



***Phthalate Source Control Monitoring Report
Glacier Northwest
River Street Cement Terminal***

Prepared for:
CalPortland

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32-25009423



6/30/26

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A blue ink signature that reads 'B. Goulet'.

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1.0 Introduction

This *Source Control Performance Monitoring Report* (Report) was prepared by Apex Companies, LLC (Apex) on behalf of Glacier Northwest (Glacier) to document the completed performance monitoring activities and results as described in the *Phthalate Source Control Measure Performance Monitoring Work Plan* (Work Plan) for the Glacier's River Street Cement Terminal, dated November 10, 2021. The site location is shown in Figure 1 and the site layout is shown in Figure 2. The performance monitoring included cleaning out the storm system, sampling catch basin solids, and sampling stormwater.

1.1 Site Description and Background

The site is located at 1050 N River Street in Portland, Oregon, on the east side of the Willamette River between approximately River Mile (RM) 11.15 and 11.35. The Oregon Department of Environmental Quality (DEQ) has required upland property owners to identify, evaluate, and control sources of contamination that may reach the Willamette River and Portland Harbor consistent with the Portland Harbor Joint Source Control Strategy (JSCS; DEQ/EPA, 2005), implemented by DEQ and the Environmental Protection Agency (EPA).

The site is divided into three stormwater basins (Basin A, Basin B, and Basin C) that each drain to a respective outfall (WR-350, WR-351, and WR-352; Figure 2). Based on the results of the Source Control Evaluation Report (Apex, 2014), the only contaminant of concern for stormwater source control associated with Glacier's operations at the site was determined to be bis(2-ethylhexyl)phthalate (BEHP), and was limited to the northern portion of the site, specifically Basin A, which ultimately drains to Outfall WR-350.

Basin A is divided into three sub-basins: Sub-Basin 1, which consists of stormwater flow from catch basins 1 through 5 (CB-1 through CB-5); Sub-Basin 2, which consists of stormwater flow from the cement storage dome into CB-3; and Sub-Basin 3, which consists of stormwater flow from catch basins 6 through 10 (CB-6 through CB-10) and from CB-3 mentioned above (Figure 3). Basin A includes two StormCeptors (A1 and A2) for suspended solids removal. StormCeptor A1 receives stormwater from paved areas of Sub-Basin 1 (flow from CB-1 and CB-2). CB-4 and CB-5 are located in pervious areas, and the catch basin inlets are each elevated a few inches above grade, such that CB-4 and CB-5 rarely receive stormwater flow. StormCeptor A2 has two inlet pipes. The west inlet pipe conveys the stormwater from Sub-Basin 1, and the east inlet pipe conveys stormwater from Sub-Basins 2 and 3 combined. The west and east inlet pipes combine and pass through StormCeptor A2 and discharge to the Willamette River via Outfall WR-350.

1.2 Previous Investigations & Control Measures

1.2.1 Source Control Evaluation—2014

A source control evaluation was conducted in 2014 in the three stormwater basins at the site (Basin A, Basin B, and Basin C) that each drain to a respective outfall (WR-350, WR-351, and WR-352; Figure 2).

Based on the results reported in the *Source Control Evaluation Report* (Apex, 2014), the only contaminant of concern for stormwater source control associated with Glacier's operations at the site was determined to be BEHP, and was limited to Basin A, which ultimately drains to Outfall WR-350.

1.2.2 Source Control Tracing—2018 through 2019

Phthalate source control tracing activities were conducted for Basin A between 2018 and 2019. These efforts included sampling stormwater and stormwater solids from each sub-basin within Basin A to narrow down the source of phthalate in stormwater in Basin A. Basin A consists of three sub-basins (Figure 3) with the following generic uses:

- Sub-Basin 1 consists of an empty lot with infrequent surplus equipment storage and includes CB-1, CB-2, CB-4, CB-5, and StormCeptor A1.
- Sub-Basin 2 consists of the cement storage dome and includes CB-3.
- Sub-Basin 3 consists of the truck entrance/driveway, cement bulker access rack, and a parking lot, and includes CB-6 through CB-10.

Stormwater from each sub-basin passes through StormCeptor A2 prior to being discharged to the Willamette River via Outfall WR-350. The activities and results from the phthalate source tracing investigation were summarized in the *Phthalate Source Tracing Report* (Apex, 2020). Based on the results of the source tracing activities, BEHP was determined to originate from Sub-Basin 2, which consists of stormwater flow from the cement storage dome into CB-3 (Figure 3). The stormwater and stormwater solids analytical results from the 2018 and 2019 source tracing activities are provided in Table 1 and Table 2. The *Phthalate Source Tracing Report* concluded that the phthalate contaminant source consisted of surfacing material on the cement storage dome. This report also included a streamlined source control measure (SCM) alternative evaluation and schedule for implementation.

1.2.3 Source Control Measure—2021

During summer 2021, Glacier implemented a stormwater SCM that included resurfacing the cement storage dome with GacoFlex S42 Series, manufactured by Gaco, a division of Firestone Building Products. GacoFlex S42 Series is a silicone-based, phthalate-free, solvent-free coating. The SCM was completed in mid-September 2021.

1.3 Regulatory Correspondence

Following the 2021 SCMs, DEQ requested a workplan for performance monitoring to monitor the effectiveness of the BEHP SCMs. The source control performance monitoring program is described in the *Revised Phthalate Source Control Measure Performance Monitoring Work Plan*, dated December 3, 2021. The Work Plan describes the proposed scope of work and sampling and analysis program to evaluate the performance of completed phthalate SCMs.

2.0 Performance Monitoring

Preparation and field sampling procedures, field observations during sampling activities, and any deviations from the Work Plan are summarized below.

2.1 Stormwater System Cleanout

The source control tracing activities identified the source of BEHP to originate from Sub-Basin 2, which included stormwater flow from the cement storage dome into CB-3 (Figure 2) within Basin A. The stormwater system cleanout activities were completed on January 7, 2022, and included cleaning of the drainage curb around the cement dome, catch basins in Basin A (CB-1 through CB-10), and StormCeptors A1 and A2.

Basin A cleanout activities included the following activities:

1. Remove drain inserts/solids traps; visually inspect each drainage inlet point and catch basins, and make notes as to sediment content;
2. Remove any accumulated solids and stagnant stormwater from each catch basin and StormCeptor using a vacuum truck. Stormwater will be collected in a 120-barrel vacuum truck for disposal;
3. Dispose of water and solids; and
4. Replace all drain inserts/solids traps.

2.2 Sampling and Analysis Methodologies

2.2.1 Stormwater Solids Sampling and Analysis Methodologies

On November 17, 2022, accumulated solids were collected from CB-3, located in drainage Basin A. The sample was homogenized and then placed directly into laboratory-provided containers. The sample was transported to an accredited environmental laboratory for analysis with chain-of-custody documentation.

Analytical methods were consistent with prior stormwater solid sampling events and consistent with the analytical methods presented in the DEQ-approved *Revised Phthalate Source Control Measure Performance Monitoring Work Plan* (Apex, 2021). Apex Laboratories, located in Tigard, Oregon, completed the laboratory work. The stormwater solid samples were submitted to the laboratory for the following analyses:

- BEHP using EPA Method 8270

2.2.2 Stormwater Sampling and Analysis Methodologies

Three sampling events were completed for predicted storm criteria events on April 18, 2022, October 24, 2023, and November 9, 2023. A storm criteria event is defined in the Storm Event Criteria and Selection outlined in the JSCS guidance (DEQ/EPA, 2005) as follows:

-
- Each sampling event should be preceded by an antecedent dry period of at least 24 hours (as defined by less than 0.1 inch over the previous 24 hours);
 - Minimum predicted rainfall intensity of greater than 0.2 inches per event; and
 - Expected storm event duration of at least three hours.

Data from the City of Portland's Albina rain gauge was used to document that each storm event met the criteria outlined in the DEQ guidance. The rain gauge lists the rainfall depth per hour (reported on a one- to three-hour time delay). Hyetographs for each sampling event are included in Appendix A. A brief description of the qualifying criteria for each storm event is included below.

- **April 18, 2022:** The 24 hours preceding the storm event had 0.04 inches of rainfall. The event had a predicted rainfall of greater than 0.2 inches with a measured total of 0.45 inches and an event duration of 9 hours (Appendix A). Runoff occurred from each of the sub-basins and was relatively representative of typical site discharge.
- **October 24, 2023:** The 24 hours preceding the storm event had 0.03 inches of rainfall. The event had a predicted rainfall of 0.50 inches with a measured total of 0.50 inches and an event duration of 13 hours (Appendix A).
- **November 9, 2023:** The 24 hours preceding the storm event had 0.02 inches of rainfall. The event had a predicted rainfall of greater than 0.2 inches with a measured total of 0.14 inches and an event duration of 4 hours (Appendix A). Although the measured rainfall intensity of the event was less than 0.2 inches, the event meets the JSCS storm event criteria since the rainfall intensity was predicted to be greater than 0.2 inches of rain.

For all three events, stormwater samples were collected from four locations:

- West inlet pipe in StormCeptor A2, representing stormwater from Sub-Basin 1;
- East inlet pipe in StormCeptor A2, representing stormwater from Sub-Basins 2 and 3 combined;
- CB- 3, representing stormwater from Sub-Basin 2 (primarily runoff from the cement storage dome); and
- Outfall (WR-350), representing stormwater discharging to the Willamette River from Basin A.

Apex made visual observations of stormwater discharge and recorded the time of initial discharge with respect to the time of grab sample collection. Field parameters (temperature and pH) were also monitored at the outfall.

All samples were collected as unfiltered (total) samples. Samples were collected in wide-mouth glass jars with Teflon lids that were pre-certified by the laboratory to be free of BEHP. An equipment blank was collected during each sampling event from any reusable equipment. Nitrile gloves or other supplies potentially containing phthalates were not used.

The samples collected from StormCeptor A2 and Outfall 350 were collected using a remote sampling device (using the same method as prior outfall sampling). The StormCeptors are a confined space and therefore

were not entered. A modified sampling procedure was implemented to sample catch basin CB-3. For this stormwater sample, the grate was removed, and the sample was collected from the runoff as it cascaded over the edge of the catch basin. This sampling method is consistent with methods for sheet flow stormwater sampling described by the Washington State Department of Ecology (Ecology; 2015) and was used at the site during previous stormwater sampling efforts.

Analytical methods were consistent with prior stormwater sampling events and consistent with the analytical methods presented in the DEQ-approved *Stormwater Sampling Work Plan Addendum* (Apex, 2013). Apex Laboratories, located in Tigard, Oregon, completed the laboratory work. The stormwater samples were submitted to the laboratory for the following analyses:

- BEHP using EPA Method 8270; and
- Total Suspended Solids using EPA Method SM-2540D.

2.3 BEHP Quality Assurance

BEHP is ubiquitous in personal and industrial products. To reduce potential for cross-contamination, preventative actions were taken to minimize potential for contamination from outside sources:

- Apex Laboratories protocols call for all solvents, extraction vessels, instrument fittings, and blank water to be phthalate-free. Method blank and equipment blank data from Apex Laboratories also confirmed that laboratory operations did not appear to introduce phthalate contamination to environmental samples.
- Equipment and supplies containing phthalates, such as rain gear, nitrile gloves, or non-stainless-steel sampling equipment, were avoided. A field blank analyzed by Apex Laboratories confirmed that field sampling procedures did not appear to cross-contaminate.

3.0 Sampling Analysis and Results

The sections below summarize the analytical results from the three stormwater sampling events (2022 and 2023). Analytical laboratory reports and a quality assurance review are provided in Appendix B and summarized in Tables 1 and 2. The laboratory analyses for stormwater were completed by Apex Laboratories, located in Tigard, Oregon.

3.1 Stormwater Solids Sampling Analytical Results

Stormwater solid samples were analyzed for BEHP via EPA Method 8270. Analytical results are discussed in more detail for each event below and are summarized in Table 1.

3.2 Stormwater Sampling Analytical Results

Stormwater samples were analyzed for BEHP via EPA Method 8270; and total suspended solids (TSS) via EPA Method SM 2540D. Analytical results are discussed in more detail for each event below and are summarized in Table 2.

3.2.1 April 2022 Event

TSS Results. TSS was not detected above the laboratory method reporting limit (MRL) of 5 milligrams per liter (mg/L) at Outfall WR-350. TSS concentrations in the sub-basins ranged from <5 mg/L to 20 mg/L. TSS SLVs or cleanup levels are not promulgated. The 1200-Z general permit benchmark of 30 mg/L is used as a relevant screening levels and TSS concentrations were below the 1200-Z benchmark. The maximum TSS concentration of 20 mg/L was observed in the sample collected from combined Sub-Basins 2 and 3.

BEHP Results. BEHP was not detected in stormwater at Outfall WR-350 or any of the upstream Basin 1 sampling points. BEHP MRLs were above the JSCS SLV and the Portland Harbor ROD Cleanup Levels. BEHP MRLs were greatest at the CB-3 sampling location.

Tentatively Identified Compound (TIC) Findings. The results of a EPA 8270E TIC search on samples from this group indicated the presence of a variety of substituted Phthalic Acids (Benzenedicarboxylic Acids) and other Organic Acids. The primary interferent with the BEHP is a substituted Phthalic acid resulting in raised MRLs for BEHP.

3.2.2 October 2023 Event

TSS Results. The TSS concentration was detected at 13 mg/L in the sample collected from Outfall WR-350. TSS concentrations at the other sample locations ranged from 5 mg/L (Sub-Basin 2) to 27 mg/L (Sub-Basin 1). All TSS concentrations were below the 1200-Z general permit benchmark of 30 mg/L.

BEHP Results. BEHP was not detected in stormwater at Outfall WR-350 or any of the upstream Basin 1 sampling points. BEHP MRLs were above the JSCS SLV and the Portland Harbor ROD Cleanup Levels. BEHP MRLs were greatest at the CB-3 sampling location, and increased compared to the April 2022 event. The laboratory reported that the elevated MRL was the result of co-eluting organic compounds.

3.2.3 November 2023 Event

TSS Results. The TSS concentration was detected at 11.0 mg/L in the sample collected from Outfall WR-350. TSS concentrations at the other sample locations ranged from 5 mg/L (Sub-Basin 1) to 18 mg/L (Sub-Basins 2 and 3 combined). All TSS concentrations were below the 1200-Z general permit benchmark of 30 mg/L.

BEHP Results. BEHP was not detected in stormwater at Outfall WR-350. BEHP was not detected in stormwater from any other sub-basins, or any of the upstream Basin 1 sampling points. BEHP MRLs were above the JSCS SLV and the Portland Harbor ROD Cleanup Levels. BEHP MRLs were greatest at the CB-3 sampling location, and increased compared to the April 2022 event. The laboratory reported that the elevated MRL was the result of co-eluting organic compounds.

4.0 Summary and Conclusions

The performance monitoring activities evaluated BEHP concentrations within Basin A and outfall WR-350 to evaluate the efficacy of the implemented SCMs. BEHP was not detected in the performance monitoring samples. The absence of BEHP in stormwater samples is qualified because the MRLs for the source control monitoring exceed the JSCS SLV and the Portland Harbor ROD Cleanup Levels.

As described above and within the analytical reports, the laboratory reported that the elevated MRL was the result of co-eluting organic compounds. Apex consulted with multiple laboratories to evaluate analytical methods to determine if the concentration of BEHP can be calculated in the presence of the co-eluting compounds. Apex Labs and other laboratories consulted did not have alternate methods or cleanup techniques available to quantify BEHP concentrations in the presence of the co-eluting compounds. Apex Labs offered customized method where samples would be spiked with known concentrations of BEHP and then recovered. The difference between the measured BEHP concentration and spiked amount should represent the BEHP concentration in the sample matrix. This method would yield results that would be semiquantitative and not acceptable for comparison to JSCS SLVs or ROD cleanup levels.

Apex recommends continued stormwater compliance monitoring to satisfy active stormwater discharge permits. Given continued compliance with all 1200-Z sampling requirements, the cleanliness of this industrial property, and the SCMs taken and in place to date, no further recommendations are warranted at this time.

5.0 References

- Apex (Apex Companies, LLC). (2013, October 18). *Stormwater Sampling Work Plan Addendum, Glacier Northwest Portland Cement Terminal, Portland, Oregon.*
- Apex. (2014, October 29). *Source Control Evaluation, Glacier Northwest Portland Cement Terminal, Portland, Oregon.*
- Apex. (2020, March 30). *Phthalate Source Tracing Report, Glacier Northwest River Street Cement Terminal, Portland, Oregon.*
- Apex. (2021, November 10). *Phthalate Source Control Measure Performance Monitoring Work Plan, Glacier Northwest River Street Cement Terminal, Portland, Oregon.*
- DEQ and EPA (Oregon Department of Environmental Quality and Environmental Protection Agency). (2005, December). *Portland Harbor Joint Source Control Strategy – Final (Screening Criteria Spreadsheet Revised July 16, 2007).*
- Ecology (Washington State Department of Ecology). (2015, December). *Stormwater Sampling Manual: A Guide for the Industrial Stormwater General Permit. Washington State Department of Ecology, Olympia, WA. Pg. 41. Publication No. 15-03-044.*
<https://apps.ecology.wa.gov/publications/summarypages/1503044.html>.

Table 1
DRAFT Stormwater Analytical Results
Glacier Northwest Portland Cement Terminal
Portland, Oregon

Sample ID	Sample Type	Sample Round	Sample Time	Sample Date	Sample Analyte		
					Bis(2-ethylhexyl) phthalate	Di-n-Octyl Phthalate	TSS
					Concentration		
					µg/L	µg/L	mg/L
Portland Harbor ROD Cleanup Levels					0.2	NE	NE
JSCS SLV					2.2	3	NE
Sub-Basin 1 (A2-West)	Pre-SCM	R1	11:03 AM	12/9/2018	<1.50	<1.50	17.0
		R2	11:40 AM		3.23	3.63	9.0
		R3	12:25 PM		<1.50	<1.50	7.0
		R4	12:59 PM		<1.50	<1.50	7.0
		R1	2:05 PM	4/10/2019	2.49	3.53	<5.00
		R2	2:30 PM		1.60	2.25	<5.00
		R3	3:00 PM		3.01	3.36	8.0
		R4	3:31 PM		1.09 J	<1.62	<5.00
	Post-SCM	--	10:20 AM	4/18/2022	<0.440	--	<5.00
		--	1:00 PM	10/24/2023	<1.98	--	27.00
--		5:17 PM	11/9/2023	<6.56	--	5.0	
Sub-Basin 2 (CB-3)	Pre-SCM	R1	11:00 AM	12/9/2018	64.5	98.9	14.0
		R2	11:33 AM		18.0	44.4	24.0
		R3	12:08 PM		5.42	7.35	<5.00
		R4	12:38 PM		5.82	7.17	5.0
		R1	1:45 PM	4/10/2019	32.9	64.2	16.0
		R2	2:15 PM		210	292	14.0
		R3	2:46 PM		30.5	49.7	10.0
		R4	3:15 PM		69.5	89.6	<5.00
	R5	3:50 PM	92.4		144.0	<5.00	
	Post-SCM	--	8:20 AM	4/18/2022	<100	--	15.6
		--	1:15 PM	10/24/2023	<110	--	5.0
		--	5:20 PM	11/9/2023	<273	--	10.0
Sub-Basins 2 & 3 Combined (A2-East)		Pre-SCM	R1	11:10 AM	12/9/2018	18.6	29.5
	R2		11:43 AM	6.45		8.00	12.0
	R3		12:20 PM	3.57		5.09	11.0
	R4		12:48 PM	3.73		3.94	<5.00
	R1		1:55 PM	4/10/2019	65.4	96.3	9.0
	R2		2:25 PM		26.9	37.8	12.0
	R3		2:58 PM		9.98	12.8	11.0
	R4		3:30 PM		9.61	12.5	<5.00
	Post-SCM	--	8:50 AM	4/18/2022	<92.9	--	20.0
		--	12:45 PM	10/24/2023	<91.4	--	20.0
		--	5:13 PM	11/9/2023	<170	--	18.0
		Out Fall WR-350	Pre-SCM	R1	11:00 AM	12/9/2018	8.92
R2	11:30 AM			14.1	23.3		14.0
R3	12:10 PM			5.20	7.94		16.0
R4	12:40 PM			3.96	5.61		6.0
R1	1:46 PM			4/10/2019	7.86	16.3	<5.00
R2	2:15 PM				22.3	33.1	<5.00
R3	2:45 PM				15.70	21.1	<5.00
R4	3:25 PM				9.33	13.3	<5.00
Post-SCM	--		8:10 AM	4/18/2022	<3.74	--	<5.00
	--		12:35 PM	10/24/2023	<26.0	--	13.0
	--	5:02 PM	11/9/2023	<32.0	--	11.0	

Notes:

1. Sub-Basin 1 = Catch basins CB-1, CB-2, CB-4, CB-5 (A2-W)
2. Sub-Basin 2 = Catch basin CB-3
3. Sub-Basin 3 = Catch basins CB-6 through CB-10
4. Phthalates analyzed via EPA Method 8270.
5. TSS = Total Suspended Solids. TSS Analyzed via Method SM 2540D.
6. SCM = Source Control Measures.
7. Portland Harbor ROD Cleanup Levels (CUL): Surface Water
8. JSCS Screening Level Value (SLV): Stormwater/Surface Water
9. NE = Not Established
10. **Bold** values indicate concentrations exceed the ROD CUL

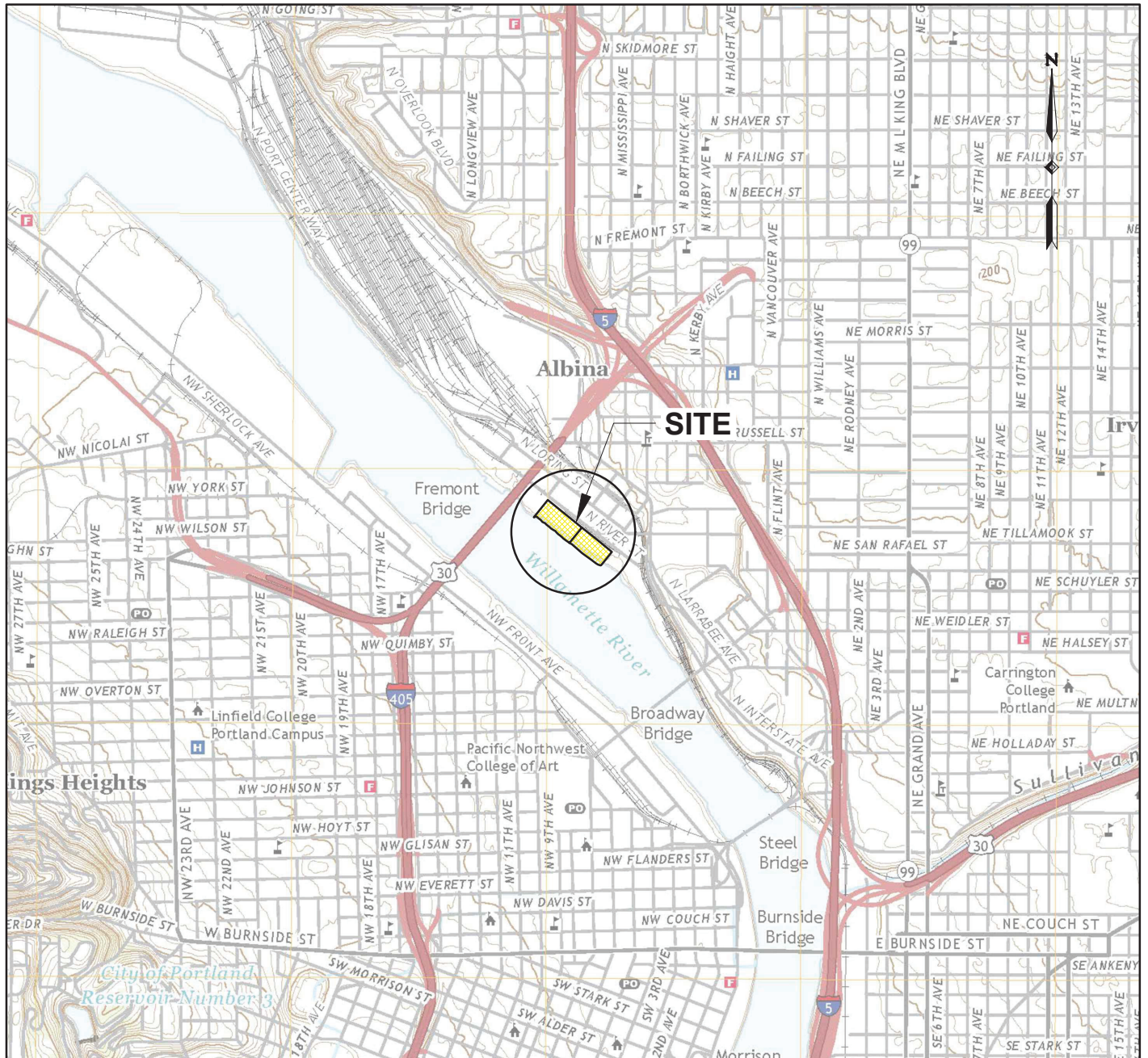
Table 2
Stormwater Solids Analytical Results
Glacier Northwest Portland Cement Terminal
Portland, Oregon

Compound Group	Constituent	Method	Basin			Basin A										
			Sample Identification			CB-1	CB-2	CB-3	CB-4	CB-5	CB-6	CB-7	CB-8	CB-9	CB-10	DOME ACC
			Units	ROD CULs	JSCS SLV	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018	No Sample 5/1/2-18	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018	Discrete 5/1/2018
Phthalates	Bis(2-ethylhexyl) phthalate	8270D	µg/kg	135	330	1,500 J	3,200 J	8,900 J	<1,400	--	2,600 J	3,400 J	2,500 J	6,200 J	3,200 J	23,000
	Di-n-octyl phthalate	8270D	µg/kg	NE	NE	<9,700	<11,000	20,000	<1,400	--	<9,400	<9,400	<10,000	<40,000	<10,000	42,000
General Parameters	Percent solids	USEPA 160.2	percent	NE	NE	63.5	54.8	55.3	90.6	No Solids Present	65.3	65.5	60.3	60.6	59.4	84.4
																45.5

Notes:

- = Not analyzed
- NE = Not established
- < = Not detected above the laboratory reporting limit
- JSCS SLV = Portland Harbor Joint Source Control Strategy Screening Level Value (Catch Basin Sediment)
- ROD CUL = Record of Decision Cleanup Level (Table 17) for Riverbank Soil and Sediment
- Bold** values indicate concentrations exceed the ROD CUL
- J = Estimated value, analyte detected below the laboratory reporting limit
- µg/kg = micrograms per kilogram
- JSCS Screening Level Values (SLV): Upland Soil/Stormwater Sediment

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Portland, Oregon

United States Geological Survey
7.5 Minute Series Topographic Map
Contour Interval: 10 feet
Scale: 1 inch = 24,000 feet
Date: 2020




OREGON

0 2,000 4,000
Scale in Feet

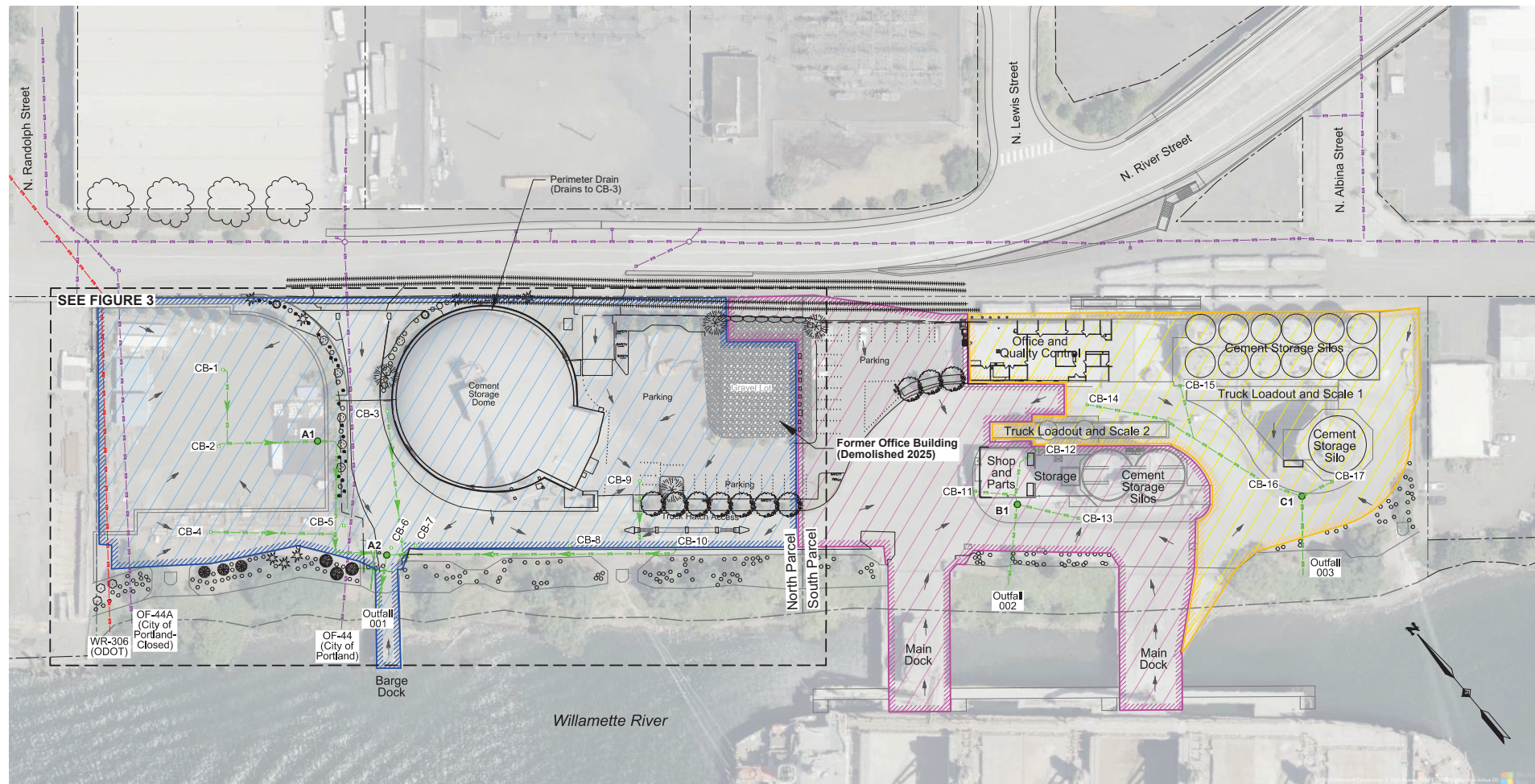
Site Location Map

Phthalate Performance Monitoring Report
Glacier Northwest Portland Cement Terminal
Portland, Oregon

 Apex Companies, LLC
214 E Galer Street, #300
Seattle, Washington 98102

Project Number: 32-25009423	Drawn: JP	Approved: JF
September 2025		

Figure
1



Legend:

- Tax Lot Boundary
- 575 --- 575 --- Glacier NW Site Storm Sewer Line
- 575 --- 575 --- City of Portland Storm Sewer Line
- 575 --- 575 --- Oregon Department of Transportation Storm Sewer Line
- Stormwater Flow Direction
- A1 ● Stormceptor Location
- Basin A
- Basin B
- Basin C

0 80 160
Scale in Feet

SOURCES: Base map prepared from an Existing Conditions survey by Minister-Glaeser Surveying Inc (02-09-2024), Taxlots from ©Oregon Metro www.oregonmetro.gov/ris.

Site Vicinity Plan

Phthalate Performance Monitoring Report
Glacier Northwest Portland Cement Terminal
Portland, Oregon

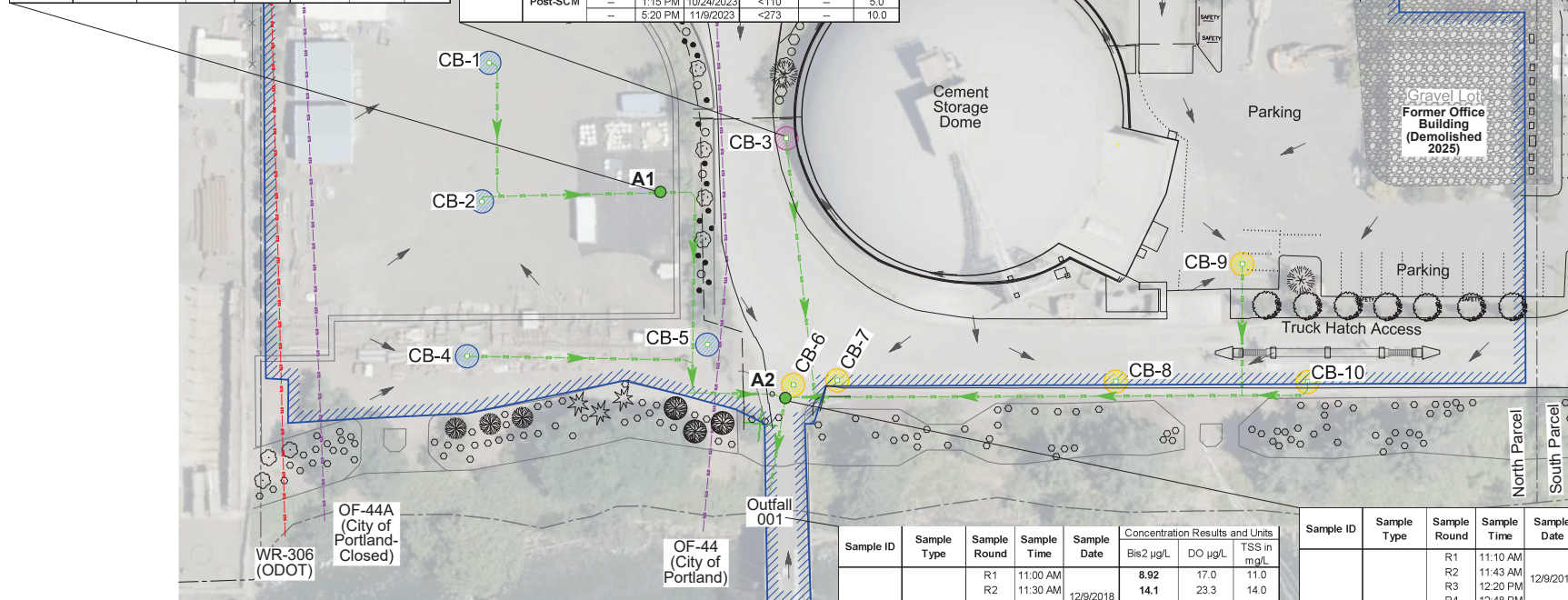
APEX Apex Companies, LLC
214 E Galer Street, #300
Seattle, Washington 98102

Project Number: 32-25009423
Drawn: JP
Approved: JF
September 2025

Figure
2

Sample ID	Sample Type	Sample Round	Sample Time	Sample Date	Concentration Results and Units		
					Bis2 µg/L	DO µg/L	TSS in mg/L
Sub-Basin 1 (A2-West)	Pre-SCM	R1	11:03 AM	12/9/2018	<1.50	<1.50	17.0
		R2	11:40 AM		3.23	3.63	9.0
		R3	12:25 PM		<1.50	<1.50	7.0
		R4	12:59 PM		<1.50	<1.50	7.0
	Post-SCM	R1	2:05 PM	4/10/2019	2.49	3.53	<5.00
		R2	2:30 PM		1.6	2.25	<5.00
		R3	3:00 PM		3.01	3.36	9.0
		R4	3:31 PM		1.09 J	<1.62	<5.00
	Post-SCM	--	10:20 AM	4/18/2022	<0.440	--	<5.00
		--	1:00 PM	10/24/2023	<1.98	--	27.00

Sample ID	Sample Type	Sample Round	Sample Time	Sample Date	Concentration Results and Units		
					Bis2 µg/L	DO µg/L	TSS in mg/L
Sub-Basin 2 (CB-3)	Pre-SCM	R1	11:00 AM	12/9/2018	64.5	98.9	14.0
		R2	11:33 AM		18.0	44.4	24.0
		R3	12:08 PM		5.42	7.35	<5.00
		R4	12:38 PM		5.82	7.17	5.0
	Post-SCM	R1	1:45 PM	4/10/2019	32.9	64.2	16
		R2	2:15 PM		210	292	14
		R3	2:46 PM		30.5	49.7	10
		R4	3:15 PM		69.5	89.6	<5.00
	Post-SCM	--	3:50 PM	4/18/2022	92.4	144.0	<5.00
		--	8:20 AM		<100	--	15.6



Sample ID	Sample Type	Sample Round	Sample Time	Sample Date	Concentration Results and Units		
					Bis2 µg/L	DO µg/L	TSS in mg/L
Outfall 001 (Former Glacier WR-350)	Pre-SCM	R1	11:00 AM	12/9/2018	8.92	17.0	11.0
		R2	11:30 AM		14.1	23.3	14.0
		R3	12:10 PM		5.20	7.94	16.0
		R4	12:40 PM		3.96	5.61	6.0
	Post-SCM	R1	1:46 PM	4/10/2019	7.86	16.3	<5.00
		R2	2:15 PM		22.3	33.1	<5.00
		R3	2:45 PM		15.70	21.1	<5.00
		R4	3:25 PM		9.33	13.3	<5.00
	Post-SCM	--	8:10 AM	4/18/2022	<3.74	--	<5.00
		--	12:35 PM	10/24/2023	<26.0	--	13.0

Sample ID	Sample Type	Sample Round	Sample Time	Sample Date	Concentration Results and Units		
					Bis2 µg/L	DO µg/L	TSS in mg/L
Sub-Basins 2 and 3 Combined (A2-East)	Pre-SCM	R1	11:10 AM	12/9/2018	18.6	29.5	26.0
		R2	11:43 AM		6.45	8.00	12.0
		R3	12:20 PM		3.57	5.09	11.0
		R4	12:48 PM		3.73	3.94	<5.00
	Post-SCM	R1	1:55 PM	4/10/2019	65.4	96.3	9.0
		R2	2:25 PM		26.9	37.8	12
		R3	2:58 PM		9.98	12.8	11
		R4	3:30 PM		9.61	12.5	<5.00
	Post-SCM	--	8:50 AM	4/18/2022	<92.9	--	20.0
		--	12:45 PM	10/24/2023	<91.4	--	20.0

Legend:

- Tax Lot Boundary
- Basin A Area
- Glacier NW Site Storm Sewer Line and Flow Direction
- City of Portland Storm Sewer Line
- Oregon Department of Transportation Storm Sewer Line
- Stormwater Flow Direction
- A1 ● Stormceptor Location
- CB-7 □ Catch Basin Location
- Sub-Basin 1
- Sub-Basin 2
- Sub-Basin 3

Sampling Notes:

- Sub-Basin 1 = Catch basins CB-1, CB-2, CB-4, CB-5 (A2-W)
- Sub-Basin 2 = Catch basin CB-3
- Sub-Basin 3 = Catch basins CB-6 through CB-10
- Phthalates analyzed via EPA Method 625
- Bis2 = Bis (2-ethylhexyl)
- DO = Di-n-Octyl
- TSS = Total Suspended Solids; TSS analyzed via Method SM 2540D.
- SCM = Source Control Measures
- Portland Harbor ROD Cleanup Levels (CUL): Surface Water
- Bold** values indicate concentrations exceeded the ROD CUL
- J = Estimated Value
- µg/L = Micrograms per Liter
- mg/L = Milligrams per Liter

0 50 100
Scale in Feet

SOURCES: Base map prepared from an Existing Conditions survey by Minister-Glaeser Surveying Inc (02-09-2024), Taxlots from ©Oregon Metro www.oregonmetro.gov/ris.

Stormwater Analytical Results

Phthalate Performance Monitoring Report
Glacier Northwest Portland Cement Terminal
Portland, Oregon

Apex Companies, LLC
214 E Galer Street, #300
APEX Seattle, Washington 98102

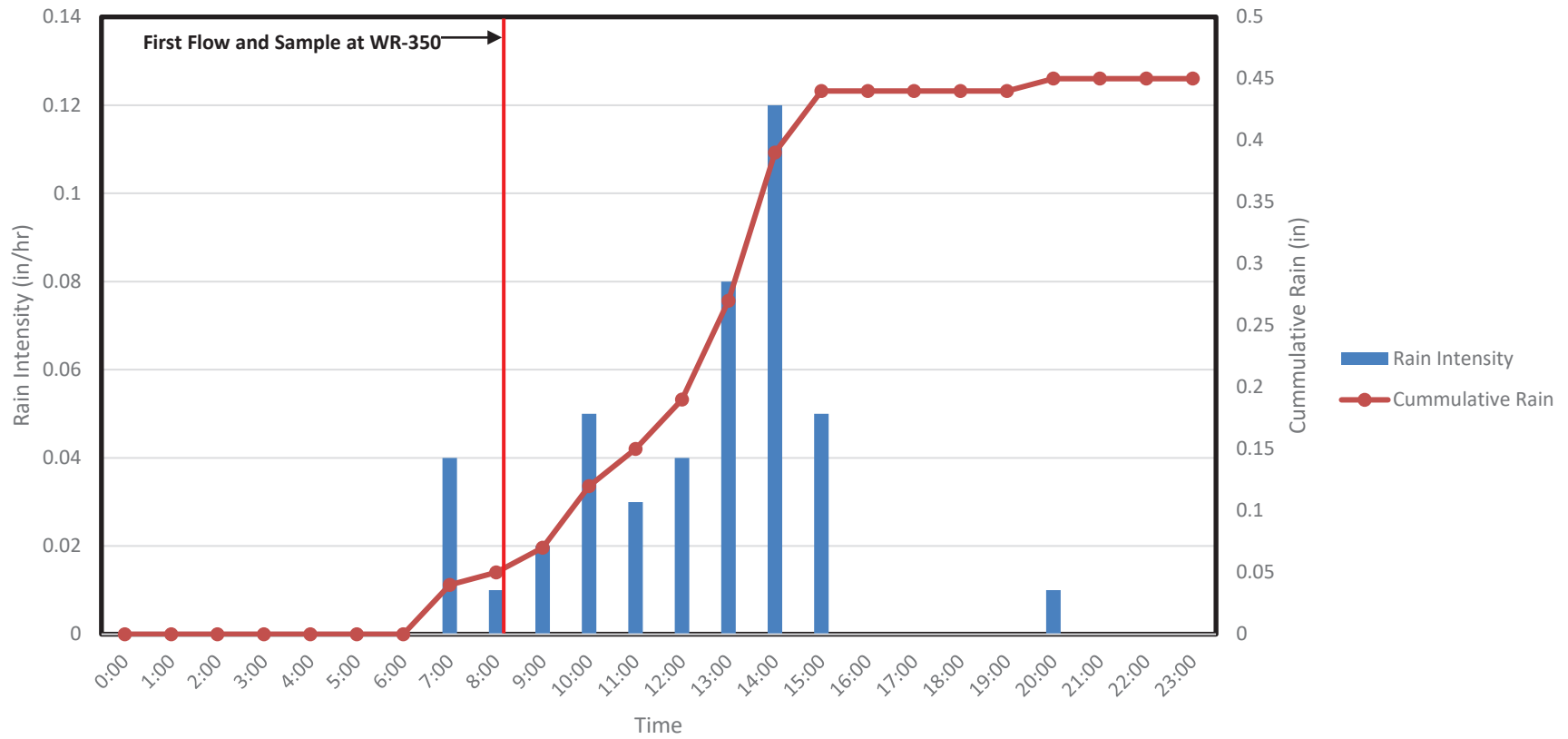
Project Number: 32-25009423
Drawn: JP
Approved: JF
September 2025

Figure
3

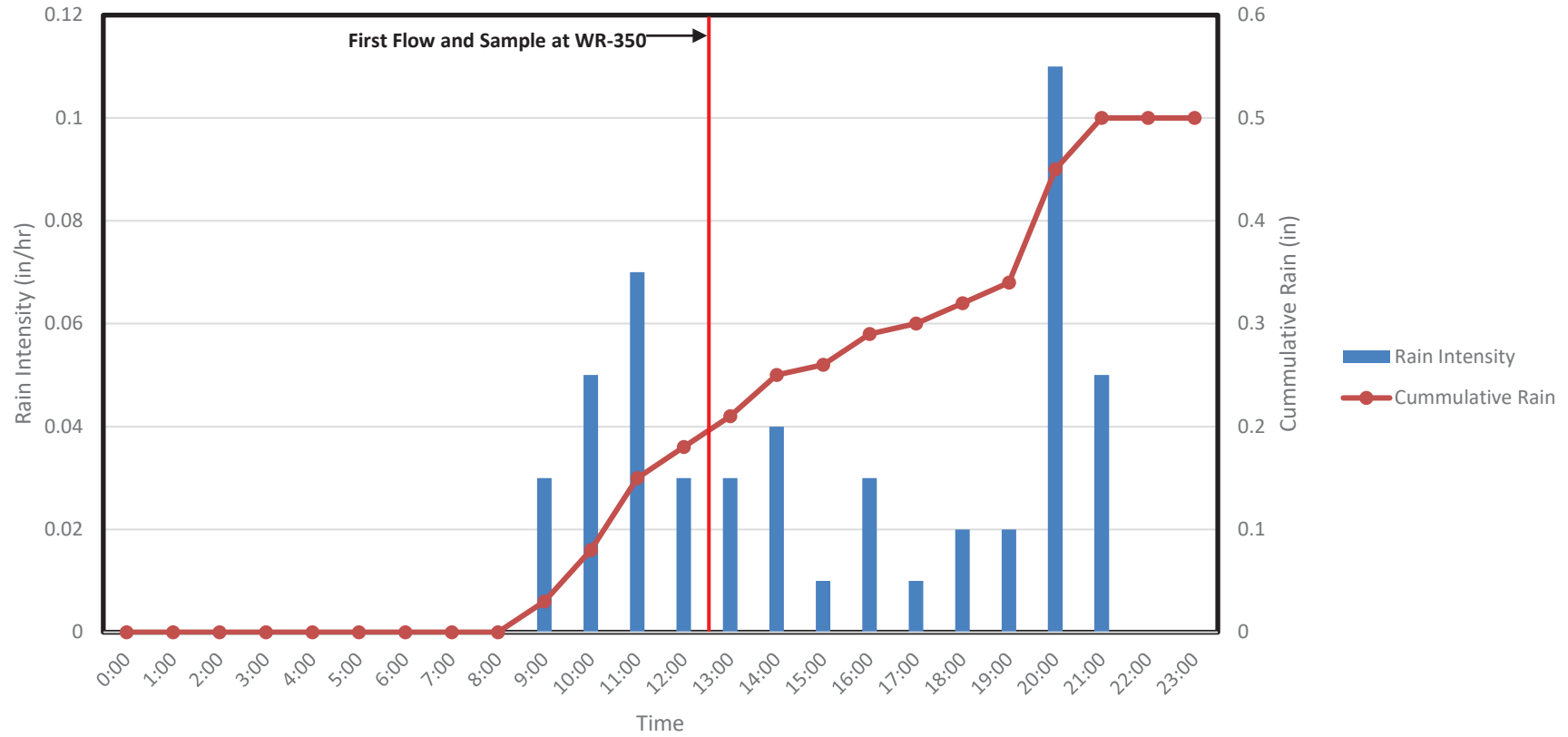
Appendix A

Stormwater Hyetographs

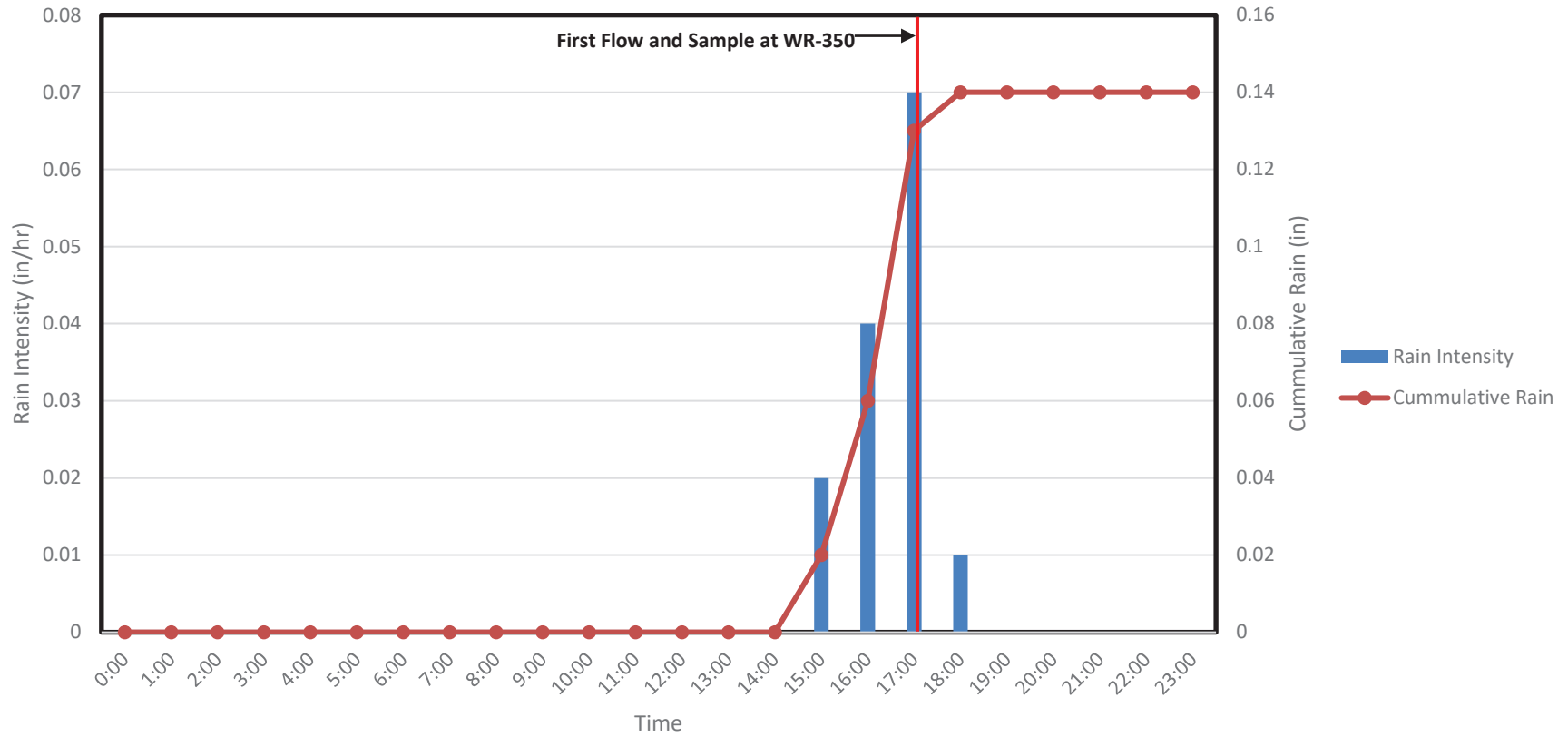
Rain Gauge Data - April 18, 2022



Rain Gauge Data - October 24, 2023



Rain Gauge Data - November 9, 2023



Appendix B

Laboratory Reports



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Monday, June 6, 2022

John Foxwell
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: A2D0649 - SCM Performance Monitoring - CAL046-0309032-21001075

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 A2D0649, which was received by the laboratory on 4/18/2022 at 2:18:00PM.

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, 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	0.9 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.



Apex Laboratories

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201

Project: **SCM Performance Monitoring**

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-350	A2D0649-01	Water	04/18/22 08:10	04/18/22 14:18
CB-3	A2D0649-02	Water	04/18/22 08:20	04/18/22 14:18
A2-East	A2D0649-03	Water	04/18/22 08:50	04/18/22 14:18
A2-West	A2D0649-04	Water	04/18/22 10:20	04/18/22 14:18
Rinse Blank	A2D0649-05	Water	04/18/22 09:30	04/18/22 14:18

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503-718-2323
ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201

Project: **SCM Performance Monitoring**

Project Number: **CAL046-0309032-21001075**

Project Manager: **John Foxwell**

Report ID:

A2D0649 - 06 06 22 0959

ANALYTICAL CASE NARRATIVE

Work Order: A2D0649

EPA 8270E: Tentatively Identified Compounds (TICs) Evaluation

The results of a Tentatively Identified Compound search on this sample indicate the presence of a variety of substituted Phthalic Acids (Benzenedicarboxylic Acids) and other Organic Acids. The primary interferent with the requested Bis(2-ethylhexyl) Phthalate is a substituted Phthalic acid resulting in raised Reporting Limits for this analyte.

Mark Zehr
Organics Manager
5/18/2022

Apex Laboratories

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ORELAP ID: OR100062

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3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A2D0649-01)		Matrix: Water			Batch: 22D0809		R-04	
Bis(2-ethylhexyl)phthalate	ND	3.74	3.74	ug/L	10	04/21/22 15:35	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	56 %	Limits:	44-120 %	10	04/21/22 15:35	EPA 8270E
2-Fluorobiphenyl (Surr)			56 %		44-120 %	10	04/21/22 15:35	EPA 8270E
Phenol-d6 (Surr)			16 %		10-133 %	10	04/21/22 15:35	EPA 8270E
p-Terphenyl-d14 (Surr)			56 %		50-134 %	10	04/21/22 15:35	EPA 8270E
2-Fluorophenol (Surr)			26 %		19-120 %	10	04/21/22 15:35	EPA 8270E
2,4,6-Tribromophenol (Surr)			96 %		43-140 %	10	04/21/22 15:35	EPA 8270E Q-41
CB-3 (A2D0649-02RE1)		Matrix: Water			Batch: 22D0809			
Bis(2-ethylhexyl)phthalate	ND	100	100	ug/L	100	04/21/22 21:01	EPA 8270E	R-02
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	76 %	Limits:	44-120 %	100	04/21/22 21:01	EPA 8270E S-05
2-Fluorobiphenyl (Surr)			65 %		44-120 %	100	04/21/22 21:01	EPA 8270E S-05
Phenol-d6 (Surr)			20 %		10-133 %	100	04/21/22 21:01	EPA 8270E S-05
p-Terphenyl-d14 (Surr)			45 %		50-134 %	100	04/21/22 21:01	EPA 8270E S-05
2-Fluorophenol (Surr)			31 %		19-120 %	100	04/21/22 21:01	EPA 8270E S-05
2,4,6-Tribromophenol (Surr)			117 %		43-140 %	100	04/21/22 21:01	EPA 8270E S-05
A2-East (A2D0649-03)		Matrix: Water			Batch: 22D0809		R-04	
Bis(2-ethylhexyl)phthalate	ND	92.9	92.9	ug/L	40	04/21/22 13:47	EPA 8270E	R-02
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	84 %	Limits:	44-120 %	40	04/21/22 13:47	EPA 8270E S-05
2-Fluorobiphenyl (Surr)			77 %		44-120 %	40	04/21/22 13:47	EPA 8270E S-05
Phenol-d6 (Surr)			25 %		10-133 %	40	04/21/22 13:47	EPA 8270E S-05
p-Terphenyl-d14 (Surr)			43 %		50-134 %	40	04/21/22 13:47	EPA 8270E S-05
2-Fluorophenol (Surr)			41 %		19-120 %	40	04/21/22 13:47	EPA 8270E S-05
2,4,6-Tribromophenol (Surr)			116 %		43-140 %	40	04/21/22 13:47	EPA 8270E S-05
A2-West (A2D0649-04RE1)		Matrix: Water			Batch: 22D0809			
Bis(2-ethylhexyl)phthalate	ND	0.440	0.440	ug/L	1	04/21/22 21:38	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery:	49 %	Limits:	44-120 %	1	04/21/22 21:38	EPA 8270E
2-Fluorobiphenyl (Surr)			51 %		44-120 %	1	04/21/22 21:38	EPA 8270E
Phenol-d6 (Surr)			19 %		10-133 %	1	04/21/22 21:38	EPA 8270E
p-Terphenyl-d14 (Surr)			60 %		50-134 %	1	04/21/22 21:38	EPA 8270E
2-Fluorophenol (Surr)			28 %		19-120 %	1	04/21/22 21:38	EPA 8270E
2,4,6-Tribromophenol (Surr)			104 %		43-140 %	1	04/21/22 21:38	EPA 8270E Q-41
Rinse Blank (A2D0649-05)		Matrix: Water			Batch: 22D0809			

Apex Laboratories

Darrell Auvil, Client Services Manager

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Rinse Blank (A2D0649-05)				Matrix: Water		Batch: 22D0809		
Bis(2-ethylhexyl)phthalate	ND	0.196	0.392	ug/L	1	04/21/22 17:24	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: 76 %	Limits: 44-120 %	1	04/21/22 17:24	EPA 8270E	
2-Fluorobiphenyl (Surr)			71 %	44-120 %	1	04/21/22 17:24	EPA 8270E	
Phenol-d6 (Surr)			24 %	10-133 %	1	04/21/22 17:24	EPA 8270E	
p-Terphenyl-d14 (Surr)			74 %	50-134 %	1	04/21/22 17:24	EPA 8270E	
2-Fluorophenol (Surr)			36 %	19-120 %	1	04/21/22 17:24	EPA 8270E	
2,4,6-Tribromophenol (Surr)			89 %	43-140 %	1	04/21/22 17:24	EPA 8270E	Q-41

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A2D0649 - 06 06 22 0959

ANALYTICAL SAMPLE RESULTS

Tentatively Identified Compounds by GC/MS (8270E)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
CB-3 (A2D0649-02)		Matrix: Water			Batch: 22D0809		X	
1,2-Benzenedicarboxylic acid, dihe	47	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
1,2-Benzenedicarboxylic acid, dino	15	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
1,2-Benzenedicarboxylic acid, diundecyl ester	47	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
2-Propanol, 1-chloro-, phosphate (7.8	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Benzenesulfonamide, N-butyl-	3.0	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Bis(1-chloro-2-propyl)(3-chloro-1-	3.0	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Nonanedioic acid, bis(2-ethylhexyl	9.1	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, 2-ethylbutyl heptyl	2.1	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, 2-propylpentyl unde	16	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, 4-methylhept-3-yl u	8.0	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, 6-ethyl-3-octyl hep	29	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, dec-2-yl heptyl est	5.4	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, hept-3-yl nonyl est	4.7	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, hept-3-yl undecyl e	5.3	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, heptyl 2-methylbuty	32	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, heptyl 2-propylpent	4.6	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, heptyl hept-2-yl es	20	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, heptyl octyl ester	6.9	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic acid, hexyl 6-methylhept-	22	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Phthalic anhydride	140	---		ug/L	10	04/21/22 16:12	EPA 8270E TICs	
Tentatively Identified Compounds	ND	---	2.2	ug/L	10	04/21/22 16:12	EPA 8270E TICs	

Apex Laboratories

Darrell Auvil, Client Services Manager

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A2D0649-01)		Matrix: Water						
Batch: 22D0695								
Total Suspended Solids	ND	---	5.00	mg/L	1	04/19/22 13:25	SM 2540 D	SL-1
CB-3 (A2D0649-02)		Matrix: Water						
Batch: 22D0695								
Total Suspended Solids	15.6	---	5.00	mg/L	1	04/19/22 13:25	SM 2540 D	
A2-East (A2D0649-03)		Matrix: Water						
Batch: 22D0695								
Total Suspended Solids	20.0	---	6.25	mg/L	1	04/19/22 13:25	SM 2540 D	
A2-West (A2D0649-04)		Matrix: Water						
Batch: 22D0695								
Total Suspended Solids	ND	---	5.00	mg/L	1	04/19/22 13:25	SM 2540 D	SL-1
Rinse Blank (A2D0649-05)		Matrix: Water						
Batch: 22D0695								
Total Suspended Solids	ND	---	5.00	mg/L	1	04/19/22 13:25	SM 2540 D	SL-1

Apex Laboratories

Darrell Auvil, Client Services Manager

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Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0809 - EPA 3510C (Acid Extraction)						Water						
Blank (22D0809-BLK1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 11:22							
EPA 8270E												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	0.0238	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	B-02, J
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Benzo(e)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,1'-Biphenyl	0.00984	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	B-02, J
2,3,5-Trimethylnaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
2,6-Dimethylnaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 71 %		Limits: 44-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		69 %		44-120 %		"						

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Darrell Auvil, Client Services Manager

Page 8 of 21



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0809 - EPA 3510C (Acid Extraction)						Water						
Blank (22D0809-BLK1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 11:22							
Surr: Phenol-d6 (Surr)		Recovery: 26 %		Limits: 10-133 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		73 %		50-134 %		"						
2-Fluorophenol (Surr)		39 %		19-120 %		"						
2,4,6-Tribromophenol (Surr)		77 %		43-140 %		"						
												Q-41
LCS (22D0809-BS1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 11:59							
EPA 8270E												
Acenaphthene	2.81	0.0400	0.0800	ug/L	4	4.00	---	70	47-122%	---	---	
Acenaphthylene	3.05	0.0400	0.0800	ug/L	4	4.00	---	76	41-130%	---	---	
Anthracene	3.15	0.0400	0.0800	ug/L	4	4.00	---	79	57-123%	---	---	
Benz(a)anthracene	3.29	0.0400	0.0800	ug/L	4	4.00	---	82	58-125%	---	---	
Benzo(a)pyrene	3.68	0.0600	0.120	ug/L	4	4.00	---	92	54-128%	---	---	
Benzo(b)fluoranthene	3.36	0.0600	0.120	ug/L	4	4.00	---	84	53-131%	---	---	
Benzo(k)fluoranthene	3.20	0.0600	0.120	ug/L	4	4.00	---	80	57-129%	---	---	
Benzo(g,h,i)perylene	3.29	0.0400	0.0800	ug/L	4	4.00	---	82	50-134%	---	---	
Chrysene	3.22	0.0400	0.0800	ug/L	4	4.00	---	81	59-123%	---	---	
Dibenz(a,h)anthracene	3.13	0.0400	0.0800	ug/L	4	4.00	---	78	51-134%	---	---	
Fluoranthene	3.39	0.0400	0.0800	ug/L	4	4.00	---	85	57-128%	---	---	
Fluorene	3.01	0.0400	0.0800	ug/L	4	4.00	---	75	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.02	0.0400	0.0800	ug/L	4	4.00	---	76	52-134%	---	---	
1-Methylnaphthalene	2.78	0.0800	0.160	ug/L	4	4.00	---	70	41-120%	---	---	
2-Methylnaphthalene	2.83	0.0800	0.160	ug/L	4	4.00	---	71	40-121%	---	---	
Naphthalene	2.67	0.0800	0.160	ug/L	4	4.00	---	67	40-121%	---	---	B-02
Phenanthrene	3.02	0.0400	0.0800	ug/L	4	4.00	---	75	59-120%	---	---	
Pyrene	3.28	0.0400	0.0800	ug/L	4	4.00	---	82	57-126%	---	---	
Carbazole	3.69	0.0600	0.120	ug/L	4	4.00	---	92	60-122%	---	---	
Dibenzofuran	3.00	0.0400	0.0800	ug/L	4	4.00	---	75	53-120%	---	---	
Bis(2-ethylhexyl)phthalate	2.81	0.800	1.60	ug/L	4	4.00	---	70	55-135%	---	---	
Butyl benzyl phthalate	2.81	0.800	1.60	ug/L	4	4.00	---	70	53-134%	---	---	
Diethylphthalate	3.19	0.800	1.60	ug/L	4	4.00	---	80	56-125%	---	---	
Dimethylphthalate	3.08	0.800	1.60	ug/L	4	4.00	---	77	45-127%	---	---	
Di-n-butylphthalate	3.23	0.800	1.60	ug/L	4	4.00	---	81	59-127%	---	---	
Di-n-octyl phthalate	2.99	0.800	1.60	ug/L	4	4.00	---	75	51-140%	---	---	
Benzo(e)pyrene	3.33	0.0400	0.0800	ug/L	4	4.00	---	83	67-120%	---	---	

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	Limits	RPD	RPD Limit	Notes	
Batch 22D0809 - EPA 3510C (Acid Extraction)						Water							
LCS (22D0809-BS1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 11:59								
Perylene	3.72	0.0400	0.0800	ug/L	4	4.00	---	93	62-130%	---	---	B-02	
1,1'-Biphenyl	2.96	0.0400	0.0800	ug/L	4	4.00	---	74	49-120%	---	---		
2,3,5-Trimethylnaphthalene	3.05	0.0400	0.0800	ug/L	4	4.00	---	76	47-120%	---	---		
2,6-Dimethylnaphthalene	2.87	0.0400	0.0800	ug/L	4	4.00	---	72	35-120%	---	---		
Surr: Nitrobenzene-d5 (Surr)		Recovery: 79 %		Limits: 44-120 %		Dilution: 4x							
2-Fluorobiphenyl (Surr)		80 %		44-120 %		"							
Phenol-d6 (Surr)		25 %		10-133 %		"							
p-Terphenyl-d14 (Surr)		81 %		50-134 %		"							
2-Fluorophenol (Surr)		40 %		19-120 %		"							
2,4,6-Tribromophenol (Surr)		102 %		43-140 %		"							
												Q-41	
LCS Dup (22D0809-BSD1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 12:35								Q-19
EPA 8270E													
Acenaphthene	2.74	0.0400	0.0800	ug/L	4	4.00	---	69	47-122%	2	30%	B-02	
Acenaphthylene	3.00	0.0400	0.0800	ug/L	4	4.00	---	75	41-130%	2	30%		
Anthracene	3.02	0.0400	0.0800	ug/L	4	4.00	---	75	57-123%	4	30%		
Benz(a)anthracene	3.17	0.0400	0.0800	ug/L	4	4.00	---	79	58-125%	4	30%		
Benzo(a)pyrene	3.61	0.0600	0.120	ug/L	4	4.00	---	90	54-128%	2	30%		
Benzo(b)fluoranthene	3.18	0.0600	0.120	ug/L	4	4.00	---	79	53-131%	6	30%		
Benzo(k)fluoranthene	3.17	0.0600	0.120	ug/L	4	4.00	---	79	57-129%	0.8	30%		
Benzo(g,h,i)perylene	3.20	0.0400	0.0800	ug/L	4	4.00	---	80	50-134%	3	30%		
Chrysene	3.06	0.0400	0.0800	ug/L	4	4.00	---	76	59-123%	5	30%		
Dibenz(a,h)anthracene	3.09	0.0400	0.0800	ug/L	4	4.00	---	77	51-134%	1	30%		
Fluoranthene	3.21	0.0400	0.0800	ug/L	4	4.00	---	80	57-128%	5	30%		
Fluorene	2.94	0.0400	0.0800	ug/L	4	4.00	---	73	52-124%	2	30%		
Indeno(1,2,3-cd)pyrene	2.98	0.0400	0.0800	ug/L	4	4.00	---	74	52-134%	1	30%		
1-Methylnaphthalene	2.73	0.0800	0.160	ug/L	4	4.00	---	68	41-120%	2	30%		
2-Methylnaphthalene	2.83	0.0800	0.160	ug/L	4	4.00	---	71	40-121%	0.1	30%		
Naphthalene	2.64	0.0800	0.160	ug/L	4	4.00	---	66	40-121%	0.9	30%		
Phenanthrene	2.86	0.0400	0.0800	ug/L	4	4.00	---	72	59-120%	5	30%		
Pyrene	3.14	0.0400	0.0800	ug/L	4	4.00	---	78	57-126%	4	30%		
Carbazole	3.52	0.0600	0.120	ug/L	4	4.00	---	88	60-122%	5	30%		
Dibenzofuran	2.96	0.0400	0.0800	ug/L	4	4.00	---	74	53-120%	1	30%		
Bis(2-ethylhexyl)phthalate	2.76	0.800	1.60	ug/L	4	4.00	---	69	55-135%	2	30%		

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0809 - EPA 3510C (Acid Extraction)						Water						
LCS Dup (22D0809-BSD1)						Prepared: 04/21/22 07:19 Analyzed: 04/21/22 12:35						Q-19
Butyl benzyl phthalate	2.77	0.800	1.60	ug/L	4	4.00	---	69	53-134%	1	30%	
Diethylphthalate	3.07	0.800	1.60	ug/L	4	4.00	---	77	56-125%	4	30%	
Dimethylphthalate	3.01	0.800	1.60	ug/L	4	4.00	---	75	45-127%	2	30%	
Di-n-butylphthalate	3.12	0.800	1.60	ug/L	4	4.00	---	78	59-127%	4	30%	
Di-n-octyl phthalate	2.99	0.800	1.60	ug/L	4	4.00	---	75	51-140%	0.1	30%	
Benzo(e)pyrene	3.31	0.0400	0.0800	ug/L	4	4.00	---	83	67-120%	0.7	30%	
Perylene	3.58	0.0400	0.0800	ug/L	4	4.00	---	90	62-130%	4	30%	
1,1'-Biphenyl	2.86	0.0400	0.0800	ug/L	4	4.00	---	72	49-120%	3	30%	B-02
2,3,5-Trimethylnaphthalene	2.99	0.0400	0.0800	ug/L	4	4.00	---	75	47-120%	2	30%	
2,6-Dimethylnaphthalene	2.75	0.0400	0.0800	ug/L	4	4.00	---	69	35-120%	4	30%	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery:	76 %	Limits:	44-120 %	Dilution:	4x				
2-Fluorobiphenyl (Surr)				77 %		44-120 %		"				
Phenol-d6 (Surr)				25 %		10-133 %		"				
p-Terphenyl-d14 (Surr)				78 %		50-134 %		"				
2-Fluorophenol (Surr)				39 %		19-120 %		"				
2,4,6-Tribromophenol (Surr)				98 %		43-140 %		"				
											Q-41	

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Apex Companies, LLC

3015 SW First Avenue
Portland, OR 97201Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Tentatively Identified Compounds by GC/MS (8270E)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0809 - EPA 3510C (Acid Extraction)							Water					
Blank (22D0809-BLK1)			Prepared: 04/21/22 07:19		Analyzed: 04/21/22 11:22		X					
EPA 8270E TICs												
Benzene, (1-butylheptyl)-	0.22	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-ethyldecyl)-	0.26	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-methyldecyl)-	0.50	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-methyldodecyl)-	0.36	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-methylnonyl)-	0.21	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-methylundecyl)-	0.43	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-propylnonyl)-	0.18	---		ug/L	1	---	---	---	---	---	---	
Benzene, (1-propyloctyl)-	0.23	---		ug/L	1	---	---	---	---	---	---	
Tentatively Identified Compounds	ND	---	0.18	ug/L	1	---	---	---	---	---	---	
Tetradecane	0.40	---		ug/L	1	---	---	---	---	---	---	
Tridecane	0.71	---		ug/L	1	---	---	---	---	---	---	

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ANALYTICAL REPORT

Apex Laboratories, LLC

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503-718-2323
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Portland, OR 97201Project: SCM Performance Monitoring
Project Number: CAL046-0309032-21001075
Project Manager: John FoxwellReport ID:
A2D0649 - 06 06 22 0959

QUALITY CONTROL (QC) SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22D0695 - Total Suspended Solids						Water						
Blank (22D0695-BLK1)			Prepared: 04/19/22 08:41 Analyzed: 04/19/22 13:25									
<u>SM 2540 D</u>												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Duplicate (22D0695-DUP1)			Prepared: 04/19/22 08:41 Analyzed: 04/19/22 13:25									
<u>QC Source Sample: Non-SDG (A2D0657-01)</u>												
Total Suspended Solids	19.7	---	7.14	mg/L	1	---	19.1	---	---	2.94	10%	
Duplicate (22D0695-DUP2)			Prepared: 04/19/22 08:41 Analyzed: 04/19/22 13:25									
<u>QC Source Sample: CB-3 (A2D0649-02)</u>												
<u>SM 2540 D</u>												
Total Suspended Solids	17.6	---	5.00	mg/L	1	---	15.6	---	---	12.0	10%	Q-05
Reference (22D0695-SRM1)			Prepared: 04/19/22 08:41 Analyzed: 04/19/22 13:25									
<u>SM 2540 D</u>												
Total Suspended Solids	781	---		mg/L	1	781		100	84.9-115.1%	---	---	

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Apex Companies, LLC**3015 SW First Avenue
Portland, OR 97201Project: **SCM Performance Monitoring**Project Number: **CAL046-0309032-21001075**Project Manager: **John Foxwell****Report ID:****A2D0649 - 06 06 22 0959****SAMPLE PREPARATION INFORMATION****Selected Semivolatile Organic Compounds by EPA 8270E****Prep: EPA 3510C (Acid Extraction)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0809							
A2D0649-01	Water	EPA 8270E	04/18/22 08:10	04/21/22 07:19	1070mL/1mL	1000mL/1mL	0.94
A2D0649-02RE1	Water	EPA 8270E	04/18/22 08:20	04/21/22 07:19	900mL/1mL	1000mL/1mL	1.11
A2D0649-03	Water	EPA 8270E	04/18/22 08:50	04/21/22 07:19	990mL/1mL	1000mL/1mL	1.01
A2D0649-04RE1	Water	EPA 8270E	04/18/22 10:20	04/21/22 07:19	910mL/1mL	1000mL/1mL	1.10
A2D0649-05	Water	EPA 8270E	04/18/22 09:30	04/21/22 07:19	1020mL/1mL	1000mL/1mL	0.98

Tentatively Identified Compounds by GC/MS (8270E)**Prep: EPA 3510C (Acid Extraction)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0809							
A2D0649-02	Water	EPA 8270E TICs	04/18/22 08:20	04/21/22 07:20	900mL/1mL	1000mL/5mL	0.22

Solid and Moisture Determinations**Prep: Total Suspended Solids**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22D0695							
A2D0649-01	Water	SM 2540 D	04/18/22 08:10	04/19/22 08:41			NA
A2D0649-02	Water	SM 2540 D	04/18/22 08:20	04/19/22 08:41			NA
A2D0649-03	Water	SM 2540 D	04/18/22 08:50	04/19/22 08:41			NA
A2D0649-04	Water	SM 2540 D	04/18/22 10:20	04/19/22 08:41			NA
A2D0649-05	Water	SM 2540 D	04/18/22 09:30	04/19/22 08:41			NA

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Portland, OR 97201

Project: **SCM Performance Monitoring**
Project Number: **CAL046-0309032-21001075**
Project Manager: **John Foxwell**

Report ID:
A2D0649 - 06 06 22 0959

QUALIFIER DEFINITIONS

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

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- J** Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-41** Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- SL-1** Result is considered an estimated value. Less than 1 liter of sample was used in analysis and the method minimum residue of 2.5 mg was not met. The reporting level has been adjusted accordingly to reflect the increased uncertainty of the result.
- X** See Case Narrative.

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Project Number: **CAL046-0309032-21001075**
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Report ID:
A2D0649 - 06 06 22 0959

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) may not be 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

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

Project: **SCM Performance Monitoring**
Project Number: **CAL046-0309032-21001075**
Project Manager: **John Foxwell**

Report ID:
A2D0649 - 06 06 22 0959

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

Darrell Auvil, Client Services Manager

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Apex Companies, LLC**
3015 SW First Avenue
Portland, OR 97201Project: **SCM Performance Monitoring**
Project Number: CAL046-0309032-21001075
Project Manager: John Foxwell**Report ID:**
A2D0649 - 06 06 22 0959**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
Water	EPA 8270E TICs		1,2-Benzenedicarboxylic acid, dihe		
Water	EPA 8270E TICs		1,2-Benzenedicarboxylic acid, dino		
Water	EPA 8270E TICs		1,2-Benzenedicarboxylic acid, diundecyl		
Water	EPA 8270E TICs		2-Propanol, 1-chloro-, phosphate (
Water	EPA 8270E TICs		Benzenesulfonamide, N-butyl-		
Water	EPA 8270E TICs		Bis(1-chloro-2-propyl)(3-chloro-1-		
Water	EPA 8270E TICs		Nonanedioic acid, bis(2-ethylhexyl		
Water	EPA 8270E TICs		Phthalic acid, 2-ethylbutyl heptyl		
Water	EPA 8270E TICs		Phthalic acid, 2-propylpentyl unde		
Water	EPA 8270E TICs		Phthalic acid, 4-methylhept-3-yl u		
Water	EPA 8270E TICs		Phthalic acid, 6-ethyl-3-octyl hep		
Water	EPA 8270E TICs		Phthalic acid, dec-2-yl heptyl est		
Water	EPA 8270E TICs		Phthalic acid, hept-3-yl nonyl est		
Water	EPA 8270E TICs		Phthalic acid, hept-3-yl undecyl e		
Water	EPA 8270E TICs		Phthalic acid, heptyl 2-methylbuty		
Water	EPA 8270E TICs		Phthalic acid, heptyl 2-propylpent		
Water	EPA 8270E TICs		Phthalic acid, heptyl hept-2-yl es		
Water	EPA 8270E TICs		Phthalic acid, heptyl octyl ester		
Water	EPA 8270E TICs		Phthalic acid, hexyl 6-methylhept-		
Water	EPA 8270E TICs		Phthalic anhydride		

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

Apex Laboratories

Darrell Auvil, Client Services Manager

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Project Manager: **John Foxwell**

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A2D0649 - 06 06 22 0959

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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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

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ORELAP ID: OR100062

Apex Companies, LLC

3015 SW First Avenue

Portland, OR 97201

Project: SCM Performance MonitoringProject Number: CAL046-0309032-21001075Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

APEX LABS		CHAIN OF CUSTODY		Apex Companies, LLC		Lab # <u>A2D0649</u> COC <u>1</u> of <u>1</u>	
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323		Project Mgr: <u>John Foxwell</u>		Project Name: <u>SCM Performance Monitoring</u>		Project #: <u>CAL046-0309032-21001075</u>	
Address: <u>3015 SW 1st Ave., Portland</u>		Phone: <u>503-312-0076</u>		Email: <u>JFoxwell@apexlabs.com</u>		PO # <u>21001075</u>	
Sampled by: <u>John Foxwell</u>		Reported by: <u>John Foxwell</u>		ANALYSIS REQUEST		Hold Sample	
Site Location: <u>OR WA CA</u>		Matrix: <u>SW</u>		Priority Metals (13)		Frozen Archive	
AK ID <u>---</u>		TIME		8081 Pesticides			
SAMPLE ID		DATE		8082 PCBs			
WA-350	4/18/22	0810	SW	8270 Semi-Vols Full List			
CB-3	4/18/22	0920	SW	8260 VOCs Full List			
A2-East	4/18/22	0850	SW	8260 RBDM VOCs			
A2-West	4/18/22	0920	SW	8260 BTEX			
Blank	4/18/22	0930	SW	NWTPH-GX			
				NWTPH-DX			
				NWTPH-HCID			
				# OF CONTAINERS			
				TAT Requested (circle)			
				1 Day 2 Day 3 Day			
				5 Day Standard Other			
SPECIAL INSTRUCTIONS: <u>Also Email Kelsie.vanspaex@apex.com</u>				RECEIVED BY: <u>John Foxwell</u> Date: <u>4/18/22</u>			
				Signature: <u>[Signature]</u> Date: <u>4/18/22</u>			
				Printed Name: <u>Robert Schaffler</u> Time: <u>1418</u>			
				Company: <u>Apex Companies</u>			

Apex Laboratories

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Darrell Auvel, Client Services Manager

Apex Companies, LLC

3015 SW First Avenue

Portland, OR 97201

Project: SCM Performance Monitoring

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2D0649 - 06 06 22 0959

APEX LABS COOLER RECEIPT FORM

Client: Apex Companies Element WO#: A2 D0649
 Project/Project #: SCM Performance Monitoring / CAL046-0309032-21001075

Delivery Info:

Date/time received: 4/18/22 @ 1418 By: HAS
 Delivered by: Apex ☒ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐

Cooler Inspection Date/time inspected: 4/18/22 @ 1420 By: HAS

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>0.9</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>real</u>						
Condition:	<u>good</u>						

Cooler out of temp? (Y/N) ☒ Possible reason why: 3

Green dots applied to out of temperature samples? Yes ☒ No ☐

Out of temperature samples form initiated? Yes ☒ No ☐

Sample Inspection: Date/time inspected: 4/18/22 @ 14:42 By: JAM

All samples intact? Yes ☒ No ☐ Comments: _____

Bottle labels/COCs agree? Yes ☒ No ☐ Comments: no time or date on containers.

COC/container discrepancies form initiated? Yes ☐ No ☒

Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: _____

Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments: _____

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

Comments: _____

Additional information:

Labeled by: JAM

Witness: JAM

Cooler Inspected by: JAM



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Wednesday, November 15, 2023

John Foxwell

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

RE: A3J1654 - CalPortland River Street - CAL046-0309032-21001075

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 A3J1654, which was received by the laboratory on 10/24/2023 at 2:00:00PM.

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, 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

Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.

(See Cooler Receipt Form for details)

Default Cooler 4.6 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

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Darrell Auvil, Client Services Manager

**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC****6700 S.W. Sandburg Street****Tigard, OR 97223****503-718-2323****ORELAP ID: OR100062****Apex Companies, LLC****15618 SW 72nd Ave****Tigard, OR 97224****Project: CalPortland River Street****Project Number: CAL046-0309032-21001075****Project Manager: John Foxwell****Report ID:****A3J1654 - 11 15 23 1546****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-350	A3J1654-01	Water	10/24/23 12:35	10/24/23 14:00
CB-3	A3J1654-02	Water	10/24/23 13:15	10/24/23 14:00
A2-West	A3J1654-03	Water	10/24/23 13:00	10/24/23 14:00
A2-East	A3J1654-04	Water	10/24/23 12:45	10/24/23 14:00
Rinse Blank	A3J1654-05	Water	10/24/23 12:30	10/24/23 14:00

Apex Laboratories

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

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503-718-2323

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15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

ANALYTICAL CASE NARRATIVE

A3J1654

Apex Laboratories

Amended Final Report Revision 1:

8270E Data Correction

This report supersedes all previous reports.

Samples WR-350 (Apex ID: A3J1654-01), CB-3 (Apex ID: A3J1654-02), A2-West (Apex ID: A3J1654-03), and A2-East (Apex ID: A3J1654-04): Due to an analyst error, these samples were originally reported with positive detections for Bis(2-ethylhexyl) Phthalate. Corrected results are Non-Detect with the reporting limits raised above the detected interference and qualified with the R-02 qualifier.

Josh King
Semivolatiles Manager
11/15/23

Apex Laboratories

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

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Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave
Tigard, OR 97224Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

ANALYTICAL SAMPLE RESULTS

*** DEFAULT GENERAL METHOD ***

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A3J1654-01RE1)		Matrix: Water		Batch: 23J1080		AMEND, R-04		
Bis(2-ethylhexyl)phthalate	ND	26.0	26.0	ug/L	10	10/30/23 16:53	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 81 %	Limits: 78-134 %	10	10/30/23 16:53	EPA 8270E LVI	S-05	
Benzo(a)pyrene-d12 (Surr)		114 %	80-132 %	10	10/30/23 16:53	EPA 8270E LVI	S-05	
CB-3 (A3J1654-02RE1)		Matrix: Water		Batch: 23J1080		AMEND, R-04		
Bis(2-ethylhexyl)phthalate	ND	110	110	ug/L	50	10/30/23 17:25	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: %	Limits: 78-134 %	50	10/30/23 17:25	EPA 8270E LVI	S-01	
Benzo(a)pyrene-d12 (Surr)		96 %	80-132 %	50	10/30/23 17:25	EPA 8270E LVI	S-05	
A2-West (A3J1654-03)		Matrix: Water		Batch: 23J1080		AMEND		
Bis(2-ethylhexyl)phthalate	ND	1.98	1.98	ug/L	1	10/27/23 17:23	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 105 %	Limits: 78-134 %	1	10/27/23 17:23	EPA 8270E LVI		
Benzo(a)pyrene-d12 (Surr)		112 %	80-132 %	1	10/27/23 17:23	EPA 8270E LVI		
A2-East (A3J1654-04RE1)		Matrix: Water		Batch: 23J1080		AMEND, R-04		
Bis(2-ethylhexyl)phthalate	ND	91.4	91.4	ug/L	20	10/30/23 17:58	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 56 %	Limits: 78-134 %	20	10/30/23 17:58	EPA 8270E LVI	S-05	
Benzo(a)pyrene-d12 (Surr)		125 %	80-132 %	20	10/30/23 17:58	EPA 8270E LVI	S-05	
Rinse Blank (A3J1654-05)		Matrix: Water		Batch: 23J1080				
Bis(2-ethylhexyl)phthalate	ND	0.199	0.399	ug/L	1	10/27/23 16:51	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		Recovery: 103 %	Limits: 78-134 %	1	10/27/23 16:51	EPA 8270E LVI		
Benzo(a)pyrene-d12 (Surr)		106 %	80-132 %	1	10/27/23 16:51	EPA 8270E LVI		

Apex Laboratories

Darrell Auvil, Client Services Manager

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ANALYTICAL REPORT

AMENDED REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A3J1654-01)				Matrix: Water				
Batch: 23J1021								
Total Suspended Solids	13.0	---	5.00	mg/L	1	10/26/23 10:42	SM 2540 D	EST_s
CB-3 (A3J1654-02)				Matrix: Water				
Batch: 23J1021								
Total Suspended Solids	5.00	---	5.00	mg/L	1	10/26/23 10:42	SM 2540 D	EST_s
A2-West (A3J1654-03)				Matrix: Water				
Batch: 23J1021								
Total Suspended Solids	27.0	---	5.00	mg/L	1	10/26/23 10:42	SM 2540 D	
A2-East (A3J1654-04)				Matrix: Water				
Batch: 23J1021								
Total Suspended Solids	20.0	---	5.00	mg/L	1	10/26/23 10:42	SM 2540 D	EST_s
Rinse Blank (A3J1654-05)				Matrix: Water				
Batch: 23J1021								
Total Suspended Solids	ND	---	5.00	mg/L	1	10/26/23 10:42	SM 2540 D	EST_s

Apex Laboratories

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Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

QUALITY CONTROL (QC) SAMPLE RESULTS

*** DEFAULT GENERAL METHOD ***

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes	
Batch 23J1080 - EPA 3511 (Bottle Extraction)							Water						
Blank (23J1080-BLK1)			Prepared: 10/27/23 06:52		Analyzed: 10/27/23 13:37								
EPA 8270E LVI													
Bis(2-ethylhexyl)phthalate	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---		
Surr: Acenaphthylene-d8 (Surr)		Recovery: 103 %		Limits: 78-134 %		Dilution: 1x							
Benzo(a)pyrene-d12 (Surr)		101 %		80-132 %		"							
LCS (23J1080-BS1)			Prepared: 10/27/23 06:52		Analyzed: 10/27/23 14:10								
EPA 8270E LVI													
Bis(2-ethylhexyl)phthalate	1.29	0.200	0.400	ug/L	1	1.60	---	81	55-135%	---	---		
Surr: Acenaphthylene-d8 (Surr)		Recovery: 103 %		Limits: 78-134 %		Dilution: 1x							
Benzo(a)pyrene-d12 (Surr)		106 %		80-132 %		"							
LCS Dup (23J1080-BSD1)			Prepared: 10/27/23 06:52		Analyzed: 10/27/23 14:42								Q-19
EPA 8270E LVI													
Bis(2-ethylhexyl)phthalate	1.25	0.200	0.400	ug/L	1	1.60	---	78	55-135%	3	30%		
Surr: Acenaphthylene-d8 (Surr)		Recovery: 104 %		Limits: 78-134 %		Dilution: 1x							
Benzo(a)pyrene-d12 (Surr)		105 %		80-132 %		"							

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15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

QUALITY CONTROL (QC) SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23J1021 - Total Suspended Solids - 2022							Water					
Blank (23J1021-BLK1)			Prepared: 10/26/23 10:42 Analyzed: 10/26/23 10:42									
<u>SM 2540 D</u>												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Duplicate (23J1021-DUP1)			Prepared: 10/26/23 10:42 Analyzed: 10/26/23 10:42									
<u>QC Source Sample: Non-SDG (A3J1603-03)</u>												
Total Suspended Solids	94.0	---	5.00	mg/L	1	---	86.0	---	---	8.89	10%	
Duplicate (23J1021-DUP2)			Prepared: 10/26/23 10:42 Analyzed: 10/26/23 10:42									
<u>QC Source Sample: Non-SDG (A3J1651-01)</u>												
Total Suspended Solids	120	---	16.7	mg/L	1	---	117	---	---	2.79	10%	
Reference (23J1021-SRM1)			Prepared: 10/26/23 10:42 Analyzed: 10/26/23 10:42									
<u>SM 2540 D</u>												
Total Suspended Solids	826	---		mg/L	1	841		98.2	85-116%	---	---	

Apex Laboratories

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

SAMPLE PREPARATION INFORMATION

*** DEFAULT GENERAL METHOD ***

Prep: EPA 3511 (Bottle Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23J1080							
A3J1654-01RE1	Water	EPA 8270E LVI	10/24/23 12:35	10/27/23 07:17	125.04mL/5mL	125mL/5mL	1.00
A3J1654-02RE1	Water	EPA 8270E LVI	10/24/23 13:15	10/27/23 07:17	124.98mL/5mL	125mL/5mL	1.00
A3J1654-03	Water	EPA 8270E LVI	10/24/23 13:00	10/27/23 07:17	125.95mL/5mL	125mL/5mL	0.99
A3J1654-04RE1	Water	EPA 8270E LVI	10/24/23 12:45	10/27/23 07:17	125.82mL/5mL	125mL/5mL	0.99
A3J1654-05	Water	EPA 8270E LVI	10/24/23 12:30	10/27/23 07:17	125.37mL/5mL	125mL/5mL	1.00

Solid and Moisture Determinations

Prep: Total Suspended Solids - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 23J1021							
A3J1654-01	Water	SM 2540 D	10/24/23 12:35	10/26/23 10:42			NA
A3J1654-02	Water	SM 2540 D	10/24/23 13:15	10/26/23 10:42			NA
A3J1654-03	Water	SM 2540 D	10/24/23 13:00	10/26/23 10:42			NA
A3J1654-04	Water	SM 2540 D	10/24/23 12:45	10/26/23 10:42			NA
A3J1654-05	Water	SM 2540 D	10/24/23 12:30	10/26/23 10:42			NA

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Darrell Auvil, Client Services Manager

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**ANALYTICAL REPORT****AMENDED REPORT****Apex Laboratories, LLC****6700 S.W. Sandburg Street****Tigard, OR 97223****503-718-2323****ORELAP ID: OR100062****Apex Companies, LLC****15618 SW 72nd Ave****Tigard, OR 97224**Project: **CalPortland River Street**Project Number: **CAL046-0309032-21001075**Project Manager: **John Foxwell****Report ID:****A3J1654 - 11 15 23 1546****QUALIFIER DEFINITIONS****Client Sample and Quality Control (QC) Sample Qualifier Definitions:****Apex Laboratories**

- AMEND** The Result, Reporting Level, Recovery and/or RPD has changed. Note: Batch QC marked as AMENDED may or may not have been issued prior to the change. Case Narrative included if client data is affected.
- EST_s** Solids results are reported as estimates when less than 2.5 mg residue is recovered during analysis. All method QC requirements have been met for samples, and reporting levels are adjusted based on volume filtered. Results meet regulatory requirements.
- 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.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-01** Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Apex Companies, LLC**15618 SW 72nd Ave
Tigard, OR 97224Project: **CalPortland River Street**Project Number: **CAL046-0309032-21001075**Project Manager: **John Foxwell****Report ID:****A3J1654 - 11 15 23 1546****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'.

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

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) may not be 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).

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ANALYTICAL REPORT

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15618 SW 72nd Ave

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Project: **CalPortland River Street**

Project Number: **CAL046-0309032-21001075**

Project Manager: **John Foxwell**

Report ID:

A3J1654 - 11 15 23 1546

REPORTING NOTES AND CONVENTIONS (Cont.):

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.

-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, if results are not reported to the MDL.

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

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

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: **CalPortland River Street**Project Number: **CAL046-0309032-21001075**Project Manager: **John Foxwell****Report ID:****A3J1654 - 11 15 23 1546****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
Water	EPA 8270E LVI	SCN-W-04	Bis(2-ethylhexyl)phthalate	6065	

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

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

Field Testing Parameters

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

Apex Laboratories

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

AMENDED REPORT

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503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River StreetProject Number: CAL046-0309032-21001075Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

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

CHAIN OF CUSTODY

Lab # A3J1654 doc 1 of 1

Company: Apex Companies, LLC Project Mgr: John Foxwell Project Name: CalPortland Project #: CAL046-0309032-21001075

Address: 15618 SW 72nd Ave, Tigard Phone: _____ Email: John.Foxwell@apexlabs.com

Sampled by: Alex Evernden David Kalpakis

Site Location: _____

State: Oregon
County: Multnomah

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-GX	8260 BTEX	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, SP, AS, BA, BE, CA, CR, CO, CU, FE, PB, HG, MG, MN, MO, NI, K, TOTAL DISS. TCCLP	TCCLP Metals (8)	TSS-EPA 8230	BEHP-EPA 8270	Hold Sample	Frozen Archive
WR-450	10/24	1235 W	3																				
CB-3	10/24	1315 W	3																				
A2-west	10/24	1300 W	3																				
A2-East	10/24	1245 W	3																				
Rinse Blank	10/24	1230 W	3																				

Standard Turn Around Time (TAT) = 10 Business Days

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

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Alex Evernden David Kalpakis Date: 10/24/23 Signature: _____

RECEIVED BY: David Kalpakis Date: 10-24-23 Signature: _____

Printed Name: Alex Evernden David Kalpakis Time: 1400

Printed Name: David Kalpakis Time: 1400

Company: Apex Company: Apex

Form Y-002 R-00

Apex Laboratories

Darrell Auvil, Client Services Manager

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Project: CalPortland River StreetProject Number: CAL046-0309032-21001075Project Manager: John Foxwell

Report ID:

A3J1654 - 11 15 23 1546

APEX LABS COOLER RECEIPT FORM

Client: Apex Companies LLC Element WO#: A3 J1654Project/Project #: Cal Portland / CAL046-0309032-21001075

Delivery Info:

Date/time received: 10-24-23 @ 1400 By: DJSDelivered by: Apex ☒ Client ☐ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 10-24-23 @ 1407 By: DJSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>4.6</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>N</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>IN</u>						

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: 10/25/23 @ 1020 By: JSAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments: No time and date on containers.COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments:

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

Comments:

Additional information:

Labeled by: JS

Witness:

DJSCooler Inspected by: APLW

Form Y-003 R-01

Apex Laboratories

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15618 SW 72nd Ave
Tigard, OR 97224

Project: **CalPortland River Street**

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-350	A3K1193-01	Water	11/09/23 17:02	11/10/23 10:00
CB-3	A3K1193-02	Water	11/09/23 17:20	11/10/23 10:00
SUB BASIN - 1	A3K1193-03	Water	11/09/23 17:17	11/10/23 10:00
SUB BASIN 2 & 3	A3K1193-04	Water	11/09/23 17:13	11/10/23 10:00
RINSE BLANK	A3K1193-05	Water	11/09/23 17:00	11/10/23 10:00

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Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

ANALYTICAL SAMPLE RESULTS

*** DEFAULT GENERAL METHOD ***

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A3K1193-01RE1)		Matrix: Water			Batch: 23K0471		R-04	
Bis(2-ethylhexyl)phthalate	ND	32.0	32.0	ug/L	10	11/14/23 15:58	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		6ecoRery:	v7 %	Limits: 78-134 %	10	11/14/23 15:58	EPA 8270E LVI	S-05
Benzo(a)pyrene-d12 (Surr)			100 %	80-132 %	10	11/14/23 15:58	EPA 8270E LVI	S-05
CB-3 (A3K1193-02RE1)		Matrix: Water			Batch: 23K0471		R-04	
Bis(2-ethylhexyl)phthalate	ND	273	273	ug/L	40	11/14/23 16:31	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		6ecoRery:	%	Limits: 78-134 %	40	11/14/23 1v:31	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)			9v %	80-132 %	40	11/14/23 1v:31	EPA 8270E LVI	S-05
SUB BASIN - 1 (A3K1193-03)		Matrix: Water			Batch: 23K0471			
Bis(2-ethylhexyl)phthalate	ND	6.56	6.56	ug/L	1	11/13/23 17:12	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		6ecoRery:	103 %	Limits: 78-134 %	1	11/13/23 17:12	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)			111 %	80-132 %	1	11/13/23 17:12	EPA 8270E LVI	
SUB BASIN 2 & 3 (A3K1193-04RE1)		Matrix: Water			Batch: 23K0471		R-04	
Bis(2-ethylhexyl)phthalate	ND	170	170	ug/L	40	11/14/23 17:03	EPA 8270E LVI	R-02
Surrogate: Acenaphthylene-d8 (Surr)		6ecoRery:	%	Limits: 78-134 %	40	11/14/23 17:03	EPA 8270E LVI	S-01
Benzo(a)pyrene-d12 (Surr)			94 %	80-132 %	40	11/14/23 17:03	EPA 8270E LVI	S-05
RINSE BLANK (A3K1193-05)		Matrix: Water			Batch: 23K0471			
Bis(2-ethylhexyl)phthalate	ND	0.197	0.394	ug/L	1	11/13/23 18:17	EPA 8270E LVI	
Surrogate: Acenaphthylene-d8 (Surr)		6ecoRery:	102 %	Limits: 78-134 %	1	11/13/23 18:17	EPA 8270E LVI	
Benzo(a)pyrene-d12 (Surr)			107 %	80-132 %	1	11/13/23 18:17	EPA 8270E LVI	

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503-718-2323
ORELAP ID: OR100062**Apex Companies, LLC**
15618 SW 72nd Ave
Tigard, OR 97224Project: **CalPortland River Street**
Project Number: **CAL046-0309032-21001075**
Project Manager: **John Foxwell****Report ID:**
A3K1193 - 11 30 23 1154**ANALYTICAL SAMPLE RESULTS****Solid and Moisture Determinations**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
WR-350 (A3K1193-01)				Matrix: Water				
Kylqe-105P285p								
Total Suspended Solids	11.0	---	5.00	mg/L	1	11/15/23 18:24	SM 2540 D	EST_s
CB-3 (A3K1193-02)				Matrix: Water				
Kylqe-105P285p								
Total Suspended Solids	10.0	---	5.00	mg/L	1	11/15/23 18:24	SM 2540 D	EST_s
SUB BASIN - 1 (A3K1193-03)				Matrix: Water				
Kylqe-105P285p								
Total Suspended Solids	5.00	---	5.00	mg/L	1	11/15/23 18:24	SM 2540 D	EST_s
SUB BASIN 2 & 3 (A3K1193-04)				Matrix: Water				
Kylqe-105P285p								
Total Suspended Solids	18.0	---	5.00	mg/L	1	11/15/23 18:24	SM 2540 D	EST_s
RINSE BLANK (A3K1193-05)				Matrix: Water				
Kylqe-105P285p								
Total Suspended Solids	ND	---	5.00	mg/L	1	11/15/23 18:24	SM 2540 D	EST_s

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15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

QUALITY CONTROL (QC) SAMPLE RESULTS

*** DEFAULT GENERAL METHOD ***

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0471 - EPA 3511 (Bottle Extraction)						Water						
Blank (23K0471-BLK1)			Prepared: 11/13/23 06:55		Analyzed: 11/13/23 14:29							
EPA 8270E LVI												
Bis(2-ethylhexyl)phthalate	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Surr: Acenaphthylene-d8 (Surr)		6ecoRery: 103 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		102 %		80-132 %		"						
LCS (23K0471-BS1)			Prepared: 11/13/23 06:55		Analyzed: 11/13/23 15:02							
EPA 8270E LVI												
Bis(2-ethylhexyl)phthalate	1.22	0.200	0.400	ug/L	1	1.60	---	76	55-135%	---	---	
Surr: Acenaphthylene-d8 (Surr)		6ecoRery: 101 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		104 %		80-132 %		"						
LCS Dup (23K0471-BSD1)			Prepared: 11/13/23 06:55		Analyzed: 11/13/23 15:34							Q-19
EPA 8270E LVI												
Bis(2-ethylhexyl)phthalate	1.21	0.200	0.400	ug/L	1	1.60	---	76	55-135%	1	30%	
Surr: Acenaphthylene-d8 (Surr)		6ecoRery: 102 %		Limits: 78-134 %		Dilution: 1x						
Benzo(a)pyrene-d12 (Surr)		105 %		80-132 %		"						

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Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

QUALITY CONTROL (QC) SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 23K0637 - Total Suspended Solids - 2022						Water						
Blank (23K0637-BLK1)			Prepared: 11/15/23 18:24 Analyzed: 11/15/23 18:24									
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Duplicate (23K0637-DUP1)			Prepared: 11/15/23 18:24 Analyzed: 11/15/23 18:24									
QC Source Sample: Non-SDG (A3K1177-01)												
Total Suspended Solids	192	---	5.00	mg/L	1	---	185	---	---	3.71	10%	
Duplicate (23K0637-DUP2)			Prepared: 11/15/23 18:24 Analyzed: 11/15/23 18:24									
QC Source Sample: Non-SDG (A3K1177-05)												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	10%	EST_s
Reference (23K0637-SRM1)			Prepared: 11/15/23 18:24 Analyzed: 11/15/23 18:24									
SM 2540 D												
Total Suspended Solids	859	---		mg/L	1	841		102	85-116%	---	---	

Apex Laboratories

Darrell Auvil, Client Services Manager

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

SAMPLE PREPARATION INFORMATION

@1 CUFV64o4: CFN1 4WH(@

Trbi -M TCN633NKvKEM Lkyqkvxz

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Kylqe-N05P2up3</u>							
A3K1193-01RE1	Water	EPA 8270E LVI	11/09/23 17:02	11/13/23 06:55	125.11mL/5mL	125mL/5mL	1.00
A3K1193-02RE1	Water	EPA 8270E LVI	11/09/23 17:20	11/13/23 06:55	126.15mL/5mL	125mL/5mL	0.99
A3K1193-03	Water	EPA 8270E LVI	11/09/23 17:17	11/13/23 06:55	125.83mL/5mL	125mL/5mL	0.99
A3K1193-04RE1	Water	EPA 8270E LVI	11/09/23 17:13	11/13/23 06:55	126.18mL/5mL	125mL/5mL	0.99
A3K1193-05	Water	EPA 8270E LVI	11/09/23 17:00	11/13/23 06:55	127.02mL/5mL	125mL/5mL	0.98

7vEAnxaN vlsdrbNokrr lxykvxs

Trbi -NVkyEYdsi bxabaNvEasM0200

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Kylqe-N05P285p</u>							
A3K1193-01	Water	SM 2540 D	11/09/23 17:02	11/15/23 18:24			NA
A3K1193-02	Water	SM 2540 D	11/09/23 17:20	11/15/23 18:24			NA
A3K1193-03	Water	SM 2540 D	11/09/23 17:17	11/15/23 18:24			NA
A3K1193-04	Water	SM 2540 D	11/09/23 17:13	11/15/23 18:24			NA
A3K1193-05	Water	SM 2540 D	11/09/23 17:00	11/15/23 18:24			NA

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A3K1193 - 11 30 23 1154

QUALIFIER DEFINITIONS

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

Apex Laboratories

- EST_s** Solids results are reported as estimates when less than 2.5 mg residue is recovered during analysis. All method QC requirements have been met for samples, and reporting levels are adjusted based on volume filtered. Results meet regulatory requirements.
- 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.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-01** Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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A3K1193 - 11 30 23 1154

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'.

Results for Volatiles analyses on soils and sediments that are reported on a "dry weight" basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an "As Received" basis do not have the WMS correction applied, as dry weight was not performed.

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) may not be 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).

Apex Laboratories

Darrell Auvi, Client Services Manager

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A3K1193 - 11 30 23 1154

REPORTING NOTES AND CONVENTIONS (Cont.):

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.

-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, if results are not reported to the MDL.

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

Darrell Auvil, Client Services Manager

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Tigard, OR 97224

Project: **CalPortland River Street**

Project Number: **CAL046-0309032-21001075**

Project Manager: **John Foxwell**

Report ID:

A3K1193 - 11 30 23 1154

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
Water	EPA 8270E LVI	SCN-W-04	Bis(2-ethylhexyl)phthalate	6065	

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

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

Field Testing Parameters

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

Apex Laboratories

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Darrell Auvil, Client Services Manager



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Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

APEX LABS		CHAIN OF CUSTODY		Lab # <u>A3K1193</u> coc 1 of 1																					
Company: APEX COMPANIES, LLC Address: 6700 SW Sandburg St, Tigard, OR 97223 Ph: 503-718-2323		Project Name: <u>CALPORTLAND RIVER ST.</u> Email: <u>JOHN.FOXWELL@APEXLABS.COM</u>		Project #: <u>CAL046-0309032-21001075</u> PO #: <u>21-21001075</u>																					
Sampled by: <u>DAVE KOLPACK / ANDREW BERBE</u>		Project Mgr: <u>JOHN FOXWELL</u>		Phone: <u>503-718-2323</u>																					
Site Location: <u>State OR</u> <u>County MULTNOMAH</u>		ANALYSIS REQUEST																							
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX	NWTPH-CX	8260 BTEX	8260 RHDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (9)	Priority Metals (13)	AL, Sb, As, Ba, Be, Cd, Cr, Cu, Fe, Ni, Pb, Hg, Mn, Mo, Se, V, Zn, Ag, Na, Li, K, TOTAL DISS. TCIP	TCIP Metals (9)	TCIP-SMAZAD	BEHP-BA-0270	Hold Sample	Frozen Archive		
NR-350	11/19/23	1702 W	W	3																					
CB-3	11/19/23	1720 W	W	3																					
SUB BKN-1	11/19/23	1717 W	W	3																					
SUB BKN 2-3	11/19/23	1713 W	W	3																					
PAUSE BLANK	11/19/23	1700 W	W	3																					

SPECIAL INSTRUCTIONS:
Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle) 1 Day 2 Day 3 Day 5 Day Standard Other:
SAMPLES ARE HELD FOR 30 DAYS
RELINQUISHED BY: Signature: [Signature] Date: 11-10-23
Printed Name: ANDREW BERBE Time: 1000
Company: APEX COMPANIES LLC
RECEIVED BY: Signature: [Signature] Date: 11-10-23
Printed Name: Dave Kolpack Time: 1000
Company: APEX COMPANIES LLC

Form Y-002 R-00

Apex Laboratories

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Darrell Auvil, Client Services Manager



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503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River StreetProject Number: CAL046-0309032-21001075Project Manager: John Foxwell

Report ID:

A3K1193 - 11 30 23 1154

APEX LABS COOLER RECEIPT FORM

Client: Apex Companies LLC Element WO#: A3 11193Project/Project #: CalPortland River St. CAL046-0309032-21001075

Delivery Info:

Date/time received: 11-10-23 @ 1000 By: DJSDelivered by: Apex ☒ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐Cooler Inspection Date/time inspected: 11-10-23 @ 1021 By: DJSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>5.7</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>SDS 11-10-23</u> <u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>In</u>						

Cooler out of temp? (Y/N) Possible reason why: YesGreen dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐Sample Inspection: Date/time inspected: 11/10/23 @ 1245 By: RMPAll samples intact? Yes ☒ No ☐ Comments: _____Bottle labels/COCs agree? Yes ☒ No ☐ Comments: _____COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: _____Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments: _____

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

Comments: _____

Additional information:

Labeled by:

RMP

Witness:

2CM

Cooler Inspected by:

DJS

Form Y-003 R-01

Apex Laboratories

Darrell Auvin, Client Services Manager

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ANALYTICAL REPORT

Apex Laboratories, LLC

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

Monday, December 5, 2022

John Foxwell
Apex Companies, LLC
15618 SW 72nd Ave
Tigard, OR 97224

RE: A2K0715 - CalPortland River Street - CAL046-0309032-21001075

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 A2K0715, which was received by the laboratory on 11/17/2022 at 4:57:00PM.

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, 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	2.6 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

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Darrell Auvil, Client Services Manager



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Apex Companies, LLC

15618 SW 72nd Ave
Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2K0715 - 12 05 22 1643

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CB-3	A2K0715-01	Soil	11/17/22 12:00	11/17/22 16:57

Apex Laboratories

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Project Manager: John Foxwell

Report ID:

A2K0715 - 12 05 22 1643

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
CB-3 (A2K0715-01)				Matrix: Soil		Batch: 22K0996		R-04
Bis(2-ethylhexyl)phthalate	ND	---	187000	ug/kg dry	100	11/30/22 22:17	EPA 8270E	R-02
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: 97 %	Limits: 37-122 %	100	11/30/22 22:17	EPA 8270E	S-05
2-Fluorobiphenyl (Surr)			83 %	44-120 %	100	11/30/22 22:17	EPA 8270E	S-05
Phenol-d6 (Surr)			174 %	33-122 %	100	11/30/22 22:17	EPA 8270E	S-05
p-Terphenyl-d14 (Surr)			81 %	54-127 %	100	11/30/22 22:17	EPA 8270E	S-05
2-Fluorophenol (Surr)			72 %	35-120 %	100	11/30/22 22:17	EPA 8270E	S-05
2,4,6-Tribromophenol (Surr)			147 %	39-132 %	100	11/30/22 22:17	EPA 8270E	S-05

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A2K0715 - 12 05 22 1643

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
CB-3 (A2K0715-01)				Matrix: Soil		Batch: 22K0759		
% Solids	45.5	---	1.00	%	1	11/21/22 05:30	EPA 8000D	

Apex Laboratories

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Project Manager: John Foxwell

Report ID:

A2K0715 - 12 05 22 1643

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22K0996 - EPA 3546												Soil
Blank (22K0996-BLK2)												Prepared: 11/30/22 09:55 Analyzed: 11/30/22 21:11
EPA 8270E												
Bis(2-ethylhexyl)phthalate	ND	---	37.5	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery:	101 %	Limits:	37-122 %		Dilution:	1x				
2-Fluorobiphenyl (Surr)			90 %		44-120 %			"				
Phenol-d6 (Surr)			88 %		33-122 %			"				
p-Terphenyl-d14 (Surr)			100 %		54-127 %			"				
2-Fluorophenol (Surr)			85 %		35-120 %			"				
2,4,6-Tribromophenol (Surr)			105 %		39-132 %			"				
LCS (22K0996-BS2)												Prepared: 11/30/22 09:55 Analyzed: 11/30/22 21:43 Q-18
EPA 8270E												
Bis(2-ethylhexyl)phthalate	641	---	80.0	ug/kg wet	2	533	---	120	51-133%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery:	101 %	Limits:	37-122 %		Dilution:	2x				
2-Fluorobiphenyl (Surr)			101 %		44-120 %			"				
Phenol-d6 (Surr)			109 %		33-122 %			"				
p-Terphenyl-d14 (Surr)			120 %		54-127 %			"				
2-Fluorophenol (Surr)			91 %		35-120 %			"				
2,4,6-Tribromophenol (Surr)			107 %		39-132 %			"				
Duplicate (22K0996-DUP2)												Prepared: 11/30/22 09:55 Analyzed: 11/30/22 22:49 R-04
QC Source Sample: CB-3 (A2K0715-01)												
EPA 8270E												
Bis(2-ethylhexyl)phthalate	ND	---	186000	ug/kg dry	100	---	ND	---	---	---	30%	R-02
Surr: Nitrobenzene-d5 (Surr)		Recovery:	64 %	Limits:	37-122 %		Dilution:	100x				S-05
2-Fluorobiphenyl (Surr)			77 %		44-120 %			"				S-05
Phenol-d6 (Surr)			155 %		33-122 %			"				S-05
p-Terphenyl-d14 (Surr)			75 %		54-127 %			"				S-05
2-Fluorophenol (Surr)			41 %		35-120 %			"				S-05
2,4,6-Tribromophenol (Surr)			130 %		39-132 %			"				S-05

Apex Laboratories

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Darrell Auvil, Client Services Manager



ANALYTICAL REPORT

Apex Laboratories, LLC

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

Apex Companies, LLC

15618 SW 72nd Ave
Tigard, OR 97224Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2K0715 - 12 05 22 1643

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 22K0759 - Total Solids (Dry Weight)						Soil						
Duplicate (22K0759-DUP1)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0512-02)												
% Solids	98.6	---	1.00	%	1	---	98.6	---	---	0.02	10%	
Duplicate (22K0759-DUP2)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0512-04)												
% Solids	98.6	---	1.00	%	1	---	98.5	---	---	0.03	10%	
Duplicate (22K0759-DUP3)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0512-06)												
% Solids	98.5	---	1.00	%	1	---	98.4	---	---	0.04	10%	
Duplicate (22K0759-DUP4)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0646-02)												
% Solids	98.2	---	1.00	%	1	---	98.3	---	---	0.09	10%	
Duplicate (22K0759-DUP5)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0646-04)												
% Solids	97.9	---	1.00	%	1	---	97.9	---	---	0.06	10%	
Duplicate (22K0759-DUP6)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30		PRO					
QC Source Sample: Non-SDG (A2K0646-06)												
% Solids	98.2	---	1.00	%	1	---	98.3	---	---	0.1	10%	
Duplicate (22K0759-DUP7)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30							
QC Source Sample: Non-SDG (A2K0677-01)												
% Solids	72.7	---	1.00	%	1	---	72.8	---	---	0.2	10%	
Duplicate (22K0759-DUP8)			Prepared: 11/19/22 12:20		Analyzed: 11/21/22 05:30							
QC Source Sample: Non-SDG (A2K0677-02)												
% Solids	73.3	---	1.00	%	1	---	73.2	---	---	0.1	10%	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, OR 97224

Project: CalPortland River Street

Project Number: CAL046-0309032-21001075

Project Manager: John Foxwell

Report ID:

A2K0715 - 12 05 22 1643

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
---------	--------	--------------------	--------------------	-------	----------	-----------------	------------------	-------	-----------------	-----	--------------	-------

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

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Project: **CalPortland River Street**Project Number: **CAL046-0309032-21001075**Project Manager: **John Foxwell****Report ID:****A2K0715 - 12 05 22 1643****SAMPLE PREPARATION INFORMATION****Selected Semivolatile Organic Compounds by EPA 8270E**Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 22K0996</u>							
A2K0715-01	Soil	EPA 8270E	11/17/22 12:00	11/30/22 09:55	15.14g/2mL	15g/2mL	0.99

Percent Dry WeightPrep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 22K0759</u>							
A2K0715-01	Soil	EPA 8000D	11/17/22 12:00	11/19/22 12:20			NA

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QUALIFIER DEFINITIONS

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

Apex Laboratories

- PRO** Sample has undergone sample processing prior to extraction and analysis.
- Q-18** Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
- R-02** The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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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) may not be 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.

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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.

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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
<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.

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APEX LABS COOLER RECEIPT FORM

Client: Apex Element WO#: A2 K0715Project/Project #: CalPortland River Street / CAL046-0309032-21001075

Delivery Info:

Date/time received: 11/17/22 @ 16:57 By: ZAMDelivered by: Apex ☐ Client ☒ ESS ☐ FedEx ☐ UPS ☐ Swift ☐ Senvoy ☐ SDS ☐ Other ☐Cooler Inspection Date/time inspected: 11/17/22 @ 16:59 By: ZAMChain 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>2.6</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>in</u>						

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: 11/18/22 @ 14:27 By: ZAMAll samples intact? Yes ☒ No ☐ Comments:Bottle labels/COCs agree? Yes ☒ No ☐ Comments:COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments:Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒

Comments:

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

Comments:

Additional information:

Labeled by:

ZAM

Witness:

ZAM

Cooler Inspected by:

ZAM

Form Y-003 R-00

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