

Kiran Supra  
Jackpot Food Mart  
51883 Columbia River Highway  
Scappoose, Oregon 97056

Tuesday, April 26, 2022

**RE: Subsurface Environmental Investigation**  
**51883 Columbia River Highway**  
**Scappoose, Oregon 97056**

**LUST #05-20-0194**  
**Point Source Project Number OR220412-1A**

At your request, Point Source Solutions (Point Source) has conducted a subsurface environmental investigation at 51883 Columbia River Highway, Scappoose, Oregon 97056 ("Site").

The Site is identified on a site location map, topographic map, and sample location diagram, all of which are located in the figures attached to this report.

### **BACKGROUND**

Point Source Solutions, LLC (Point Source) was provided with documentation furnished by the client and Oregon Department of Environmental Quality (ODEQ) detailing the discovery of diesel-impacted soils that had been identified during the replacement of the fuel dispensers at the Site. The contractor (4 C's) tasked with replacing the dispensers reported the release to ODEQ, and the Site was assigned LUST #05-20-0194. An initial report was prepared by the UST contractor and submitted to ODEQ in 2020. Upon review of the report, ODEQ requested further investigation to define the extent of the release.

The scope of work for the requested investigation included 3 borings in the vicinity of where the contamination was found with a soil sample from each boring. A groundwater sample was also requested if groundwater was encountered at a depth of 15 feet or less below ground surface (bgs).

The client directed Point Source to develop a scope of work that would coincide with ODEQ's request for further investigation of the Site. The resulting scope of work was authorized by the client on April 13, 2022, and is detailed below.

### **GEOPHYSICAL SURVEY**

A geophysical survey of the Site was conducted by Geopotential on April 20, 2022 in order to clear three boring locations surrounding the original location where diesel-impacted soils had been discovered. Boring locations were chosen immediately outside the concrete fueling pad, due to the reinforced concrete causing interference with the accuracy of the ground-penetrating radar.

### **SAMPLING**

Point Source conducted soil sampling on April 20, 2022. The investigation was conducted as follows:

- Boring SB1 was advanced to 15.0 feet bgs approximately 10 feet west of the westernmost fuel dispenser. No indications of soil contamination in the form of staining, odor or volatile organic compound (VOC) detections with a hand-held photoionization detector (PID) were noted in this boring. No groundwater was

encountered. A soil sample was collected at 4.0 feet bgs.

- Boring SB2 was advanced to 15.0 feet bgs approximately 10 feet north of the westernmost dispenser. No indications of soil contamination in the form of staining, odor or VOC detections with a hand-held PID were noted in this boring. No groundwater was encountered. A soil sample was collected at 4.0 feet bgs.
- Boring SB3 was advanced to 4.0 feet bgs approximately 10 feet south of the westernmost dispenser. No indications of soil contamination in the form of staining, odor or VOC detections with a hand-held PID were noted in this boring. A soil sample was collected at 4.0 feet bgs. Drilling refusal was met at 4.0 feet bgs.

Soils observed during the subsurface investigation consisted predominantly of clays and coarse gravels.

All borings were advanced using Geoprobe DT22 dual-tube tooling driven by a truck-mounted probe. Soil samples were obtained continuously from the surface using 4-foot-long, 2.25-inch diameter sample tooling lined with PVC sleeves. The sampling tooling was driven in 4-foot intervals until the target depth was achieved.

Soil samples were collected in laboratory provided 4-ounce glassware with Teflon-lined lids and 40-mL VOA vials preserved with methanol.

Samples were labeled for identification and stored in an iced cooler. Soils were field-screened using visual, sheen, and olfactory observations, and for the presence of VOCs using a PID.

Notes on visual appearance, odor and PID readings were recorded on field boring logs included as Appendix A.

Direct push tooling was decontaminated in a water and detergent solution and rinsed in tap water between samples and boring locations. A clean pair of Nitrile gloves was worn by field personnel for the collection of each sample.

**DATA ANALYSIS & INTERPRETATION**

Analysis and interpretation of the data generated during the field activities for the sampling event is presented in the following sections.

***Sampling Results***

Point Source transported the soil samples under chain-of-custody to Friedman and Bruya, Inc. of Seattle, WA, an Oregon certified laboratory, for analysis by TPH-Dx (diesel range petroleum hydrocarbons) with an acid/silica gel cleanup to eliminate organic interference in the sample results.

The analytical results, including the original samples collected by 4 C's are summarized in the table below:

TABLE 1 - SOIL SAMPLE RESULTS IN MG/KG			
SAMPLE ID	DATE	DEPTH	NWTPH-DX
B1*	2/20/20	3.0'	<54.6
B2*	2/20/20	3.0'	<59.7
B3*	2/20/20	3.0'	<60.3
B4*	2/20/20	3.0'	<b>3390</b>

TABLE 1 - SOIL SAMPLE RESULTS IN MG/KG			
SAMPLE ID	DATE	DEPTH	NWTPH-DX
SB1-S1	4/20/22	4.0'	<50
SB2-S1	4/20/22	4.0'	<50
SB3-S1	4/20/22	4.0'	<50

**Table 1 Notes:**

\* = Soil sample collected by 4 C's during initial investigation.

Copies of laboratory analytical reports are presented in Appendix B.

**Quality Assurance/Quality Control Review**

Laboratory QA/QC measures were performed through data validation of available analytical data generated as part of these sampling events. Data validation considered the following:

- Method Detection and/or Reporting Limits
- Laboratory Matrix Blanks
- Sample Holding Times
- Surrogate and Matrix Spike Recoveries, and
- Laboratory Duplicate Analysis Results

Friedman and Bruya did not report qualifiers that would indicate problems with the sample results. According to the lab reports all analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Exceptions are qualified in the analytical report. In cases where there is insufficient sample material provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

**SUMMARY AND CONCLUSIONS**

Based on the results of this sampling event, the following conclusions have been developed:

**No diesel-range petroleum hydrocarbons were detected in any of the samples collected. Groundwater was not encountered to a maximum explored depth of 15 feet below ground surface. The contamination that was observed and sampled from the westernmost dispenser area appears to be limited in extent. No further action is recommended.**

This investigation was completed in general accordance with ASTM E1903-11, Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process. These methodologies are described as representing good commercial and customary practice for conducting a Phase II ESA of a property for the purpose of evaluating recognized environmental conditions.

Point Source appreciates the opportunity to provide these services. If you have any questions concerning this

report, or if we can assist you in any other matter, please contact Gil Cobb or Jeff Jackman at 503.236.5885.



Prepared by:  
Kyle Fisher, Environmental Technician



Reviewed By:  
Gil Cobb, Registered Geologist (Oregon #G1440)



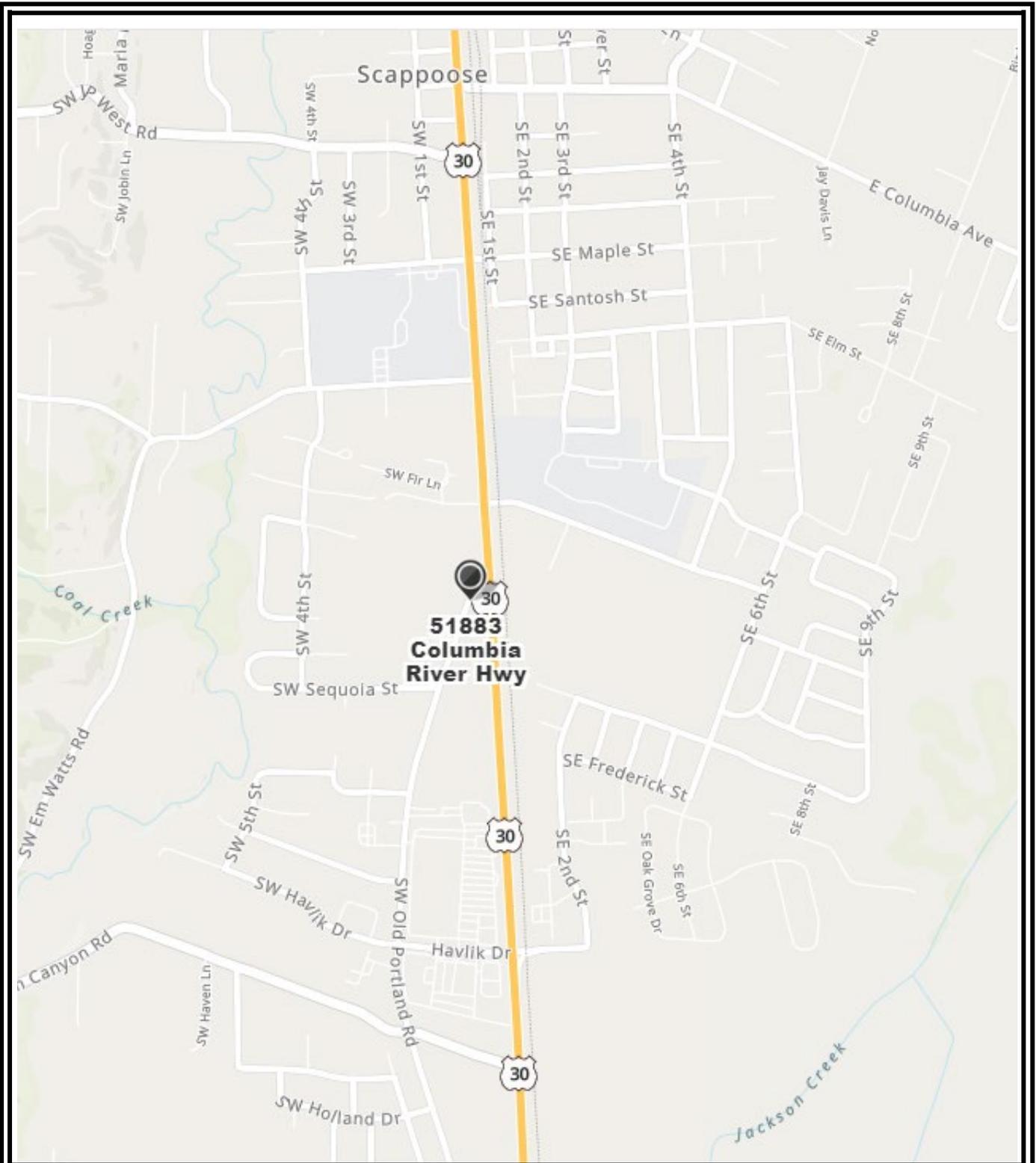
*Expires 12/31/2022*

**Attachments:**

- Figure 1 – Site Location Map
- Figure 2 – Topographic Map
- Figure 3 – Sample Location Diagram

- Appendix A – Field Boring Logs
- Appendix B – Laboratory Analytical Report

## FIGURES



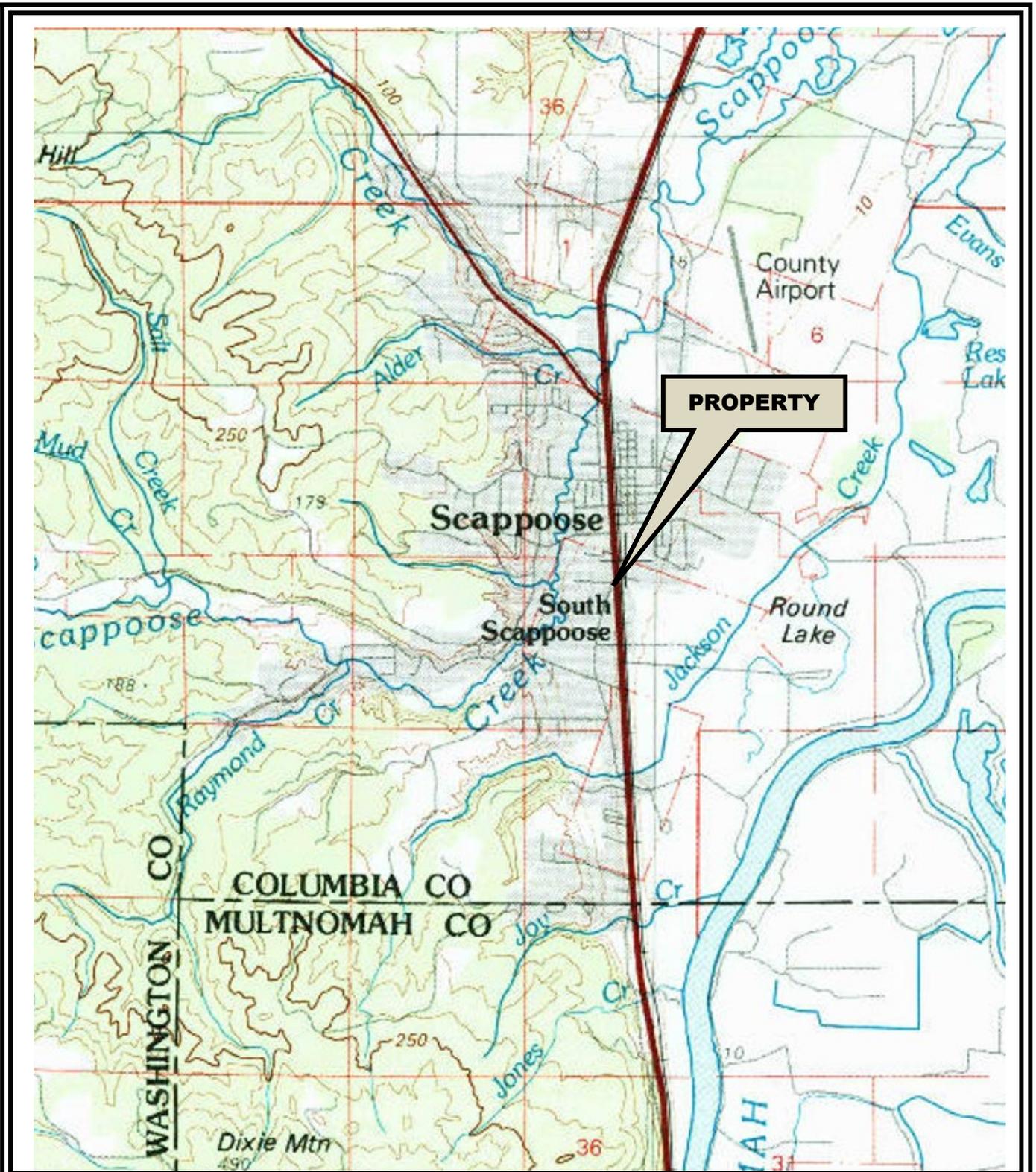
**FIGURE 1: SITE LOCATION MAP**

Map from MapQuest



**Site Name: Jackpot Food Mart**  
**51883 Columbia River Highway**  
**Scappoose, Oregon 97056**

**Project Number: OR220412-1A**



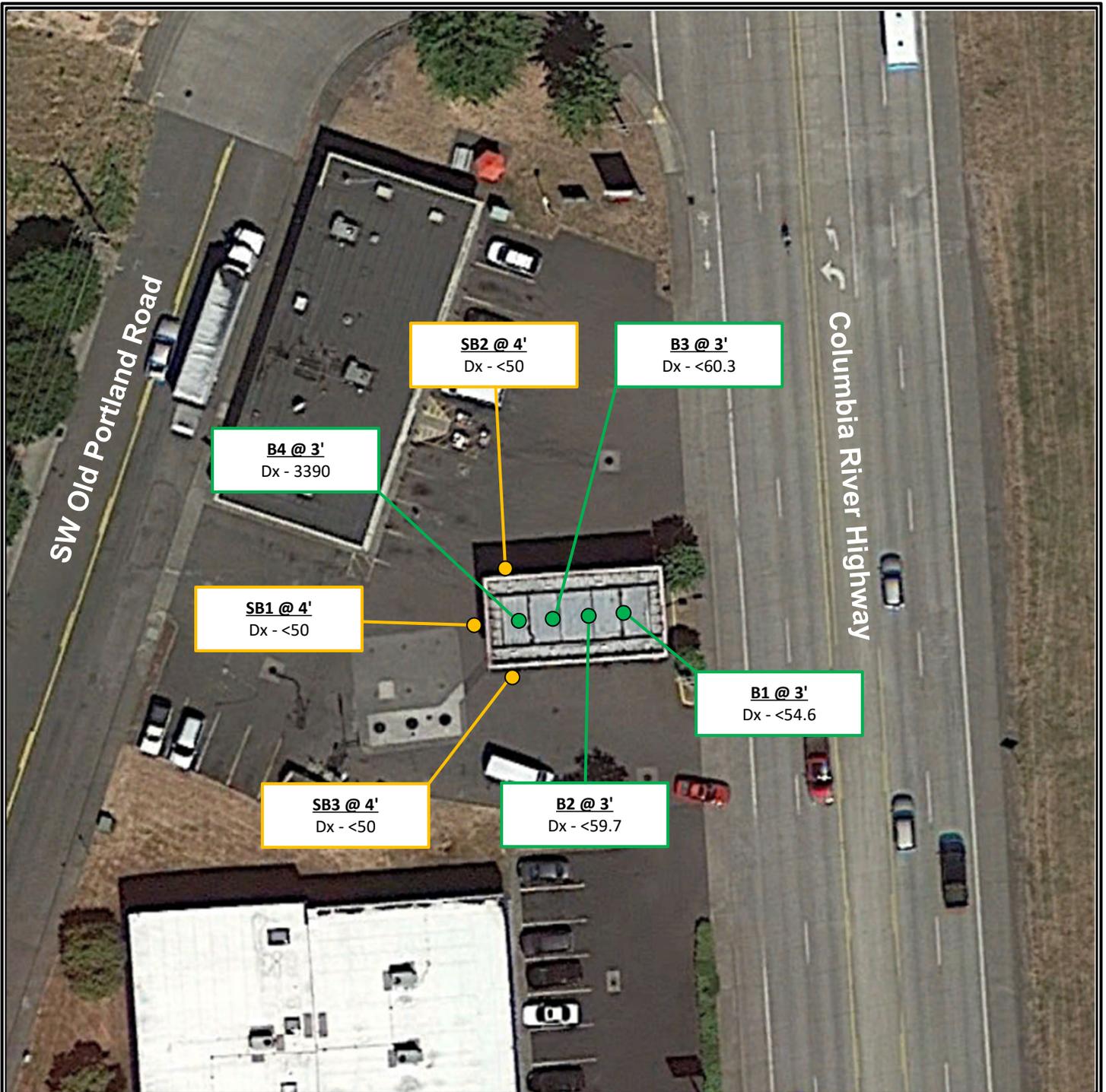
**FIGURE 2: TOPOGRAPHIC MAP**

Source: USGS 30 x 60 Minute Topographic Map  
Vancouver, WA Quadrangle 1979



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**FIGURE 3: SAMPLE LOCATION DIAGRAM**

Aerial Imagery from  
Google Earth (2020)



**Notes:**

- Soil results in mg/kg

- Soil Sample Location
- 4 C's Soil Sample Location

**Scale in Feet (Approximate)**



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## APPENDICES

**APPENDIX A**  
**FIELD BORING LOGS**



**BORING AND WELL LOG LEGEND**

	<p><b>SURFACE</b>          ASPHALT          CONCRETE          FILL          TOPSOIL          AIR          ICE</p> <p><b>USCS</b>          Well-graded GRAVEL (GW)          Poorly graded GRAVEL (GP)          Silty GRAVEL (GM)          Clayey GRAVEL (GC)          Silty, Clayey GRAVEL (GC-GM)          Well-graded GRAVEL with silt (GW-GM)          Poorly graded GRAVEL with silt (GP-GM)          Well-graded GRAVEL with clay (GW-GC)          Poorly graded GRAVEL with clay (GP-GC)          Well-graded SAND (SW)          Poorly graded SAND (SP)          Silty SAND (SM)          Clayey SAND (SC)          Silty, Clayey SAND (SC-SM)          Well-graded SAND with silt (SW-SM)          Poorly graded SAND with silt (SP-SM)          Well-graded SAND with clay (SW-SC)          Poorly graded SAND with clay (SP-SC)          SILT (ML)          Lean CLAY (CL)          Silty CLAY (CL-ML)          Organic SOIL (OL)          Elastic SILT (MH)          Fat CLAY (CH)          Organic SOIL (OH)          Organic SOIL (OL/OH)          PEAT (PT)          BEDROCK          IGNEOUS Rock          METAMORPHIC Rock          SEDIMENTARY Rock          WATER</p> <p><b>Non-USCS</b>          Gravel          Sand          Silt          Clayey Silt          Silt &amp; Clay          Clay &amp; Silt          Silty Clay          Clay          Boulders          Cobbles          Peastone          Glacial Till          Iron Ore          Wood          Peat          Saprolite          Ash          Waste</p>		<p><b>Volume Descriptors</b>          Trace = &lt;5%          Few = 5-10%          Little = 15-25%          Some = 30-45%          Mostly = &gt;=50%</p> <p><b>Water Levels</b>          Water Level During Drilling          Water Level at End of Drilling/in Completed Well</p> <p><b>Well/Boring Completion</b>          Cap          Riser          Screen          End Plug          Annular Seal          Sanitary Seal (Bentonite Slurry/Chips/Pellets/Powder, Other)          Filter Pack (Sand, Gravel, Other)          Backfill</p> <p><b>Sample Type</b>          GR Grab          EN Encore          SS Split Spoon          SH Shelby Tube          CO Core Barrel          DP Direct Push          ID Lab Sample and ID</p>
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Client: Kiran Supra  
 Project: Jackpot Food Mart  
 Address: 51883 Columbia River Hwy, Scappoose, OR

**BORING LOG**  
 Boring No. SB1  
 Page: 1 of 3

Drilling Start Date: 4/20/22	Boring Depth (ft): 15.0
Drilling End Date: 4/20/22	Boring Diameter (in): 2.25
Drilling Company: Point Source Solutions	Sampling Method(s): Direct Push
Drilling Method: Direct Push	DTW During Drilling (ft): N/A
Drilling Equipment: Geoprobe DT22	DTW After Drilling (ft): N/A
Driller: JR	Ground Surface Elev. (ft): 62
Logged By: KF	Location (Lat, Long): 45.74753, -122.87759

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT			SOIL/ROCK VISUAL DESCRIPTION	MEASURE		ELEVATION (ft)
				Sample Type	Time	Blow Counts		Recovery (ft)	PID (ppm)	
0	Asphalt						(0') Asphalt			62
1.60	Lean CLAY (CL)						(1') Lean CLAY (CL); brown, with organics. no staining, no odor			
4.40	Poorly graded GRAVEL with clay (GP-GC)						(4') Poorly graded GRAVEL with clay (GP-GC); coarse grained, some clay, dry, brown, no staining, no odor. Hard driving		SB1-S1-4	
8.80	As Above						(8') As Above: hard driving			
12.15	Poorly graded GRAVEL (GP)						(12') Poorly graded GRAVEL (GP); dry, hard driving			
15.00	(15') Boring terminated									

NOTES: Hole precleared on 4/20/22 by Geopotential.



Client: Kiran Supra  
 Project: Jackpot Food Mart  
 Address: 51883 Columbia River Hwy, Scappoose, OR

**BORING LOG**  
 Boring No. SB2  
 Page: 2 of 3

Drilling Start Date: 4/20/22  
 Drilling End Date: 4/20/22  
 Drilling Company: Point Source Solutions  
 Drilling Method: Direct Push  
 Drilling Equipment: Geoprobe DT22  
 Driller: JR  
 Logged By: KF

Boring Depth (ft): 15.0  
 Boring Diameter (in): 2.25  
 Sampling Method(s): Direct Push  
 DTW During Drilling (ft): N/A  
 DTW After Drilling (ft): N/A  
 Ground Surface Elev. (ft): 62  
 Location (Lat, Long): 45.74757, -122.87757

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT			SOIL/ROCK VISUAL DESCRIPTION	MEASURE		ELEVATION (ft)
				Sample Type	Time	Blow Counts		Recovery (ft)	PID (ppm)	
0	Asphalt			DP			(0') Asphalt			62
1	Lean CLAY (CL)						(1') Lean CLAY (CL); brown, with organics. no staining, no odor	0.4		60
5	Poorly graded GRAVEL with clay (GP-GC)			DP			(4') Poorly graded GRAVEL with clay (GP-GC); coarse grained, some clay, dry, brown, no staining, no odor. Hard driving	0.3	SB2-S1-4	55
13	As Above			DP			(8') As Above: hard driving	0		50
15	Poorly graded GRAVEL (GP)			DP			(12') Poorly graded GRAVEL (GP); dry, hard driving	0		45
15	(15') Boring terminated									

NOTES: Hole precleared on 4/20/22 by Geopotential.

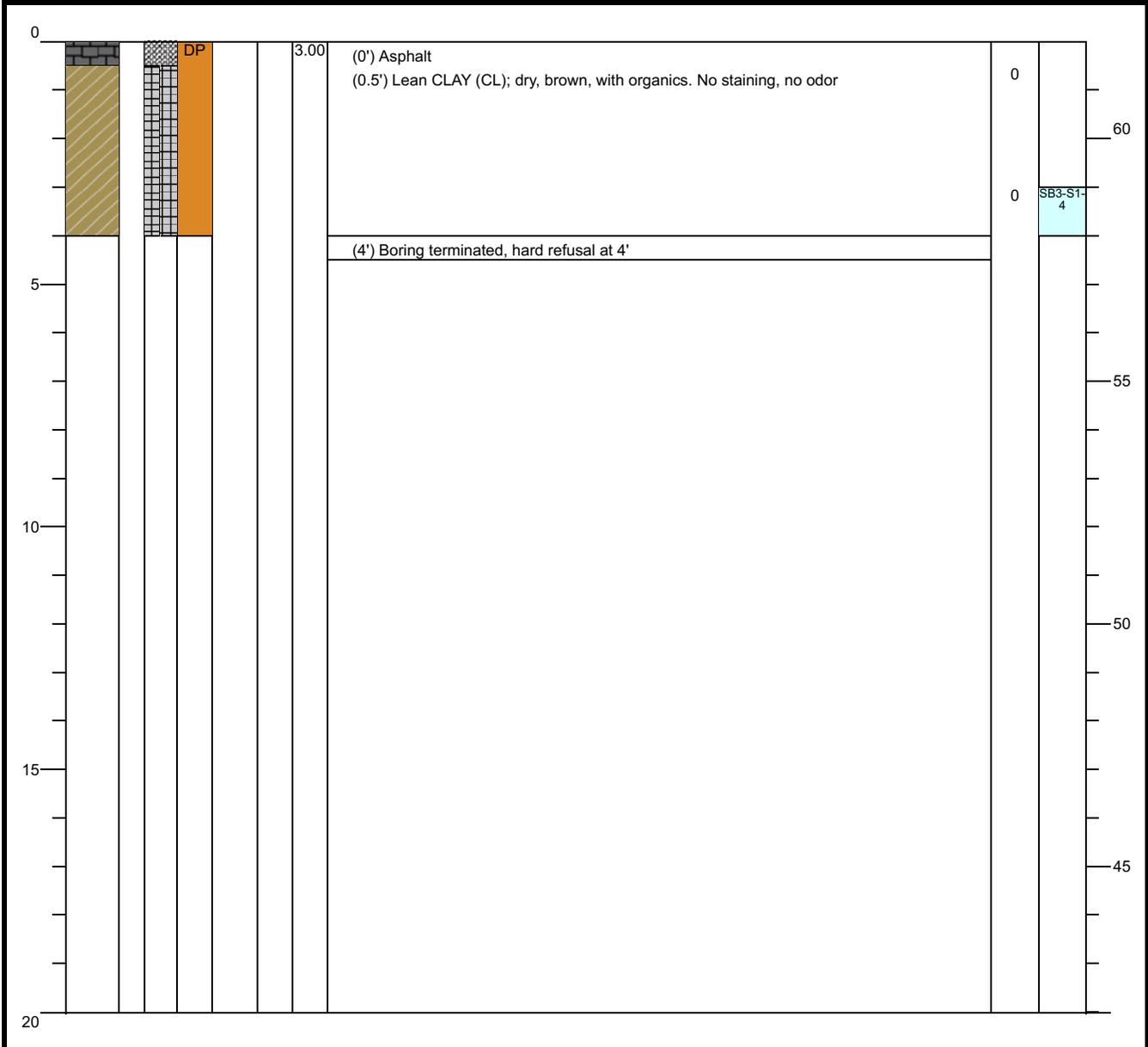


Client: Kiran Supra  
 Project: Jackpot Food Mart  
 Address: 51883 Columbia River Hwy, Scappoose, OR

**BORING LOG**  
 Boring No. SB3  
 Page: 3 of 3

Drilling Start Date: 4/20/22	Boring Depth (ft): 4.0
Drilling End Date: 4/20/22	Boring Diameter (in): 2.25
Drilling Company: Point Source Solutions	Sampling Method(s): Direct Push
Drilling Method: Direct Push	DTW During Drilling (ft): N/A
Drilling Equipment: Geoprobe DT22	DTW After Drilling (ft): N/A
Driller: JR	Ground Surface Elev. (ft): 62
Logged By: KF	Location (Lat, Long): 45.74750, -122.87756

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		ELEVATION (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)		PID (ppm)	Lab Sample	



NOTES: Hole precleared on 4/20/22 by Geopotential.

**APPENDIX B**  
**LABORATORY ANALYTICAL REPORTS**



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
EPA ID: OR01039

AMENDED REPORT

Monday, March 9, 2020  
Casey Michaels  
4C's Environmental Inc.  
1590 SE Uglow Ave  
Dallas, OR 97338

RE: A0B0596 - Jackpot Market 1798

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 A0B0596, which was received by the laboratory on 2/21/2020 at 12:42:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [DAuvil@apex-labs.com](mailto:DAuvil@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.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1                      4.9 degC

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

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

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Darrell Auvil, Project Manager



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
EPA ID: OR01039

AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1	A0B0596-01	Soil	02/20/20 14:30	02/21/20 12:42
B2	A0B0596-02	Soil	02/20/20 14:35	02/21/20 12:42
B3	A0B0596-03	Soil	02/20/20 14:40	02/21/20 12:42
B4	A0B0596-04	Soil	02/20/20 14:50	02/21/20 12:42

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Darrell Auvil, Project Manager



Apex Laboratories, LLC

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Tigard, OR 97223  
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AMENDED REPORT

<u>4C's Environmental Inc.</u> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <u>Jackpot Market 1798</u>  Project Manager: Casey Michaels	<u>Report ID:</u> A0B0596 - 03 09 20 1552
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ANALYTICAL CASE NARRATIVE

Work Order: A0B0596

Amended Report Revision 1:

Additional Analyses-

This report supersedes all previous reports.

The final report has been amended to include additional data for sample; B4 (Apex ID: A0B0596-04). Additional analyses include: 8260 BTEX, NW TPH-Dx with silica gel cleanup, and PAHs by EPA 8270 SIM.

Darrell Auvil  
Project Manager  
3/9/2020

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Darrell Auvil, Project Manager



AMENDED REPORT

<b>4C's Environmental Inc.</b>	Project#: <b>Jackpot Market 1798</b>	
1590 SE Uglow Ave	Project Manager: Casey Michaels	<b>Report ID:</b>
Dallas, OR 97338		<b>A0B0596 - 03 09 20 1552</b>

**ANALYTICAL SAMPLE RESULTS**

**Hydrocarbon Identification Screen by NWTPH-HCID**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>B1 (A0B0596-01RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020698</b>		
Gasoline Range Organics	ND	---	21.8	mg/kg dry	1	02/24/20 09:51	NWTPH-HCID	
Diesel Range Organics	ND	---	54.6	mg/kg dry	1	02/24/20 09:51	NWTPH-HCID	
Oil Range Organics	ND	---	109	mg/kg dry	1	02/24/20 09:51	NWTPH-HCID	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 94 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>02/24/20 09:51</i>	<i>NWTPH-HCID</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>95 %</i>		<i>50-150 %</i>		<i>1</i>	<i>02/24/20 09:51</i>	<i>NWTPH-HCID</i>
<b>B2 (A0B0596-02RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020698</b>		
Gasoline Range Organics	ND	---	23.9	mg/kg dry	1	02/24/20 10:11	NWTPH-HCID	
Diesel Range Organics	ND	---	59.7	mg/kg dry	1	02/24/20 10:11	NWTPH-HCID	
Oil Range Organics	ND	---	119	mg/kg dry	1	02/24/20 10:11	NWTPH-HCID	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 81 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>02/24/20 10:11</i>	<i>NWTPH-HCID</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>84 %</i>		<i>50-150 %</i>		<i>1</i>	<i>02/24/20 10:11</i>	<i>NWTPH-HCID</i>
<b>B3 (A0B0596-03RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020698</b>		
Gasoline Range Organics	ND	---	24.1	mg/kg dry	1	02/24/20 10:32	NWTPH-HCID	
Diesel Range Organics	ND	---	60.3	mg/kg dry	1	02/24/20 10:32	NWTPH-HCID	
Oil Range Organics	ND	---	121	mg/kg dry	1	02/24/20 10:32	NWTPH-HCID	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>02/24/20 10:32</i>	<i>NWTPH-HCID</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>92 %</i>		<i>50-150 %</i>		<i>1</i>	<i>02/24/20 10:32</i>	<i>NWTPH-HCID</i>
<b>B4 (A0B0596-04RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020698</b>		
Gasoline Range Organics	ND	---	22.5	mg/kg dry	1	02/24/20 10:52	NWTPH-HCID	
Diesel Range Organics	DET	---	56.2	mg/kg dry	1	02/24/20 10:52	NWTPH-HCID	F-11
Oil Range Organics	ND	---	112	mg/kg dry	1	02/24/20 10:52	NWTPH-HCID	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 87 %</i>		<i>Limits: 50-150 %</i>		<i>1</i>	<i>02/24/20 10:52</i>	<i>NWTPH-HCID</i>
<i>4-Bromofluorobenzene (Surr)</i>		<i>87 %</i>		<i>50-150 %</i>		<i>1</i>	<i>02/24/20 10:52</i>	<i>NWTPH-HCID</i>



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

**4C's Environmental Inc.**

1590 SE Uglow Ave

Dallas, OR 97338

Project#: **Jackpot Market 1798**

Project Manager: Casey Michaels

**Report ID:**

**A0B0596 - 03 09 20 1552**

**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	
<b>B4 (A0B0596-04RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020771</b>			
Diesel	3390	---	114	mg/kg dry	5	02/26/20 11:22	NWTPH-Dx	F-11	
Oil	ND	---	229	mg/kg dry	5	02/26/20 11:22	NWTPH-Dx		
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 93 %</i>		<i>Limits: 50-150 %</i>		<i>5</i>	<i>02/26/20 11:22</i>	<i>NWTPH-Dx</i>	<i>S-05</i>

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Darrell Auvil, Project Manager



**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
EPA ID: OR01039

AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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**ANALYTICAL SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
<b>B4 (A0B0596-04RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0030189</b>			
Diesel	3500	---	114	mg/kg dry	5	03/06/20 09:15	NWTPH-Dx/SG	F-11	
Oil	ND	---	229	mg/kg dry	5	03/06/20 09:15	NWTPH-Dx/SG		
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 50-150 %</i>		<i>5</i>	<i>03/06/20 09:15</i>	<i>NWTPH-Dx/SG</i>	<i>S-05</i>

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Darrell Auvil, Project Manager



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 Tigard, OR 97223  
 503-718-2323  
 EPA ID: OR01039

AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> <b>A0B0596 - 03 09 20 1552</b>
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**ANALYTICAL SAMPLE RESULTS**

**BTEX Compounds by EPA 8260C**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>B4 (A0B0596-04RE1)</b>				<b>Matrix: Soil</b>		<b>Batch: 0030167</b>		<b>V-15</b>
Benzene	ND	---	0.0134	mg/kg dry	50	03/05/20 11:07	5035A/8260C	
Toluene	ND	---	0.0672	mg/kg dry	50	03/05/20 11:07	5035A/8260C	
Ethylbenzene	ND	---	0.0336	mg/kg dry	50	03/05/20 11:07	5035A/8260C	
Xylenes, total	ND	---	0.101	mg/kg dry	50	03/05/20 11:07	5035A/8260C	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>		<i>102 %</i>	<i>Limits:</i>		<i>80-120 %</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>				<i>101 %</i>			<i>80-120 %</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>				<i>104 %</i>			<i>80-120 %</i>	<i>1</i>

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Darrell Auvil, Project Manager



AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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ANALYTICAL SAMPLE RESULTS

**Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>B4 (A0B0596-04)</b>				<b>Matrix: Soil</b>		<b>Batch: 0030119</b>		
Acenaphthene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Acenaphthylene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Anthracene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Benz(a)anthracene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Benzo(a)pyrene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Benzo(b)fluoranthene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Benzo(k)fluoranthene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Benzo(g,h,i)perylene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Chrysene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Dibenz(a,h)anthracene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Fluoranthene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Fluorene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
Naphthalene	ND	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
<b>Phenanthrene</b>	<b>0.0701</b>	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
<b>Pyrene</b>	<b>0.0950</b>	---	0.0598	mg/kg dry	5	03/04/20 19:16	EPA 8270D (SIM)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 76 %</i>		<i>Limits: 44-120 %</i>	5	03/04/20 19:16	EPA 8270D (SIM)	
<i>p-Terphenyl-d14 (Surr)</i>		<i>90 %</i>		<i>54-127 %</i>	5	03/04/20 19:16	EPA 8270D (SIM)	



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

EPA ID: OR01039

AMENDED REPORT

**4C's Environmental Inc.**

1590 SE Uglow Ave

Dallas, OR 97338

Project#: **Jackpot Market 1798**

Project Manager: Casey Michaels

**Report ID:**

**A0B0596 - 03 09 20 1552**

**ANALYTICAL SAMPLE RESULTS**

**Percent Dry Weight**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>B1 (A0B0596-01)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020666</b>		
% Solids	88.1	---	1.00	%	1	02/24/20 08:36	EPA 8000C	
<b>B2 (A0B0596-02)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020666</b>		
% Solids	80.4	---	1.00	%	1	02/24/20 08:36	EPA 8000C	
<b>B3 (A0B0596-03)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020666</b>		
% Solids	81.5	---	1.00	%	1	02/24/20 08:36	EPA 8000C	
<b>B4 (A0B0596-04)</b>				<b>Matrix: Soil</b>		<b>Batch: 0020666</b>		
% Solids	82.4	---	1.00	%	1	02/24/20 08:36	EPA 8000C	

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Darrell Auvil, Project Manager



AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Hydrocarbon Identification Screen by NWTPH-HCID**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 0020667 - NWTPH-HCID (Soil)</b>						<b>Soil</b>						
<b>Blank (0020667-BLK1)</b>		Prepared: 02/21/20 12:11 Analyzed: 02/21/20 22:31										
<u>NWTPH-HCID</u>												
Gasoline Range Organics	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	---
Diesel Range Organics	ND	---	45.5	mg/kg wet	1	---	---	---	---	---	---	---
Oil Range Organics	ND	---	90.9	mg/kg wet	1	---	---	---	---	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 88 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>82 %</i>		<i>50-150 %</i>		<i>"</i>						

<b>Batch 0020698 - NWTPH-HCID (Soil)</b>						<b>Soil</b>						
<b>Blank (0020698-BLK1)</b>		Prepared: 02/24/20 07:03 Analyzed: 02/24/20 08:29										
<u>NWTPH-HCID</u>												
Gasoline Range Organics	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	---
Diesel Range Organics	ND	---	45.5	mg/kg wet	1	---	---	---	---	---	---	---
Oil Range Organics	ND	---	90.9	mg/kg wet	1	---	---	---	---	---	---	---
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 89 %</i>		<i>Limits: 50-150 %</i>		<i>Dilution: 1x</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>94 %</i>		<i>50-150 %</i>		<i>"</i>						



AMENDED REPORT

<b>4C's Environmental Inc.</b>	Project#: <b>Jackpot Market 1798</b>	
1590 SE Uglow Ave	Project Manager: Casey Michaels	<b>Report ID:</b>
Dallas, OR 97338		<b>A0B0596 - 03 09 20 1552</b>

**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
<b>Batch 0020771 - EPA 3546 (Fuels)</b>						<b>Soil</b>						
<b>Blank (0020771-BLK1)</b>		Prepared: 02/25/20 13:02 Analyzed: 02/25/20 23:01										
<u>NWTPH-Dx</u>												
Diesel	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	36.4	mg/kg wet	1	---	---	---	---	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 93 % Limits: 50-150 % Dilution: 1x</i>										
<b>LCS (0020771-BS1)</b>		Prepared: 02/25/20 13:02 Analyzed: 02/25/20 23:23										
<u>NWTPH-Dx</u>												
Diesel	109	---	20.0	mg/kg wet	1	125	---	87	76 - 115%	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 97 % Limits: 50-150 % Dilution: 1x</i>										



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<b>4C's Environmental Inc.</b>	Project#: <b>Jackpot Market 1798</b>	
1590 SE Uglow Ave		<b>Report ID:</b>
Dallas, OR 97338	Project Manager: Casey Michaels	A0B0596 - 03 09 20 1552

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 0030189 - EPA 3546 w/SG+Acid (NWTPH)</b>						<b>Soil</b>						
<b>Blank (0030189-BLK1)</b>		Prepared: 02/25/20 13:02 Analyzed: 03/05/20 21:48										
<u>NWTPH-Dx/SG</u>												
Diesel	ND	---	25.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 90 % Limits: 50-150 % Dilution: 1x</i>										
<b>LCS (0030189-BS1)</b>		Prepared: 02/25/20 13:02 Analyzed: 03/05/20 22:11										
<u>NWTPH-Dx/SG</u>												
Diesel	109	---	25.0	mg/kg wet	1	125	---	87	73 - 115%	---	---	
<i>Surr: o-Terphenyl (Surr)</i>		<i>Recovery: 95 % Limits: 50-150 % Dilution: 1x</i>										



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QUALITY CONTROL (QC) SAMPLE RESULTS

**BTEX Compounds by EPA 8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 0030156 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (0030156-BLK1)</b>			Prepared: 03/04/20 09:00 Analyzed: 03/04/20 16:38									
<u>5035A/8260C</u>												
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	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>105 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>101 %</i>		<i>79-120 %</i>		<i>"</i>						
<b>LCS (0030156-BS1)</b>			Prepared: 03/04/20 09:00 Analyzed: 03/04/20 15:44									
<u>5035A/8260C</u>												
Benzene	1.00	---	0.0100	mg/kg wet	50	1.00	---	100	80 - 120%	---	---	
Toluene	0.970	---	0.0500	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Ethylbenzene	0.991	---	0.0250	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Xylenes, total	2.90	---	0.0750	mg/kg wet	50	3.00	---	97	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>79-120 %</i>		<i>"</i>						



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QUALITY CONTROL (QC) SAMPLE RESULTS

**BTEX Compounds by EPA 8260C**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 0030167 - EPA 5035A</b>						<b>Soil</b>						
<b>Blank (0030167-BLK1)</b>			Prepared: 03/05/20 09:00 Analyzed: 03/05/20 10:40									
<u>5035A/8260C</u>												
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	---	---	---	---	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>99 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>103 %</i>		<i>79-120 %</i>		<i>"</i>						
<b>LCS (0030167-BS1)</b>			Prepared: 03/05/20 09:00 Analyzed: 03/05/20 09:46									
<u>5035A/8260C</u>												
Benzene	0.975	---	0.0100	mg/kg wet	50	1.00	---	97	80 - 120%	---	---	
Toluene	0.964	---	0.0500	mg/kg wet	50	1.00	---	96	80 - 120%	---	---	
Ethylbenzene	0.976	---	0.0250	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Xylenes, total	2.87	---	0.0750	mg/kg wet	50	3.00	---	96	80 - 120%	---	---	
<i>Surr: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 101 %</i>		<i>Limits: 80-120 %</i>		<i>Dilution: 1x</i>						
<i>Toluene-d8 (Surr)</i>		<i>102 %</i>		<i>80-120 %</i>		<i>"</i>						
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>79-120 %</i>		<i>"</i>						



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QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC % REC	RPD RPD	Notes
<b>Batch 0030119 - EPA 3546</b>						<b>Soil</b>				
<b>Blank (0030119-BLK1)</b>		Prepared: 03/04/20 09:16 Analyzed: 03/04/20 16:45								
<b>EPA 8270D (SIM)</b>										
Acenaphthene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Acenaphthylene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Anthracene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Benz(a)anthracene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Benzo(a)pyrene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Benzo(b)fluoranthene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Benzo(k)fluoranthene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Benzo(g,h,i)perylene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Chrysene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Dibenz(a,h)anthracene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Fluoranthene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Fluorene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Naphthalene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Phenanthrene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
Pyrene	ND	---	0.00250	mg/kg wet	1	---	---	---	---	---
<i>Surr: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 79 %</i>		<i>Limits: 46-120 %</i>		<i>Dilution: 1x</i>				
<i>p-Terphenyl-d14 (Surr)</i>		<i>102 %</i>		<i>49-126 %</i>		<i>"</i>				

<b>LCS (0030119-BS1)</b>		Prepared: 03/04/20 09:16 Analyzed: 03/04/20 17:10								
<b>EPA 8270D (SIM)</b>										
Acenaphthene	0.658	---	0.00400	mg/kg wet	1	0.800	---	82	44 - 120%	---
Acenaphthylene	0.650	---	0.00400	mg/kg wet	1	0.800	---	81	39 - 120%	---
Anthracene	0.672	---	0.00400	mg/kg wet	1	0.800	---	84	50 - 120%	---
Benz(a)anthracene	0.672	---	0.00400	mg/kg wet	1	0.800	---	84	54 - 122%	---
Benzo(a)pyrene	0.638	---	0.00400	mg/kg wet	1	0.800	---	80	50 - 125%	---
Benzo(b)fluoranthene	0.674	---	0.00400	mg/kg wet	1	0.800	---	84	53 - 128%	---
Benzo(k)fluoranthene	0.683	---	0.00400	mg/kg wet	1	0.800	---	85	56 - 123%	---
Benzo(g,h,i)perylene	0.650	---	0.00400	mg/kg wet	1	0.800	---	81	49 - 127%	---
Chrysene	0.692	---	0.00400	mg/kg wet	1	0.800	---	87	57 - 120%	---
Dibenz(a,h)anthracene	0.703	---	0.00400	mg/kg wet	1	0.800	---	88	50 - 129%	---
Fluoranthene	0.676	---	0.00400	mg/kg wet	1	0.800	---	85	55 - 120%	---
Fluorene	0.659	---	0.00400	mg/kg wet	1	0.800	---	82	47 - 120%	---

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Darrell Auvil, Project Manager



AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 0030119 - EPA 3546</b>						<b>Soil</b>						
<b>LCS (0030119-BS1)</b>		Prepared: 03/04/20 09:16 Analyzed: 03/04/20 17:10										
Indeno(1,2,3-cd)pyrene	0.674	---	0.00400	mg/kg wet	1	0.800	---	84	49 - 130%	---	---	
Naphthalene	0.599	---	0.00400	mg/kg wet	1	0.800	---	75	38 - 120%	---	---	
Phenanthrene	0.667	---	0.00400	mg/kg wet	1	0.800	---	83	49 - 120%	---	---	
Pyrene	0.680	---	0.00400	mg/kg wet	1	0.800	---	85	55 - 120%	---	---	
<i>Surr: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery: 78 %</i>		<i>Limits: 46-120 %</i>		<i>Dilution: 1x</i>						
<i>p-Terphenyl-d14 (Surr)</i>		<i>88 %</i>		<i>49-126 %</i>		<i>"</i>						



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
EPA ID: OR01039

AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project/#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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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
<b>Batch 0020666 - Total Solids (Dry Weight)</b>						<b>Soil</b>						

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

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Darrell Auvil, Project Manager



AMENDED REPORT

<b>4C's Environmental Inc.</b> 1590 SE Uglow Ave Dallas, OR 97338	Project#: <b>Jackpot Market 1798</b>  Project Manager: Casey Michaels	<b>Report ID:</b> A0B0596 - 03 09 20 1552
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SAMPLE PREPARATION INFORMATION

Hydrocarbon Identification Screen by NWTPH-HCID

Prep: NWTPH-HCID (Soil)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0020698							
A0B0596-01RE1	Soil	NWTPH-HCID	02/20/20 14:30	02/24/20 07:03	10.4g/10mL	10g/10mL	0.96
A0B0596-02RE1	Soil	NWTPH-HCID	02/20/20 14:35	02/24/20 07:03	10.41g/10mL	10g/10mL	0.96
A0B0596-03RE1	Soil	NWTPH-HCID	02/20/20 14:40	02/24/20 07:03	10.17g/10mL	10g/10mL	0.98
A0B0596-04RE1	Soil	NWTPH-HCID	02/20/20 14:50	02/24/20 07:03	10.8g/10mL	10g/10mL	0.93

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: 0020771							
A0B0596-04RE1	Soil	NWTPH-Dx	02/20/20 14:50	02/25/20 17:26	10.61g/5mL	10g/5mL	0.94

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Prep: EPA 3546 w/SG+Acid (NWTPH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0030189							
A0B0596-04RE1	Soil	NWTPH-Dx/SG	02/20/20 14:50	02/25/20 17:26	10.61g/5mL	10g/5mL	0.94

BTEX Compounds by EPA 8260C

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0030167							
A0B0596-04RE1	Soil	5035A/8260C	02/20/20 14:50	02/21/20 13:32	5.37g/5mL	5g/5mL	0.93

Polyaromatic Hydrocarbons (PAHs) by EPA 8270D SIM

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 0030119							
A0B0596-04	Soil	EPA 8270D (SIM)	02/20/20 14:50	03/04/20 14:47	10.14g/5mL	10g/5mL	0.99

Percent Dry Weight



**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
EPA ID: OR01039

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**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
<u>Batch: 0020666</u>							
A0B0596-01	Soil	EPA 8000C	02/20/20 14:30	02/21/20 16:55			NA
A0B0596-02	Soil	EPA 8000C	02/20/20 14:35	02/21/20 16:55			NA
A0B0596-03	Soil	EPA 8000C	02/20/20 14:40	02/21/20 16:55			NA
A0B0596-04	Soil	EPA 8000C	02/20/20 14:50	02/21/20 16:55			NA

Apex Laboratories

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QUALIFIER DEFINITIONS

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

**Apex Laboratories**

- F-11 The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
- S-05 Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- V-15 Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

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**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 1/2 the Reporting Limit (RL).  
-For Blank hits falling between 1/2 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.



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**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.



AMENDED REPORT

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LABORATORY ACCREDITATION INFORMATION

**TNI 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
<u>All reported analytes are included in Apex Laboratories' current ORELAP scope.</u>					

**Secondary Accreditations**

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

**Subcontract Laboratory Accreditations**

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

**Field Testing Parameters**

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

Apex Laboratories

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	Project Manager: Casey Michaels	

**APEX LABS COOLER RECEIPT FORM**

**Client:** 4C's Env. **Element WO#:** A0 B0596

**Project/Project #:** Jackpot Market #1798

**Delivery Info:**  
 Date/time received: 2/21/20 @ 1242 By: APK  
 Delivered by: Apex  Client  ESS  FedEx  UPS  Swift  Senvoy  SDS  Other

**Cooler Inspection** Date/time inspected: 2/21/20 @ 1242 By: APK  
 Chain of Custody included? Yes  No  Custody seals? Yes  No   
 Signed/dated by client? Yes  No   
 Signed/dated by Apex? Yes  No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>4.9</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>N</u>						
Ice type: (Gel/Real/Other)	<u>Gel</u>						
Condition:	<u>Melty</u>						

Cooler out of temp? (Y/N)  Possible reason why: \_\_\_\_\_  
 If some coolers are in temp and some out, were green dots applied to out of temperature samples? Yes/No/NA   
 Out of temperature samples form initiated? Yes/No/NA   
**Samples Inspection:** Date/time inspected: 2/21/20 @ 1245 By: APK  
 All samples intact? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 Bottle labels/COCs agree? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 COC/container discrepancies form initiated? Yes  No  NA   
 Containers/volumes received appropriate for analysis? Yes  No  Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 Do VOA vials have visible headspace? Yes  No  NA   
 Comments: \_\_\_\_\_  
 Water samples: pH checked: Yes  No  NA  pH appropriate? Yes  No  NA   
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
**Additional information:** \_\_\_\_\_  
 \_\_\_\_\_  
 Labeled by: APK Witness: JJ Cooler Inspected by: APK See Project Contact Form: Y

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Vineta Mills, M.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

April 26, 2022

Jeff Jackman, Project Manager  
Point Source Solutions  
5317 NE St Johns Rd, Suite D  
Vancouver, WA 98661

Dear Mr Jackman:

Included are the results from the testing of material submitted on April 21, 2022 from the Jackpot Market, F&BI 204352 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures

c: Gil Cobb, Johnny Ramus, Kyle Fisher  
PSS0426R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 21, 2022 by Friedman & Bruya, Inc. from the Point Source Solutions Jackpot Market, F&BI 204352 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Point Source Solutions</u>
204352 -01	SB1-S1-4
204352 -02	SB2-S1-4
204352 -03	SB3-S1-4

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/26/22  
Date Received: 04/21/22  
Project: Jackpot Market, F&BI 204352  
Date Extracted: 04/22/22  
Date Analyzed: 04/23/22

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-D<sub>x</sub>  
Sample Extracts Passed Through a  
Silica Gel Column Prior to Analysis  
Results Reported on a Dry Weight Basis  
Results Reported as mg/kg (ppm)**

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% <u>Recovery</u> ) (Limit 56-165)
SB1-S1-4 204352-01	<50	<250	104
SB2-S1-4 204352-02	<50	<250	104
SB3-S1-4 204352-03	<50	<250	102
Method Blank 02-981 MB	<50	<250	118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/26/22

Date Received: 04/21/22

Project: Jackpot Market, F&BI 204352

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 204314-01 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	118	112	63-146	5

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	79-144

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

