-	-
HC06-15.0	15.0	01/13/22	<17.9	<43.9	<87.7	<0.0358	<0.179	<0.0896	<0.269	-	<0.358	-	-	-	-	-	-	-	-	-	-	-	-
HC07-10.0	10.0	01/13/22	**18**	**64.4**	**89.6**	<0.0303	<0.152	<0.0758	<0.227	-	<0.303	-	-	-	-	-	-	-	-	-	-	-	-
HC08-5.0	5	01/13/22	**11**	<25.2	**167**	<0.0120	<0.0598	<0.0299	<0.0897	<0.0598	**0.122**	<0.0598	<0.0299	<0.0598	<0.0598	<0.0598	-	-	-	-	-	-	-
Applicable DEQ Risk-Based Concentrations[1]																							
Vapor Intrusion into Buildings (RBC $_{si}$)																							
Occupational			>Max	>Max	>Max	2.1	>538	17	>358	110	83	0.16	1	>335	210	>Max	NV	>Max	NV	NV	>Max	NV	-
Volatilization to Outdoor Air (RBC $_{so}$)																							
Occupational			69,000	>Max	>Max	50	>538	160	>358	1500	83	0.65	15	>335	980	>Max	NV	>Max	NV	NV	>Max	NV	
Soil Ingestion, Dermal Contact, and Inhalation (RBC $_{ss}$)																							
Occupational Worker			20,000	14,000	36,000	37	88,000	150	25,000	1,100	23	0.73	16	57,000	2,000	12,000	30,000	47,000	NV	NV	23,000	NV	
Construction Worker			9,700	4,600	11,000	380	28,000	1,700	20,000	12,000	580	9	580	580	580	580	10,000	14,000	NV	NV	7,500	NV	-
Excavation Worker			>Max	>Max	>Max	11,000	770,000	49,000	560,000	320,000	16,000	250	16,000	16,000	16,000	16,000	280,000	390,000	NV	NV	210,000	NV	

NOTES:

bgs = below ground surface

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.

BTEX + Napthalene analyzed by EPA Method 8260D.

[1]Oregon Department of Environmental Quality (DEQ). Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites.

mg/kg = milligrams per kilogram (parts per million)

Bold indicates analyte detection exceeds one or more RBC.

"<6.09" indicates the analyte was not detected above the laboratory reporting limit.

>Csat = this soil RBC exceeds the limit of three-phase equillibrium partitioning.

>Max = this constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg. Therefore, this substance is deemed to not pose risks in this scenario.

* - Sample flagged as results for diesel range is due to overlap from gasoline range product.

Table 2
Summary of Phase II ESA Groundwater Analytical Results
3730 Hwy 97, Klamath Falls, Oregon

Well Identification	Sample Date	Groundwater Analytical Results in µg/L																						
		GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Xylenes, Total	MTBE	Napthalene	EDB	EDC	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acenaphthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Phenanthrene	Pyrene	Dibenzofuran	Remaining PAHs	Lead
HC01-W	01/15/22	**771**	**5,450**	<162	**3.94**	**22.30**	**2.11**	**23.30**	<1.00	<4.0	<0.500	<0.500	<1.00	**3.41**	**1.82**	<1.49	**2.82**	**6.49**	<0.851	**0.984**	**0.613**	**1.21**	<1.49	-
HC04-W	01/15/22	<100	**129**	<151	<0.200	<1.0	<0.500	<1.50	-	<2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC06-W	01/15/22	<100	<87.0	<174	<0.200	<1.0	<0.500	<1.50	-	<2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC07-W	01/15/22	**408**	**3,230**	<151	<0.200	<1.0	<0.500	<1.50	-	<2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC08-W	01/15/22	**17,400**	**2,330**	<163	**202**	**48**	**910**	**581**	**1.52**	**181.0**	<0.500	<0.500	<87.4	**584**	**144**	-	-	-	-	-	-	-	-	**23.1**
Applicable DEQ Risk-Based Concentrations[1]																								
Vapor Intrusion into Buildings (RBC $_{wi}$)																								
Occupational		>150,000	>80,000	>100,000	2,800	>526,000	8,200	>106,000	870,000	11,000	590	3,900	>61,300	>57,000	>48,200	>3,900	>1,690	>25,000	>24,600	NV	>135	-	-	-
Volatilization to Outdoor Air (RBC $_{wo}$)																								
Occupational		>150,000	>80,000	>100,000	14,000	>526,000	43,000	>106,000	1,500,000	16,000	790	9,000	>61,300	>57,000	>48,200	>3,900	>1,690	>25,000	>24,600	NV	>135	-	-	-
Groundwater in Excavation (RBC $_{we}$)																								
Cons. & Exc. Worker		**14,000**	>80,000	>100,000	1,800	220,000	4,500	23,000	63,000	500	27	630	51,000	1,700	15,000	>3,900	>1,690	>25,000	>24,600	NV	>Pv	-	-	<S

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

[1]Oregon 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

STANDARD OPERATING PROCEDURES

STANDARD OPERATING PROCEDURE SOP - 02

HYDROCARBON FIELD SCREENING

GENERAL

This standard operating procedure (SOP) presents the qualitative field screening methods for hydrocarbons in soil. Field screening results are site-specific. The results may vary with soil type, soil moisture and organic content, ambient air temperature, and type of contaminant.

Field screening will be conducted on soil samples obtained from exploratory boreholes or excavations. Field screening results are used as a general guideline to delineate areas with potential residual hydrocarbons in soils. In addition, field screening results are used as a basis for selecting soil samples for chemical analysis. The field screening methods employed include 1) visual examination, 2) sheen testing, and 3) headspace vapor testing using an Mini Rae 2000 photoionization detector (PID) (or equivalent) calibrated to isobutylene. Sheen testing and headspace vapor testing are more sensitive screening methods that have been effective in detecting hydrocarbon concentrations below typical underground storage tank (UST) regulatory cleanup guidelines. The results of headspace and sheen screening should be included on the borehole logs or field notes.

VISUAL SCREENING

Visual screening consists of inspecting the soil for the presence of stains indicative of residual petroleum hydrocarbons. Visual screening is generally more effective in detecting the presence of heavier petroleum hydrocarbons, such as motor oil, or when hydrocarbon concentrations are high. Indications of the presence of hydrocarbons typically include a mottled appearance or dark discoloration of the soil.

SHEEN TESTING

Sheen testing involves immersion of the soil sample in water and observing the water surface for signs of sheen. A representative soil sample is placed into a clean stainless steel or plastic pan filled with clean water with as little disturbance as possible. Visual evidence of sheen forming on the surface of the water is classified as follows:

- No sheen (NS): No visible sheen on the water surface

- Colorless Sheen (CS): Light, nearly colorless sheen; spread is irregular, not rapid; film dissipates rapidly (Note: light colorless sheens can be confused with sheens produced by organic content). Note that this sheen may or may not indicate the presence hydrocarbons.

- Heavy Sheen (HS): Light to heavy colorful film with iridescence; stringy, spread is rapid; sheen flows off the sample; most or all of water surface is covered with sheen

Following the sheen test, the pan must be decontaminated with methanol and distilled water prior to the next sampling event.

HEADSPACE VAPOR SCREENING

Headspace vapor screening involves placing a small representative soil sample in a plastic sample bag. The sealed sample bag should be allowed to sit at ambient temperature for approximately ten minutes. The sample bag is then shaken slightly to promote volatilization to the air trapped in the bag. The probe of a PID equipped with a 10.6 eV bulb or equivalent, calibrated to isobutylene, is inserted into the bag to withdraw air from the bag. The instrument measures the concentration of organic vapors within the sample bag headspace in parts per million (ppm).

STANDARD OPERATING PROCEDURE SOP - 05

GEOPROBE SOIL SAMPLING

1.0 General

Continuous or discrete soil samples can be collected using direct-push "GeoProbe"[R] equipment and techniques. The GeoProbe equipment is mounted on a one-ton van or similar small truck. Borings are advanced by hydraulically pushing or hammering small-diameter steel rods into the subsurface. Sampling rods vary in outside diameter between two inches and 0.75 inches. Specialized tools are added to the base of the rod string in order to collect soil, groundwater, and/or vapor samples.

All soil samples are collected in new, dedicated clear acrylic liners placed inside the steel drive rods. Continuous soil sample cores can be collected as the rods are advanced. To collect discrete soil samples, the drive rods are advanced to the desired sampling depth with a disposable steel drive point blocking the sampler. A threaded pin locking the drive point can then be removed and soil then enters the sample rod/tube assembly as the rod string is advanced. Sample rods/tubes are typically four feet in length, and must be removed from the open hole to collect the sample. Sampling equipment is then decontaminated, a new drive point is locked into place, and the rod assembly is driven back into the open hole to the new desired sampling interval.

1.1 Sample Collection Methodology

The following standard procedures are followed during sample collection:

- The recovered sample tube is opened on a clean surface using a decontaminated knife or specialized cutter. Representative soils are quickly transferred to appropriate sample containers and sample disturbance is minimized. Each sample container is immediately labeled and sealed.
- Representative portions of each soil sample are transferred from the sample tube to new zip-lock type plastic bags or polyethylene bags and sealed. Volatile head-space vapor readings are then measured as described in the SOP 1 (Hydrocarbon Field Screening for Soil). After head-space measurements have been recorded, a small volume of clean water is added to the soil. After agitation, the soil-water mixture is observed for visible sheen.
- Soil observed through the sample interval is then logged according to HC's format described in the SOP.
- Following sample collection and logging, the sample rods and equipment are decontaminated in an isolated and dedicated area as follows.

- All re-usable sampling equipment and down-hole equipment will be decontaminated using a hot pressure washer or in a solution of water and non-phosphatic detergent.
- The sampling equipment will be rinsed with distilled or de-ionized water following washing.

STANDARD OPERATING PROCEDURE SOP - 11

LOW-FLOW PERISTALTIC PUMP GROUNDWATER SAMPLING

1.0 General

This standard operating procedure is designed to assist the technician in taking representative groundwater samples from monitoring wells. Groundwater samples will be collected using low-flow (minimal drawdown) purging and sampling methods as discussed in U.S. EPA, Ground Water Issue, Publication Number EPA/540/S-95/504, July 1996 by Puls, R.W. and M.J. Barcelona - "Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells."

The sampler's objective is to purge and sample the well so that the water that is discharged from the pump, and subsequently collected, is representative of the formation water from the aquifer's identified zone of interest.

1.1 Initial Pump Flow Test Procedures

Measure and record the Static Water Level (SWL) on field data sheet following the procedures outlined in SOP 9.

The appropriate tubing type (Teflon, HDPE, PVC, polyethylene, etc.) should be preselected based on the analytes of interest.

The mid-point of the saturated screen length is used by convention as the location of the tubing intake. Site specific work plans may change the location of sample intake depth in order to sample from the highest yielding zone within the screened interval. In wells with a fully saturated screen length over 10 feet, testing should be performed if possible during development to determine highest water yielding zone within screened interval.

After tubing installation and confirmation that the SWL has returned to its original level (as determined prior to tubing installation), the peristaltic pump should be started at a discharge rate less than 0.5 liters per minute (0.13 gal/min) without any In-Line Flow Cell connected. The water level in the well casing must be monitored continuously for any change from the original measurement. If significant drawdown is observed, the pump's flow rate should be reduced until the SWL drawdown stabilizes. Total drawdown from the initial (static) water level should not exceed 0.3 feet. In any case, the water level in the well should not be lowered below the top of the screen/intake zone of the well.

Once the specific well's optimum flow rate has been determined and documented, connect the In-Line Flow Cell system (if available) to be used to the well discharge and determine the control settings required to achieve the well's determined optimum flow rate with the In-Line Flow Cell connected (due to the system's back-pressure, the flow rate will be decreased by 10 to 20 percent).

1.2 Purge and Sampling Events

Prior to the initiation of purging a well, the SWL will be measured and documented. The peristaltic pump will be started utilizing its documented control settings and its flow rate will be confirmed by volumetric discharge measurement with the In-Line Flow Cell connected. If necessary, any minor modifications to the control settings to achieve the well's optimum flow rate will be documented on the appropriate field form. When the optimum pump flow rate has been established, the SWL drawdown has stabilized within the required range, and at least one pump system volume (down well extraction tubing, pump head tubing, and discharge tubing volume) has been purged, begin taking field measurements for pH, temperature (T), conductivity (Ec), oxygen reduction potential (ORP), dissolved oxygen (DO), and turbidity (TU) using an in-line flow cell or if unavailable individual water quality meters. All water chemistry field measurements will be documented on the appropriate field form. Measurements should be taken every three to five minutes until stabilization has been achieved. Stabilization is achieved after all parameters have stabilized for three consecutive readings. In lieu of measuring all five parameters, a minimum subset would include pH, conductivity, and turbidity or dissolved oxygen. Three consecutive measurements indicating stability should be within:

Temperature	± 3% of reading (min ± 0.2° C)
pH	± 0.1 units, min
Conductance	± 3% of reading
Dissolved Oxygen	± 10% of reading
Redox	± 10 mV
Turbidity	± 10% NTU or <10 NTU

When water quality parameters have stabilized, and there has been no change in the stabilized SWL (i.e., no continuous drawdown), sample collection may begin.

1.3 Field Procedures

A summary of field procedures used to collect groundwater samples using a peristaltic pump is provided below.

- Calibrate all field instruments at the start of each day following the instrument manufacturer's instructions. Record calibration data on field form.
- Prior to use at each well, decontaminate all instruments that will be lowered in the well (electronic water level indicator and/or oil/water interface probe) by washing with phosphate-free detergent, rinsing with potable water, and rinsing with deionized water.
- Make notes in the appropriate field form documenting condition of the well and activity in the vicinity of the well.
- Measure the depth to water from the surveyed reference mark on the wellhead and record the measurement on the appropriate field form. Lock the water level meter in place so that the level can be monitored during purging and sampling.
- Place a new length of disposable sampling tubing into the well casing so that the tip of the tubing is located at appropriate sampling depth within the well screen.
- Place a new length of silicone tubing into the peristaltic pump head fixture.
- Connect the sample tubing to the influent end of the silicone tubing in the peristaltic pump head fixture.
- Place a new length of disposable sample tubing to the effluent end of the silicone tubing on the peristaltic pump and secure to drain the water purged from the well into the collection container (i.e., 5 gallon bucket).
- Start the peristaltic pump. Set the pump controller settings to the appropriate settings for the specific well. Confirm the flow rate is equal to the well's established optimum flow rate. Modify as necessary (documenting any required modifications).
- Monitor the water level and confirm that the SWL drawdown has stabilized within the well's allowable limits.
- Remove the pump discharge tubing.
- Connect the pump discharge tubing to the In-Line flow cells "IN" fitting.
- Connect the Flow Cell's "OUT" line and secure to drain the water purged from the well into the collection container (i.e., 5 gallon bucket).
- After purging the first system volume (down well sampling tubing, pump head silicone tubing, and discharge tubing volume) record the water quality field measurements every three to five minutes until all parameters have stabilized within their allowable ranges for at least three consecutive measurements. Begin sampling after stabilization has been achieved.
- Disconnect the flow cell and tubing from the pump discharge line before collecting samples. Decrease the pump rate to 100 milliliters per minute or less by lowering the pump controller's setting prior to collecting samples for volatiles. Place the samples in a chilled cooler with enough blue ice or ice to keep the temperature at 4 degrees Centigrade.
- Once samples for volatiles have been collected, re-establish pump flow rate to the original purge flow rate by inputting the documented controller settings for the well without the In-Line Flow Cell connected, and collect remaining samples.
- Consolidate purge water into a labeled 55-gallon drum(s).

- Remove and decontaminate the electronic water level indicator with phosphate-free detergent, rinsing with potable water and rinsing with deionized water.
- Disconnect and dispose the sample and silicone tubing used to collect the sample.
- Secure the peristaltic pump in the portable pump carrying case.
- Place the wellhead cover on the well and secure with a lock.
- Move equipment to next well to be sampled and repeat.
- At the end of each dayclean and decontaminate the In-Line Flow Cell with phosphate-free detergent, rinsing with potable water, and rinsing with deionized water.
- Make a photocopy of all completed field forms. The copies should be retained on site. The original forms will be kept in the HC's project file.

1.4 Equipment List

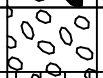
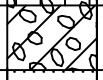
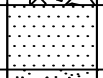
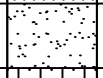
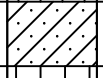
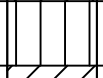
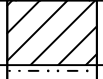
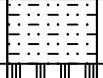
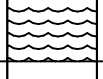
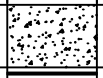
The following equipment is needed to conduct low flow purging and sampling:

- Peristaltic pump equipped with a flow controller.
- Appropriate amount of disposable sample tubing to collect groundwater samples from each well at the site.
- In-Line Flow Cell and meter(s) with connection fittings and tubing to measure water quality.
- Water quality meters as backup in-case of in-line flow cell malfunction.
- Photoionization detector (PID).
- Electronic Water Level Indicator Probe.
- Laboratory-prepared sample containers appropriate for the analytical requirements.
- Field documentation forms.
- Measuring cup.
- Five gallon bucket(s) for containerizing purge water.
- Stopwatch.
- Cleaning and decontamination supplies.

APPENDIX B

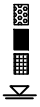
BORING LOGS

GUIDE TO BOREHOLE LOGS**

MAJOR DIVISIONS		SYMBOLS		TYPICAL NAMES
		GW		Well-graded gravels or gravel-sand mixtures, little to no fines.
COARSE GRAINED SOILS (more than 1/2 of soil >No. 200 sieve size)	GRAVELS more than 50% coarse fraction > no.4 sieve	GP		Poorly-graded gravels or gravel-sand mixtures, little to no fines.
		GM		Silty gravels, gravel-sand-silt mixtures.
		GC		Clayey gravels or gravel-sand-clay mixtures
	SANDS less than 50% coarse fraction > no.4 sieve	SW		Well-sorted sands or gravelly sands, little to no fines.
		SP		Poorly-sorted sands or gravelly sands, little to no fines.
		SM		Silty sands, sand-silt mixtures.
		SC		Clayey sands, sand-clay mixtures.
FINED GRAINED SOILS (more than 1/2 of soil < No. 200 sieve size)	SILTS & CLAYS Liquid Limit* less than 50%	ML		Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity.
		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy or silty clays, lean clays.
		OL		Organic silts and organic silty clays of low plasticity.
	SILTS & CLAYS Liquid Limit* greater than 50%	MH		Inorganic silts, micaceous or diatomaceous fine sand or silty soils, elastic silts.
		CH		Inorganic clays of high plasticity, fat clays.
		OH		Organic clays of medium to high plasticity, organic silty clay, organic silts.
HIGHLY ORGANIC SOILS		Pt		Peat or other highly organic soils.
		Conc		Concrete
		Fill		Fill
		Asph		Asphalt

* Liquid Limit represents the moisture content (in percent) of a soil at which point the soil no longer behaves like a plastic and starts to behave like a liquid.

BORING LOG SYMBOLS



SAMPLE LOCATION
SAMPLE INTERVAL
SAMPLE RECOVERY
GROUNDWATER, FIRST OBSERVED

SAMPLE TYPES:
SS - Split Spoon
G - Grab
ST - Shelby Tube
GS - Geoprobe Sampler

SHEEN TYPES:
NS - No Sheen observed
SS - Slight Sheen observed (Spotty coverage of sheen pan, no iridescence)
MS - Moderate Sheen (full coverage of sheen pan, no iridescence) pan, iridescent)
HS - Heavy Sheen (full coverage of sheen

PERCENTAGES:
Trace - Particles are present but estimated to be less than 5% Few - 5 to 10%
Little - 15 to 25%
Some - 30 to 45%
Mostly - 50 to 100%

SAMPLE PLASTICITY (FINE-GRAINED SOILS):
Nonplastic - Cannot be rolled at any moisture content
Low - Barely rolled, lump cannot be formed when drier than plastic limit
Medium - Easily rolled, lump crumbles when drier than plastic limit
High - Easily rolled yet takes considerable time to reach the plastic limit, molded shape can be formed without crumbling when drier than the plastic limit

PARTICLE SIZE RANGE (COARSE-GRAINED SOILS):
Gravel - Fine, Coarse
Sand - Fine, Medium, Coarse

SAMPLE MOISTURE:
Dry - No moisture, dry to touch
Moist - Damp but no visible moisture
Wet - Visible free water

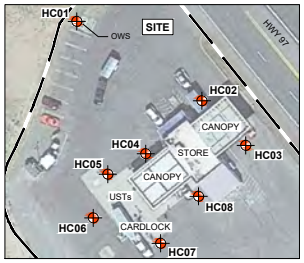
**Based on Unified Soil Classification System and ASTM Standard D2487 and D2488

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER: HC01

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-12-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SILT WITH GRAVEL (ML), Brown, 80% low-plasticity silt, 20% fine to medium sub-angular gravel, medium stiff to stiff, moist, no odor or sheen.					0.0			
SILTY SAND WITH GRAVEL (SM), Brown, 60% very fine- to medium-grained sand, 30% low-plasticity fines, 10% fine to medium sub-angular gravel, dense, damp, no odor or sheen.					0.0	3.50'		
GRAVEL WITH SILT AND SAND (GP), Gray, 85% fine to very coarse angular gravel, 10% low-plasticity fines, 5% very fine- to medium-grained sand, med. dense, very moist to wet, strong hydrocarbon odor, no sheen. Becomes saturated at 5.5' bgs.	5			HC01-5.0	0.0 24.8 22.3 12.3			
SILT WITH CLAY (ML), V. light greenish-gray, 85% low-plasticity silt, 15% clay, very stiff to hard, damp, faint hydrocarbon odor, no sheen. ***Note:*** *Water sample HC01-W collected from temp PVC screen set in borehole from 4.0' to 9.0' bgs.*	10			HC01-10.0	6.9			
BOTTOM OF BORING AT 10.0' B.G.S.								
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	15							
	20							
	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Direct-Push (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 2.25"
SAMPLING METHOD: Continuous Macro Core
START CARD NUMBER: N/A

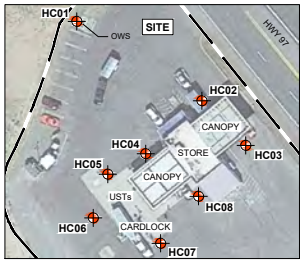
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER: HC02

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-12-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SANDY SILT WITH GRAVEL (ML), Dark brown, 45% low-plasticity silt, 40% very fine-grained sand, 15% fine to medium sub-angular to angular gravel, medium stiff, damp, no odor or sheen.					0.0			
SILTY SAND (SM), Dark brown, 70% very fine- to fine-grained sand, 30% low-plasticity fines, medium dense, slightly moist, no odor or sheen. Grain size coarsens with depth. Becomes light yellowish brown at 3.0' bgs. Refusal with direct-push drilling at 4.0' bgs.	5			HC02-4.0	4.3			
GRAVELLY SILT (ML), Very coarse angular gravel embedded in silt and clay with faint hydrocarbon odor and no sheen - in shoe at refusal at 4.0' bgs. ***Note:*** *No water encountered in borehole.*								
REFUSAL AT 4.0' B.G.S. (DIRECT-PUSH) REFUSAL AT 6.0' B.G.S. (HSA)	10							
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	15							
	20							
	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Direct-Push / Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 2.25" / 6.25"
SAMPLING METHOD: Continuous Macro Core / Cuttings
START CARD NUMBER: N/A

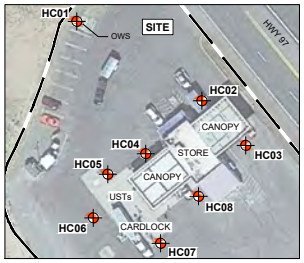
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER: HC03

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-12-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
GRAVEL WITH SILT AND SAND (GP), Very dark gray, 85% fine sub-angular gravel, 10% low-plasticity fines, 5% fine- to medium-grained sand, medium dense, moist, no odor or sheen.					0.0			
SILTY SAND (SM), Brown, 60% very fine- to fine-grained sand, 40% low-plasticity fines, medium dense, dry to damp, no odor or sheen.				HC03-4.0	0.0			
SILTY GRAVEL (GM), Light brown-gray, 75% fine to coarse sub-angular to angular gravel, 25% low-plasticity fines, trace very fine-grained sand, very dense to hard, dry, no odor or sheen.	5							
Note: *No water encountered in borehole.*								
BOTTOM OF BORING (REFUSAL) AT 4.0' B.G.S.								
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	10							
	15							
	20							
	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Direct-Push (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 2.25"
SAMPLING METHOD: Continuous Macro Core
START CARD NUMBER: N/A

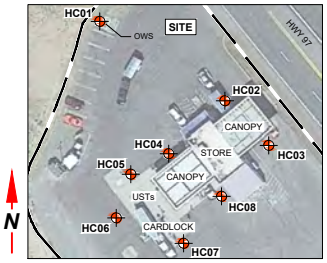
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER HC04

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-12-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0				0.0			
Note: *Sample stuck in core barrel, not logged from 0' - 5.0' bgs.*					0.0			
SANDY SILT (ML), Light brown, 70% low-plasticity silt, 30% very fine-grained sand, trace clay, trace gravel, stiff, damp, no odor or sheen.	5				0.0			
SILT WITH CLAY (ML), Buff to light tan, 80% low-plasticity silt, 20% clay, low- to moderate-plasticity, very stiff to hard, dry, no odor or sheen. Becomes waxy at 8.0' bgs.					0.0			
Refusal with direct-push drilling at 10.0' bgs.	10			HC04-10.0	0.0			
	15				0.0	▼ 16.50'		
Note: *Water sample HC04-W collected from temp PVC screen set in borehole from 15.0' to 20.0' bgs.*								
REFUSAL AT 10.0' B.G.S. (DIRECT-PUSH) BOTTOM OF BORING AT 20.0' B.G.S. (HSA)	20							
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Direct-Push / Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 2.25" / 6.25"
SAMPLING METHOD: Continuous Macro Core / Cuttings
START CARD NUMBER: N/A

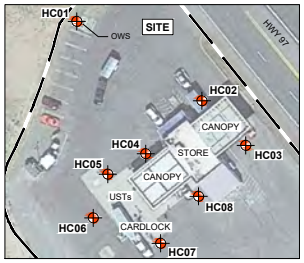
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER HC05

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-12-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SANDY SILT WITH GRAVEL (ML), Dark brown, 45% low-plasticity silt, 40% very fine-grained sand, 15% fine to medium sub-angular to angular gravel, medium stiff, damp, no odor or sheen.					0.0			
SILT WITH CLAY (ML), Buff to light tan, 80% low-plasticity silt, 20% clay, trace coarser material, low- to moderate-plasticity, stiff to very stiff, moist, no odor or sheen.	5				0.0	7.00'		
	10				0.0			
SILTY CLAY (CH), Tan, 60% high-plasticity clay, 40% silt, high-plasticity, medium stiff, moist to wet, no odor or sheen.	15				0.0			
Note: *No water encountered in borehole.*								
BOTTOM OF BORING AT 20.0' B.G.S.	20			HC05-20.0	0.0			
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 6.25"
SAMPLING METHOD: Cuttings
START CARD NUMBER: N/A

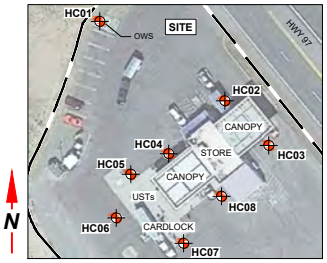
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER HC06

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-13-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SANDY SILT WITH GRAVEL (ML), Dark brown, 45% low-plasticity silt, 40% very fine-grained sand, 15% fine to medium sub-angular to angular gravel, medium stiff, damp, no odor or sheen.					0.0			
SILT WITH CLAY (ML), Light yellowish-brown, 85% low-plasticity silt, 15% clay, trace coarser material, low- to moderate-plasticity, medium stiff, moist, no odor or sheen.	5				0.0			
CLAYEY SILT (ML), Very light brown, 70% low-plasticity silt, 30% clay, trace very fine-grained sand, moderate-plasticity, medium stiff, moist, no odor or sheen.	10				0.0			
SILTY CLAY (CH), Tan, 60% high-plasticity clay, 40% silt, high-plasticity, medium stiff, moist to wet, no odor or sheen. ***Note:*** *Water sample HC06-W collected from temp PVC screen set in borehole from 13.0' to 18.0' bgs.*	15			HC06-15.0	0.0	▼ 16.50'		
BOTTOM OF BORING (REFUSAL) AT 18.0' B.G.S.					0.0			
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	20							
	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 6.25"
SAMPLING METHOD: Cuttings
START CARD NUMBER: N/A

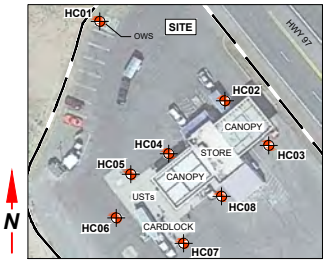
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER HC07

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-13-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SANDY SILT WITH GRAVEL (ML), Dark brown, 45% low-plasticity silt, 40% very fine-grained sand, 15% fine to medium sub-angular to angular gravel, medium stiff, damp, no odor or sheen.					0.0			
SILT WITH CLAY (ML), Tan, 85% low-plasticity silt, 15% clay, trace coarser material, low- to moderate-plasticity, medium stiff, moist, no odor or sheen.	5				0.1			
CLAYEY SILT (ML), Very light brown, 70% low-plasticity silt, 30% clay, trace coarser material, moderate-plasticity, medium stiff, moist, no odor or sheen.	10			HC07-10.0	1.6			
SILTY CLAY (CH), Tan, 60% high-plasticity clay, 40% silt, high-plasticity, medium stiff, moist to wet, no odor or sheen.	15				1.4			
Note: *Water sample HC07-W collected from temp PVC screen set in borehole from 15.0' to 20.0' bgs.*						18.50'		
BOTTOM OF BORING AT 20.0' B.G.S.	20				0.5			
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 6.25"
SAMPLING METHOD: Cuttings
START CARD NUMBER: N/A

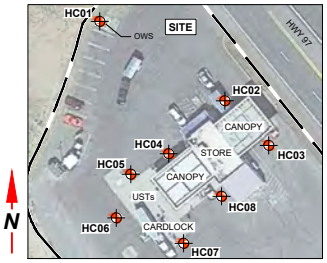
CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

HydroCon
314 W 15th Street Suite 300
Vancouver, WA 98660
Phone: 360-703-6079

WELL/BORING NUMBER: HC08

PROJECT NAME: Ed Staub & Sons Multi-Site Phase II ESAs
PROJECT NUMBER: 2022-001
PROJECT LOCATION: 3730 Hwy 97, Klamath Falls, Oregon
LOGGED BY: M. Whitson
REVIEWED BY: C. Sheridan
DATE: 01-13-2022

LOCATION MAP



DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)	DEPTH (FT.)	SYMBOL	WELL DETAILS	SAMPLE ID	PID	FIRST WATER	BLOW COUNTS	BOREHOLE/WELL CONSTRUCTION DETAILS
ASPHALT-CONCRETE, 2-3-inches at surface.	0							
SANDY SILT WITH GRAVEL (ML), Dark brown, 65% low-plasticity silt, 30% very fine- to medium-grained sand, 5% fine to medium sub-angular gravel, medium stiff, damp, no odor or sheen.					0.0			
Becomes very dark grayish-brown, moist to very moist with moderate hydrocarbon odor at 5.0' bgs.	5			HC08-5.0	33.7			
Becomes saturated at 7.0' bgs.						▽		
Note: *Water sample HC08-W collected from temp PVC screen set in borehole from 5.0' to 10.0' bgs.*						▼ 8.50'		
BOTTOM OF BORING AT 10.0' B.G.S.	10				27.6			
BORING BACKFILLED WITH BENTONITE AND FINISHED AT SURFACE WITH COLD-PATCH ASPHALT-CONCRETE UPON COMPLETION.	15							
	20							
	25							
	30							

LEGEND:
- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS/BACKFILL
- WATER LEVEL DURING DRILLING
- WATER LEVEL AFTER DRILLING
- FINAL WATER LEVEL

DRILLING CONTRACTOR: Steadfast Services Northwest, LLC
DRILLING METHOD: Hollow-Stem Auger (GeoProbe® 7720DT)
BOREHOLE DIAMETER: 6.25"
SAMPLING METHOD: Cuttings
START CARD NUMBER: N/A

CASING ELEVATION: NR
GROUND SURFACE ELEVATION: NR
LOCATION: See Above

APPENDIX C

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

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

ANALYTICAL REPORT

Wednesday, February 9, 2022

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

RE: A2A0593 - ES&S-3730 HWY 97 K Falls - 2022-001B

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 A2A0593, which was received by the laboratory on 1/17/2022 at 8:09:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: cobrien@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	0.3 degC	Cooler #2	3.3 degC

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

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HC01-W	A2A0593-01	Water	01/12/22 09:45	01/17/22 08:09
HC04-W	A2A0593-02	Water	01/13/22 09:00	01/17/22 08:09
HC06-W	A2A0593-03	Water	01/14/22 07:25	01/17/22 08:09
HC07-W	A2A0593-04	Water	01/14/22 07:45	01/17/22 08:09
HC08-W	A2A0593-05	Water	01/13/22 15:00	01/17/22 08:09

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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
HC01-W (A2A0593-01)				**Matrix: Water**		**Batch: 22A0540**		
Diesel	**5450**	---	80.8	ug/L	1	01/17/22 22:53	NWTPH-Dx LL	
Oil	ND	---	162	ug/L	1	01/17/22 22:53	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 101 %*	*Limits: 50-150 %*		*1*	*01/17/22 22:53*	*NWTPH-Dx LL*	
HC04-W (A2A0593-02)				**Matrix: Water**		**Batch: 22A0540**		
Diesel	**129**	---	75.5	ug/L	1	01/17/22 23:14	NWTPH-Dx LL	**F-11**
Oil	ND	---	151	ug/L	1	01/17/22 23:14	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 90 %*	*Limits: 50-150 %*		*1*	*01/17/22 23:14*	*NWTPH-Dx LL*	
HC06-W (A2A0593-03)				**Matrix: Water**		**Batch: 22A0540**		
Diesel	ND	---	87.0	ug/L	1	01/17/22 23:34	NWTPH-Dx LL	
Oil	ND	---	174	ug/L	1	01/17/22 23:34	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*01/17/22 23:34*	*NWTPH-Dx LL*	
HC07-W (A2A0593-04)				**Matrix: Water**		**Batch: 22A0540**		
Diesel	**3230**	---	75.5	ug/L	1	01/17/22 23:54	NWTPH-Dx LL	
Oil	ND	---	151	ug/L	1	01/17/22 23:54	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 86 %*	*Limits: 50-150 %*		*1*	*01/17/22 23:54*	*NWTPH-Dx LL*	
HC08-W (A2A0593-05)				**Matrix: Water**		**Batch: 22A0540**		
Diesel	**2330**	---	81.6	ug/L	1	01/18/22 00:14	NWTPH-Dx LL	**F-20**
Oil	ND	---	163	ug/L	1	01/18/22 00:14	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*	*Limits: 50-150 %*		*1*	*01/18/22 00:14*	*NWTPH-Dx LL*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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
HC01-W (A2A0593-01)				**Matrix: Water**		**Batch: 22A0645**		
Gasoline Range Organics	**771**	---	100	ug/L	1	01/19/22 19:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*	*Limits: 50-150 %*		*1*	*01/19/22 19:33*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*105 %*	*50-150 %*	*1*	*01/19/22 19:33*	*NWTPH-Gx (MS)*	
HC04-W (A2A0593-02)				**Matrix: Water**		**Batch: 22A0592**		
Gasoline Range Organics	ND	---	100	ug/L	1	01/18/22 23:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*01/18/22 23:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*109 %*	*50-150 %*	*1*	*01/18/22 23:19*	*NWTPH-Gx (MS)*	
HC06-W (A2A0593-03)				**Matrix: Water**		**Batch: 22A0592**		
Gasoline Range Organics	ND	---	100	ug/L	1	01/18/22 23:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*1*	*01/18/22 23:46*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*109 %*	*50-150 %*	*1*	*01/18/22 23:46*	*NWTPH-Gx (MS)*	
HC07-W (A2A0593-04)				**Matrix: Water**		**Batch: 22A0592**		
Gasoline Range Organics	**408**	---	100	ug/L	1	01/19/22 00:12	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*	*Limits: 50-150 %*		*1*	*01/19/22 00:12*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*01/19/22 00:12*	*NWTPH-Gx (MS)*	
HC08-W (A2A0593-05RE1)				**Matrix: Water**		**Batch: 22A0705**		
Gasoline Range Organics	**17400**	---	2000	ug/L	20	01/20/22 12:02	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*	*Limits: 50-150 %*		*1*	*01/20/22 12:02*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*104 %*	*50-150 %*	*1*	*01/20/22 12:02*	*NWTPH-Gx (MS)*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC04-W (A2A0593-02)				**Matrix: Water**		**Batch: 22A0592**		
Benzene	ND	---	0.200	ug/L	1	01/18/22 23:19	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	01/18/22 23:19	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	01/18/22 23:19	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	01/18/22 23:19	EPA 8260D	
Naphthalene	ND	---	2.00	ug/L	1	01/18/22 23:19	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits: 80-120 %*	*1*	*01/18/22 23:19*	*EPA 8260D*	
Toluene-d8 (Surr)			*106 %*	*80-120 %*	*1*	*01/18/22 23:19*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*01/18/22 23:19*	*EPA 8260D*	
HC06-W (A2A0593-03)				**Matrix: Water**		**Batch: 22A0592**		
Benzene	ND	---	0.200	ug/L	1	01/18/22 23:46	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	01/18/22 23:46	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	01/18/22 23:46	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	01/18/22 23:46	EPA 8260D	
Naphthalene	ND	---	2.00	ug/L	1	01/18/22 23:46	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits: 80-120 %*	*1*	*01/18/22 23:46*	*EPA 8260D*	
Toluene-d8 (Surr)			*106 %*	*80-120 %*	*1*	*01/18/22 23:46*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*01/18/22 23:46*	*EPA 8260D*	
HC07-W (A2A0593-04)				**Matrix: Water**		**Batch: 22A0592**		
Benzene	ND	---	0.200	ug/L	1	01/19/22 00:12	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	01/19/22 00:12	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	01/19/22 00:12	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	01/19/22 00:12	EPA 8260D	
Naphthalene	ND	---	2.00	ug/L	1	01/19/22 00:12	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/19/22 00:12*	*EPA 8260D*	
Toluene-d8 (Surr)			*104 %*	*80-120 %*	*1*	*01/19/22 00:12*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*	*1*	*01/19/22 00:12*	*EPA 8260D*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC01-W (A2A0593-01)				**Matrix: Water**		**Batch: 22A0645**		
Benzene	**3.94**	---	0.200	ug/L	1	01/19/22 19:33	EPA 8260D	
Toluene	**22.3**	---	1.00	ug/L	1	01/19/22 19:33	EPA 8260D	
Ethylbenzene	**2.11**	---	0.500	ug/L	1	01/19/22 19:33	EPA 8260D	
Xylenes, total	**23.3**	---	1.50	ug/L	1	01/19/22 19:33	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	01/19/22 19:33	EPA 8260D	
Naphthalene	ND	---	4.00	ug/L	1	01/19/22 19:33	EPA 8260D	R-02
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	01/19/22 19:33	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	01/19/22 19:33	EPA 8260D	
Isopropylbenzene	ND	---	1.00	ug/L	1	01/19/22 19:33	EPA 8260D	
1,3,5-Trimethylbenzene	**1.82**	---	1.00	ug/L	1	01/19/22 19:33	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*	*01/19/22 19:33*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*		*80-120 %*	*01/19/22 19:33*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*	*01/19/22 19:33*	*EPA 8260D*	
HC01-W (A2A0593-01RE1)				**Matrix: Water**		**Batch: 22A0912**		
Benzene	**3.83**	---	0.200	ug/L	1	01/26/22 18:59	EPA 8260D	
1,2,4-Trimethylbenzene	**3.41**	---	1.00	ug/L	1	01/26/22 18:59	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits:*	*80-120 %*	*01/26/22 18:59*	*EPA 8260D*	
Toluene-d8 (Surr)			*101 %*		*80-120 %*	*01/26/22 18:59*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*	*01/26/22 18:59*	*EPA 8260D*	
HC08-W (A2A0593-05)				**Matrix: Water**		**Batch: 22A0645**		
Toluene	**48.0**	---	1.00	ug/L	1	01/19/22 20:00	EPA 8260D	
Methyl tert-butyl ether (MTBE)	**1.52**	---	1.00	ug/L	1	01/19/22 20:00	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	01/19/22 20:00	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	01/19/22 20:00	EPA 8260D	
Isopropylbenzene	**87.4**	---	1.00	ug/L	1	01/19/22 20:00	EPA 8260D	
1,3,5-Trimethylbenzene	**144**	---	1.00	ug/L	1	01/19/22 20:00	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits:*	*80-120 %*	*01/19/22 20:00*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*		*80-120 %*	*01/19/22 20:00*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*	*01/19/22 20:00*	*EPA 8260D*	
HC08-W (A2A0593-05RE1)				**Matrix: Water**		**Batch: 22A0705**		
Benzene	**202**	---	4.00	ug/L	20	01/20/22 12:02	EPA 8260D	
Ethylbenzene	**910**	---	10.0	ug/L	20	01/20/22 12:02	EPA 8260D	
Xylenes, total	**581**	---	30.0	ug/L	20	01/20/22 12:02	EPA 8260D	
Naphthalene	**181**	---	40.0	ug/L	20	01/20/22 12:02	EPA 8260D	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC08-W (A2A0593-05RE1)				**Matrix: Water**		**Batch: 22A0705**		
1,2,4-Trimethylbenzene	**584**	---	20.0	ug/L	20	01/20/22 12:02	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits: 80-120 %*	*1*	*01/20/22 12:02*	*EPA 8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*01/20/22 12:02*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*80-120 %*	*1*	*01/20/22 12:02*	*EPA 8260D*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC01-W (A2A0593-01)				**Matrix: Water**		**Batch: 22A0587**		
Acenaphthene	ND	---	1.49	ug/L	10	01/18/22 18:33	EPA 8270E SIM	R-02
Acenaphthylene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Anthracene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Benz(a)anthracene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Chrysene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Fluoranthene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Fluorene	**2.82**	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
1-Methylnaphthalene	**6.49**	---	0.851	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	0.851	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Naphthalene	ND	---	1.06	ug/L	10	01/18/22 18:33	EPA 8270E SIM	R-02
Phenanthrene	**0.984**	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Pyrene	**0.613**	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Dibenzofuran	**1.21**	---	0.426	ug/L	10	01/18/22 18:33	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*82 %*	*Limits: 44-120 %*	*10*	*01/18/22 18:33*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*70 %*	*50-134 %*	*10*	*01/18/22 18:33*	*EPA 8270E SIM*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC08-W (A2A0593-05)				**Matrix: Water**				
Batch: 22B0257								
Lead	**23.1**	---	0.200	ug/L	1	02/08/22 15:47	EPA 200.8	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0540 - EPA 3510C (Fuels/Acid Ext.)												**Water**
Blank (22A0540-BLK1)		Prepared: 01/17/22 07:19		Analyzed: 01/17/22 21:32								
NWTPH-Dx LL												
Diesel	ND	---	72.7	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	145	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 109 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (22A0540-BS1)		Prepared: 01/17/22 07:19		Analyzed: 01/17/22 21:52								
NWTPH-Dx LL												
Diesel	477	---	80.0	ug/L	1	500	---	95	36 - 132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 103 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS Dup (22A0540-BSD1)		Prepared: 01/17/22 07:19		Analyzed: 01/17/22 22:13								**Q-19**
NWTPH-Dx LL												
Diesel	503	---	80.0	ug/L	1	500	---	101	36 - 132%	5	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 109 %*		*Limits: 50-150 %*			*Dilution: 1x*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0592 - EPA 5030B									Water			
Blank (22A0592-BLK1)		Prepared: 01/18/22 10:56		Analyzed: 01/18/22 15:17								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 92 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*105 %*	*50-150 %*			*"*					
LCS (22A0592-BS2)		Prepared: 01/18/22 10:56		Analyzed: 01/18/22 14:24								
NWTPH-Gx (MS)												
Gasoline Range Organics	563	---	100	ug/L	1	500	---	113	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0645 - EPA 5030B									Water			
Blank (22A0645-BLK1)		Prepared: 01/19/22 08:25		Analyzed: 01/19/22 10:11								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*107 %*		*50-150 %*			*"*				
LCS (22A0645-BS2)		Prepared: 01/19/22 08:25		Analyzed: 01/19/22 09:18								
NWTPH-Gx (MS)												
Gasoline Range Organics	542	---	100	ug/L	1	500	---	108	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 98 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*105 %*		*50-150 %*			*"*				
Duplicate (22A0645-DUP2)		Prepared: 01/19/22 13:00		Analyzed: 01/19/22 20:27								
QC Source Sample: HC08-W (A2A0593-05)												
NWTPH-Gx (MS)												
Gasoline Range Organics	**14800**	---	100	ug/L	1	---	15000	---	---	0.8	30%	E
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*104 %*		*50-150 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0705 - EPA 5030B									Water			
Blank (22A0705-BLK1)		Prepared: 01/20/22 08:02		Analyzed: 01/20/22 11:35								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*104 %*	*50-150 %*			*"*					
LCS (22A0705-BS2)		Prepared: 01/20/22 08:02		Analyzed: 01/20/22 10:41								
NWTPH-Gx (MS)												
Gasoline Range Organics	546	---	100	ug/L	1	500	---	109	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 98 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*104 %*	*50-150 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0592 - EPA 5030B							**Water**					
Blank (22A0592-BLK1)		Prepared: 01/18/22 10:56		Analyzed: 01/18/22 15:17								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 101 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*104 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*103 %*		*80-120 %*			*"*					
LCS (22A0592-BS1)		Prepared: 01/18/22 10:56		Analyzed: 01/18/22 13:57								
EPA 8260D												
Benzene	20.2	---	0.200	ug/L	1	20.0	---	101	80 - 120%	---	---	
Toluene	20.2	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
Ethylbenzene	20.5	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Xylenes, total	59.7	---	1.50	ug/L	1	60.0	---	100	80 - 120%	---	---	
Naphthalene	17.6	---	2.00	ug/L	1	20.0	---	88	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 100 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*103 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*94 %*		*80-120 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0645 - EPA 5030B							**Water**					
Blank (22A0645-BLK1)		Prepared: 01/19/22 08:25		Analyzed: 01/19/22 10:11								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*105 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
LCS (22A0645-BS1)		Prepared: 01/19/22 08:25		Analyzed: 01/19/22 08:47								
EPA 8260D												
Benzene	19.4	---	0.200	ug/L	1	20.0	---	97	80 - 120%	---	---	
Toluene	19.4	---	1.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
Ethylbenzene	19.5	---	0.500	ug/L	1	20.0	---	98	80 - 120%	---	---	
Xylenes, total	57.6	---	1.50	ug/L	1	60.0	---	96	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	18.2	---	1.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
Naphthalene	16.7	---	2.00	ug/L	1	20.0	---	84	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	20.1	---	0.500	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	20.1	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Isopropylbenzene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
1,2,4-Trimethylbenzene	20.9	---	1.00	ug/L	1	20.0	---	105	80 - 120%	---	---	
1,3,5-Trimethylbenzene	21.1	---	1.00	ug/L	1	20.0	---	106	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				
Duplicate (22A0645-DUP2)		Prepared: 01/19/22 13:00		Analyzed: 01/19/22 20:27								

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0645 - EPA 5030B												**Water**
Duplicate (22A0645-DUP2)		Prepared: 01/19/22 13:00 Analyzed: 01/19/22 20:27										
QC Source Sample: HC08-W (A2A0593-05)												
EPA 8260D												
Benzene	**211**	---	0.200	ug/L	1	---	213	---	---	0.8	30%	E
Toluene	**47.0**	---	1.00	ug/L	1	---	48.0	---	---	2	30%	
Ethylbenzene	**863**	---	0.500	ug/L	1	---	880	---	---	2	30%	E
Xylenes, total	**611**	---	1.50	ug/L	1	---	637	---	---	4	30%	E
Methyl tert-butyl ether (MTBE)	**1.53**	---	1.00	ug/L	1	---	1.52	---	---	1	30%	
Naphthalene	**216**	---	2.00	ug/L	1	---	214	---	---	0.8	30%	E
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	---	ND	---	---	---	30%	
Isopropylbenzene	**87.4**	---	1.00	ug/L	1	---	87.4	---	---	0.006	30%	
1,2,4-Trimethylbenzene	**643**	---	1.00	ug/L	1	---	645	---	---	0.4	30%	E
1,3,5-Trimethylbenzene	**145**	---	1.00	ug/L	1	---	144	---	---	0.7	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0705 - EPA 5030B							**Water**					
Blank (22A0705-BLK1)		Prepared: 01/20/22 08:02		Analyzed: 01/20/22 11:35								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*105 %*		*80-120 %*			*"*				
LCS (22A0705-BS1)		Prepared: 01/20/22 08:02		Analyzed: 01/20/22 10:10								
EPA 8260D												
Benzene	20.3	---	0.200	ug/L	1	20.0	---	101	80 - 120%	---	---	
Toluene	20.0	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
Ethylbenzene	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Xylenes, total	59.2	---	1.50	ug/L	1	60.0	---	99	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	19.6	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
Naphthalene	18.7	---	2.00	ug/L	1	20.0	---	94	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	21.1	---	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	20.6	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Isopropylbenzene	19.7	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
1,2,4-Trimethylbenzene	21.7	---	1.00	ug/L	1	20.0	---	109	80 - 120%	---	---	
1,3,5-Trimethylbenzene	21.6	---	1.00	ug/L	1	20.0	---	108	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0912 - EPA 5030B							**Water**					
Blank (22A0912-BLK1)		Prepared: 01/26/22 07:30		Analyzed: 01/26/22 09:37								
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*			*"*				
LCS (22A0912-BS1)		Prepared: 01/26/22 07:30		Analyzed: 01/26/22 08:37								
EPA 8260D												
Benzene	20.0	---	0.200	ug/L	1	20.0	---	100	80 - 120%	---	---	
Toluene	19.5	---	1.00	ug/L	1	20.0	---	98	80 - 120%	---	---	
Ethylbenzene	19.6	---	0.500	ug/L	1	20.0	---	98	80 - 120%	---	---	
Xylenes, total	57.2	---	1.50	ug/L	1	60.0	---	95	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	18.2	---	1.00	ug/L	1	20.0	---	91	80 - 120%	---	---	
Naphthalene	16.1	---	2.00	ug/L	1	20.0	---	81	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	20.0	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	20.1	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
Isopropylbenzene	19.4	---	1.00	ug/L	1	20.0	---	97	80 - 120%	---	---	
1,2,4-Trimethylbenzene	20.8	---	1.00	ug/L	1	20.0	---	104	80 - 120%	---	---	
1,3,5-Trimethylbenzene	20.7	---	1.00	ug/L	1	20.0	---	103	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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 22A0587 - EPA 3510C (Acid Extraction)									Water			
Blank (22A0587-BLK1)		Prepared: 01/18/22 07:08		Analyzed: 01/18/22 16:53								
EPA 8270E SIM												
Acenaphthene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 77 %*	*Limits: 44-120 %*				*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*86 %*	*50-134 %*				*"*				
LCS (22A0587-BS1)		Prepared: 01/18/22 07:08		Analyzed: 01/18/22 17:18								
EPA 8270E SIM												
Acenaphthene	3.05	---	0.0200	ug/L	1	4.00	---	76	47 - 122%	---	---	
Acenaphthylene	3.08	---	0.0200	ug/L	1	4.00	---	77	41 - 130%	---	---	
Anthracene	3.17	---	0.0200	ug/L	1	4.00	---	79	57 - 123%	---	---	
Benz(a)anthracene	3.36	---	0.0200	ug/L	1	4.00	---	84	58 - 125%	---	---	
Benzo(a)pyrene	3.48	---	0.0200	ug/L	1	4.00	---	87	54 - 128%	---	---	
Benzo(b)fluoranthene	3.64	---	0.0200	ug/L	1	4.00	---	91	53 - 131%	---	---	
Benzo(k)fluoranthene	3.68	---	0.0200	ug/L	1	4.00	---	92	57 - 129%	---	---	
Benzo(g,h,i)perylene	2.66	---	0.0200	ug/L	1	4.00	---	66	50 - 134%	---	---	
Chrysene	3.24	---	0.0200	ug/L	1	4.00	---	81	59 - 123%	---	---	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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 22A0587 - EPA 3510C (Acid Extraction)							**Water**					
LCS (22A0587-BS1)		Prepared: 01/18/22 07:08		Analyzed: 01/18/22 17:18								
Dibenz(a,h)anthracene	3.51	---	0.0200	ug/L	1	4.00	---	88	51 - 134%	---	---	
Fluoranthene	3.41	---	0.0200	ug/L	1	4.00	---	85	57 - 128%	---	---	
Fluorene	3.09	---	0.0200	ug/L	1	4.00	---	77	52 - 124%	---	---	
Indeno(1,2,3-cd)pyrene	2.83	---	0.0200	ug/L	1	4.00	---	71	52 - 134%	---	---	
1-Methylnaphthalene	2.76	---	0.0400	ug/L	1	4.00	---	69	41 - 120%	---	---	
2-Methylnaphthalene	2.60	---	0.0400	ug/L	1	4.00	---	65	40 - 121%	---	---	
Naphthalene	2.78	---	0.0400	ug/L	1	4.00	---	69	40 - 121%	---	---	
Phenanthrene	3.12	---	0.0200	ug/L	1	4.00	---	78	59 - 120%	---	---	
Pyrene	3.36	---	0.0200	ug/L	1	4.00	---	84	57 - 126%	---	---	
Dibenzofuran	3.06	---	0.0200	ug/L	1	4.00	---	77	53 - 120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		*Recovery: 85 %*		*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*94 %*		*50-134 %*		*"*					
LCS Dup (22A0587-BSD1)		Prepared: 01/18/22 07:08		Analyzed: 01/18/22 17:43								**Q-19**
EPA 8270E SIM												
Acenaphthene	3.00	---	0.0200	ug/L	1	4.00	---	75	47 - 122%	2	30%	
Acenaphthylene	3.09	---	0.0200	ug/L	1	4.00	---	77	41 - 130%	0.6	30%	
Anthracene	3.14	---	0.0200	ug/L	1	4.00	---	79	57 - 123%	0.9	30%	
Benz(a)anthracene	3.31	---	0.0200	ug/L	1	4.00	---	83	58 - 125%	1	30%	
Benzo(a)pyrene	3.46	---	0.0200	ug/L	1	4.00	---	86	54 - 128%	0.6	30%	
Benzo(b)fluoranthene	3.57	---	0.0200	ug/L	1	4.00	---	89	53 - 131%	2	30%	
Benzo(k)fluoranthene	3.66	---	0.0200	ug/L	1	4.00	---	92	57 - 129%	0.4	30%	
Benzo(g,h,i)perylene	2.70	---	0.0200	ug/L	1	4.00	---	67	50 - 134%	1	30%	
Chrysene	3.23	---	0.0200	ug/L	1	4.00	---	81	59 - 123%	0.4	30%	
Dibenz(a,h)anthracene	3.34	---	0.0200	ug/L	1	4.00	---	84	51 - 134%	5	30%	
Fluoranthene	3.30	---	0.0200	ug/L	1	4.00	---	83	57 - 128%	3	30%	
Fluorene	3.05	---	0.0200	ug/L	1	4.00	---	76	52 - 124%	1	30%	
Indeno(1,2,3-cd)pyrene	2.82	---	0.0200	ug/L	1	4.00	---	70	52 - 134%	0.4	30%	
1-Methylnaphthalene	2.77	---	0.0400	ug/L	1	4.00	---	69	41 - 120%	0.6	30%	
2-Methylnaphthalene	2.62	---	0.0400	ug/L	1	4.00	---	65	40 - 121%	0.6	30%	
Naphthalene	2.79	---	0.0400	ug/L	1	4.00	---	70	40 - 121%	0.6	30%	
Phenanthrene	3.09	---	0.0200	ug/L	1	4.00	---	77	59 - 120%	0.8	30%	
Pyrene	3.26	---	0.0200	ug/L	1	4.00	---	82	57 - 126%	3	30%	
Dibenzofuran	3.03	---	0.0200	ug/L	1	4.00	---	76	53 - 120%	1	30%	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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 22A0587 - EPA 3510C (Acid Extraction)												**Water**
LCS Dup (22A0587-BSD1)			Prepared: 01/18/22 07:08 Analyzed: 01/18/22 17:43									**Q-19**
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 79 %*		*Limits: 44-120 %*							*Dilution: 1x*
p-Terphenyl-d14 (Surr)			*89 %*		*50-134 %*							*"*

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22B0257 - EPA 3015A							**Water**					
Blank (22B0257-BLK1)		Prepared: 02/07/22 10:18		Analyzed: 02/08/22 15:38								
EPA 200.8												
Lead	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
LCS (22B0257-BS1)		Prepared: 02/07/22 10:18		Analyzed: 02/08/22 15:43								
EPA 200.8												
Lead	54.5	---	0.200	ug/L	1	55.6	---	98	85 - 115%	---	---	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

SAMPLE PREPARATION INFORMATION

Diesel and/or 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: 22A0540							
A2A0593-01	Water	NWTPH-Dx LL	01/12/22 09:45	01/17/22 12:28	990mL/2mL	1000mL/2mL	1.01
A2A0593-02	Water	NWTPH-Dx LL	01/13/22 09:00	01/17/22 12:28	1060mL/2mL	1000mL/2mL	0.94
A2A0593-03	Water	NWTPH-Dx LL	01/14/22 07:25	01/17/22 12:28	920mL/2mL	1000mL/2mL	1.09
A2A0593-04	Water	NWTPH-Dx LL	01/14/22 07:45	01/17/22 12:28	1060mL/2mL	1000mL/2mL	0.94
A2A0593-05	Water	NWTPH-Dx LL	01/13/22 15:00	01/17/22 12:28	980mL/2mL	1000mL/2mL	1.02

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: 22A0592							
A2A0593-02	Water	NWTPH-Gx (MS)	01/13/22 09:00	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00
A2A0593-03	Water	NWTPH-Gx (MS)	01/14/22 07:25	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00
A2A0593-04	Water	NWTPH-Gx (MS)	01/14/22 07:45	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00
Batch: 22A0645							
A2A0593-01	Water	NWTPH-Gx (MS)	01/12/22 09:45	01/19/22 13:00	5mL/5mL	5mL/5mL	1.00
Batch: 22A0705							
A2A0593-05RE1	Water	NWTPH-Gx (MS)	01/13/22 15:00	01/20/22 08:30	5mL/5mL	5mL/5mL	1.00

BTEX+N Compounds by EPA 8260D

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0592							
A2A0593-02	Water	EPA 8260D	01/13/22 09:00	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00
A2A0593-03	Water	EPA 8260D	01/14/22 07:25	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00
A2A0593-04	Water	EPA 8260D	01/14/22 07:45	01/18/22 10:56	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0645							
A2A0593-01	Water	EPA 8260D	01/12/22 09:45	01/19/22 13:00	5mL/5mL	5mL/5mL	1.00
A2A0593-05	Water	EPA 8260D	01/13/22 15:00	01/19/22 13:00	5mL/5mL	5mL/5mL	1.00

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

SAMPLE PREPARATION INFORMATION

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0705							
A2A0593-05RE1	Water	EPA 8260D	01/13/22 15:00	01/20/22 08:30	5mL/5mL	5mL/5mL	1.00
Batch: 22A0912							
A2A0593-01RE1	Water	EPA 8260D	01/12/22 09:45	01/26/22 07:30	5mL/5mL	5mL/5mL	1.00

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

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0587							
A2A0593-01	Water	EPA 8270E SIM	01/12/22 09:45	01/18/22 07:08	940mL/2mL	1000mL/2mL	1.06

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22B0257							
A2A0593-05	Water	EPA 200.8	01/13/22 15:00	02/07/22 10:18	45mL/50mL	45mL/50mL	1.00

Apex Laboratories

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

E	Estimated Value. The result is above the calibration range of the instrument.
F-11	The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
F-20	Result for Diesel is Estimated due to overlap from Gasoline Range Organics or other VOCs.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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.
For further details, please request a copy of this document.

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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 time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

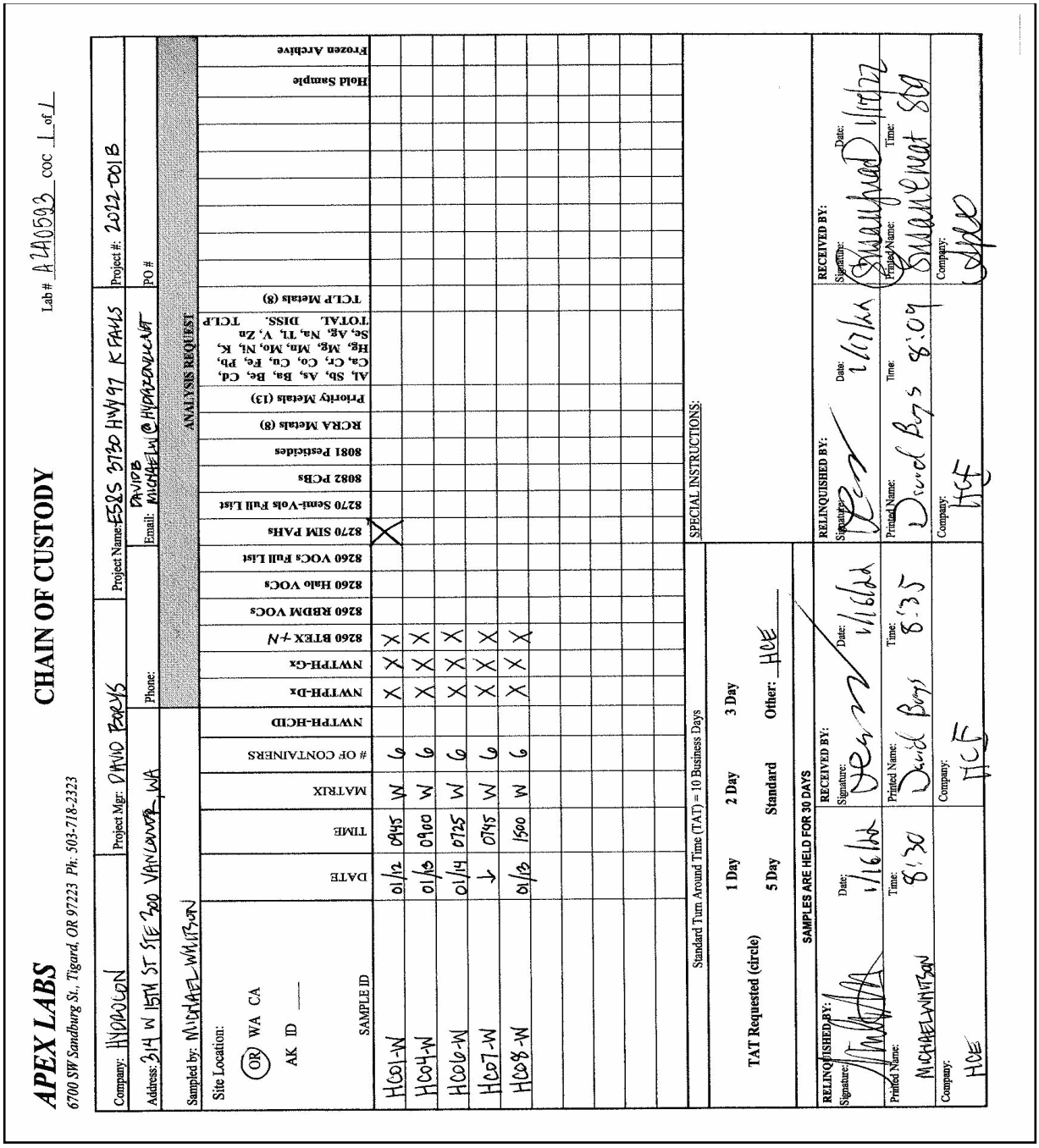
Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph. 503-718-2323

CHAIN OF CUSTODY

Lab # A2A0593 COC 1 of 1

Company: HYDROCON | Project Mgr: DAVID BORYS | Project Name: ES&S 3730 HWY 97 K FALLS | Project #: 2022-001B
Address: 314 W 15TH ST STE 300 VANCOUVER, WA | Phone: | Email: DAVIDB MICHAELW @ HYDROCON.NET | PO #
Sampled by: MICHAEL WHITSON

Site Location: (OR) WA CA AK ID ____

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX +N	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
HC01-W	01/12	0945	W	6		X	X	X				X									
HC04-W	01/13	0900	W	6		X	X	X													
HC06-W	01/14	0725	W	6		X	X	X													
HC07-W	↓	0745	W	6		X	X	X													
HC08-W	01/13	1600	W	6		X	X	X													

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: HOE

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: [illegible] Date: 1/16/22 Time: 8:30 Printed Name: MICHAEL WHITSON Company: HOE

RECEIVED BY: Signature: [illegible] Date: 1/16/22 Time: 8:35 Printed Name: Dave Borys Company: HCE

RELINQUISHED BY: Signature: [illegible] Date: 1/17/22 Time: 8:09 Printed Name: Dave Borys Company: HCE

RECEIVED BY: Signature: [illegible] Date: 1/17/22 Time: 8:09 Printed Name: SHANE NEAT Company: Apex

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S-3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0593 - 02 09 22 1156**

APEX LABS COOLER RECEIPT FORM

Client: Hydrocon Element WO#: A2A0593

Project/Project #: ~~3730~~ @ 1/19/22 ES+S 3730 Hwy 97 K Falls / 2022-001B

Delivery Info:

Date/time received: 1/19/22 @ 809 By: SO

Delivered by: Apex____ Client X ESS____ FedEx____ UPS____ Swift____ Senvoy____ SDS____ Other_____

Cooler Inspection Date/time inspected: 1/19/22 @ 819 By: SO

Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No _____

Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.3	3.3					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	real	real					
Condition:	good	good					

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

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 1/19/22 @ 1123 By: SO

All samples intact? Yes X No ___ Comments:_____

Bottle labels/COCs agree? Yes X No ___ Comments: No date/time on IL UP anubers HC06-W + HC07-W

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments Sed in 3/3 VOAs HC01-W

Water samples: pH checked: Yes X No___NA___ pH appropriate? Yes✓ No___NA____

Comments: _____

Additional information: _____

Labeled by: SO Witness: HAS Cooler Inspected by: SO

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

Tuesday, February 8, 2022

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

RE: A2A0602 - ES&S 3730 HWY 97 K Falls - 2022-001 B

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 A2A0602, which was received by the laboratory on 1/17/2022 at 8:09:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: cobrien@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	0.3 degC

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

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HC01-5.0	A2A0602-01	Soil	01/12/22 09:15	01/17/22 08:09
HC01-10.0	A2A0602-02	Soil	01/12/22 09:20	01/17/22 08:09
HC02-4.0	A2A0602-03	Soil	01/12/22 10:00	01/17/22 08:09
HC03-4.0	A2A0602-04	Soil	01/12/22 11:55	01/17/22 08:09
HC04-10.0	A2A0602-05	Soil	01/12/22 13:15	01/17/22 08:09
HC05-20.0	A2A0602-06	Soil	01/12/22 16:00	01/17/22 08:09
HC06-15.0	A2A0602-07	Soil	01/13/22 10:45	01/17/22 08:09
HC07-10.0	A2A0602-08	Soil	01/13/22 13:15	01/17/22 08:09
HC08-5.0	A2A0602-09	Soil	01/13/22 14:30	01/17/22 08:09

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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
HC01-5.0 (A2A0602-01)				**Matrix: Soil**		**Batch: 22A0625**		
Diesel	**3370**	---	31.7	mg/kg dry	1	01/19/22 00:01	NWTPH-Dx	
Oil	ND	---	63.3	mg/kg dry	1	01/19/22 00:01	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 92 %*		*Limits: 50-150 %*	*1*	*01/19/22 00:01*	*NWTPH-Dx*	
HC01-10.0 (A2A0602-02)				**Matrix: Soil**		**Batch: 22A0570**		
Diesel	**80.4**	---	46.8	mg/kg dry	1	01/18/22 00:53	NWTPH-Dx	
Oil	ND	---	93.5	mg/kg dry	1	01/18/22 00:53	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 66 %*		*Limits: 50-150 %*	*1*	*01/18/22 00:53*	*NWTPH-Dx*	
HC02-4.0 (A2A0602-03)				**Matrix: Soil**		**Batch: 22A0570**		
Diesel	ND	---	25.0	mg/kg dry	1	01/18/22 01:16	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	01/18/22 01:16	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 81 %*		*Limits: 50-150 %*	*1*	*01/18/22 01:16*	*NWTPH-Dx*	
HC03-4.0 (A2A0602-04)				**Matrix: Soil**		**Batch: 22A0570**		
Diesel	ND	---	25.0	mg/kg dry	1	01/18/22 01:38	NWTPH-Dx	
Oil	ND	---	50.0	mg/kg dry	1	01/18/22 01:38	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 72 %*		*Limits: 50-150 %*	*1*	*01/18/22 01:38*	*NWTPH-Dx*	
HC04-10.0 (A2A0602-05)				**Matrix: Soil**		**Batch: 22A0570**		
Diesel	ND	---	43.0	mg/kg dry	1	01/18/22 02:00	NWTPH-Dx	
Oil	ND	---	86.0	mg/kg dry	1	01/18/22 02:00	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 60 %*		*Limits: 50-150 %*	*1*	*01/18/22 02:00*	*NWTPH-Dx*	
HC05-20.0 (A2A0602-06)				**Matrix: Soil**		**Batch: 22A0583**		
Diesel	ND	---	39.8	mg/kg dry	1	01/17/22 22:16	NWTPH-Dx	
Oil	ND	---	79.6	mg/kg dry	1	01/17/22 22:16	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 65 %*		*Limits: 50-150 %*	*1*	*01/17/22 22:16*	*NWTPH-Dx*	
HC06-15.0 (A2A0602-07)				**Matrix: Soil**		**Batch: 22A0583**		
Diesel	ND	---	43.9	mg/kg dry	1	01/17/22 22:59	NWTPH-Dx	
Oil	ND	---	87.7	mg/kg dry	1	01/17/22 22:59	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 68 %*		*Limits: 50-150 %*	*1*	*01/17/22 22:59*	*NWTPH-Dx*	
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0583**		
Diesel	**64.4**	---	39.6	mg/kg dry	1	01/17/22 23:20	NWTPH-Dx	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0583**		
Oil	**89.6**	---	79.1	mg/kg dry	1	01/17/22 23:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)			*Recovery: 78 %*	*Limits: 50-150 %*	*1*	*01/17/22 23:20*	*NWTPH-Dx*	
HC08-5.0 (A2A0602-09RE2)				**Matrix: Soil**		**Batch: 22A0583**		
Diesel	ND	---	25.2	mg/kg dry	1	01/18/22 09:46	NWTPH-Dx	
Oil	**167**	---	50.5	mg/kg dry	1	01/18/22 09:46	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)			*Recovery: 82 %*	*Limits: 50-150 %*	*1*	*01/18/22 09:46*	*NWTPH-Dx*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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
HC01-5.0 (A2A0602-01RE1)				**Matrix: Soil**		**Batch: 22A0591**		
Gasoline Range Organics	**231**	---	11.6	mg/kg dry	50	01/18/22 10:55	NWTPH-Gx (MS)	**F-09**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 158 %*	*Limits: 50-150 %*		*1*	*01/18/22 10:55*	*NWTPH-Gx (MS)*	*S-08*
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*01/18/22 10:55*	*NWTPH-Gx (MS)*	
HC01-10.0 (A2A0602-02)				**Matrix: Soil**		**Batch: 22A0552**		
Gasoline Range Organics	ND	---	22.9	mg/kg dry	50	01/17/22 18:59	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 122 %*	*Limits: 50-150 %*		*1*	*01/17/22 18:59*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*01/17/22 18:59*	*NWTPH-Gx (MS)*	
HC02-4.0 (A2A0602-03)				**Matrix: Soil**		**Batch: 22A0552**		
Gasoline Range Organics	**191**	---	7.15	mg/kg dry	50	01/17/22 19:26	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 115 %*	*Limits: 50-150 %*		*1*	*01/17/22 19:26*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*130 %*	*50-150 %*	*1*	*01/17/22 19:26*	*NWTPH-Gx (MS)*	
HC03-4.0 (A2A0602-04)				**Matrix: Soil**		**Batch: 22A0552**		
Gasoline Range Organics	ND	---	7.37	mg/kg dry	50	01/17/22 19:53	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 116 %*	*Limits: 50-150 %*		*1*	*01/17/22 19:53*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*101 %*	*50-150 %*	*1*	*01/17/22 19:53*	*NWTPH-Gx (MS)*	
HC04-10.0 (A2A0602-05)				**Matrix: Soil**		**Batch: 22A0552**		
Gasoline Range Organics	ND	---	23.9	mg/kg dry	50	01/17/22 20:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 121 %*	*Limits: 50-150 %*		*1*	*01/17/22 20:20*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*102 %*	*50-150 %*	*1*	*01/17/22 20:20*	*NWTPH-Gx (MS)*	
HC05-20.0 (A2A0602-06)				**Matrix: Soil**		**Batch: 22A0584**		
Gasoline Range Organics	ND	---	16.8	mg/kg dry	50	01/18/22 00:23	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 121 %*	*Limits: 50-150 %*		*1*	*01/18/22 00:23*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*103 %*	*50-150 %*	*1*	*01/18/22 00:23*	*NWTPH-Gx (MS)*	
HC06-15.0 (A2A0602-07)				**Matrix: Soil**		**Batch: 22A0584**		
Gasoline Range Organics	ND	---	17.9	mg/kg dry	50	01/18/22 01:17	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 124 %*	*Limits: 50-150 %*		*1*	*01/18/22 01:17*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*103 %*	*50-150 %*	*1*	*01/18/22 01:17*	*NWTPH-Gx (MS)*	
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0584**		
Gasoline Range Organics	**18.0**	---	15.2	mg/kg dry	50	01/18/22 02:11	NWTPH-Gx (MS)	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0584**		
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*127 %*	*Limits: 50-150 %*	*1*	*01/18/22 02:11*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*104 %*	*50-150 %*	*1*	*01/18/22 02:11*	*NWTPH-Gx (MS)*	
HC08-5.0 (A2A0602-09)				**Matrix: Soil**		**Batch: 22A0584**		
Gasoline Range Organics	**10.8**	---	5.98	mg/kg dry	50	01/18/22 02:38	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*123 %*	*Limits: 50-150 %*	*1*	*01/18/22 02:38*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*105 %*	*50-150 %*	*1*	*01/18/22 02:38*	*NWTPH-Gx (MS)*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC01-10.0 (A2A0602-02)				**Matrix: Soil**		**Batch: 22A0552**		
Benzene	ND	---	0.0459	mg/kg dry	50	01/17/22 18:59	5035A/8260D	
Toluene	ND	---	0.229	mg/kg dry	50	01/17/22 18:59	5035A/8260D	
Ethylbenzene	ND	---	0.115	mg/kg dry	50	01/17/22 18:59	5035A/8260D	
Xylenes, total	ND	---	0.344	mg/kg dry	50	01/17/22 18:59	5035A/8260D	
Naphthalene	ND	---	0.459	mg/kg dry	50	01/17/22 18:59	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/17/22 18:59*	*5035A/8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*01/17/22 18:59*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*	*1*	*01/17/22 18:59*	*5035A/8260D*	
HC02-4.0 (A2A0602-03)				**Matrix: Soil**		**Batch: 22A0552**		
Benzene	ND	---	0.0143	mg/kg dry	50	01/17/22 19:26	5035A/8260D	
Toluene	ND	---	0.0715	mg/kg dry	50	01/17/22 19:26	5035A/8260D	
Ethylbenzene	ND	---	0.0358	mg/kg dry	50	01/17/22 19:26	5035A/8260D	
Xylenes, total	ND	---	0.107	mg/kg dry	50	01/17/22 19:26	5035A/8260D	
Naphthalene	ND	---	0.143	mg/kg dry	50	01/17/22 19:26	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/17/22 19:26*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*01/17/22 19:26*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*	*1*	*01/17/22 19:26*	*5035A/8260D*	
HC03-4.0 (A2A0602-04)				**Matrix: Soil**		**Batch: 22A0552**		
Benzene	ND	---	0.0147	mg/kg dry	50	01/17/22 19:53	5035A/8260D	
Toluene	ND	---	0.0737	mg/kg dry	50	01/17/22 19:53	5035A/8260D	
Ethylbenzene	ND	---	0.0368	mg/kg dry	50	01/17/22 19:53	5035A/8260D	
Xylenes, total	ND	---	0.111	mg/kg dry	50	01/17/22 19:53	5035A/8260D	
Naphthalene	ND	---	0.147	mg/kg dry	50	01/17/22 19:53	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/17/22 19:53*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*01/17/22 19:53*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*	*1*	*01/17/22 19:53*	*5035A/8260D*	
HC04-10.0 (A2A0602-05)				**Matrix: Soil**		**Batch: 22A0552**		
Benzene	ND	---	0.0477	mg/kg dry	50	01/17/22 20:20	5035A/8260D	
Toluene	ND	---	0.239	mg/kg dry	50	01/17/22 20:20	5035A/8260D	
Ethylbenzene	ND	---	0.119	mg/kg dry	50	01/17/22 20:20	5035A/8260D	
Xylenes, total	ND	---	0.358	mg/kg dry	50	01/17/22 20:20	5035A/8260D	
Naphthalene	ND	---	0.477	mg/kg dry	50	01/17/22 20:20	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*01/17/22 20:20*	*5035A/8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*01/17/22 20:20*	*5035A/8260D*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

ANALYTICAL SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC04-10.0 (A2A0602-05)				**Matrix: Soil**		**Batch: 22A0552**		
Surrogate: 4-Bromofluorobenzene (Surr)		*Recovery: 102 %*	*Limits: 79-120 %*		*1*	*01/17/22 20:20*	*5035A/8260D*	
HC05-20.0 (A2A0602-06)				**Matrix: Soil**		**Batch: 22A0584**		
Benzene	ND	---	0.0336	mg/kg dry	50	01/18/22 00:23	5035A/8260D	
Toluene	ND	---	0.168	mg/kg dry	50	01/18/22 00:23	5035A/8260D	
Ethylbenzene	ND	---	0.0839	mg/kg dry	50	01/18/22 00:23	5035A/8260D	
Xylenes, total	ND	---	0.252	mg/kg dry	50	01/18/22 00:23	5035A/8260D	
Naphthalene	ND	---	0.336	mg/kg dry	50	01/18/22 00:23	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*	*Limits: 80-120 %*		*1*	*01/18/22 00:23*	*5035A/8260D*	
Toluene-d8 (Surr)		*98 %*	*80-120 %*		*1*	*01/18/22 00:23*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)		*100 %*	*79-120 %*		*1*	*01/18/22 00:23*	*5035A/8260D*	
HC06-15.0 (A2A0602-07)				**Matrix: Soil**		**Batch: 22A0584**		
Benzene	ND	---	0.0358	mg/kg dry	50	01/18/22 01:17	5035A/8260D	
Toluene	ND	---	0.179	mg/kg dry	50	01/18/22 01:17	5035A/8260D	
Ethylbenzene	ND	---	0.0896	mg/kg dry	50	01/18/22 01:17	5035A/8260D	
Xylenes, total	ND	---	0.269	mg/kg dry	50	01/18/22 01:17	5035A/8260D	
Naphthalene	ND	---	0.358	mg/kg dry	50	01/18/22 01:17	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*	*Limits: 80-120 %*		*1*	*01/18/22 01:17*	*5035A/8260D*	
Toluene-d8 (Surr)		*98 %*	*80-120 %*		*1*	*01/18/22 01:17*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)		*103 %*	*79-120 %*		*1*	*01/18/22 01:17*	*5035A/8260D*	
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0584**		
Benzene	ND	---	0.0303	mg/kg dry	50	01/18/22 02:11	5035A/8260D	
Toluene	ND	---	0.152	mg/kg dry	50	01/18/22 02:11	5035A/8260D	
Ethylbenzene	ND	---	0.0758	mg/kg dry	50	01/18/22 02:11	5035A/8260D	
Xylenes, total	ND	---	0.227	mg/kg dry	50	01/18/22 02:11	5035A/8260D	
Naphthalene	ND	---	0.303	mg/kg dry	50	01/18/22 02:11	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*	*Limits: 80-120 %*		*1*	*01/18/22 02:11*	*5035A/8260D*	
Toluene-d8 (Surr)		*98 %*	*80-120 %*		*1*	*01/18/22 02:11*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)		*101 %*	*79-120 %*		*1*	*01/18/22 02:11*	*5035A/8260D*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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
HC01-5.0 (A2A0602-01RE1)				**Matrix: Soil**		**Batch: 22A0591**		
Benzene	ND	---	0.0231	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Toluene	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Ethylbenzene	ND	---	0.0578	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Xylenes, total	ND	---	0.173	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Naphthalene	ND	---	0.491	mg/kg dry	50	01/18/22 10:55	5035A/8260D	R-02
1,2-Dibromoethane (EDB)	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0578	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Isopropylbenzene	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.116	mg/kg dry	50	01/18/22 10:55	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/18/22 10:55*	*5035A/8260D*	
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*1*	*01/18/22 10:55*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*	*1*	*01/18/22 10:55*	*5035A/8260D*	
HC08-5.0 (A2A0602-09)				**Matrix: Soil**		**Batch: 22A0584**		
Benzene	ND	---	0.0120	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Toluene	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Ethylbenzene	ND	---	0.0299	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Xylenes, total	ND	---	0.0897	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Naphthalene	**0.122**	---	0.120	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0299	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Isopropylbenzene	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0598	mg/kg dry	50	01/18/22 02:38	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*01/18/22 02:38*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*01/18/22 02:38*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*105 %*	*79-120 %*	*1*	*01/18/22 02:38*	*5035A/8260D*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

ANALYTICAL SAMPLE RESULTS

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

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC01-5.0 (A2A0602-01)				**Matrix: Soil**		**Batch: 22A0866**		
Acenaphthene	ND	---	0.488	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Acenaphthylene	ND	---	0.102	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Anthracene	ND	---	0.183	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Benz(a)anthracene	ND	---	0.0660	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Benzo(a)pyrene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Chrysene	ND	---	0.0711	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Dibenz(a,h)anthracene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Fluoranthene	**0.102**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Fluorene	**1.40**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
1-Methylnaphthalene	**1.02**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Naphthalene	ND	---	0.127	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	R-02
Phenanthrene	**0.691**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Pyrene	**0.779**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Dibenzofuran	**0.479**	---	0.0508	mg/kg dry	3	01/25/22 21:00	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*65 %*	*Limits: 44-120 %*	*3*	*01/25/22 21:00*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*72 %*	*54-127 %*	*3*	*01/25/22 21:00*	*EPA 8270E SIM*	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HC01-5.0 (A2A0602-01)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**58.1**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC01-10.0 (A2A0602-02)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**42.6**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC02-4.0 (A2A0602-03)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**86.0**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC03-4.0 (A2A0602-04)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**81.6**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC04-10.0 (A2A0602-05)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**44.0**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC05-20.0 (A2A0602-06)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**48.3**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC06-15.0 (A2A0602-07)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**45.2**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC07-10.0 (A2A0602-08)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**50.1**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	
HC08-5.0 (A2A0602-09)				**Matrix: Soil**		**Batch: 22A0694**		
% Solids	**79.1**	---	1.00	%	1	01/20/22 10:22	EPA 8000D	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0570 - EPA 3546 (Fuels)									Soil			
Blank (22A0570-BLK1)			Prepared: 01/17/22 13:10		Analyzed: 01/17/22 21:32							
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 74 %*		*Limits: 50-150 %*			*Dilution: 1x*				
LCS (22A0570-BS1)			Prepared: 01/17/22 13:10		Analyzed: 01/17/22 21:55							
NWTPH-Dx												
Diesel	88.9	---	25.0	mg/kg wet	1	125	---	71	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 72 %*		*Limits: 50-150 %*			*Dilution: 1x*				
Batch 22A0583 - EPA 3546 (Fuels)									Soil			
Blank (22A0583-BLK1)			Prepared: 01/17/22 17:05		Analyzed: 01/17/22 21:33							
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 83 %*		*Limits: 50-150 %*			*Dilution: 1x*				
LCS (22A0583-BS1)			Prepared: 01/17/22 17:05		Analyzed: 01/17/22 21:55							
NWTPH-Dx												
Diesel	99.7	---	25.0	mg/kg wet	1	125	---	80	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 87 %*		*Limits: 50-150 %*			*Dilution: 1x*				
Duplicate (22A0583-DUP1)			Prepared: 01/17/22 17:05		Analyzed: 01/17/22 22:37							
QC Source Sample: HC05-20.0 (A2A0602-06)												
NWTPH-Dx												
Diesel	ND	---	40.4	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	80.7	mg/kg dry	1	---	ND	---	---	**---**	**30%**	
Surr: o-Terphenyl (Surr)			*Recovery: 75 %*		*Limits: 50-150 %*			*Dilution: 1x*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0625 - EPA 3546 (Fuels)							Soil					
Blank (22A0625-BLK1)		Prepared: 01/18/22 13:42		Analyzed: 01/18/22 20:49								
NWTPH-Dx												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 81 %*		*Limits: 50-150 %*			*Dilution: 1x*					
LCS (22A0625-BS1)		Prepared: 01/18/22 13:42		Analyzed: 01/18/22 21:10								
NWTPH-Dx												
Diesel	99.4	---	25.0	mg/kg wet	1	125	---	80	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 86 %*		*Limits: 50-150 %*			*Dilution: 1x*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: ES&S 3730 HWY 97 K Falls	
314 W 15th Street Suite 300	Project Number: 2022-001 B	Report ID:
Vancouver, WA 98660	Project Manager: Dave Borys	A2A0602 - 02 08 22 1654

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0552 - EPA 5035A									Soil			
Blank (22A0552-BLK1)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 11:45								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 112 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*		*"*					
LCS (22A0552-BS2)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 11:18								
NWTPH-Gx (MS)												
Gasoline Range Organics	27.6	---	5.00	mg/kg wet	50	25.0	---	110	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 110 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*104 %*		*50-150 %*		*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							**Soil**					
Blank (22A0584-BLK1)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 23:56								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 116 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*103 %*		*50-150 %*			*"*					
LCS (22A0584-BS2)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 23:29								
NWTPH-Gx (MS)												
Gasoline Range Organics	29.3	---	5.00	mg/kg wet	50	25.0	---	117	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 113 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*			*"*					
Duplicate (22A0584-DUP1)		Prepared: 01/12/22 16:00		Analyzed: 01/18/22 00:50								
QC Source Sample: HC05-20.0 (A2A0602-06)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	17.1	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 121 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*103 %*		*50-150 %*			*"*					
Duplicate (22A0584-DUP2)		Prepared: 01/13/22 10:45		Analyzed: 01/18/22 01:44								
QC Source Sample: HC06-15.0 (A2A0602-07)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	17.9	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 122 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*103 %*		*50-150 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

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

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0591 - EPA 5035A												**Soil**
Blank (22A0591-BLK1)		Prepared: 01/18/22 07:00		Analyzed: 01/18/22 10:28								
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*102 %*		*50-150 %*			*"*				
LCS (22A0591-BS2)		Prepared: 01/18/22 07:00		Analyzed: 01/18/22 10:01								
NWTPH-Gx (MS)												
Gasoline Range Organics	25.7	---	5.00	mg/kg wet	50	25.0	---	103	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 112 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*104 %*		*50-150 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0552 - EPA 5035A							**Soil**					
Blank (22A0552-BLK1)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 11:45								
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	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
LCS (22A0552-BS1)		Prepared: 01/17/22 09:00		Analyzed: 01/17/22 10:51								
5035A/8260D												
Benzene	1.07	---	0.0100	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
Toluene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
Ethylbenzene	1.00	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Xylenes, total	3.15	---	0.0750	mg/kg wet	50	3.00	---	105	80 - 120%	---	---	
Naphthalene	1.01	---	0.100	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							**Soil**					
Blank (22A0584-BLK1)		Prepared: 01/17/22 09:00	Analyzed: 01/17/22 23:56									
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	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
LCS (22A0584-BS1)		Prepared: 01/17/22 09:00	Analyzed: 01/17/22 23:02									
5035A/8260D												
Benzene	1.08	---	0.0100	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
Toluene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Ethylbenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Xylenes, total	3.14	---	0.0750	mg/kg wet	50	3.00	---	105	80 - 120%	---	---	
Naphthalene	1.03	---	0.100	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				
Duplicate (22A0584-DUP1)		Prepared: 01/12/22 16:00	Analyzed: 01/18/22 00:50									
QC Source Sample: HC05-20.0 (A2A0602-06)												
5035A/8260D												
Benzene	ND	---	0.0342	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0855	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.256	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.342	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*79-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: ES&S 3730 HWY 97 K Falls	
314 W 15th Street Suite 300	Project Number: 2022-001 B	Report ID:
Vancouver, WA 98660	Project Manager: Dave Borys	A2A0602 - 02 08 22 1654

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX+N Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							Soil					
Duplicate (22A0584-DUP2)		Prepared: 01/13/22 10:45 Analyzed: 01/18/22 01:44										
QC Source Sample: HC06-15.0 (A2A0602-07)												
5035A/8260D												
Benzene	ND	---	0.0359	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0897	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.269	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.359	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*98 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*101 %*		*79-120 %*			*"*					
Matrix Spike (22A0584-MS1)		Prepared: 01/13/22 14:30 Analyzed: 01/18/22 03:06										
QC Source Sample: HC08-5.0 (A2A0602-09)												
5035A/8260D												
Benzene	1.30	---	0.0120	mg/kg dry	50	1.20	0.00640	108	77 - 121%	---	---	
Toluene	1.17	---	0.0598	mg/kg dry	50	1.20	ND	98	77 - 121%	---	---	
Ethylbenzene	1.20	---	0.0299	mg/kg dry	50	1.20	0.0205	99	76 - 122%	---	---	
Xylenes, total	3.79	---	0.0897	mg/kg dry	50	3.59	ND	105	78 - 124%	---	---	
Naphthalene	1.46	---	0.120	mg/kg dry	50	1.20	0.122	112	62 - 129%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)		*98 %*		*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)		*104 %*		*79-120 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							**Soil**					
Blank (22A0584-BLK1)		Prepared: 01/17/22 09:00	Analyzed: 01/17/22 23:56									
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:*	*103 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
LCS (22A0584-BS1)		Prepared: 01/17/22 09:00	Analyzed: 01/17/22 23:02									
5035A/8260D												
Benzene	1.08	---	0.0100	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
Toluene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Ethylbenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Xylenes, total	3.14	---	0.0750	mg/kg wet	50	3.00	---	105	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
Naphthalene	1.03	---	0.100	mg/kg wet	50	1.00	---	103	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	0.998	---	0.0250	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Isopropylbenzene	1.14	---	0.0500	mg/kg wet	50	1.00	---	114	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.13	---	0.0500	mg/kg wet	50	1.00	---	113	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				
Duplicate (22A0584-DUP1)		Prepared: 01/12/22 16:00	Analyzed: 01/18/22 00:50									

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							**Soil**					
Duplicate (22A0584-DUP1)		Prepared: 01/12/22 16:00 Analyzed: 01/18/22 00:50										
QC Source Sample: HC05-20.0 (A2A0602-06)												
5035A/8260D												
Benzene	ND	---	0.0342	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0855	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.256	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.342	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0855	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.171	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*79-120 %*			*"*				
Duplicate (22A0584-DUP2)		Prepared: 01/13/22 10:45 Analyzed: 01/18/22 01:44										
QC Source Sample: HC06-15.0 (A2A0602-07)												
5035A/8260D												
Benzene	ND	---	0.0359	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0897	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.269	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.359	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0897	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.179	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0584 - EPA 5035A							**Soil**					
Duplicate (22A0584-DUP2)		Prepared: 01/13/22 10:45		Analyzed: 01/18/22 01:44								
QC Source Sample: HC06-15.0 (A2A0602-07)												
Surr: 4-Bromofluorobenzene (Surr)			*Recovery: 101 %*	*Limits: 79-120 %*			*Dilution: 1x*					
Matrix Spike (22A0584-MS1)		Prepared: 01/13/22 14:30		Analyzed: 01/18/22 03:06								
QC Source Sample: HC08-5.0 (A2A0602-09)												
5035A/8260D												
Benzene	1.30	---	0.0120	mg/kg dry	50	1.20	0.00640	108	77 - 121%	---	---	
Toluene	1.17	---	0.0598	mg/kg dry	50	1.20	ND	98	77 - 121%	---	---	
Ethylbenzene	1.20	---	0.0299	mg/kg dry	50	1.20	0.0205	99	76 - 122%	---	---	
Xylenes, total	3.79	---	0.0897	mg/kg dry	50	3.59	ND	105	78 - 124%	---	---	
Methyl tert-butyl ether (MTBE)	1.30	---	0.0598	mg/kg dry	50	1.20	ND	108	73 - 125%	---	---	
Naphthalene	1.46	---	0.120	mg/kg dry	50	1.20	0.122	112	62 - 129%	---	---	
1,2-Dibromoethane (EDB)	1.33	---	0.0598	mg/kg dry	50	1.20	ND	111	78 - 122%	---	---	
1,2-Dichloroethane (EDC)	1.25	---	0.0299	mg/kg dry	50	1.20	ND	105	73 - 128%	---	---	
Isopropylbenzene	1.37	---	0.0598	mg/kg dry	50	1.20	ND	115	68 - 134%	---	---	
1,2,4-Trimethylbenzene	1.36	---	0.0598	mg/kg dry	50	1.20	ND	113	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.30	---	0.0598	mg/kg dry	50	1.20	ND	108	73 - 124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*98 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*			*"*					

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0591 - EPA 5035A							**Soil**					
Blank (22A0591-BLK1)		Prepared: 01/18/22 07:00		Analyzed: 01/18/22 10:28								
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:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
LCS (22A0591-BS1)		Prepared: 01/18/22 07:00		Analyzed: 01/18/22 09:32								
5035A/8260D												
Benzene	1.06	---	0.0100	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
Toluene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
Ethylbenzene	0.984	---	0.0250	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Xylenes, total	3.10	---	0.0750	mg/kg wet	50	3.00	---	103	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80 - 120%	---	---	
Naphthalene	0.978	---	0.100	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.08	---	0.0500	mg/kg wet	50	1.00	---	108	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
Isopropylbenzene	1.14	---	0.0500	mg/kg wet	50	1.00	---	114	80 - 120%	---	---	
1,2,4-Trimethylbenzene	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	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:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

APEX LABORATORIES

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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 22A0866 - EPA 3546							**Soil**					
Blank (22A0866-BLK1)		Prepared: 01/25/22 11:33	Analyzed: 01/25/22 15:09									
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: 92 %*	*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*103 %*	*54-127 %*			*"*					
LCS (22A0866-BS1)		Prepared: 01/25/22 11:33	Analyzed: 01/25/22 15:35									
EPA 8270E SIM												
Acenaphthene	0.703	---	0.0100	mg/kg wet	1	0.800	---	88	40 - 123%	---	---	
Acenaphthylene	0.716	---	0.0100	mg/kg wet	1	0.800	---	90	32 - 132%	---	---	
Anthracene	0.699	---	0.0100	mg/kg wet	1	0.800	---	87	47 - 123%	---	---	
Benz(a)anthracene	0.721	---	0.0100	mg/kg wet	1	0.800	---	90	49 - 126%	---	---	
Benzo(a)pyrene	0.724	---	0.0100	mg/kg wet	1	0.800	---	91	45 - 129%	---	---	
Benzo(b)fluoranthene	0.753	---	0.0100	mg/kg wet	1	0.800	---	94	45 - 132%	---	---	
Benzo(k)fluoranthene	0.784	---	0.0100	mg/kg wet	1	0.800	---	98	47 - 132%	---	---	
Benzo(g,h,i)perylene	0.611	---	0.0100	mg/kg wet	1	0.800	---	76	43 - 134%	---	---	
Chrysene	0.692	---	0.0100	mg/kg wet	1	0.800	---	87	50 - 124%	---	---	

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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 22A0866 - EPA 3546							**Soil**					
LCS (22A0866-BS1)		Prepared: 01/25/22 11:33		Analyzed: 01/25/22 15:35								
Dibenz(a,h)anthracene	0.721	---	0.0100	mg/kg wet	1	0.800	---	90	45 - 134%	---	---	
Fluoranthene	0.726	---	0.0100	mg/kg wet	1	0.800	---	91	50 - 127%	---	---	
Fluorene	0.689	---	0.0100	mg/kg wet	1	0.800	---	86	43 - 125%	---	---	
Indeno(1,2,3-cd)pyrene	0.621	---	0.0100	mg/kg wet	1	0.800	---	78	45 - 133%	---	---	
1-Methylnaphthalene	0.683	---	0.0100	mg/kg wet	1	0.800	---	85	40 - 120%	---	---	
2-Methylnaphthalene	0.652	---	0.0100	mg/kg wet	1	0.800	---	82	38 - 122%	---	---	
Naphthalene	0.661	---	0.0100	mg/kg wet	1	0.800	---	83	35 - 123%	---	---	
Phenanthrene	0.701	---	0.0100	mg/kg wet	1	0.800	---	88	50 - 121%	---	---	
Pyrene	0.721	---	0.0100	mg/kg wet	1	0.800	---	90	47 - 127%	---	---	
Dibenzofuran	0.702	---	0.0100	mg/kg wet	1	0.800	---	88	44 - 120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 88 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*96 %*		*54-127 %*			*"*				

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22A0694 - Total Solids (Dry Weight)												**Soil**
Duplicate (22A0694-DUP3)		Prepared: 01/19/22 17:40			Analyzed: 01/20/22 10:22							
QC Source Sample: HC01-5.0 (A2A0602-01)												
EPA 8000D												
% Solids	**58.9**	---	1.00	%	1	---	58.1	---	---	1	10%	

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

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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: 22A0570							
A2A0602-02	Soil	NWTPH-Dx	01/12/22 09:20	01/17/22 17:05	10.04g/5mL	10g/5mL	1.00
A2A0602-03	Soil	NWTPH-Dx	01/12/22 10:00	01/17/22 17:05	10.48g/5mL	10g/5mL	0.95
A2A0602-04	Soil	NWTPH-Dx	01/12/22 11:55	01/17/22 17:05	10.42g/5mL	10g/5mL	0.96
A2A0602-05	Soil	NWTPH-Dx	01/12/22 13:15	01/17/22 17:05	10.56g/5mL	10g/5mL	0.95
Batch: 22A0583							
A2A0602-06	Soil	NWTPH-Dx	01/12/22 16:00	01/17/22 17:05	10.41g/5mL	10g/5mL	0.96
A2A0602-07	Soil	NWTPH-Dx	01/13/22 10:45	01/17/22 17:13	10.08g/5mL	10g/5mL	0.99
A2A0602-08	Soil	NWTPH-Dx	01/13/22 13:15	01/17/22 17:13	10.1g/5mL	10g/5mL	0.99
A2A0602-09RE2	Soil	NWTPH-Dx	01/13/22 14:30	01/17/22 17:13	10.01g/5mL	10g/5mL	1.00
Batch: 22A0625							
A2A0602-01	Soil	NWTPH-Dx	01/12/22 09:15	01/18/22 14:26	10.88g/5mL	10g/5mL	0.92

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: 22A0552							
A2A0602-02	Soil	NWTPH-Gx (MS)	01/12/22 09:20	01/12/22 09:20	3.62g/5mL	5g/5mL	1.38
A2A0602-03	Soil	NWTPH-Gx (MS)	01/12/22 10:00	01/12/22 10:00	4.59g/5mL	5g/5mL	1.09
A2A0602-04	Soil	NWTPH-Gx (MS)	01/12/22 11:55	01/12/22 11:55	4.91g/5mL	5g/5mL	1.02
A2A0602-05	Soil	NWTPH-Gx (MS)	01/12/22 13:15	01/12/22 13:15	3.24g/5mL	5g/5mL	1.54
Batch: 22A0584							
A2A0602-06	Soil	NWTPH-Gx (MS)	01/12/22 16:00	01/12/22 16:00	4.53g/5mL	5g/5mL	1.10
A2A0602-07	Soil	NWTPH-Gx (MS)	01/13/22 10:45	01/13/22 10:45	4.66g/5mL	5g/5mL	1.07
A2A0602-08	Soil	NWTPH-Gx (MS)	01/13/22 13:15	01/13/22 13:15	4.91g/5mL	5g/5mL	1.02
A2A0602-09	Soil	NWTPH-Gx (MS)	01/13/22 14:30	01/13/22 14:30	6.77g/5mL	5g/5mL	0.74
Batch: 22A0591							
A2A0602-01RE1	Soil	NWTPH-Gx (MS)	01/12/22 09:15	01/12/22 09:15	5.42g/5mL	5g/5mL	0.92

BTEX+N Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0552							

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: ES&S 3730 HWY 97 K Falls	
314 W 15th Street Suite 300	Project Number: 2022-001 B	Report ID:
Vancouver, WA 98660	Project Manager: Dave Borys	A2A0602 - 02 08 22 1654

SAMPLE PREPARATION INFORMATION

BTEX+N Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A2A0602-02	Soil	5035A/8260D	01/12/22 09:20	01/12/22 09:20	3.62g/5mL	5g/5mL	1.38
A2A0602-03	Soil	5035A/8260D	01/12/22 10:00	01/12/22 10:00	4.59g/5mL	5g/5mL	1.09
A2A0602-04	Soil	5035A/8260D	01/12/22 11:55	01/12/22 11:55	4.91g/5mL	5g/5mL	1.02
A2A0602-05	Soil	5035A/8260D	01/12/22 13:15	01/12/22 13:15	3.24g/5mL	5g/5mL	1.54
Batch: 22A0584							
A2A0602-06	Soil	5035A/8260D	01/12/22 16:00	01/12/22 16:00	4.53g/5mL	5g/5mL	1.10
A2A0602-07	Soil	5035A/8260D	01/13/22 10:45	01/13/22 10:45	4.66g/5mL	5g/5mL	1.07
A2A0602-08	Soil	5035A/8260D	01/13/22 13:15	01/13/22 13:15	4.91g/5mL	5g/5mL	1.02

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: 22A0584							
A2A0602-09	Soil	5035A/8260D	01/13/22 14:30	01/13/22 14:30	6.77g/5mL	5g/5mL	0.74
Batch: 22A0591							
A2A0602-01RE1	Soil	5035A/8260D	01/12/22 09:15	01/12/22 09:15	5.42g/5mL	5g/5mL	0.92

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: 22A0866							
A2A0602-01	Soil	EPA 8270E SIM	01/12/22 09:15	01/25/22 13:16	10.17g/5mL	10g/5mL	0.98

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22A0694							
A2A0602-01	Soil	EPA 8000D	01/12/22 09:15	01/19/22 17:40			NA
A2A0602-02	Soil	EPA 8000D	01/12/22 09:20	01/19/22 17:40			NA
A2A0602-03	Soil	EPA 8000D	01/12/22 10:00	01/19/22 17:40			NA
A2A0602-04	Soil	EPA 8000D	01/12/22 11:55	01/19/22 17:40			NA
A2A0602-05	Soil	EPA 8000D	01/12/22 13:15	01/19/22 17:40			NA
A2A0602-06	Soil	EPA 8000D	01/12/22 16:00	01/19/22 17:40			NA

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A2A0602-07	Soil	EPA 8000D	01/13/22 10:45	01/19/22 17:40			NA
A2A0602-08	Soil	EPA 8000D	01/13/22 13:15	01/19/22 17:40			NA
A2A0602-09	Soil	EPA 8000D	01/13/22 14:30	01/19/22 17:40			NA

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

F-09	Results in the Gasoline Range are impacted by the overlap of a heavier fuel hydrocarbon product.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
S-08	TPH-Gx Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract. See 8260 results for accurate Surrogate recovery.

Apex Laboratories

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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.
For further details, please request a copy of this document.

Apex Laboratories

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.

Cameron O'Brien, Project Manager

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

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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 time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Cameron O'Brien, Project Manager

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

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 provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Cameron O'Brien, Project Manager

ANALYTICAL REPORT

HydroCon LLC	Project:	ES&S 3730 HWY 97 K Falls	
314 W 15th Street Suite 300	Project Number:	2022-001 B	Report ID:
Vancouver, WA 98660	Project Manager:	Dave Borys	A2A0602 - 02 08 22 1654

APEX LABS

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A2A0602 COC 1 of 1

Company: HYDROCON | Project Mgr: DAVID BORYS | Project Name: ES&S 3730 HWY 97 K FALLS | Project #: 2022-001B

Address: 314 W 15TH STREET STE 300 VANCOUVER, WA | Phone: | Email: DAVIDB MICHAELW @ HYDROCONLLC.NET | PO #

Sampled by: MICHAEL WHITSON

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX +N	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
HC01-5.0	01/12	0915	S	3		X	X	X													
HC01-10.0	↓	0920	S	3		X	X	X													
HC02-4.0	↓	1000	S	3		X	X	X													
HC03-4.0	↓	1155	S	3		X	X	X													
HC04-10.0	↓	1315	S	3		X	X	X													
HC05-20.0	↓	1600	S	3		X	X	X													
HC06-15.0	01/13	1045	S	3		X	X	X													
HC07-10.0	↓	1315	S	3		X	X	X													
HC08-5.0	↓	1430	S	3		X	X	X													

Standard Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: HCE

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date: 1/16/22	Signature: [signature] Date: 1/18/22	Signature: [signature] Date: 1/17/22	Signature: [signature] Date: 1/18/22
Printed Name: MICHAEL WHITSON Time: 8:30	Printed Name: D. Borys Time: 8:35	Printed Name: D. Borys Time: 8:09	Printed Name: Susan Lhead Time: 809
Company: HCE	Company: HCE	Company: HCE	Company: Apex

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

ANALYTICAL REPORT

HydroCon LLC	Project: **ES&S 3730 HWY 97 K Falls**	
314 W 15th Street Suite 300	Project Number: **2022-001 B**	**Report ID:**
Vancouver, WA 98660	Project Manager: **Dave Borys**	**A2A0602 - 02 08 22 1654**

APEX LABS COOLER RECEIPT FORM

Client: Hydrocon Element WO#: A2 A0602

Project/Project #: ES+S 3730 Hwy 97 KFalls / 2022-001B

Delivery Info:

Date/time received: 1/17/22 @ 809 By: (8)

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift____Senvoy____SDS____Other_____

Cooler Inspection Date/time inspected: 1/17/22 @ 819 By: (8)

Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No _____

Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.3						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	real						
Condition:	Good						

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

Green dots applied to out of temperature samples? Yes(No)

Out of temperature samples form initiated? Yes(No)

Sample Inspection: Date/time inspected: 1/17/22 @ 14:22 By: KAM

All samples intact? Yes X No ___ Comments:_____

Bottle labels/COCs agree? Yes X No ___ Comments: _____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments_____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: _____

Additional information: _____

Labeled by: KAM Witness: (8) Cooler Inspected by: KAM

Apex Laboratories

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.

Cameron O'Brien, Project Manager