Report

# Second Half 2020 Groundwater Monitoring Report



J.H. Baxter & Co. Wood Treating Facility Eugene, Oregon ECSI No. 55

Prepared for

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Prepared by



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# 1. Introduction

This report presents the results of groundwater monitoring activities conducted in the second half of 2020 at the J.H. Baxter & Co. (Baxter or J.H. Baxter) facility in Eugene, Oregon (facility or Site), located at 85 Baxter Street (Figures 1 and 2). Groundwater monitoring activities were conducted in accordance with the *Groundwater Monitoring Work Plan* (Hart Crowser, 2001), *Revised Groundwater Monitoring Work Plan* (Baxter, 2003), and *Revised Monitoring Program May 2015* (Baxter, 2015).

The facility has a total of 3 extraction wells and 41 monitoring wells. Additionally, an offsite well not owned by Baxter is included in the monitoring well network. The wells are:

- Extraction Wells (total of 3): W-13S, W-13I, and W-20I
- **Onsite Monitoring Wells** (total of 26): W-1S, W-2S, W-2I, W-3S, W-4S, W-5I, W-6I, W-7S, W-8S, W-8I, W-9S, W-9I, W-9D, W-11S, W-11I, W-12I, W-12D, W-13D, W-14I, W-15S, W-18AS, W-18AI, W-21S, W-21I, W-22S, and W-23
- Offsite Monitoring Wells (total of 15): W-16AS, W-16AI, W-17AS, W-17AI, W-17BI, W-18BI, W-19AS, W-24, W-25, W-26, W-28, W-29, W-32, W-34, and W-35
- Non-Baxter Offsite Monitoring Well: Zip-O-Log

Of these wells, 17 were sampled in September 2020 for Site-related constituents in agreement with the *Revised Monitoring Program May 2015* (Baxter, 2015). On May 7, 2015, the *Revised Monitoring Program May 2015* was approved by the Oregon Department of Environmental Quality (DEQ; DEQ, 2015). The revised monitoring program requires the sampling of 4 wells semiannually in March and September (W-24, W-25, W-26 and W-29), and 13 additional wells annually in September. Monitoring well W-24 was not sampled in September 2020 due to access restrictions from asphalt paving operations, Baxter will work with the City of Eugene to gain access to W-24 for future sampling events. The analytical method was changed from EPA Method 8270C to EPA Method 625.1 due to analytical laboratory limitations. One additional well, W-18AI was sampled in September 2020. This report summarizes the results of the September 2020 monitoring event and the groundwater extraction data through December 2020.

# 2. Monitoring Activities

The groundwater monitoring event was conducted on September 28 through 30, 2020. Field activities, including groundwater level measurements and groundwater sampling, were completed by GSI Water Solutions and Baxter personnel. Wells were sampled using low-flow methods as described in the *Revised Groundwater Monitoring Work Plan* (Baxter, 2003), with dedicated groundwater pumps and tubing. Groundwater samples, equipment decontamination, and sample custody procedures were in accordance with previous sampling events, the *Groundwater Monitoring Work Plan* (Hart Crowser, 2001), and *Revised Groundwater Monitoring Work Plan* (Baxter, 2003).

Groundwater samples were analyzed by Neilson Research Corporation (NRC) of Medford, Oregon for the following:

• Pentachlorophenol (PCP) and Phenol by U.S. Environmental Protection Agency (EPA) Method 625.1.

Groundwater levels were measured at 33 wells and groundwater samples were collected from 17 wells. The laboratory report is presented in Appendix A and groundwater sampling forms are presented in Appendix B.

On September 29, 2020, one field blind, or duplicate, was collected at well W-20I. The blind was analyzed for PCP and phenol. No equipment blank was required in September 2020 since dedicated pumps were installed in 2020 and are now used for groundwater monitoring at all sampled wells.

# 3. Groundwater Elevations

Groundwater elevations are presented in Table 1. Groundwater elevation contours are presented in Figures 3 and 4, with the shallow zone contoured in Figure 3 and the intermediate zone contoured in Figure 4. The groundwater contour maps for both the shallow and intermediate zones show that the extraction system is achieving capture within the historic source area.

# 4. Analytical Results

Groundwater samples for the September 2020 monitoring event were analyzed for PCP and phenol. The laboratory results are provided in Table 2. PCP results are presented in Figure 5 and time-series plots are provided in Appendix C. Note that the non-detect values on the time-series plots are shown as hollow symbols so that when method detection limits (MDL) are elevated, it is not misinterpreted as representing the concentration in the well.

# 4.1 Onsite Monitoring Wells

Seven onsite monitoring wells were sampled during the September 2020 monitoring event. PCP was detected in five of the onsite wells, with concentrations ranging from an estimated detection of 2.03 to 1,560 micrograms per liter ( $\mu$ g/L). The highest concentration of PCP was found in well W-7S. W-18AI had a detected value of  $4.45 \,\mu g/L$ , Baxter does not plan on sampling W-18AI in the future as it is not included in the Revised Monitoring Program May 2015 (Baxter, 2015). Figure C-1 in Appendix C shows that the concentrations in well W-7S have generally decreased from a high of  $4,000 \ \mu g/L$  in 2009, however; a rising trend in PCP concentrations began after the October 2016 sampling event before peaking in September 2019 and beginning to shows a reversing trend with the September 2020 results. However, as 2020 was the first indication of a falling concentration since 2016, the results will continue to be monitored closely to determine if the trend is sustained. The reasoning for the variable trend is unknown but may indicate more effective movement of PCP from points upgradient of W-7S towards the extraction well or variable saturation of the vadose zone soil from year to year during the time of sampling. September 2019 was one of the wettest Septembers on record while September 2020 was close to an average month. However, September 2018 showed an increasing trend and was an exceptionally dry month. Additionally, there is no increase in the extraction well concentrations indicating a new

source. Concentrations in all other wells sampled continue to decrease towards reporting limits or are stable around or below method reporting limits (MRLs) aside from W-23 (C-6) which noted an increase in PCP concentration but with the detected result at only at 12.4  $\mu$ g/L. The second half 2020 detections remain less than historical averages and continue on decreasing trends.

No phenol was detected at any of the onsite monitoring wells. The phenol result from W-6I was rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. As such, the presence or absence cannot be verified.

# 4.2 Onsite Extraction Wells

PCP was detected in the three onsite extraction wells during the September 2020 monitoring event, with concentrations ranging from 1.88 to 254  $\mu$ g/L. The highest detection was in well W-13I. No phenol was detected in any onsite extraction wells. Concentrations in W-13S (Figure C-4) appear to have stabilized near reporting limits since first quarter of 2015. Concentrations in W-13I (Figure C-4) have appeared to stabilize below 400  $\mu$ g/L since the first quarter of 2015 and concentrations in W-20I (Figure C-6) have appeared to stabilize around 20-25  $\mu$ g/L since the third quarter of 2015 indicating consistent and continuous removal of PCPs in intermediate zone groundwater over time.

# 4.3 Offsite Monitoring Wells

PCP was detected in three of the seven off-site monitoring wells sampled during the September 2020 monitoring event. Detectable concentrations ranged from 0.61 to 9.25  $\mu$ g/L. The highest offsite concentration of PCP was in well W-25, which is located west of the Site.

No phenol was detected in any of the off-site monitoring wells in September 2020. The phenol result from W-29 was rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. As such, the presence or absence cannot be verified.

Overall, offsite wells have shown a general decline in PCP concentrations since 2011.

# 4.4 Quality Assurance and Quality Control

Groundwater samples for the September 2020 monitoring event were analyzed by Nielson Research Corporation (NRC) for Analytical Laboratory Group (ALG). The case narrative in the laboratory report (Appendix A) describes the flags or footnotes associated with exceptions to standard analytical protocols and is summarized below. All results except two (W-29 and W-6I) are considered usable with the appropriate additional flags.

EPA 8270C was requested on the chain of custody (COC). However, it was agreed upon by the project manager and the contract laboratory that EPA 625.1 would be a more suitable method to achieve offsite PCP screening levels with laboratory detection limits. This method was used for all analyses.

Sample coolers for the September 2020 monitoring event arrived at the laboratory in good condition; however, some samples were above EPA's 6 degrees Celsius (°C)

recommendation. The samples that were greater than 6 °C were submitted the same day as sampling occurred. Because large sample volumes were collected for the analysis, samples were unable to equilibrate below 6 °C before they were submitted to the analytical laboratory. Samples were received by NRC at below 6 °C.

Three samples (W-13I, W-7S, and W-12I) required dilution before analysis. Elevated detection limits (DLs) are provided.

There were no PCP detections in the method blank.

There was a systematic negative bias in recovery of 2,4,6-tribromophenol, 2-fluorophenol, and phenol-d6, the three acid fraction surrogates associated with pentachlorophenol (PCP) and phenol analysis. The recovery for phenol-d6 was especially low and was below the lower control limit of 10% in two samples (W-6I and W-29, in which PCP was not detected). Because of this low recovery, all sample results were qualified "J-," and W-6I and W-29 results for phenol were rejected (qualified "R").

One blind sample was collected during the September 2020 monitoring event from W-20I. The blind sample was analyzed for PCP. The parent sample and blind duplicate results were comparable.

# 5. Groundwater Extraction and Treatment System

The groundwater extraction and treatment system consists of three wells, a filtration system, and granulated activated carbon. The system was in operation approximately 183 days, from July 1, 2020 to December 31, 2020. The estimated pumping rates and extracted constituent mass are presented in Table 3.

During the second half of 2020, approximately 13.25 million gallons (MG) of groundwater were extracted and sent through the treatment system. An extracted contaminant mass for PCP was calculated based on the September 2020 analytical results for each extraction well (Table 3). In the second half of 2020, approximately 9.86 pounds of PCP was removed.

Since January 1994, approximately 671.5 MG of groundwater have been extracted and treated. Approximately 1,688 pounds of PCP have been extracted since January 1994. Polycyclic aromatic hydrocarbons (PAH) and total metals were analyzed in groundwater samples through June 2015, so a calculated mass of 4.4 pounds of PAHs and 3.6 pounds of total metals were extracted between January 1994 and June 2015. PAHs and total metals are still extracted from groundwater, but the mass removed is no longer quantified as of June 2015.

# 6. First Half 2021 Activities

Semiannual groundwater monitoring will be conducted for the first half of 2021 in accordance with the *Revised Monitoring Program May* 2015 (Baxter, 2015), and is planned to occur in March 2021.

# 7. References

Baxter. 2003. Revised Groundwater Monitoring Work Plan J.H. Baxter & Co. Wood Preserving Facility, 85 Baxter Road, Eugene, Oregon. Prepared by J.H. Baxter & Co. March 7, 2003.

Baxter. 2015. Revised Monitoring Program May 2015 J.H. Baxter Eugene Site ESCI No. 55. Prepared by J.H. Baxter & Co. May 1, 2015.

DEQ. 2015. Email message from Greg Aitken, Oregon Department of Environmental Quality, to Heidi Blischke re: "RE: Groundwater Monitoring Program for the Baxter Site as Discussed at our Meeting." May 7, 2015.

Hart Crowser. 2001. Groundwater Monitoring Work Plan J.H. Baxter Wood Preserving Eugene Facility. Prepared by Hart Crowser, Inc. May 22, 2001.

Tables

#### Table 1. Groundwater Elevation Summary

J.H. Baxter Wood Treating Facility *Eugene, Oregon* 

		Double to Mich	Depth to	Groundwater			
Well ID	Top of Casing Elevation	Depth to Well Bottom	Water	Elevation			
weirib	(ft msl)	(ft)	(ft)	(ft amsl)			
			9/28/2020				
W-1S	395.91	28.5	11.56	384.35			
W-2S	393.16	27.6	8.71	384.45			
W-2I	394.23	81.71					
W-3S	395.01	33	14.38	380.63			
W-4S	396.56	22.3					
W-5I	396.71	75.5					
W-6I	397.77	70	15.82	381.95			
W-7S	397.66	20	14.97	382.69			
W-8S	395.90	20.17	11.03	384.87			
W-8I	393.66	82.33	8.64	385.02			
W-9S	396.45	25	10.82	385.63			
W-9I	396.19	67	10.33	385.86			
W-11S	394.17	24.85	11.37	382.80			
W-11I	394.17	83	13.42	380.75			
W-12I	395.62	78.5	16.66	378.96			
W-12D	395.54	133.75					
W-13S	396.71	29.02	14.95	381.76			
W-13I	396.15	71.46	15.13	381.02			
W-13D	396.40	133.51					
W-14I	395.60	77.5	13.48	382.12			
W-15S	396.62	28	14.52	382.10			
W-16AS	391.86	24.98	7.12	384.74			
W-16AI	391.86	81.85	12.33	379.53			
W-17AS	390.29	23.67	8.95	381.34			
W-17AI	390.80	87.42	11.97	378.83			
W-17BI	392.08	84.88	12.48	379.60			
W-18AS	392.84	25.05	10.00	382.84			
W-18AI	393.70	86.81	14.10	379.60			
W-18BI	391.98	88.6					
W-19AS	393.82	23.66	9.91	383.91			
W-20I	397.10	85					
W-21S	393.80	16.75	10.89	382.91			
W-21I	393.80	81.42					
W-22S	396.72	19.38	12.66	384.06			
W-23	396.16	55.5	15.28	380.88			
W-24	391.64	65					
W-25	389.92	64	10.13	379.79			
W-26	390.14	79	10.11	380.03			
W-28	390.01	84.42	10.38	379.63			
W-29	388.56	74.83	9.11	379.45			
W-32	388.35	74	10.02	378.33			
W-34	389.17	76	10.73	378.44			
W-35	391.46	77					

Notes

-- = not measured.

ft amsl = feet above mean sea level.

#### Table 2. Phenol Analytical Results in Groundwater Samples

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Eugene, Oregon

Well ID	Well Location	Sample Date	Pentachlorophenol <sup>1</sup>	Phenol <sup>1</sup>
N/ CI	On City	0/20/2020	(μg/L)	(μg/L)
W-6I	On-Site	9/29/2020	2.03 J-	0.211 R
W-7S	On-Site	9/29/2020	1,560 J-	0.211 UJ-
W-11S	On-Site	9/30/2020	0.571 UJ-	0.211 UJ-
W-11I	On-Site	9/30/2020	0.571 UJ-	0.211 UJ-
W-12I	On-Site	9/30/2020	74.4 J-	0.211 UJ-
W-13S	Extraction	9/29/2020	1.88 J-	0.211 UJ-
W-13I	Extraction	9/29/2020	254 J-	0.211 UJ-
W-17AS	Off-Site	9/28/2020	0.571 UJ-	0.211 UJ-
W-17AI	Off-Site	9/28/2020	0.571 UJ-	0.211 UJ-
W-18AI	On-Site	9/30/2020	4.45 J-	0.211 UJ-
W-20I	Extraction	9/29/2020	19.5 J-	0.211 UJ-
W-20I (Blind)	Extraction	9/29/2020	18.1 J-	0.211 UJ-
W-23	On-Site	9/30/2020	12.4 J-	0.211 UJ-
W-24	Off-Site		NS	NS
W-25	Off-Site	9/29/2020	9.25 J-	0.211 UJ-
W-26	Off-Site	9/29/2020	0.61 J-	0.211 UJ-
W-29	Off-Site	9/29/2020	2.96 J-	0.211 R
W-32	Off-Site	9/29/2020	0.571 UJ-	0.211 UJ-
Zip-O-Log	Off-Site	9/29/2020	0.571 UJ-	0.211 UJ-

#### Notes

<sup>1</sup> Pentachlorophenol and Phenol analysis by EPA method 625.1

µg/L = micrograms per liter.

Blind = duplicate sample

J- = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte and may have a potential negative bias.

U = Analyte was not detected above the sample method detection limit.

R = The result is rejected due to serious deficiencies in the ability to analyze the sample and to meet QC criteria. The presence or absence of the analyte cannot be verified.

NS = Not Sampled

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Eugene, Oregon

					W-20I				
	Pumping Information		Average Concentrations <sup>1,2,3</sup>			Estimat	ed Mass Ex	tracted <sup>4</sup>	
Observation Period	Days Pumping	Rate⁵	Volume	РСР	PAHs	Metals	РСР	PAHs	Metals
	(days)	(gpm)	(gallons)	(µg/L)	(µg/L)	(µg/L)	(pounds)	(pounds)	(pounds)
01-Jan-94 to 02-Dec-98	1,783	20 - 30	61,012,800	361	27	0.00	19.57	0.86	0.00
03-Dec-98 to 23-Feb-99	83	25	2,988,000	74	0.43	0.00	1.84	0.01	0.00
24-Feb-99 to 03-Mar-99	8	35	403,200	74	0.43	0.00	0.25	0.00	0.00
04-Mar-99 to 02-Jun-99	92	35	4,636,800	80	0.43	0.00	3.09	0.02	0.00
02-Jun-99 to 15-Dec-99	181	35	9,122,400	97	0.00	0.00	7.39	0.00	0.00
30-Nov-99 to 13-Mar-00	104	35	5,241,600	87	0.00	0.00	3.80	0.00	0.00
13-Mar-00 to 10-Jul-00	119	35	5,997,600	87	0.00	0.00	4.34	0.00	0.00
11-Jul-00 to 30-Sept-00	82	35	4,132,800	97	0.00	0.00	3.36	0.00	0.00
01-Oct-00 to 31-Jan-01	123	35	6,199,200	98	0.00	0.00	5.05	0.00	0.00
01-Feb-01 to 30-Jun-01	150	35	7,560,000	103	0.00	0.00	6.49	0.00	0.00
01-Jul-01 to 31-Dec-01	184	35	9,273,600	104	0.00	0.00	8.01	0.00	0.00
01-Jan-02 to 30-Jun-02	151	35	7,610,400	106	0.00	0.00	6.70	0.00	0.00
01-July-02 to 31-Dec-02	183	35	9,223,200	111	0.00	0.00	8.51	0.00	0.00
01-Jan-03 to 30-Jun-03	134	35	6,753,600	100	0.00	0.00	5.66	0.00	0.00
01-July-03 to 31-Dec-03	184	35	9,273,600	135	0.00	0.00	10.41	0.00	0.00
01-Jan-04 to 30-Jun-04	180	35	9,072,000	108	0.00	0.00	8.14	0.00	0.00
01-July-04 to 31-Dec-04	155	35	7,812,000	185	0.00	0.00	12.03	0.00	0.00
, 01-Jan-05 to 30-Jun-05	181	35	9,122,400	196	0.00	0.00	14.92	0.00	0.00
01-July-05 to 31-Dec-05	152	35	7,660,800	117	0.00	0.00	7.45	0.00	0.00
01-Jan-06 to 30-Jun-06	176	35	8,870,400	95	0.00	0.00	7.02	0.00	0.00
01-July-06 to 31-Dec-06	184	35	9,273,600	96	0.00	0.00	7.39	0.00	0.00
01-Jan-07 to 30-Jun-07	181	35	9,122,400	83	0.00	0.00	6.31	0.00	0.00
01-July-07 to 31-Dec-07	183	35	9,223,200	78	0.00	0.00	5.98	0.00	0.00
01-Jan-08 to 30-Jun-08	180	35	9,072,000	83	0.00	0.00	6.25	0.00	0.00
01-July-08 to 31-Dec-08	177	35	8,920,800	83	0.00	0.00	6.14	0.00	0.00
01-Jan-09 to 30-Jun-09	180	35	9,072,000	47	0.00	0.00	3.53	0.00	0.00
01-July-09 to 31-Dec-09	180	35	9,072,000	49	0.95	0.00	3.74	0.07	0.00
01-Jan-10 to 30-Jun-10	181	35	9,122,400	43	0.00	0.00	3.30	0.00	0.00
01-July-10 to 31-Dec-10	181	35	9,122,400	61	0.00	0.00	4.65	0.00	0.00
01-Jan-11 to 30-Jun-11	181	35	9,122,400	115	0.00	3.65	8.75	0.00	0.28
01-July-11 to 31-Dec-11	184	35	9,273,600	44	0.00	1.57	3.41	0.00	0.12
01-Jan-12 to 30-Jun-12	163	35	8,215,200	47	0.19	0.60	3.24	0.01	0.04
01-July-12 to 31-Dec-12	183	35	9,223,200	47	0.00	0.00	3.58	0.00	0.00
01-Jan-13 to 30-Jun-13	176	35	8,870,400	24	0.00	2.11	1.78	0.00	0.16
01-July-13 to 31-Dec-13	184	35	9,273,600	37	0.00	0.36	2.89	0.00	0.10
01-Jan-14 to 30-Jun-14	184	35	9,122,400	33	0.00	2.55	2.85	0.00	0.03
01-July-14 to 31-Dec-14	181	35	9,122,400	11	0.09	2.55	0.85	0.01	0.19
01-July-14 to 31-Dec-14 01-Jan-15 to 30-Jun-15	185	35	9,072,000	47	0.00	0.55	3.56	0.00	0.20
01-Jul-15 to 31-Dec-15	180	35	9,072,000	28			2.16		0.04
01-Jan-16 to 30-Jun-16	180	35	9,072,000	28			2.12		
01-Jul-16 to 31-Dec-16	183	35	9,223,200	19			1.46		
01-Jan-17 to 30-Jun-17	180	35	9,072,000	19			1.44		
01-Jul-17 to 31-Dec-17 01-Jan-18 to 30-Jun-18	183 180	35 35	9,223,200 9,072,000	25 25			1.92 1.89		

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Eugene, Oregon								r	
01-Jul-18 to 31-Dec-18	184	35	9,273,600	16			1.24		
01-Jan-19 to 30-Jun-19	180	35	9,072,000	16			1.21		
01-Jul-19 to 31-Dec-19	184	35	9,273,600	21			1.63		
01-Jan-20 to 30-Jun-20	180	35	9,072,000	21			1.59		
01-Jul-20 to 31-Dec-20	184	35	9,273,600	55			4.22		
Cumulative Amounts			456,213,600				242.72	0.98	1.06
				Well	W-13S				
Observation Davied	Ρι	Imping Inform	nation	Average	Concentra	tions <sup>1,2,3</sup>	Estimate	ed Mass Ex	tracted <sup>4</sup>
Observation Period	Days	Rate⁵	Volume	РСР	PAHs	Metals	РСР	PAHs	Metals
	(days)	(gpm)	(gallons)	(µg/L)	(µg/L)	(µg/L)	(pounds)	(pounds)	(pounds)
01-Jan-94 to 02-Dec-98	1,783	5	12,837,600	25,175	35	0.00	321.36	1.21	0.00
03-Dec-98 to 23-Feb-99	83	5	597,600	4,170	0.00	0.00	20.85	0.00	0.00
24-Feb-99 to 03-Mar-99	8	5	57,600	4,170	0.00	0.00	2.01	0.00	0.00
04-Mar-99 to 02-Jun-99	92	5	662,400	4,105	0.00	0.00	22.75	0.00	0.00
02-Jun-99 to 15-Dec-99	181	5	1,303,200	3,260	0.00	0.00	35.54	0.00	0.00
30-Nov-99 to 13-Mar-00	104	5	748,800	2,485	0.00	0.00	15.57	0.00	0.00
13-Mar-00 to 10-Jul-00	119	5	856,800	1,880	0.00	0.00	13.47	0.00	0.00
11-Jul-00 to 30-Sept-00	82	5	590,400	1,560	9.7	0.00	7.69	0.05	0.00
01-Oct-00 to 31-Jan-01	123	5	885,600	1,590	1.9	0.00	11.75	0.01	0.00
01-Feb-01 to 30-Jun-01	150	5	1,080,000	1,481	1.4	0.00	13.35	0.01	0.00
01-Jul-01 to 31-Dec-01	184	5	1,324,800	1,379	4.1	0.00	15.25	0.05	0.00
01-Jan-02 to 30-Jun-02	151	5	1,087,200	1,455	1.2	0.00	13.20	0.01	0.00
01-July-02 to 31-Dec-02	183	5	1,317,600	1,435	0.30	0.00	15.78	0.00	0.00
01-Jan-03 to 30-Jun-03	134	5	964,800	1,235	1.2	0.00	9.94	0.01	0.00
01-July-03 to 31-Dec-03	184	5	1,324,800	235	0.17	0.00	2.60	0.00	0.00
01-Jan-04 to 30-Jun-04	180	5	1,296,000	541	0.62	0.00	5.85	0.01	0.00
01-July-04 to 31-Dec-04	155	5	1,116,000	1,018	0.42	0.00	9.48	0.00	0.00
01-Jan-05 to 30-Jun-05	181	5	1,303,200	2,070	2.1	0.00	22.51	0.02	0.00
01-July-05 to 31-Dec-05	152	5	1,094,400	1,730	0.52	0.00	15.80	0.00	0.00
01-Jan-06 to 30-Jun-06	176	5	1,267,200	1,034	0.36	0.00	10.93	0.00	0.00
01-July-06 to 31-Dec-06	184	5	1,324,800	902	0.18	0.00	9.97	0.00	0.00
01-Jan-07 to 30-Jun-07	181	5	1,303,200	729	0.13	0.00	7.92	0.00	0.00
01-July-07 to 31-Dec-07	183	5	1,317,600	78	0.13	0.00	0.86	0.00	0.00
01-Jan-08 to 30-Jun-08	180	5	1,296,000	127	0.11	0.00	1.38	0.00	0.00
01-July-08 to 31-Dec-08	177	5	1,274,400	127	0.11	0.00	1.35	0.00	0.00
01-Jan-09 to 30-Jun-09	180	5	1,296,000	1.36	0.00	0.00	0.01	0.00	0.00
01-July-09 to 31-Dec-09	180	5	1,296,000	43	0.06	165.5	0.46	0.00	1.79
01-Jan-10 to 30-Jun-10	181	5	1,303,200	93	0.00	0.00	1.01	0.00	0.00
01-July-10 to 31-Dec-10	181	5	1,303,200	59	0.00	0.00	0.65	0.00	0.00
01-Jan-11 to 30-Jun-11	181	5	1,303,200	455	0.05	3.10	4.94	0.00	0.03
01-July-11 to 31-Dec-11	184	5	1,324,800	180	0.00	7.70	1.99	0.00	0.09
, 01-Jan-12 to 30-Jun-12	163	5	1,173,600	590	0.54	3.61	5.78	0.01	0.04
01-July-12 to 31-Dec-12	183	5	1,317,600	428	0.08	4.28	4.70	0.00	0.05
, 01-Jan-13 to 30-Jun-13	176	5	1,267,200	1,400	0.44	4.95	14.81	0.00	0.05
01-July-13 to 31-Dec-13	184	5	1,324,800	515	1.1	4.63	5.69	0.01	0.05
01-Jan-14 to 30-Jun-14	181	5	1,303,200	168	0.10	3.55	1.82	0.00	0.04
01-July-14 to 31-Dec-14	183	5	1,317,600	85	0.00	2.81	0.93	0.00	0.03
01-Jan-15 to 30-Jun-15	180	5	1,296,000	20	0.00	7.9	0.21	0.00	0.09
01-July-15 to 31-Dec-15	183	5	1,317,600	2.7	-		0.03	-	-

J.H. Baxter Wood Treating Facility

#### Eugene, Oregon

Eugene, Oregon					1	1		1	I
01-Jan-16 to 30-Jun-16	180	5	1,296,000	2.7			0.03		
01-Jul-16 to 31-Dec-16	183	5	1,317,600	4.8			0.05		
01-Jan-17 to 30-Jun-17	180	5	1,296,000	4.8			0.05		
01-Jul-17 to 31-Dec-17	183	5	1,317,600	8			0.09		
01-Jan-18 to 30-Jun-18	180	5	1,296,000	8			0.09		
01-Jul-18 to 31-Dec-18	184	5	1,324,800	8.5			0.09		
01-Jan-19 to 30-Jun-19	180	5	1,296,000	8.5			0.09		
01-Jul-19 to 31-Dec-19	184	5	1,324,800	4.6			0.05		
01-Jan-20 to 30-Jun-20	180	5	1,296,000	4.6			0.05		
01-Jul-20 to 31-Dec-20	184	5	1,324,800	1.88			0.02		
Cumulative Amounts			69,465,600				650.81	1.40	2.26
				Well	W-13I				
	Ρι	umping Inform	nation	Average	Concentra	tions <sup>1,2,3</sup>	Estimat	ed Mass Ex	tracted <sup>4</sup>
<b>Observation Period</b>	Days Pumping	Rate⁵	Volume	РСР	PAHs	Metals	РСР	PAHs	Metals
	(days)	(gpm)	(gallons)	(µg/L)	(µg/L)	(µg/L)	(pounds)	(pounds)	(pounds)
01-Jan-94 to 02-Dec-98	1,783	10 - 15	32,522,400	3,196	35	0.00	124.69	1.44	0.00
03-Dec-98 to 23-Feb-99	83	10	1,195,200	590	0.00	0.00	5.90	0.00	0.00
24-Feb-99 to 03-Mar-99	8	10	115,200	590	0.00	0.00	0.57	0.00	0.00
04-Mar-99 to 02-Jun-99	92	10	1,324,800	640	0.00	0.00	7.09	0.00	0.00
02-Jun-99 to 15-Dec-99	181	10	2,606,400	876	0.00	0.00	19.10	0.00	0.00
30-Nov-99 to 13-Mar-00	104	10	1,497,600	823	0.00	0.00	10.30	0.00	0.00
13-Mar-00 to 10-Jul-00	119	10	1,713,600	785	0.95	0.00	11.25	0.01	0.00
11-Jul-00 to 30-Sept-00	82	10	1,180,800	803	9.6	0.00	7.91	0.09	0.00
01-Oct-00 to 31-Jan-01	123	10	1,771,200	747	1.8	0.00	11.04	0.03	0.00
01-Feb-01 to 30-Jun-01	150	10	2,160,000	778	1.4	0.00	14.02	0.02	0.00
01-Jul-01 to 31-Dec-01	184	10	2,649,600	887	1.2	0.00	19.61	0.03	0.00
01-Jan-02 to 30-Jun-02	151	10	2,174,400	672	0.55	0.00	12.19	0.01	0.00
01-July-02 to 31-Dec-02	183	10	2,635,200	1,025	0.85	0.00	22.54	0.02	0.00
01-Jan-03 to 30-Jun-03	134	10	1,929,600	829	0.80	0.00	13.35	0.01	0.00
01-July-03 to 31-Dec-03	184	10	2,649,600	883	1.2	0.00	19.51	0.03	0.00
01-Jan-04 to 30-Jun-04	180	10	2,592,000	859	1.2	0.00	18.59	0.03	0.00
01-July-04 to 31-Dec-04	155	10	2,232,000	1,260	1.3	0.00	23.47	0.02	0.00
01-Jan-05 to 30-Jun-05	181	10	2,606,400	942	1.4	0.00	20.48	0.03	0.00
01-July-05 to 31-Dec-05	152	10	2,188,800	970	1.3	0.00	17.72	0.02	0.00
01-Jan-06 to 30-Jun-06	176	10	2,534,400	897	0.88	0.00	18.97	0.02	0.00
01-July-06 to 31-Dec-06	184	10	2,649,600	865	0.43	0.00	19.13	0.01	0.00
01-Jan-07 to 30-Jun-07	181	10	2,606,400	857	0.63	0.00	18.64	0.01	0.00
01-July-07 to 31-Dec-07	183	10	2,635,200	623	1.5	0.00	13.70	0.03	0.00
01-Jan-08 to 30-Jun-08	180	10	2,592,000	866	0.53	0.00	18.73	0.01	0.00
01-July-08 to 31-Dec-08	177	10	2,548,800	866	0.53	0.00	18.41	0.01	0.00
01-Jan-09 to 30-Jun-09	180	10	2,592,000	729	0.32	0.00	15.77	0.01	0.00
01-July-09 to 31-Dec-09	180	10	2,592,000	805	0.95	0.00	17.42	0.02	0.00
01-Jan-10 to 30-Jun-10	181	10	2,606,400	639	0.68	0.00	13.90	0.01	0.00
01-July-10 to 31-Dec-10	181	10	2,606,400	754	0.33	0.00	16.40	0.01	0.00
01-Jan-11 to 30-Jun-11	181	10	2,606,400	1,298	0.30	2.45	28.22	0.01	0.05
01-July-11 to 31-Dec-11	184	10	2,649,600	980	0.50	1.18	21.67	0.01	0.03
01-Jan-12 to 30-Jun-12	163	10	2,347,200	700	0.40	2.73	13.71	0.01	0.05
01-July-12 to 31-Dec-12	183	10	2,635,200	830	1.1	1.56	18.25	0.02	0.03

J.H. Baxter Wood Treating Facility

#### Eugene, Oregon

TOTALS			671,500,800				1,688.26	4.43	3.58
									-
Cumulative Amounts			145,821,600				794.73	2.05	0.27
01-Jul-20 to 31-Dec-20	184	10	2,649,600	254			5.62		
01-Jan-20 to 30-Jun-20	180	10	2,592,000	290			6.27		
01-Jul-19 to 31-Dec-19	184	10	2,649,600	290			6.41		
01-Jan-19 to 30-Jun-19	180	10	2,592,000	370			8.00		
01-Jul-18 to 31-Dec-18	184	10	2,649,600	370			8.18		
01-Jan-18 to 30-Jun-18	181	10	2,606,400	350			7.61		
01-Jul-17 to 31-Dec-17	183	10	2,635,200	350			7.70		
01-Jan-17 to 30-Jun-17	181	10	2,606,400	350			7.61		
01-Jul-16 to 31-Dec-16	183	10	2,635,200	350			7.70		
01-Jan-16 to 30-Jun-16	181	10	2,606,400	490			10.66		
01-Jul-15 to 31-Dec-15	183	10	2,635,200	490			10.78		
01-Jan-15 to 30-Jun-15	180	10	2,592,000	385	0.20	0.00	8.33	0.00	0.00
01-July-14 to 31-Dec-14	183	10	2,635,200	563	0.20	0.26	12.37	0.00	0.01
01-Jan-14 to 30-Jun-14	181	10	2,606,400	533	0.29	1.95	11.58	0.01	0.04
01-July-13 to 31-Dec-13	184	10	2,649,600	970	1.2	0.28	21.45	0.03	0.01
01-Jan-13 to 30-Jun-13	176	10	2,534,400	1,050	1.1	2.55	22.21	0.02	0.05

#### Notes

<sup>1</sup> Concentrations are averages of detected values from quarterly analytical results or from semi-annual sampling analytical results

once quarterly sampling ended. For metals, the concentration is average of the sum for each sampling event.

<sup>2</sup> Field duplicate values averaged with parent value before calculating the average concentration for the observation period.

 $^{\rm 3}\,$  No value assigned to concentrations below the method reporting limit.

<sup>4</sup> Estimated mass calculated on the basis of corrected average concentrations.

<sup>5</sup> Flow rate estimated based upon pump capacity

-- = data not available or not applicable.

 $\mu$ g/L = micrograms per liter.

gpm = gallons per minute.

PCP = pentachlorophenol.

PAHs = polycyclic aromatic hydrocarbons.

Metals = total arsenic, total chromium, total copper, and total zinc.

Figures





Eugene City Limits Major Roads

Site Vicinity Map J.H. Baxter Wood Treating Facility Eugene, Oregon



ent Path: P:\Portland\302 - Baxter\GIS\Eugene\Project\_mxds\2016\_1h\_Report\Figure1\_Site\_Vicinity\_Map.mxd





Document Path: Y:\0302\_Baxter\Source\_Figures\Eugene\2020\_2h\_Report\Figure3\_Shallow\_Zone\_GW\_Elev.mx

### Shallow Zone Groundwater Elevation, Second Half 2020

J.H. Baxter Wood Treating Facility Eugene, Oregon

- Shallow Zone Monitoring Well (September 2020 Groundwater Elevation)





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## FIGURE 5

# Pentachlorophenol in Groundwater, Second Half 2020

J.H. Baxter Wood Treating Facility Eugene, Oregon

#### LEGEND



- Extraction Well
- Facility Boundary
- →→→ Union Pacific Railroad

- **NOTES:** 1. Results in µg/L (microgram per liter).
- 2. Abbreviations:

Abbreviations: NS = Not Sampled J- = The analyte was positively identified; the associated numerical value is the approximate concentration of the analytein the sample, and may have a potential negative bias. U = Analyte was not detected above the sample method detection limit. R = The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

verified.



Date: January 25, 2021 Data Sources: AMEC, OGIC, ESRI, Air photo taken on June 6, 2014 by Google Earth



Appendix A



ALG ORELAP ID #OR100012 361 West 5th Ave Eugene, OR 97401 TEL: (541) 485-8404 FAX: (541) 484-5995 Website:

Jeanne Olson J.H. Baxter & Co. 85 Baxter Street Eugene, OR 97402 TEL: (541) 689-3801 FAX:

RE: Groundwater Wells

Order No.: 2009B74

Dear Jeanne Olson:

Analytical Laboratory Group received 13 sample(s) on 9/29/2020 for the analyses presented in the following report.

The analysis was performed according to our laboratory's NELAP/TNI-approved quality assurance program. Any exceptions to this quality assurance program are noted on the case narrative.

Testing methods used are sufficiently sensitive enough to meet the requirements that support client/permittee NPDES permits that we have on file. The client is responsible for reviewing reports. The permittee is responsible for meeting permit limits.

Quality control data is within laboratory defined or method specified acceptance limits except if noted on the case narrative.

If you have any questions regarding these tests results, please feel free to call.

Kimberly J. Keeven Morghan

Kimberly Reever Morghan Quality Manager 361 West 5th Ave Eugene, OR 97401



ALG ORELAP ID #OR100012 361 West 5th Ave Eugene, OR 97401 TEL: (541) 485-8404 FAX: (541) 484-5995 Website:

### **Case Narrative**

WO#:	
Date:	

2009B74

This report presents the results of the analyses of the sample(s) received on the date above and assigned the listed Analytical Laboratory Group Analytical Report numbers. Test results relate only to the parameters tested and to the samples as received by the laboratory.

This report shall not be reproduced, except in full, without written consent of Analytical Laboratory Group, Inc.

All analyses were performed according to the Analytical Laboratory Group, Inc. Quality Assurance Program. All QA/QC requirements were met except as noted below.

Analytical comments are noted with qualifiers (see "Qual" column) or data flags on the reports and/or below.

Pentachlorophenol and Phenol by EPA 625 were analyzed by Neilson Research Corporation, Medford OR: ORELAP ID# OR100016. No anomalies associated with the analysis of these sample(s) were reported except as noted in the NRC Case Narrative or qualified with data flags on the NRC report.



October 13, 2020

Katrina Garcia Analytical Laboratory Group, Inc. 361 West Fifth Avenue Eugene, OR 97401 TEL: (800) 262-5973 FAX: (541) 484-5995

RE: 2009B74

Neilson Research Corporation 245 S Grape St Medford, OR 97501 TEL: (541) 770-5678 FAX: (541) 770-2901 Website: www.nrclabs.com

Order No.: 20100013

Dear Katrina Garcia:

Neilson Research Corporation received 13 sample(s) on 10/1/2020 for the analyses presented in the following report.

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Neilson Research Corporation. If you have any questions regarding these test results, please feel free to call.

Sincerely, Neilson Research Corporation

Tama Stimedeman

Tamra Schmedemann Senior Project Manager 245 S Grape St Medford, OR 97501



Original

Page 1 of 21



### **Case Narrative**

WO#: 20100013 Date: 10/13/2020

CLIENT: Analytical Laboratory Group, Inc.Project: 2009B74

The analyses were performed according to the guidelines in the Neilson Research Corporation Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

Neilson Research Corporation certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.



## **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/28/2020 3:00:00 PM
Lab ID:	20100013-01	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-001	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-17AI		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A ND 0.571 10/02/20 17:00 TJW Pentachlorophenol 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/02/20 17:00 TJW Surr: 4-Terphenyl-d14 E625 109 1 50 - 140 %Rec 10/02/20 17:00 TJW Surr: 2,4,6-20 - 140 E625 76.9 %Rec 10/02/20 17:00 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 84.7 1 40 - 140 %Rec 10/02/20 17:00 TJW Surr: 2-Fluorophenol E625 41.8 10 - 120 %Rec 10/02/20 17:00 TJW 1 Surr: Nitrobenzene-d5 E625 82.6 1 40 - 140 %Rec 10/02/20 17:00 TJW 10 - 110 Surr: Phenol-d6 E625 25.8 1 0 %Rec 10/02/20 17:00 TJW

C1Sample container temperature is out of limit as specified at testcode Н

QUALIFIERS Holding times for preparation or analysis exceeded MI

PLPermit Limit

NELAP

Recovery outside comtrol limits due to Matrix Interference

Е Value above quantitation range T

Analyte detected below quantitation limits ND

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Original

Accredited. ORELAP 100016, OR-028 NELAP Α



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/28/2020 3:34:00 PM
Lab ID:	20100013-02	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-002	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-17AS		

Analyses	Method	NELAP Status	Result Qı	DF ual	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	ND	1	0.571	1.00	µg/L		10/02/20 18:21 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 18:21 TJW
Surr: 4-Terphenyl-d14	E625		84.9	1		50 - 140	%Rec		10/02/20 18:21 TJW
Surr: 2,4,6- Tribromophenol	E625		30.1	1		20 - 140	%Rec		10/02/20 18:21 TJW
Surr: 2-Fluorobiphenyl	E625		69.7	1		40 - 140	%Rec		10/02/20 18:21 TJW
Surr: 2-Fluorophenol	E625		18.1	1		10 - 120	%Rec		10/02/20 18:21 TJW
Surr: Nitrobenzene-d5	E625		68.5	1		40 - 140	%Rec		10/02/20 18:21 TJW
Surr: Phenol-d6	E625		11.0	1	0	10 - 110	%Rec		10/02/20 18:21 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded

MI PL

Recovery outside comtrol limits due to Matrix Interference Permit Limit

Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R

RPD outside accepted recovery limits

Original



## **Analytical Report**

 WO#:
 20100013

 Date Reported:
 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 7:40:00 AM
Lab ID:	20100013-03	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-003	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-13S		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A 1.88 0.571 10/02/20 18:48 TJW Pentachlorophenol 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/02/20 18:48 TJW Surr: 4-Terphenyl-d14 E625 96.5 1 50 - 140 %Rec 10/02/20 18:48 TJW Surr: 2,4,6-20 - 140 E625 36.4 %Rec 10/02/20 18:48 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 77.1 1 40 - 140 %Rec 10/02/20 18:48 TJW Surr: 2-Fluorophenol E625 17.0 1 10 - 120 %Rec 10/02/20 18:48 TJW Surr: Nitrobenzene-d5 E625 76.2 1 40 - 140 %Rec 10/02/20 18:48 TJW 10 - 110 Surr: Phenol-d6 E625 10.6 1 0 %Rec 10/02/20 18:48 TJW

C1 Sample container temperature is out of limit as specified at testcode H Holding times for preparation or analysis exceeded

 H
 Holding times for preparation or analysis exceeded

 MI
 Recovery outside comtrol limits due to Matrix Interference

PL Permit Limit

QUALIFIERS

NELAP

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 7:45:00 AM
Lab ID:	20100013-04	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-004	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-13I		

Analyses	Method	NELAP Status	Result Qເ	DF Jal	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	254	10	5.71	10.0	µg/L		10/05/20 17:23 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 19:15 TJW
Surr: 4-Terphenyl-d14	E625		88.2	1		50 - 140	%Rec		10/02/20 19:15 TJW
Surr: 2,4,6- Tribromophenol	E625		34.1	1		20 - 140	%Rec		10/02/20 19:15 TJW
Surr: 2-Fluorobiphenyl	E625		69.0	1		40 - 140	%Rec		10/02/20 19:15 TJW
Surr: 2-Fluorophenol	E625		16.6	1		10 - 120	%Rec		10/02/20 19:15 TJW
Surr: Nitrobenzene-d5	E625		65.2	1		40 - 140	%Rec		10/02/20 19:15 TJW
Surr: Phenol-d6	E625		10.5	1	0	10 - 110	%Rec		10/02/20 19:15 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded

MI PL

Recovery outside comtrol limits due to Matrix Interference Permit Limit

Е Value above quantitation range

J Analyte detected below quantitation limits ND

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 7:50:00 AM
Lab ID:	20100013-05	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-005	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-20I		

Analyses	Method	NELAP Status	Result C	DF Qual	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	19.5	1	0.571	1.00	µg/L		10/02/20 19:42 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 19:42 TJW
Surr: 4-Terphenyl-d14	E625		92.6	1		50 - 140	%Rec		10/02/20 19:42 TJW
Surr: 2,4,6- Tribromophenol	E625		35.2	1		20 - 140	%Rec		10/02/20 19:42 TJW
Surr: 2-Fluorobiphenyl	E625		76.1	1		40 - 140	%Rec		10/02/20 19:42 TJW
Surr: 2-Fluorophenol	E625		20.1	1		10 - 120	%Rec		10/02/20 19:42 TJW
Surr: Nitrobenzene-d5	E625		71.9	1		40 - 140	%Rec		10/02/20 19:42 TJW
Surr: Phenol-d6	E625		12.0	1	0	10 - 110	%Rec		10/02/20 19:42 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded

MI PL

Recovery outside comtrol limits due to Matrix Interference Permit Limit

Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 8:50:00 AM
Lab ID:	20100013-06	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-006	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	Zippo		

Analyses	Method	NELAP Status	Result Q	DF ual	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	ND	1	0.571	1.00	µg/L		10/02/20 20:08 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 20:08 TJW
Surr: 4-Terphenyl-d14	E625		88.0	1		50 - 140	%Rec		10/02/20 20:08 TJW
Surr: 2,4,6- Tribromophenol	E625		32.6	1		20 - 140	%Rec		10/02/20 20:08 TJW
Surr: 2-Fluorobiphenyl	E625		68.4	1		40 - 140	%Rec		10/02/20 20:08 TJW
Surr: 2-Fluorophenol	E625		17.0	1		10 - 120	%Rec		10/02/20 20:08 TJW
Surr: Nitrobenzene-d5	E625		64.6	1		40 - 140	%Rec		10/02/20 20:08 TJW
Surr: Phenol-d6	E625		10.5	1	0	10 - 110	%Rec		10/02/20 20:08 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded Recovery outside comtrol limits due to Matrix Interference

MI PL Permit Limit Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 9:57:00 AM
Lab ID:	20100013-07	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-007	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-32		

Analyses	Method	NELAP Status	Result Qua	DF al	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	ND	1	0.571	1.00	µg/L		10/02/20 20:35 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 20:35 TJW
Surr: 4-Terphenyl-d14	E625		90.8	1		50 - 140	%Rec		10/02/20 20:35 TJW
Surr: 2,4,6- Tribromophenol	E625		34.3	1		20 - 140	%Rec		10/02/20 20:35 TJW
Surr: 2-Fluorobiphenyl	E625		75.5	1		40 - 140	%Rec		10/02/20 20:35 TJW
Surr: 2-Fluorophenol	E625		17.8	1		10 - 120	%Rec		10/02/20 20:35 TJW
Surr: Nitrobenzene-d5	E625		72.6	1		40 - 140	%Rec		10/02/20 20:35 TJW
Surr: Phenol-d6	E625		10.7	1	0	10 - 110	%Rec		10/02/20 20:35 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded Recovery outside comtrol limits due to Matrix Interference

MI PL Permit Limit Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R

RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 11:05:00 AM
Lab ID:	20100013-08	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-008	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-25		

Analyses	Method	NELAP Status	Result Qເ	DF 1al	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	9.25	1	0.571	1.00	µg/L		10/02/20 21:02 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 21:02 TJW
Surr: 4-Terphenyl-d14	E625		94.3	1		50 - 140	%Rec		10/02/20 21:02 TJW
Surr: 2,4,6- Tribromophenol	E625		35.4	1		20 - 140	%Rec		10/02/20 21:02 TJW
Surr: 2-Fluorobiphenyl	E625		77.0	1		40 - 140	%Rec		10/02/20 21:02 TJW
Surr: 2-Fluorophenol	E625		18.2	1		10 - 120	%Rec		10/02/20 21:02 TJW
Surr: Nitrobenzene-d5	E625		73.5	1		40 - 140	%Rec		10/02/20 21:02 TJW
Surr: Phenol-d6	E625		11.5	1	0	10 - 110	%Rec		10/02/20 21:02 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded

MI PL Permit Limit

Recovery outside comtrol limits due to Matrix Interference

Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R

RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 12:12:00 PM
Lab ID:	20100013-09	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-009	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-29		

Analyses	Method	NELAP Status	Resul	t Qual	DF	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1								
Pentachlorophenol	E625	А	2.96		1	0.571	1.00	µg/L		10/02/20 21:29 TJW
Phenol	E625	А	ND		1	0.211	1.00	µg/L		10/02/20 21:29 TJW
Surr: 4-Terphenyl-d14	E625		88.8		1		50 - 140	%Rec		10/02/20 21:29 TJW
Surr: 2,4,6- Tribromophenol	E625		32.3		1		20 - 140	%Rec		10/02/20 21:29 TJW
Surr: 2-Fluorobiphenyl	E625		73.3		1		40 - 140	%Rec		10/02/20 21:29 TJW
Surr: 2-Fluorophenol	E625		16.3		1		10 - 120	%Rec		10/02/20 21:29 TJW
Surr: Nitrobenzene-d5	E625		70.2		1		40 - 140	%Rec		10/02/20 21:29 TJW
Surr: Phenol-d6	E625		9.92	S	1	0	10 - 110	%Rec		10/02/20 21:29 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded Recovery outside comtrol limits due to Matrix Interference

MI PL Permit Limit Е Value above quantitation range J

Analyte detected below quantitation limits ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Original



# **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 8:15:00 AM
Lab ID:	20100013-10	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-010A	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	Dup-1		

Analyses	Method	NELAP Status	Result Q	DF ual	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES OR	GANICS EPA	625.1							
Pentachlorophenol	E625	А	18.1	1	0.571	1.00	µg/L		10/02/20 21:56 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 21:56 TJW
Surr: 4-Terphenyl-d14	E625		92.2	1		50 - 140	%Rec		10/02/20 21:56 TJW
Surr: 2,4,6- Tribromophenol	E625		34.4	1		20 - 140	%Rec		10/02/20 21:56 TJW
Surr: 2-Fluorobiphenyl	E625		72.0	1		40 - 140	%Rec		10/02/20 21:56 TJW
Surr: 2-Fluorophenol	E625		17.8	1		10 - 120	%Rec		10/02/20 21:56 TJW
Surr: Nitrobenzene-d5	E625		70.1	1		40 - 140	%Rec		10/02/20 21:56 TJW
Surr: Phenol-d6	E625		11.2	1	0	10 - 110	%Rec		10/02/20 21:56 TJW

C1 Sample container temperature is out of limit as specified at testcode

NELAP QUALIFIERS Н Holding times for preparation or analysis exceeded

MI PL Permit Limit

Recovery outside comtrol limits due to Matrix Interference

Е Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R

RPD outside accepted recovery limits

Original



### **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 1:19:00 PM
Lab ID:	20100013-11	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-011A	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-26		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A 0.610 0.571 10/03/20 1:04 Pentachlorophenol J 1 1.00 µg/L TJW Phenol E625 A ND 1 0.211 1.00 µg/L 10/03/20 1:04 TJW Surr: 4-Terphenyl-d14 E625 101 1 50 - 140 %Rec 10/03/20 1:04 TJW Surr: 2,4,6-20 - 140 E625 39.1 %Rec 10/03/20 1:04 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 76.8 1 40 - 140 %Rec 10/03/20 1:04 TJW Surr: 2-Fluorophenol E625 18.9 1 10 - 120 %Rec 10/03/20 1:04 TJW Surr: Nitrobenzene-d5 E625 70.8 1 40 - 140 %Rec 10/03/20 1:04 TJW 10 - 110 Surr: Phenol-d6 E625 12.1 1 0 %Rec 10/03/20 1:04 TJW

C1Sample container temperature is out of limit as specified at testcode Н

Holding times for preparation or analysis exceeded MI Recovery outside comtrol limits due to Matrix Interference

PLPermit Limit

QUALIFIERS

NELAP

Е Value above quantitation range

T Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R

RPD outside accepted recovery limits

Original

Accredited. ORELAP 100016, OR-028 NELAP Α


#### **Analytical Report**

 WO#:
 20100013

 Date Reported:
 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 2:09:00 PM
Lab ID:	20100013-12	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-012A	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-7S		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A 1560 100 100 10/05/20 18:17 TJW Pentachlorophenol 57.1 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/03/20 1:31 TJW Surr: 4-Terphenyl-d14 E625 90.5 1 50 - 140 %Rec 10/03/20 1:31 TJW Surr: 2,4,6-26.7 20 - 140 E625 %Rec 10/03/20 1:31 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 80.6 1 40 - 140 %Rec 10/03/20 1:31 TJW Surr: 2-Fluorophenol E625 11.2 1 10 - 120 %Rec 10/03/20 1:31 TJW Surr: Nitrobenzene-d5 E625 72.1 1 40 - 140 %Rec 10/03/20 1:31 TJW 10 - 110 Surr: Phenol-d6 E625 10.7 1 0 %Rec 10/03/20 1:31 TJW

C1 Sample container temperature is out of limit as specified at testcode

QUALIFIERS

NELAP

 H
 Holding times for preparation or analysis exceeded

 MI
 Recovery outside comtrol limits due to Matrix Interference

PL Permit Limit

E Value above quantitation range

J Analyte detected below quantitation limits ND Not Detected at the Reporting Limit

NDNot Detected at the Reporting LimitRRPD outside accepted recovery limits

RID outside accepted recovery minus

Original

NELAP A Accredited. ORELAP 100016, OR-028



#### **Analytical Report**

WO#: 20100013 Date Reported: 10/13/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/29/2020 2:45:00 PM
Lab ID:	20100013-13	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009B74-013A	Matrix:	AQUEOUS
Project:	2009B74		
Sample Location:	W-6I		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A 2.03 0.571 10/02/20 22:23 TJW Pentachlorophenol 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/02/20 22:23 TJW Surr: 4-Terphenyl-d14 E625 93.0 1 50 - 140 %Rec 10/02/20 22:23 TJW Surr: 2,4,6-20 - 140 10/02/20 22:23 TJW E625 34.6 %Rec 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 71.4 1 40 - 140 %Rec 10/02/20 22:23 TJW Surr: 2-Fluorophenol E625 13.7 1 10 - 120 %Rec 10/02/20 22:23 TJW Surr: Nitrobenzene-d5 E625 67.0 1 40 - 140 %Rec 10/02/20 22:23 TJW 10 - 110 Surr: Phenol-d6 E625 8.62 S 1 0 %Rec 10/02/20 22:23 TJW

C1Sample container temperature is out of limit as specified at testcode Н

Holding times for preparation or analysis exceeded MI

PLPermit Limit

QUALIFIERS

NELAP

Recovery outside comtrol limits due to Matrix Interference

Е Value above quantitation range T

Analyte detected below quantitation limits ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Original



### **QC SUMMARY REPORT**

TestCode: EPA625.1

WO#: 20100013

13-Oct-20

Original

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2009B74

Sample ID: MB-6108	SampType: <b>MBLK</b>	TestCode	e: EPA625.1 Units: µg/L			Prep Da	te: 10/2/20	20	RunNo: <b>150</b>		
Client ID: PBW	Batch ID: 6108	TestNo	: <b>E625</b>	E3510C	Analysis Date: 10/2/2020		20	SeqNo: 226			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	1.00									
Phenol	ND	1.00									
Surr: 4-Terphenyl-d14	19.9		20.00		99.7	50	140				
Surr: 2,4,6-Tribromophenol	14.5		20.00		72.5	20	140				
Surr: 2-Fluorobiphenyl	17.2		20.00		86.1	40	140				
Surr: 2-Fluorophenol	9.29		20.00		46.5	10	120				
Surr: Nitrobenzene-d5	16.9		20.00		84.5	40	140				
Surr: Phenol-d6	5.83		20.00		29.2	10	110				

Sample ID: LCS-6108	SampType: LCS	TestCo	de: EPA625.1	Units: µg/L	Prep Date: 10/2/2020		20	RunNo: <b>150</b>	)43		
Client ID: LCSW	Batch ID: 6108	Test	No: <b>E625</b>	E3510C	Analysis Date: 10/2/2020		20	SeqNo: 226739			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	7.42	1.00	10.00	0	74.2	38	151				
Phenol	2.88	1.00	10.00	0	28.8	17	110				
Surr: 4-Terphenyl-d14	20.5		20.00		102	50	140				
Surr: 2,4,6-Tribromophenol	15.9		20.00		79.4	20	140				
Surr: 2-Fluorobiphenyl	17.3		20.00		86.7	40	140				
Surr: 2-Fluorophenol	9.28		20.00		46.4	10	120				
Surr: Nitrobenzene-d5	16.9		20.00		84.7	40	140				
Surr: Phenol-d6	6.26		20.00		31.3	10	110				

**Qualifiers:** 

Sample container temperature is out of limit as specified at testcode

J Analyte detected below quantitation limits

- MI
   Recovery outside comtrol limits due to Matrix Interference

   R
   RPD outside accepted recovery limits
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

PL Permit Limit

C1

Page 18 of 25

E Value above quantitation range

H Holding times for preparation or analysis exceed



### **QC SUMMARY REPORT**

WO#: 20100013

13-Oct-20

Original

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2009B74 TestCode: EPA625.1

Sample ID: 20100013-01AMS	SampType: <b>MS</b>	TestCo	de: EPA625.1	Units: µg/L		Prep Dat	te: 10/2/20	20	RunNo: 150	)43	
Client ID: 2009B74-001	Batch ID: 6108	TestN	No: <b>E625</b>	E3510C	Analysis Date: 10/2/2020		20	SeqNo: 226741			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	8.24	1.00	10.00	0	82.4	20	120				
Phenol	2.45	1.00	10.00	0	24.5	10	120				
Surr: 4-Terphenyl-d14	22.0		20.00		110	50	140				
Surr: 2,4,6-Tribromophenol	16.6		20.00		82.8	20	140				
Surr: 2-Fluorobiphenyl	17.6		20.00		88.0	40	140				
Surr: 2-Fluorophenol	8.15		20.00		40.8	10	120				
Surr: Nitrobenzene-d5	17.1		20.00		85.3	40	140				
Surr: Phenol-d6	5.20		20.00		26.0	10	110				

Sample ID: 20100013-01AMSD	SampType: <b>MSD</b>	TestCoo	de: EPA625.1	Units: µg/L		Prep Dat	te: 10/2/20	20	RunNo: 150	)43	
Client ID: 2009B74-001	Batch ID: 6108	TestN	lo: <b>E625</b>	E3510C	Analysis Date: 10/2/2020		20	SeqNo: 226742			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	8.00	1.00	10.00	0	80.0	20	120	8.240	2.96	35	
Phenol	2.51	1.00	10.00	0	25.1	10	120	2.450	2.42	35	
Surr: 4-Terphenyl-d14	20.7		20.00		103	50	140		0		
Surr: 2,4,6-Tribromophenol	16.2		20.00		81.0	20	140		0		
Surr: 2-Fluorobiphenyl	17.8		20.00		89.0	40	140		0		
Surr: 2-Fluorophenol	8.93		20.00		44.6	10	120		0		
Surr: Nitrobenzene-d5	17.4		20.00		86.8	40	140		0		
Surr: Phenol-d6	5.45		20.00		27.3	10	110		0		

**Qualifiers:** 

Sample container temperature is out of limit as specified at testcode C1

Н Holding times for preparation or analysis exceed

J Analyte detected below quantitation limits

- MI Recovery outside comtrol limits due to Matrix Interference R RPD outside accepted recovery limits
- ND Not Detected at the Reporting Limit RL Reporting Detection Limit

PL Permit Limit

Page 19 of 25

Е Value above quantitation range



#### Sample Log-In Check List

Clie	nt Name:	AnalyticalLab	Work Order Number	r: 20100013		RcptNo: 1
Log	ged by:	Denise Neal	10/1/2020 12:20:00 F	M	Renie P	real
Con	npleted By:	Tamra Schmedemann	10/13/2020 11:33:53	АМ	Tama S	medem
Rev	iewed By:	Tamra Schmedemann	10/13/2020 11:34:00	AM	Tamie M Tamig St Tamig S	meder am
Cha	in of Cus	stody				
		Custody complete?		Yes 🖌	No 🗌	Not Present
		ne sample delivered?		<u>Client</u>		
Log	In					
-	Coolers are	e present?		Yes 🖌	No 🗌	
-				_		
4.	Shipping co	ontainer/cooler in good condit	ion?	Yes 🗹	No 🗌	_
	Custody se	als intact on shipping contain	er/cooler?	Yes 🗋	No 🗌	Not Present
	No.	Seal Date	:	Signed By:	_	_
5.	Was an att	empt made to cool the sampl	es?	Yes 🖌	No	NA 📖
6.	Were all sa	amples received at a tempera	ture of >0° C to 6.0°C	Yes 🖌	No 🗌	
7.	Sample(s)	in proper container(s)?		Yes 🖌	No 🗌	
8.	Sufficient s	ample volume for indicated to	est(s)?	Yes 🖌	No	
		es (except VOA and ONG) pro		Yes 🖌	No	
•••		rvative added to bottles?	· · · · · · · · · · · · · · · · · · ·	Yes	No 🗌	NA 🔽
10.	rrao proco					NA
11	Is the head	lspace in the VOA vials less t	han 1/4 inch or 6 mm?	Yes	No 🗌	No VOA Vials 🗹
		sample containers received b		Yes	No 🔽	
	-	rwork match bottle labels?		Yes 🖌	No 🗌	
		epancies on chain of custody	)			
14.	Are matrice	es correctly identified on Chai	n of Custody?	Yes 🗹	No 🗌	
15.	Is it clear w	hat analyses were requested	?	Yes 🗹	No 🗌	
16.		olding times able to be met? y customer for authorization.)		Yes 🖌	No 🗌	
Sno		dling (if applicable)				
_		notified of all discrepancies v	vith this order?	Yes	No 🗌	NA 🗹
		n Notified:	Date:			
	By WI	p	Via:		hone 🗌 Fax	In Person
	-		via.			
	Regar	-				
	Client	Instructions:				

18. Additional remarks:

#### **Cooler Information**

Cooler No	Temp <sup>o</sup> C	Condition	Seal Intact	Seal No	Seal Date	Signed By
8	2.3	Good				TRS

## Analytical Laboratory Group, Inc.

361 WEST FIFTH AVENUE EUGENE, OREGON 97401

800-262-5973/541-485-8404 Fax 541-484-5995

Delivering more than just test results

Email: alglabs@alglabsinc.com

# **CHAIN OF CUSTODY**

Attention:	Cynthia O'Kelle	۷			Client: Analytical Laboratory Group, Inc							
Phone:	541-485-8404	•			Address:		- Nest 5th A		• •			
Fax:	541-484-5995				/100001		ene, OR 9					
Client Project:	Neilson Resear	ch			Source:	Envir	onmental	ALG PO#	# 201001-05			
Lab ID	ALG Sample ID	ALG Sample Point	Sample Descr Grab/		Collect Date	ion Time	Bottles	1	Analysis equested	1		
01	2009B74-001A	W-17AI	EW/0		0/28/20 1500 (3) 625 Pentach			loropher ol by EPA				
60	2009B74-002A	W-17AS	EW/0	Grab	9/28/20	1534	(3) 625	1	Pentachlorophenol and Phenol by EPA 625			
03	2009B74-003A	W-13S	EW/0	Grab	9/29/20	0740	(3) 625		nioropher ol by EPA	1		
04	2009B74-004A	W-13I	EW/C	Grab	9/29/20	0745	(3) 625		loropher ol by EPA			
05	2009B74-005A	W-20I	EW/0	Grab	9/29/20	0750	(3) 625	Pentach Phene	1			
06	2009B74-006A	Zippo	EW/O	Grab	1 9799796 1 69661 1 73 696 1				loropher	6		
07	2009B74-007A	W-32	EW/C	Grab	9/29/20	0957	(3) 625	Pentachlorophenol an Phenol by EPA 625				
08	2009B74-008A	W-25	EW/C	Grab	9/29/20	1105	(3) 625		loropher			
Notes: Please R Include:	eturn Shipper MDL											
Turn Arou	nd Time Request	ed:			Shipped V				Refrig	erated		
			Nor	mal		Uie	int		YES	3		
-	PO made by:	<u> </u>	Date	Time	Received	by:			Date	Time		
Cynthe	a O'Kelley 10/2/20 11:0				1							
Relinquist	red by:		Time	Received	by:		Date	Time				
Relinquist	ned by:		Date	Time	ne Received by Laboratory:					Time		
					PM	la	0	10/1	12030	12:20		

Note: Standard Termscand Conditions on Reverse

Page \_\_\_\_\_ of \_

## Analytical Laboratory Group, Inc.

361 WEST FIFTH AVENUE EUGENE, OREGON 97401 800-262-5973/541-485-8404 Fax 541-484-5995



Delivering more than just test results

Email: alglabs@alglabsinc.com

# **CHAIN OF CUSTODY**

Attention:	Cynthia O'Kelle	у Э			Client:	Anal	ytical Lab	oratory Gro	oup, Inc		
Phone:	541-485-8404				Address:	361 \	Nest 5th A	Avenue			
Fax:	541-484-5995					Euge	ene, OR 9	7401			
Client Project:	Neilson Resear	ch			Source:	Envir	onmental	ALG PO#	<b>20</b> # 201001-05		
Lab ID	ALG Sample ID	ALG Sample Point	Sample I Descri Grab/		Collect Date	ion Time	Bottles		Analysis equested		
09	2009B74-009A	W-29	EW/C	Grab	9/29/20	1212	(3) 625		lorophen ol by EPA		
10	2009B74-010A	Dup-1	EW/C	Grab	9/29/20	0815	(3) 625	Phene	lorophen ol by EPA	625	
11	2009B74-011A	W-26	EW/C	Grab	9/29/20	1319	(3) 625	Pentach Phene			
ا بي	2009B74-012A	W-7S	EW/C	Grab	9/29/20	1409	(3) 625	Pentach Pheno			
13	2009B74-013A	W-61	EW/C	Grab	9/29/20	1445	(3) 625		lorophen ol by EPA		
Notes: Please R Include:	eturn Shipper MDL										
Turn Arou	Ind Time Request	ted:			Shipped \		•		Refrige	rated	
			Nor	mal		Ui	ent		YES J		
COC and	PO made by:		Date	Time	Received	by:			Date	Time	
	ia O'Kelley	10/2/20	11:01								
Relinquis	hed by:	Date	Time	Received	by:			Date	Time		
Relinquis	hed by:	<u>.</u>	Date	Time	Received	by Lab	oratory:		Date	Time	
					Meal IOPH200162:20						

Note: Standard Termas, and Gonditions on Reverse

Page \_\_\_\_\_ of \_\_\_\_



### **Data Flags** WO#: 20100013

Date: 10/13/2020

B Analyte detected in the associated method blank.

- BA BOD Alternative Calculation: The initial results performed by Standard Methods did not fall within parameters of the Standard Methods calculation. An alternate approved calculation was performed using the HACH method and the value reported is an estimated concentration.
- C Sample(s) does not meet NELAP/ORELAP sample acceptance criteria. See Case Narrative.
- C1 Sample(s) does not meet NELAP/ORELAP sample acceptance criteria for temperature.
- CF Results confirmed by re-analysis.
- CU Cleanup performed as specified by method.
- D1 The diesel elution pattern for the sample is not typical.
- D2 The sample appears to be a heavier hydrocarbon range than diesel.
- D3 The sample appears to be a lighter hydrocarbon range than diesel.
- D4 Detected hydrocarbons do not have pattern and range consistent with typical petroleum products and may be due to biogenic interference.
- D5 Detected hydrocarbons in the diesel range appear to be weathered diesel.
- E Estimated value.

ER Elevated reporting limit due to matrix. Report limits (MDLs, MRLs & PQLs) are adjusted based on variations in sample preparation amounts, analytical dilutions, and percent solids, where applicable.

- FC Fecal Coliforms: Sample(s) received past 40 CFR Part 136 specified holding time. Results reported as estimated values.
- G1 The gasoline elution pattern for the sample is not typical.
- G2 The sample appears to be a heavier hydrocarbon range than gasoline.
- G3 The sample appears to be a lighter hydrocarbon range than gasoline.
- G4 Detected hydrocarbons in the gasoline range appear to be weathered gasoline.
- HP Sample re-analysis performed outside of method specified holding time.
- HR Sample received outside of method specified holding time.
- HS Sample analyzed for volatile organics contained headspace.
- $HT\square$  At the client's request, the sample was analyzed outside of method specified holding time.
- H Analysis performed outside of method specified holding time.
- J Analyte detected below the Minimum Reporting Limit (MRL) and above the Method Detection Limit (MDL). The J flag result is an estimated value and the user should be aware that this data is of limited reliability.
- L Dissolved metals were not filtered within 15 minutes of collection per 40 CFR Part 136.
- MI Surrogate, Duplicate Sample (DUP) or Matrix Spikes recoveries are out of control limits due to matrix interference. Sample results may be biased.
- N See Case Narrative on page 2 of report.
- NLR No Legionella Recovered.
- PLR Presence of Legionella Recovered.
- Q Initial calibration verification (ICV), continuing calibration verification (CCV) or laboratory control sample (LCS) exceeded high recovery limits, but associated samples are non-detect and the sample results are not affected. Data meets EPA/NELAP requirements.
- R Relative percent difference (RPD) is outside of the accepted recovery limits.
- R1 Relative percent difference (RPD) is outside of the accepted recovery limits. However, analyses are not controlled on RPD values for sample concentrations that are less than the reporting limit.
- R3 The relative percent difference (RPD) and/or percent recovery for the duplicate (DUP) or matrix spike (MS)/matrix spike duplicate (MSD) cannot be accurately calculated due to the concentration of analyte already present in the sample.
- R4 Duplicate analysis failed due to result being at or near the method reporting limit.
- S Surrogate and/or matrix spike recovery is outside of the accepted recovery limits. Sample results may be biased.
- S1 Surrogate or matrix spike recovery is outside of control limits due to dilution necessary for analysis.
- SC Sub-contracted to another laboratory for analysis.
- SP Sample(s) were not collected per EPA Method 5035A protocols. The results are considered minimum values.
- # Value exceeds regulatory level for TCLP contaminant.
- X1 The motor oil elution pattern for the sample is not typical.
- X2 The sample appears to be a heavier hydrocarbon range than motor oil.
- X3 The sample appears to be a lighter hydrocarbon range than motor oil.
- \* Value exceeds Maximum Contaminant Level or is outside the acceptable range.

-1

	Delivarii	ng more then results	SignatureLIMS:361 WEST FIFTH AVENUEChecked:EUGENE, OREGON 97401Phone: 541-485-8404 Fax: 541-484-5995Email: alglabs@alglabsinc.com									
	EW GE	NERAI	_			DY						
Report to: Jeanne Ols	on Josh	Bale	Company	; J.H. Bax	ter & Co.							
Phone: 541-689-380	)1		Address:	85 Baxte	r Street							
Email: jolson@jhb	axter.com ၂၂၉	ale Qgsilus.	City, State, Zip:	Eugene,	OR 97402							
Client Project: Groundwate			Sampler N	Name: Joe Shi	errod							
Sample Point	Sample Matrix & Grab/Comp		ction Time	Analysis	Tune	Bottl	es -Lab U					
W-17AI	EW/Grab	9/28/20		Phenols &	Penta 8270C	Type	3	Pres	T ℃ 3.5		b ID	
W-17AS	EW/Grab	9/28/20	1534		Penta 8270C	(25 8270C	3		5.7 4.63	\$ <b>\$</b> 00		
W-13s	EWGrat	9/29/20	1 1		Penta 8270C	8270C	3		5.3	00		
W-13I	EW/Grab	9/29/20		Phenols &	Penta 8270C	82700	3		9.3		UAA)	
W-7.0I	EWGrab	9/29/20		Phenols &	Penta 8270C		3		9.9	00		
Zippo	ENVIOL AND				Penta-8270C	-8270G	3		12.6	Q.Q	GA	
W-32	EW/Grab	9/29/20	0957		Penta \$270C	82702	3		10.3	00	7A	
W-25	EW/Grab	9/29/20	1105		Penta 8270C	-82702	3		124	ØC	AG(	
W-529	EW/Grab	9/29/20			Penta <b>3270</b> C	8270C	3		122	ØØ	9AP	
Dup-1	EW/Grab	9/29/20	0815	Phenols &	Penta 8270C	\$270G	3		4.7	010	ØA	
Notes:	Corri	ected met		210 60	Lab ID	Preserv Date/Time	r	n Cheo reserved		нТ	Tech	
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J.H. Baxter 9-25-2	20	1.100		(		Pag	je	of	2			

Work Order # 2009374

AN		Bellvarin just tast EW GE		EUGENE, 0 Phone: 54 Email: alg	labs@algla	7401 Fax: 541-484 bsinc.com		LIM Che	S: ecked:	. The The	<u>,                                    </u>	
Report to:	Jeanne Olse	on Josh	Bale	Company	J.H. Baxt	er & Co.						
Phone:	541-689-380			Address:	85 Baxte	r Street						
Email:	jolson@jhb	axter.com	ile agrives.	City, State, Zip:	Eugene,	OR 97402						
Client Project:	Groundwate		Com	Sampler N		Sharod						
Samp	le Point	Sample Matrix		ection	Analysis	Requested			les -Lab Us			
	ר <i>ר</i>	& Grab/Comp EW/Grab	0	Time		Penta 8270C	Type	#	Pres	T°C	La	D
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W - I	<u>&gt;</u>	EW/Grab	9/29/20	1409		Penta 8270C	8270C	3		163	0912	
W-6	L	EW/Grab	9/29/20	1445	Phenois & Penta 8270C 8270C			3		izi	013	SP-
		EW/Grab		Phenols & Penta 8270C. 8270C			3					
		EW/Grab			Phenols &	Penta <del>8270C</del>	8270C	3				
		EW/Grab			Phenols &	Penta 8270C	8270C	3				
		EW/Grab	1		Phenols &	Penta <del>8270</del> C	.8270C	3				
		EW/Grab			Phenols &	Penta-8270C	8270C	3				
		EW/Grab			Phenols &	Penta-8270C	- <del>8270C</del>	3				
Notes:				- 1 - T	11		Preserv					
MDL= 0.65 ug/	1		Correc	ted meth	10/2/20 CC	Lab ID	Date/Time	Pre-F	Preserved	p	H	Tech
WDL- 0.05 dg/					10/2/20 20			É.				
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Turn Aroun	d Time Requ	ested (Rush inc	urs a Surc	harge):	Shipped V	ia:		ļ	R	frig	erated	
	NORM	AL [	RUSH		ALG	Covier	-		lce	)	No	ne
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J.H	. Baxter 9-25-2	20			<u>C</u>		Pa	ge	01		-	



ALG ORELAP ID #OR100012 361 West 5th Ave Eugene, OR 97401 TEL: (541) 485-8404 FAX: (541) 484-5995 Website:

Jeanne Olson J.H. Baxter & Co. 85 Baxter Street Eugene, OR 97402 TEL: (541) 689-3801 FAX:

RE: Groundwater Wells

Order No.: 2009C10

Dear Jeanne Olson:

Analytical Laboratory Group received 5 sample(s) on 9/30/2020 for the analyses presented in the following report.

The analysis was performed according to our laboratory's NELAP/TNI-approved quality assurance program. Any exceptions to this quality assurance program are noted on the case narrative.

Testing methods used are sufficiently sensitive enough to meet the requirements that support client/permittee NPDES permits that we have on file. The client is responsible for reviewing reports. The permittee is responsible for meeting permit limits.

Quality control data is within laboratory defined or method specified acceptance limits except if noted on the case narrative.

If you have any questions regarding these tests results, please feel free to call.

Kimberly J. Keeven Morghan

Kimberly Reever Morghan Quality Manager 361 West 5th Ave Eugene, OR 97401



ALG ORELAP ID #OR100012 361 West 5th Ave Eugene, OR 97401 TEL: (541) 485-8404 FAX: (541) 484-5995 Website:

#### **Case Narrative**

WO#:	
Date:	

2009C10

This report presents the results of the analyses of the sample(s) received on the date above and assigned the listed Analytical Laboratory Group Analytical Report numbers. Test results relate only to the parameters tested and to the samples as received by the laboratory.

This report shall not be reproduced, except in full, without written consent of Analytical Laboratory Group, Inc.

All analyses were performed according to the Analytical Laboratory Group, Inc. Quality Assurance Program. All QA/QC requirements were met except as noted below.

Analytical comments are noted with qualifiers (see "Qual" column) or data flags on the reports and/or below.

Pentachlorophenol and Phenol by EPA 625 were analyzed by Neilson Research Corporation, Medford OR; ORELAP ID# OR100016. No anomalies associated with the analysis of these sample(s) were reported except as noted in the NRC Case Narrative or qualified with data flags on the NRC report.



October 14, 2020

Katrina Garcia Analytical Laboratory Group, Inc. 361 West Fifth Avenue Eugene, OR 97401 TEL: (800) 262-5973 FAX: (541) 484-5995

RE: 2009C10

Neilson Research Corporation 245 S Grape St Medford, OR 97501 TEL: (541) 770-5678 FAX: (541) 770-2901 Website: www.nrclabs.com

Order No.: 20100055

Dear Katrina Garcia:

Neilson Research Corporation received 5 sample(s) on 10/1/2020 for the analyses presented in the following report.

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Neilson Research Corporation. If you have any questions regarding these test results, please feel free to call.

Sincerely, Neilson Research Corporation

Tama Stimedeman

Tamra Schmedemann Senior Project Manager 245 S Grape St Medford, OR 97501



Original

Page 1 of 11



#### **Case Narrative**

WO#:20100055Date:10/14/2020

**CLIENT:**Analytical Laboratory Group, Inc.**Project:**2009C10

The analyses were performed according to the guidelines in the Neilson Research Corporation Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

Neilson Research Corporation certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.



#### **Analytical Report**

WO#: 20100055 Date Reported: 10/14/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/30/2020 9:16:00 AM
Lab ID:	20100055-01	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009C10-001A	Matrix:	AQUEOUS
Project:	2009C10		
Sample Location:	W-18AI		

Analyses	Method	NELAP Status	Result Qເ	DF Jal	MDL	RL	Units	MCL	Date Analyst Analyzed
SEMIVOLATILES ORG	GANICS EPA	625.1							
Pentachlorophenol	E625	А	4.45	1	0.571	1.00	µg/L		10/02/20 22:50 TJW
Phenol	E625	А	ND	1	0.211	1.00	µg/L		10/02/20 22:50 TJW
Surr: 4-Terphenyl-d14	E625		96.9	1		50 - 140	%Rec		10/02/20 22:50 TJW
Surr: 2,4,6- Tribromophenol	E625		34.7	1		20 - 140	%Rec		10/02/20 22:50 TJW
Surr: 2-Fluorobiphenyl	E625		74.8	1		40 - 140	%Rec		10/02/20 22:50 TJW
Surr: 2-Fluorophenol	E625		16.3	1		10 - 120	%Rec		10/02/20 22:50 TJW
Surr: Nitrobenzene-d5	E625		69.5	1		40 - 140	%Rec		10/02/20 22:50 TJW
Surr: Phenol-d6	E625		10.3	1	0	10 - 110	%Rec		10/02/20 22:50 TJW

C1 Sample container temperature is out of limit as specified at testcode

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits

NELAP QUALIFIERS

PL

Н Holding times for preparation or analysis exceeded

MI Recovery outside comtrol limits due to Matrix Interference

Permit Limit

Original

NELAP Accredited. ORELAP 100016, OR-028 А



#### **Analytical Report**

WO#: 20100055 Date Reported: 10/14/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/30/2020 9:53:00 AM
Lab ID:	20100055-02	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009C10-002A	Matrix:	AQUEOUS
Project:	2009C10		
Sample Location:	W-23		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 A 0.571 10/02/20 23:16 TJW Pentachlorophenol 12.4 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/02/20 23:16 TJW Surr: 4-Terphenyl-d14 E625 104 1 50 - 140 %Rec 10/02/20 23:16 TJW Surr: 2,4,6-20 - 140 E625 37.9 %Rec 10/02/20 23:16 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 77.7 1 40 - 140 %Rec 10/02/20 23:16 TJW Surr: 2-Fluorophenol E625 16.3 1 10 - 120 %Rec 10/02/20 23:16 TJW Surr: Nitrobenzene-d5 E625 69.2 1 40 - 140 %Rec 10/02/20 23:16 TJW 10 - 110 Surr: Phenol-d6 E625 10.7 1 0 %Rec 10/02/20 23:16 TJW

C1Sample container temperature is out of limit as specified at testcode

Analyte detected below quantitation limits T ND

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

QUALIFIERS

NELAP

н MI

Holding times for preparation or analysis exceeded Recovery outside comtrol limits due to Matrix Interference

PL Permit Limit

Original



#### **Analytical Report**

WO#: 20100055 Date Reported: 10/14/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/30/2020 10:42:00 AM
Lab ID:	20100055-03	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009C10-003A	Matrix:	AQUEOUS
Project:	2009C10		
Sample Location:	W-11I		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 А ND 0.571 10/02/20 23:43 TJW Pentachlorophenol 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/02/20 23:43 TJW Surr: 4-Terphenyl-d14 E625 102 1 50 - 140 %Rec 10/02/20 23:43 TJW Surr: 2,4,6-20 - 140 E625 37.0 %Rec 10/02/20 23:43 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 82.0 1 40 - 140 %Rec 10/02/20 23:43 TJW Surr: 2-Fluorophenol E625 19.5 1 10 - 120 %Rec 10/02/20 23:43 TJW Surr: Nitrobenzene-d5 E625 76.9 1 40 - 140 %Rec 10/02/20 23:43 TJW 10 - 110 Surr: Phenol-d6 E625 12.0 1 0 %Rec 10/02/20 23:43 TJW

C1Sample container temperature is out of limit as specified at testcode T

Analyte detected below quantitation limits ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

QUALIFIERS

NELAP

MI

PL

н Holding times for preparation or analysis exceeded

Recovery outside comtrol limits due to Matrix Interference Permit Limit

Original



#### **Analytical Report**

WO#: 20100055 Date Reported: 10/14/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/30/2020 11:14:00 AM
Lab ID:	20100055-04	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009C10-004A	Matrix:	AQUEOUS
Project:	2009C10		
Sample Location:	W-11S		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 А ND 0.571 10/03/20 0:10 TJW Pentachlorophenol 1 1.00 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/03/20 0:10 TJW Surr: 4-Terphenyl-d14 E625 108 1 50 - 140 %Rec 10/03/20 0:10 TJW Surr: 2,4,6-20 - 140 E625 41.2 %Rec 10/03/20 0:10 TJW 1 Tribromophenol Surr: 2-Fluorobiphenyl E625 91.8 1 40 - 140 %Rec 10/03/20 0:10 TJW Surr: 2-Fluorophenol E625 19.0 1 10 - 120 %Rec 10/03/20 0:10 TJW Surr: Nitrobenzene-d5 E625 85.2 1 40 - 140 %Rec 10/03/20 0:10 TJW 10 - 110 Surr: Phenol-d6 E625 11.5 1 0 %Rec 10/03/20 0:10 TJW

C1Sample container temperature is out of limit as specified at testcode QUALIFIERS T Analyte detected below quantitation limits

NELAP

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

н MI

PL

Holding times for preparation or analysis exceeded Recovery outside comtrol limits due to Matrix Interference

Permit Limit

Original



#### **Analytical Report**

WO#: 20100055 Date Reported: 10/14/2020

CLIENT:	Analytical Laboratory Group, Inc.	<b>Collection Date:</b>	9/30/2020 12:13:00 PM
Lab ID:	20100055-05	<b>Received Date:</b>	10/1/2020 12:20:00 PM
<b>Client Sample ID</b>	2009C10-005A	Matrix:	AQUEOUS
Project:	2009C10		
Sample Location:	W-12I		

#### NELAP DF MDL RL MCL Analyses Method Result Units Date Analyst Status Analyzed Qual **SEMIVOLATILES ORGANICS EPA 625.1** E625 А 5 2.85 5.00 10/05/20 17:50 TJW Pentachlorophenol 74.4 µg/L Phenol E625 A ND 1 0.211 1.00 µg/L 10/03/20 0:37 TJW Surr: 4-Terphenyl-d14 E625 107 1 50 - 140 %Rec 10/03/20 0:37 TJW Surr: 2,4,6-20 - 140 E625 40.0 1 %Rec 10/03/20 0:37 TJW Tribromophenol Surr: 2-Fluorobiphenyl E625 84.6 1 40 - 140 %Rec 10/03/20 0:37 TJW Surr: 2-Fluorophenol E625 19.6 1 10 - 120 %Rec 10/03/20 0:37 TJW Surr: Nitrobenzene-d5 E625 79.3 1 40 - 140 %Rec 10/03/20 0:37 TJW 10 - 110 Surr: Phenol-d6 E625 12.1 1 0 %Rec 10/03/20 0:37 TJW

C1Sample container temperature is out of limit as specified at testcode

T Analyte detected below quantitation limits ND

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

QUALIFIERS

NELAP

н MI

PL

Holding times for preparation or analysis exceeded

Recovery outside comtrol limits due to Matrix Interference Permit Limit

Original



### **QC SUMMARY REPORT**

WO#: 20100055

14-Oct-20

Original

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2009C10

TestCode: EPA625.1

Sample ID: MB-6108	SampType: MBLK	TestCode: EPA625.1	Units: µg/L		Prep Da	te: 10/2/20	20	RunNo: 150	043	
Client ID: PBW	Batch ID: 6108	TestNo: <b>E625</b>	E3510C		Analysis Da	te: 10/2/202	20	SeqNo: 226	6738	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	1.00								
Phenol	ND	1.00								
Surr: 4-Terphenyl-d14	19.9	20.00		99.7	50	140				
Surr: 2,4,6-Tribromophenol	14.5	20.00		72.5	20	140				
Surr: 2-Fluorobiphenyl	17.2	20.00		86.1	40	140				
Surr: 2-Fluorophenol	9.29	20.00		46.5	10	120				
Surr: Nitrobenzene-d5	16.9	20.00		84.5	40	140				
Surr: Phenol-d6	5.83	20.00		29.2	10	110				

Sample ID: LCS-6108	SampType: LCS	TestCo	de: EPA625.1	Units: µg/L			20	RunNo: <b>15043</b> SeqNo: <b>226739</b>			
Client ID: LCSW	Batch ID: 6108	Test	No: <b>E625</b>	E3510C			20				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	7.42	1.00	10.00	0	74.2	38	151				
Phenol	2.88	1.00	10.00	0	28.8	17	110				
Surr: 4-Terphenyl-d14	20.5		20.00		102	50	140				
Surr: 2,4,6-Tribromophenol	15.9		20.00		79.4	20	140				
Surr: 2-Fluorobiphenyl	17.3		20.00		86.7	40	140				
Surr: 2-Fluorophenol	9.28		20.00		46.4	10	120				
Surr: Nitrobenzene-d5	16.9		20.00		84.7	40	140				
Surr: Phenol-d6	6.26		20.00		31.3	10	110				

**Qualifiers:** 

C1 Sample container temperature is out of limit as specified at testcode Н Holding times for preparation or analysis exceeded

Analyte detected below quantitation limits J PL

Permit Limit

MI Recovery outside comtrol limits due to Matrix Interference R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit RL Reporting Detection Limit

Page 10 of 14



### **QC SUMMARY REPORT**

WO#: 20100055

14-Oct-20

Original

**Client:** Analytical Laboratory Group, Inc.

**Project:** 2009C10 TestCode: EPA625.1

Sample ID: 20100013-01AMS	SampType: <b>MS</b>	TestCo	de: EPA625.1	Units: µg/L		Prep Da	te: 10/2/20	20	RunNo: 150	943	
Client ID: BatchQC	Batch ID: 6108	Test	lo: <b>E625</b>	E3510C		Analysis Da	te: 10/2/20	20	SeqNo: 226	6741	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	8.24	1.00	10.00	0	82.4	20	120				
Phenol	2.45	1.00	10.00	0	24.5	10	120				
Surr: 4-Terphenyl-d14	22.0		20.00		110	50	140				
Surr: 2,4,6-Tribromophenol	16.6		20.00		82.8	20	140				
Surr: 2-Fluorobiphenyl	17.6		20.00		88.0	40	140				
Surr: 2-Fluorophenol	8.15		20.00		40.8	10	120				
Surr: Nitrobenzene-d5	17.1		20.00		85.3	40	140				
Surr: Phenol-d6	5.20		20.00		26.0	10	110				

Sample ID: 20100013-01AMSD	SampType: <b>MSD</b>	TestCo	de: EPA625.1	Units: µg/L		Prep Dat	te: 10/2/20	20	RunNo: 150	)43	
Client ID: BatchQC	Batch ID: 6108	TestN	lo: <b>E625</b>	E3510C		Analysis Da	te: 10/2/20	20	SeqNo: 226	6742	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	8.00	1.00	10.00	0	80.0	20	120	8.240	2.96	35	
Phenol	2.51	1.00	10.00	0	25.1	10	120	2.450	2.42	35	
Surr: 4-Terphenyl-d14	20.7		20.00		103	50	140		0		
Surr: 2,4,6-Tribromophenol	16.2		20.00		81.0	20	140		0		
Surr: 2-Fluorobiphenyl	17.8		20.00		89.0	40	140		0		
Surr: 2-Fluorophenol	8.93		20.00		44.6	10	120		0		
Surr: Nitrobenzene-d5	17.4		20.00		86.8	40	140		0		
Surr: Phenol-d6	5.45		20.00		27.3	10	110		0		

**Qualifiers:** 

C1 Sample container temperature is out of limit as specified at testcode Н Holding times for preparation or analysis exceeded

Analyte detected below quantitation limits J PL

Permit Limit

MI Recovery outside comtrol limits due to Matrix Interference R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit RL Reporting Detection Limit

Page 11 of 14



#### Sample Log-In Check List

Clien	it Name:	AnalyticalLab	Work Order Number	r: 20100055		RcptNo: 1
Logg	ed by:	Naomi Orr	10/1/2020 12:20:00 F	M	Na	
Com	pleted By:	Tamra Schmedemann	10/14/2020 8:29:05 A	M	Tampa S	limedesnam limedesnam
Revie	ewed By:	Tamra Schmedemann	10/14/2020 8:29:08 A	M	Tampa S	limedeman
<u>Chai</u>	in of Cus	stody				
1.	Is Chain of	Custody complete?		Yes 🖌	No	Not Present
2. 1	How was th	e sample delivered?		<u>Client</u>		
Log	<u>In</u>					
-	Coolers are	e present?		Yes 🖌	No 🗌	
	Chinning	antoinar/applar in good conditio	22	Yes 🖌	No 🗌	
		ontainer/cooler in good conditionals intact on shipping containe		Yes		Not Present
	No.	Seal Date:		Signed By:		Not i lesent 💌
	-	empt made to cool the sample		Yes 🖌	No 🗌	
0.						
6. \	Were all sa	imples received at a temperation	Ire of >0° C to 6.0°C	Yes 🖌	No 🗌	
7. 3	Sample(s)	in proper container(s)?		Yes 🗹	No 🗌	
8. 3	Sufficient s	ample volume for indicated tes	st(s)?	Yes 🖌	No 🗌	
9. /	Are sample	es (except VOA and ONG) prop	perly preserved?	Yes 🖌	No 🗌	
10. \	Was prese	rvative added to bottles?		Yes	No 🗌	NA 🔽
						NA
11.	Is the head	space in the VOA vials less th	an 1/4 inch or 6 mm?	Yes	No 🗌	No VOA Vials 🗹
12. \	Were any s	ample containers received bro	oken?	Yes	No 🗹	
		rwork match bottle labels? epancies on chain of custody)		Yes 🖌	No	
		es correctly identified on Chain	of Custody?	Yes 🖌	No 🗌	
		hat analyses were requested?	-	Yes 🖌	No 🗌	
16. \	Were all ho	olding times able to be met?		Yes 🖌	No 🗌	
		y customer for authorization.)				
<u>Spec</u>	<u>cial Hanc</u>	<u>lling (if applicable)</u>				
17.	Was client	notified of all discrepancies wi	th this order?	Yes	No 🗌	
	Perso	n Notified:	Date:			
	By WI	hom:	Via:	eMail	Phone 🗌 Fax	In Person
	Regar	rding:				
	Client	Instructions:				
40	A shall the second second					

18. Additional remarks:

#### **Cooler Information**

Cooler No	Temp <sup>o</sup> C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good				DLN

### Analytical Laboratory Group, Inc.

361 WEST FIFTH AVENUE EUGENE, OREGON 97401

800-262-5973/541-485-8404 Fax 541-484-5995



Delivering more than just test results

Email: alglabs@alglabsinc.com

# **CHAIN OF CUSTODY**

Attention:	Cynthia O'Kelle	<u></u>			Client:	Anal	ytical Lab	oratory Gro	oup, Inc	
Phone:	541-485-8404			·	Address:	361 1	West 5th /	Avenue		
Fax:	541-484-5995					Euge	ene, OR 9	7401		
Client Project:	Neilson Resear				Source:	Envir	onmental	ALG PO#	201001-0	)4
Lab ID	ALG Sample ID	ALG Sample Point	Descr	Matrix & ription /Comp	Collect Date	tion Time	Bottles		Analysis Requested	
	2009C10-001A		Grab	9/30/20	0916	(3) 625		nlorophen ol by EPA		
	2009C10-002A	EW/(	Grab	9/30/20	0953	(3) 625		nlorophen ol by EPA		
	2009C10-003A	EW/0	Grab	9/30/20	1042	(3) 625	Phen	nlorophen ol by EPA	625	
	2009C10-004A	W-11S	EW/(	Grab	9/30/20	1114	(3) 625	Phene	nlorophen ol by EPA	625
	2009C10-005A	W-12I	EW/0	Grab	9/30/20	1213	(3) 625	Pentachlorophone		
Notes: Please R Include:	eturn Shipper MDL									
Turn Arou	Ind Time Request	ed:			Shipped V	/ia:U	ient			erated
			Nor							3.1°C
COC and I	PO made by:	2	Date 10/2/20	Time 11:04	Received	by:			Date	Time
					Decaived	L			Data	Time
Kelliyuə	led by:		Date	Time	Received	by:	-		Date	Time
Relinquist	ned by:		Date	Time	Received	by Lab	øratory:		Date	Time
						$\mathcal{U}$	Vr	-	19-1-2000 Page 73 0	( <u>て</u> .20 f 14

Note: Standard Terms and Gonditions on Reverse

Page \_\_\_\_\_ of \_\_\_\_\_

Work Order #\_\_\_\_\_QQQCicp\_\_\_\_\_

	DRY GROUP (1991-1997)		361 WEST FIFTH AVENUE       Checked:         361 WEST FIFTH AVENUE       Checked:         EUGENE, OREGON 97401       Phone: 541-485-8404 Fax: 541-484-5995         Email: alglabs@alglabsinc.com       LOHAIN OF CUSTODY							W)	6
Depart to Looppo Old											
Report to: Jeanne Ols	JUSH	Bale	Company: J.H. Baxter & Co.								
Phone: 541-689-38			Address: 85 Baxter Street								
Email: jolson@jht	baxter.com, Jba	le agricus	City, State, Zip:	Eugene, OR 9	7402						
Client Groundwat Project:	ter wells		Sampler N	Joe S	herrod	\$					
Sample Point	Sample Matrix & Grab/Comp	1	ction Time	Analysis Requ	ested	Туре	Bottl	es -Lab U Pres	se Only		b ID
4/-18AI	EW/Grab	9/30/20		Phenols & Penta	82700	-8270C	3	ries	9.1		**
W-23	EW/Grab	9/30/20		Phenois & Penta	8270C	(22) 8270C	3		8:54	æ0:	ZA
W-111	EW/Grab	9/30/20	1042	Phenols & Penta	82706	8270C	3		10.9	00	
W-115	EW/Grab	9/30/20	1114	Phenols & Penta	625 82706	8270C	3		9.1 106 10.3 10.6		4A
W-12I	EW/Grab	9130120	1213	Phenols & Penta	\$270 <del>2</del>	8270C	3		11295	- 12A	BA
	EW/Grab		12	Phenols & Penta	82702	8270C	3				
	EW/Grab			Phenols & Penta	82702	8270C	3				
	EW/Grab			Phenols & Penta	8270C	82706	3				
	EW/Grab			Phenols & Penta	82700	-82700-	3				
	EW/Grab			Phenols & Penta	8270C	-82700-	3				
Notes:		Corre	cted p	nethod/		Preserv					
MDL= 0.65 ug/L				bottle 1:	ab ID	Date/Time	Pre-P	reserved	p	H	
Turn Around Time Requ	ested (Rush inc	urs a Surcl	narge):	Shipped Via:			-	R	efrige	erated	<u> </u>
	AL [	RUSH		ALG CO	rier	-		lice	)	No	one
Relinquished by:		Date	Time	Received by:		1		Date			me
Relinquished by:	/	9/30/26 Date	1433 Time	Received by:	J	An	_	9/36/ Date		14 3 Tir	33 me
ryennyulaneu by.		Date	1 IIIIe					Dalt			нс
Relinquished by:		Date	Time Received by Laboratory: Date Time								
Jes Jan		9(30/20	1448	Vand	S	me		Page 1/	1/of,	14	48
J.H. Baxter 9-25-	20		C	/		Pag	je	of			

ſ

Appendix B

1.	Install Groundwater Sampling Field Log IH Baxter Jedicated PUMP Eugene, Oregon Data: 9/29/20											
40	esica	fed	Pump	IH Baxt		gene	-1 OCR	gon	Date: $\begin{array}{c} \begin{array}{c} \begin{array}{c} 1 \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} $			
2020												
Total Depth: (ft)	-5	0	(-) DTW: (ft)	n.97	Time:	1420	(x) 0.16 - 2 (x) 0.65 - 4 (x) 1.47 - 6	gal/feet	= Well Casing Volume			
Field Co	ondition	s:										
Decont	aminatio	on: Alco	nox + tap wa									
	<u> </u>			PU	IRGE IN	FORMA	TION					
	Purge N	/lethod:	Submersible	e Pump								
L	Purge N	/lethod:										
	Refer to	o calibra	tion log this	date, Y	si # Z	>						
Pump S	Suction D	epth (fi	t BTOC):				Purge	water di	sposal: Extraction System			
Type of	Measur	ement	Method:		10 oz cu	р	$\checkmark$	YSI 556 Fl	ow Through Cell			
Comme	ents/Exce	eptions	to SAP:									
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)			
Stabilizat	ion Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)			
14:35	Pump On	, Water R	Reaches the Pu	rge Bucke	et			Initial	dear, 68			
14:30	.6	16.2	283.2	469	6.78	-g. (	609	Z. (	11.52			
14:41	1.2	16.2	306.2	4,08	6.8(	-17.2	600	[]	11 , 16			
4.44	1.9	15.7	401.4	1.91	6.97	-46.2	606	1)				
14:47	2.4	[S. G	417.6	1,15	7.05	- 65.7	600	lj				
14:50	3.0	(5.6	426.0	0.85	7. 0	-76.5	600	(1	11.7			
14:53	3.6	15.8	435.6	6.52	7.13	ــــــــــــــــــــــــــــــــــــــ	600	1	11/7			
14:56	47	15.6		0.45	7.14	-46.8	600	1)	11 7.			
14: 50		15.6		0.37		-10 Z.8		11	11 $3$			
							<u> </u>	L]				
		I	<u> </u>	l	l							
	Start Sam											
:	End Samp	oling										

Eugene, Oregon JH Baxter - Arlin <del>gton, Washington</del>											
	JH B	axter - Arling	t <del>on, Washing</del>	ton							
Date:09 / 28 / 29 ැට	Time: 5	>: 00									
Sampling Method (circle one):	Ŕ		e tube disconnec	ted from flow t	hrough cell						
	B	dedicated samp	oling port								
	C	other:									
Sample I.D.:	Number of										
	sample containers	Volume of									
	(circle)		Container Type	Pres.	Analytical Method						
	(encic)	Site V		1103.							
	_			1	Phenots + Pert						
W-17AI	Iζ	()	amber	N/A	-8270D SIM - PEP						
		10			SLIO LL						
QAQC: Sample ID & Time>											
Dups = GW-Dup-X-MMYY											
MS/MSD = same sample ID											
Sampling Criteria (circle one):											
Collect anytime: stabile paramete	rs over 15 mi	nutes(4 reading	s) with controlled	l drawdown	(1)						
After 3 well casing volumes: stabil	e parameters	but uncontrolle	ed/falling water le	evel	2						
After 5 well casing volumes: unsta	bile paramet	ers with or with	out drawdown co	ontrol	3						
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 ł	nours	4						
Comments:											

Groundwater Sampling Field Log												
JH Baxter -												
	2020 Eugene, Oregon Date: 4128120 W-17AS Well ID:											
2020							$\sim$	2	Well ID:			
Total				0.00			(x) 0.16 - 2					
Depth:	5	0	(-) DTW: (ft)	8.45	Time:	S(d	(x) 0.65 - 4 (x) 1.47 - 6					
(ft)								gal/feet	= Well Casing Volume			
Field Conditions:												
Decontamination: Alconox + tap wash; Tap rinse; DI rinse												
PURGE INFORMATION												
	Purge N	/lethod:	Submersible	e Pump								
	Purge N	/lethod:										
	Refer to calibration log this date, YSI # $\mathcal{Z}$											
Pump S	Pump Suction Depth (ft BTOC): Purge water disposal: Extraction System											
Type of	Type of Measurement Method: 10 oz cup YSI 556 Flow Through Cell											
Comme	ents/Exce	eptions	to SAP:									
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)			
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)			
S :15	Pump On	, Water R	eaches the Pu	rge Bucke	et			Initial				
15:21	7.0	17.g	228.0	4.69	-1.8	6.1	COP	9.32	dearing 207			
15:24	2.8	ר.ר)	229.Z	4.58	6.86	-11.4	600	9.54	dearing, 24			
IS: 27	3,5	(8.0	232. 1	4.43	6.85	-9.G	600	1	clear, 6			
15:30		17.9	233.7	4.46	6-83	-68	600	lı	clean 4			
15:33	4.s	(7.9	2339	4.48	6.83	-6.7	600	()	den 4			
:												
:												
:												
:					ļ	ļ						
:												
:	Start Sam	npling										
:	End Samp	oling										

JH Baxter - Arlington, Washington											
Date: 9 / 28 / 20	Time: (5	: 34									
Sampling Method (circle one):	A	dedicated purg	e tube disconnect	ted from flow	through cell						
	В С	dedicated samp other:	ling port								
Sample I.D.:	Number of sample containers										
	(circle)		Container Type	Pres.	Analytical Method						
		Site \	Nide								
W-17AS 3 IL amber NA Phenols & Penta 82700 SIM PCP 8270 LL											
	<b> </b>	<sup> </sup>									
	<b> </b>				ļ						
QAQC: Sample ID & Time>			<u> </u>								
Dups = GW-Dup-X-MMYY											
MS/MSD = same sample ID											
Sampling Criteria (circle one): Collect anytime: stabile parameter		. –									
After 3 well casing volumes: stabile			-		2						
After 5 well casing volumes: unsta	•				3						
Pump dry: return anytime if there	is adequate	volume for conta	ainers within 24 r	nours	4						
Comments:											

	Groundwater Sampling Field Log JH Baxter - Eugene, Oregon										
Dedicated DUMP installed											
(									Date: $9/2$ ¢/20		
2H 2020									well ID: W·32		
Total							(x) 0.16 - 2 (x) 0.65 - 4				
Depth:							(x) 1.47 - 6	/			
(ft)			(-) DTW: (ft)		Time	=		gal/feet	= Well Casing Volume		
Field Conditions:											
Decontamination: Alconox + tap wash; Tap rinse; DI rinse PURGE INFORMATION											
	<u>í.</u>		<u> </u>			FURIVIA	TION				
	-		Submersible	e Pump							
	Purge Method:										
	Refer to calibration log this date, YSI # $3$										
Pump S	Pump Suction Depth (ft BTOC): Purge water disposal: Extraction System										
Type of Measurement Method: 10 oz cup VYSI 556 Flow Through Cell											
Comme	ents/Exc	eptions	to SAP:								
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizat	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
:	Pump On	, Water F	Reaches the Pu	rge Bucke	et			Initial			
oq:38	6.1	15.1	(0.6	6.72	7. 7A	เลิя			clear, 4		
A :41	2.0	M.8	1(6.1	0. (D	691	63.0			Clear, 3		
त्र : <u>4</u> 4	3.0	14,7	164.0	6.40	6.89	41,2			clean 3		
9:47	4,0	14,6	230.6	<i>4,15</i>	6.93	29.7			dear 3		
09: SO		14.5	254 S	1.64	6.46	18.3			dear 4		
61.53	6.0	14.4	259.7	1. SI		2 0 0.0			clear, 3		
69:26	<u>ט.ש</u> 6 , <i>ר</i>	14,4	261.7	1.01	7,09	-2.9			clear, 3		
:	,,0			1,-(,	7,0 (	2.1					
:											
:											
: 	Start Sam										
:	End Sam	oling									

JH Baxter - Eugene, Oregon											
Date: 9 / 29 / 2020	Time;0	: 57									
Sampling Method (circle one):	(A)		e tube disconnec	ted from flow t	through cell						
	G G	dedicated samp other:	oling port								
Sample I.D.	Number of	other.									
W = 37	sample										
GW-Well ID-MMYY	containers	Volume of									
	(circle)		Container Type	Pres.	Analytical Method						
	[	Site \	Nide								
W-32	3	11	amber	NIA	Phenols + PCP 8270 LL						
QAQC: Sample ID & Time>											
Dups = GW-Dup-X-MMYY											
MS/MSD = same sample ID											
Sampling Criteria (circle one):					$\overline{\bigcirc}$						
Collect anytime: stabile parameter		. –	-		$\begin{pmatrix} 1 \end{pmatrix}$						
After 3 well casing volumes: stabil	-		-		2						
After 5 well casing volumes: unsta	-				3						
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 h	nours	4						
Comments:											

		_		ng Field <i>Oregon</i>	Log				
Ũ	edica	ted	Pump			<b>J</b> ,	5		Date: 9/29/2020
2H 2020									Well ID: W-25
Total			,	12			(x) 0.16 - 2		
Depth:			0]	.13		0	(x) 0.65 - 4 (x) 1.47 - 6	/	
(ft)			(-) DTW: (ft)		Time	=	(,,) 1.1,7 0	gal/feet	= Well Casing Volume
	onditions								
Decont	aminatio	on: Alco	nox + tap w						
<u> </u>	/				RGE IN	FORMA	TION		
	Purge N	/lethod:	Submersibl	e Pump					
	Purge N								
	Refer to	o calibra	tion log this	date, Y	<u>si # 5</u>				
Pump S	uction D	)epth (fi	t BTOC):		•		Purge	water di	sposal: Extraction System
Type of	Measur	ement	Method:		10 oz cu	р		YSI 556 Fl	ow Through Cell
Comme	ents/Exce	eptions	to SAP:						
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)
:	Pump On	, Water R	eaches the Pu	rge Bucke	et			Initial	Muddy
10:37	.4	15.2	646	3.55	7.18	29.4	600	9.69	muder/clearing 97
(o: 4	ۍ ر <del>م</del>	(5.3		2.04	7, <b>%</b>	9.7	ll	۱J	clearing, 95
10:43	1.2	15.1	652	1.45	7.08	-2.5	l (	li	Cleaning, 43
10:46	1.6	15.0	654	6,94	7.9	-14,2	1(	ιl	clearing, 26
10:49	2.0	15.4	658	0.75	7,10	-18.2	l	(	clear, 40
10:52	. 2, 4	15.(	660	0.58	ס, נס	-21.8	U.	(	Clear, 20
10:55	2.8	12.0	660	0,41	7.A	-27.7	li	կ	Clear, 12
10:58	3.2	15.2	662	0.20	ר, ר)	-36.2	[]	LI.	clean, 7
اد : ۵۱	3.6	12.1	662	0-2S	٩٥،٢	-yo.s		1(	clear, 6
11:04		15.1	662	0.26	- 0	-43.6	l	(\	clear, 4
:	Start Sam	npling							, -
:	End Samp	oling							

JH Baxter - Eugene, Oregon										
Date: 9 / 29 / 20	Time:	: 05								
Sampling Method (circle one):	(A')	dedicated purg	e tube disconnec	ted from flow t	through cell					
		dedicated samp other:	oling port							
Sample I.D.	Number of									
W-25	sample									
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method					
	(en ele)	Site V		1105.	/ individed incention					
W-25	3	IL	amber	NA	Phanols + PCP B270CL					
QAQC: Sample ID & Time>										
Dups = GW-Dup-X-MMYY										
MS/MSD = same sample ID										
Sampling Criteria (circle one):		<i></i>								
Collect anytime: stabile parameter		. –	-		$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$					
After 3 well casing volumes: stabil	-		-		<b>2</b>					
After 5 well casing volumes: unsta Pump dry: return anytime if there	•				3					
	-				4					
Comments: Turbidity Sl	ightly	above	87able	/						

Groundwater Sampling Field Log										
JH Baxter - Eugene, Oregon Dedicated PUMP Date: 9(2,9(20)									$\Omega$ (a. $\Omega$ (a.	
(Jedication ( )								Date:	4124120	
2H 2020									Well ID:	<u>412 9120</u> W-29
Total							(x) 0.16 - 2 (x) 0.65 - 4			
Depth:							(x) 1.47 - 6"			
(ft) (-) DTW: (ft) Time =						gal/feet = Well Casing Volume				
-	Field Conditions: Decontamination: Alconox + tap wash; Tap rinse; DI rinse									
Decontam	ninatio	n: Alco	nox + tap wa		-		TION			
PURGE INFORMATION										
	_		SUDITIEISIDI	e Pump						
	Purge Method:									
Refer to calibration log this date, YSI # 3										
Pump Suc							Purge water disposal: Extraction System			
Type of M	leasur	ement l	Method:		10 oz cu	р	YSI 556 Flow Through Cell			
Comment	Comments/Exceptions to SAP:									
Time V	Purge /olume gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed,	/*Clarity/ Color/Remarks (NTU)
Stabilization (	Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10				10% (NTU>5) dings < 5 (NTU<5)
(1:43 Pump On, Water Reaches the Purge Bucket							Initial	Cleari	'ng	
11:47 -	6	16.6	414,5	2.93	7.32	53.9	600	8.97	Cleari	ing, 98
1(:So 1	.2	(6.7	460-8	1.90	7.29	43.3	1)	.[1]	cleari	rg 43
(1:53)	1. 8	$\left( \left( \cdot, \cdot \right) \right)$	491.1	1.35	7. 26	31.0	li	li	Clear	~ 33
11:562	2.4	(6.4	506.3				. ll	(	clear	23
11:593	σ,σ	16.4	Slo.4	0.72	7.1.4	14.3	LI LI	li	Clear	17
12:02 3	م) ر	162		0-57	7.24	4.9	Ú	lı	cleen,	14
12.05L	1.2	(6.2	514,9	0.24	7.23	-1.7	ι(	()	clean	13
	1.8	16.1	515.9	ט.(7	7.23	-5.9	(	(	clear!	7
	3.4	ه. م)	516.3	0-14	7.23	-129	l(	((	clear	, 6
:			-							(
: Sta	art Sam	pling								
	End Sampling									

JH Baxter - Eugene, Oregon									
Date: $9 / 29 / 20$ Time: $12 : 12$									
Sampling Method (circle one): (A) dedicated purge tube disconnected from flow through cell									
	B dedicated sampling port								
Sample I.D.	C other:								
W-7.9	sample								
GW-Well ID-MMYY	containers	Volume of		-					
	(circle)		Container Type	Pres.	Analytical Method				
		Site \	wide (						
W-29	3	12	amber	NNA	phenols + PCP 8270 LL				
QAQC: Sample ID & Time>									
Dups = GW-Dup-X-MMYY	Dups = GW-Dup-X-MMYY								
MS/MSD = same sample ID									
Sampling Criteria (circle one):	Sampling Criteria (circle one):								
Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown									
After 3 well casing volumes: stabile parameters but uncontrolled/falling water level 2									
After 5 well casing volumes: unstabile parameters with or without drawdown control3									
Pump dry: return anytime if there is adequate volume for containers within 24 hours 4									
Comments:									

Groundwater Sampling Field Log JH Baxter - Eugene, Oregon											
	Dec	lica	fed	Pun	чP				Date: 9(29(2020) Well ID: 11-26		
2Н 2020							Well ID: 11-26				
Total Depth:							(x) 0. <u>16 - 2</u> (x) 0.65 - 4 (x) 1.47 - 6				
(ft) (-) DTW: (ft) Time =							. ,	gal/feet	= Well Casing Volume		
	Field Conditions:										
Decontamination: Alconox + tap wash; Tap rinse; DI rinse PURGE INFORMATION											
	Purgo N	lothod:	Submersibl								
$\vdash V$	_			e Pullip							
	Purge Method:										
<b>D</b>	Refer to calibration log this date, YSI #         Pump Suction Depth (ft BTOC):         Pump Suction Depth (ft BTOC):										
				<b></b>			Purge	/	sposal: Extraction System		
			Method:		10 oz cu	р	YSI 556 Flow Through Cell				
Comme	ents/Exc	eptions	to SAP:								
L											
					1						
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
13:00	Pump On	, Water F	Reaches the Pu	rge Bucke	et			Initial			
13: 03		16.2	-	3.2/	7. 47	67.6	400	9.88	Cleaning 25		
13: 06	, S	16.3		2.56	6.99	535	((	((	Clearing 31		
13:09	1.0	15.7	51.6	2 (g	6.69	56.9	lı	ใเ	clear, 32		
13: 12		15.4	5(.3	2.(5	6.62	539	· Li	U	clen 79		
13.15	20	15.3	50,9	2.17	6.51	5(,2		(1	clem, 24		
( <u>3</u> . (y	•	16.3	50,9	2.21	5,55		- 1( 	()	(		
[0. ()		10.0		2.21	- • -				clen		
:											
:											
:											
:	Start Sampling										
:	End Sampling										
JH Baxter - Eugene, Oregon											
---	--	-----------------------------	---------------------	-----------------	--	--	--	--	--	--	--
Date: 4 / 29/ 202e	Times / 2	. 19									
Sampling Method (circle one):	(A)		e tube disconnec	ted from flow t	through cell						
	В	dedicated samp									
	С	other:									
Sample I.D.	Number of sample										
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method						
		Site \	Vide								
W-26	Ŋ	1L	amber	NIA	Phenols + PCP 8270 LL						
QAQC: Sample ID & Time>											
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID											
Sampling Criteria (circle one):											
Collect anytime: stabile parameter	rs over 15 mi	nutes(4 reading	s) with controlled	drawdown	$\begin{pmatrix} 1 \\ 1 \end{pmatrix}$						
After 3 well casing volumes: stabile	e parameters	s but uncontrolle	ed/falling water le	evel	2						
After 5 well casing volumes: unsta	After 5 well casing volumes: unstabile parameters with or without drawdown control 3										
Pump dry: return anytime if there is adequate volume for containers within 24 hours 4											
Comments:											

	Groundwater Sampling Field Log JH Baxter - Eugene, Oregon										
	Date: $9/29/20$										
2H 2020	2H 2020 Well ID: W-75										
Total							(x) 0.16 - 2				
Depth:	: (x) 1.47 - 6"										
(ft)	ft) (-) DTW: (ft) Time = Well Casing Volume										
	ondition										
Decont	aminatio	on: Alco	nox + tap w	-							
	<u> </u>				IRGE IN	FORMA	TION				
	-		Submersibl	e Pump							
	Purge N	lethod:									
	Refer to	o calibra	tion log this	date, Y	<u>ک</u> # si	1					
Pump S	uction D	epth (f	t BTOC):				Purge	water di	sposal: Extraction System		
Type of	<sup>-</sup> Measur	ement	Method:		10 oz cu	р		YSI 556 Fl	ow Through Cell		
Comme	ents/Exce	eptions	to SAP:								
	Purge	Temp.	SC	DO		ORP	Purge Rate	DTW			
Time	Volume (gallons)	(°C)	(uS/cm)	(mg/L)	рН	(mV)	(mL/min)	(ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
:	Pump On	, Water R	eaches the Pu	rge Bucke	et			Initial			
13:40	.8	16.7	4(8.3	2.65	5.76	104.3	500	14.78	brown Cleaning, 213		
13:47	1.4	15.9	431.9	1.61	S. 79	97.3	(]	ll	11 ,248		
ور :2ا	2.0	م. م)	4552	0.68	6.9	77.1	Ú	li	11,613		
13:52		18.4	470.2	0.39	6.31	59.6	h	(1	brown, 390		
13:56		5.05	487.9	0.76	6.42	Υq.S	11	(1	Cleaning, 104		
13:59	36	22.0	512,1	0-21	6.53	38.S	[]	()	11 , 50		
14:02	41	22.4	542	0.20	6.61	22.4	(I	(	11,31		
14: o S	4.8	22.4		0.18	6.66	16.3	(	()	(1 28		
14: og		22.4	558	0.15	6.66	[].9	(1	(1	h , Z6		
:	,								- <b>~</b>		
:	Start Sam	pling									
:	End Samp										

JH Baxter - Eugene, Oregon										
Date: 9 / 29/ 20	Time:  4	: 09								
Sampling Method (circle one):		dedicated purg	e tube disconnec	ted from flow t	through cell					
	С С	dedicated samp other:	oling port							
Sample I.D.	Number of sample									
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method					
		Site \	Vide							
W-75	3	lL	amber	NA	Phenols + Pr(2 8270 LL					
				•	0					
QAQC: Sample ID & Time>										
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID										
Sampling Criteria (circle one):					A					
Collect anytime: stabile parameter	rs over 15 mi	nutes(4 reading	s) with controlled	drawdown	(1)					
After 3 well casing volumes: stabile	-		-		$\underbrace{}_{2}$					
After 5 well casing volumes: unsta	-				3					
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 h	nours	4					
Comments:										

	Groundwater Sampling Field Log JH Baxter - Eugene, Oregon									
De	Dedicated pump <u>Date:</u> 9129120									
2H 2020 Well ID: W-Gて										
Total					-		(x) 0.16 - 2			
Depth:	(X) 1.47 - 6									
(ft) (-) DTW: (ft) Time = ' gal/feet = Well Casing Volume										
	ondition	-		·		<u>.</u>				
Decont		on: Alco	nox + tap wa	-		DI rinse FORMA				
./		lothod:	Submorsibl							
	-		Submersibl	e Pump						
	Purge N				<u></u>					
			tion log this	date, Y	51# 5			<u> </u>		
	uction D						Purge		sposal: Extraction System	
			Method:		10 oz cu	р	V	YSI 556 Flo	ow Through Cell	
Comme	ents/Exco	eptions	to SAP:							
				1						
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)	
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)	
(4:25	Pump On	, Water R	leaches the Pu	rge Bucke	et			Initial	clem, 13	
(4:32	.8	(5.2	317.0	1.24	7.16	29.9	≈6∞	1579	clem 13	
14: 35	1.5	15.2	317.0	0.35		(0.8	ų	()	dear (	
(4: 38	2.2	15.4	316.7	0.(9	7.10	1.0	11	11	Clean 9	
14:41	2.9	(5.3		0.14	6).7		ι	U I	cleen 8	
14:44	3.7	15.4	3(6.9	0. (2	7.09	-10.5		lı	clev 8	
:	0. /			0. ( L						
·										
<u> </u>										
<u> </u>										
:										
:	Start Sam	npling								
:	End Sam	oling								

JH Baxter - Eugene, Oregon										
Date: 9 / 29/ 20	Time: ( <sup>(</sup>	: 45								
Sampling Method (circle one):	Â	dedicated purg dedicated samp	e tube disconnec	ted from flow t	hrough cell					
	C	other:	hing port							
Sample I.D.	Number of sample									
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method					
		Site \	Vide							
W-6I	3	(L	amber	- N/A	Phenols + PCP 8270 LL					
QAQC: Sample ID & Time>										
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID										
Sampling Criteria (circle one):					2					
Collect anytime: stabile parameter	rs over 15 mi	nutes(4 reading	s) with controlled	drawdown	$\begin{pmatrix} 1 \end{pmatrix}$					
After 3 well casing volumes: stabil	e parameters	s but uncontrolle	ed/falling water le	evel	2					
After 5 well casing volumes: unsta	bile paramet	ers with or with	out drawdown co	ontrol	3					
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 h	nours	4					
Comments:										

			Gr	ng Field <i>Oregon</i>	Log						
De	dicat	ed 1	pump	JII DC	ixter - L	uyene,	Oregon		Date: 午(ろつ( 2♂		
2H 2020							(w) 0 1 C 2		Well ID: W-10カエ		
Total	$: \qquad I \mathcal{U}_{10} \qquad \qquad$										
Depth:	(x) 1.47 - 6"										
(ft) (-) DTW: (ft) Time = ' gal/feet = Well Casing Volume Field Conditions:											
			nox + tap wa	ash· Tar	rinse	DI rinse					
Decont	/			-		FORMA	TION				
	Purge N	/lethod:	Submersible								
	Purge N										
			tion log this	date. Y	SI # Z	,					
Pumn S	uction D		-	44(6) 1	<u> </u>	)	Purge	water di	sposal: Extraction System		
			Method:		10 oz cu	n			ow Through Cell		
					10 02 cu	ρ	V	131 330 110			
Comme	nts/Exce	eptions	LO SAP:								
	Purge										
Time	Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
:	Pump On	, Water R	eaches the Pu	rge Bucke	et			Initial			
ઝ. પુડ	S	14.8	340.9	4.40	7. lo	102.2	2600	13.50	den, 72		
Pg:S(	(.5	14.7	352.6	-			2600	(3.60	11,57		
<sup>છ</sup> : ડ્ય	( j	14.9	351.7	3-01	7.14	66.(	2500	(3.4 อื	(1, 37		
रु <sub>:</sub> ५७	2.4	(4.8	35 2.1	2.96	7.16	59.3		13.46			
9 :00	2.8	(4,8	351.6	2.63	7.17	46.0		11	11 28		
F :03	3.2	14.7	349.6	2.33	7.(7	37.8	1	(1	11. 19		
Jo: P	4.0	14.7	348.2	2.23		31.7	/(	<b>(</b> 1	(1 12		
9:09	45	(4,7	347.2	0,70	) ۲	28.1	l (	((	11 8		
9:12	5.0	14.7	345.9	0.41	7.17	24.7	ll	(	(1 8		
9 : IS	5.S	14.7	345.2	6.44	רויר	2(.7	LI	ί	11 5		
:	Start Sam	npling		;							
:	End Samp	oling									

JH Baxter - Eugene, Oregon										
Date: 9 / 30 / 2020	Time:07	: 16								
Sampling Method (circle one):	(A)	dedicated purg	e tube disconnec	ted from flow t	hrough cell					
	G G	dedicated samp other:	oling port							
Sample I.D.	Number of sample	other.								
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method					
	, , , , , , , , , , , , , , , , , , ,	Site \			,					
W-(841	3	IL	amber	NA	Phenols + PCP 8270 LC					
QAQC: Sample ID & Time>										
Dups = GW-Dup-X-MMYY										
MS/MSD = same sample ID										
Sampling Criteria (circle one):										
Collect anytime: stabile parameter		· –	-		$\begin{pmatrix} 1 \end{pmatrix}$					
After 3 well casing volumes: stabil	-		-		2					
After 5 well casing volumes: unsta	-				3					
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 h	nours	4					
Comments:										

		1	Gr			-	ng Field <i>Oregon</i>	Log			
De	dica f	-cd	Pump						Date: 4130120		
2H 2020	2н 2020 Well ID: W - 7.3										
Total Depth:	h: $(x) = \frac{1}{1.47 - 6''}$										
(ft) Field Co	ondition	c•	(-) DTVV: (ft)		Time	=		gal/feet	= well casing volume		
			nox + tap wa	ash; Tap	rinse;	DI rinse					
	/		I	-	IRGE IN		TION				
$\checkmark$	Purge N	/lethod:	Submersibl	e Pump							
	Purge N	/lethod:									
			tion log this	date, Y	sı # 3						
Pump S	uction D			,			Purge	water di	sposal: Extraction System		
			, Method:		10 oz cu	p	V		ow Through Cell		
	ents/Exce					•			0		
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
:	Pump On	, Water R	leaches the Pu	rge Bucke	et			Initial			
વ : પ૦	. 7	(5.2	613-2	1.74	ר שט ר	59.(	~ (Goo	14.68	dear, 17		
9:43	1. S	[S.4	616	0.64	7.06	47.4		14.63			
<del>9</del> : 46	1.8	15.5	619	0.31	7.06	40.2	- 11	14,64	11 5		
9:49	2.3	15.6	621	0.25		34,5		()	11.3		
9 : SZ	-	15.6	624	0.25		30.4	1(	(1	li 4		
:	<u> </u>				70			L <sup>*</sup>	· ( /		
·											
·											
:											
:											
:	Start Sam										
:	End Samp	oling									

	JH Baxter - Eugene, Oregon									
Date: අ / 3ං / 2ං	Time: 7	: 53								
Sampling Method (circle one): A dedicated purge tube disconnected from flow through cell   B dedicated sampling port   C other:										
Sample I.D.	Number of sample containers	Volume of								
GW-Well ID-MMYY	(circle)		Container Type	Pres.	Analytical Method					
		Site \	Vide							
W-23	3	( L	amber	NIA	Phenols frep g270 LL					
QAQC: Sample ID & Time>										
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID										
Sampling Criteria (circle one):										
Collect anytime: stabile parameter					1					
After 3 well casing volumes: stabil	-		-		2					
After 5 well casing volumes: unsta	-				3					
Pump dry: return anytime if there Comments:	is adequate	volume for cont	amers within 24 f	IUUIS	4					
comments.										

	Groundwater Sampling Field Log JH Baxter - Eugene, Oregon									
De	d i'ca	fed	Pump						Date: 4/30/20	
2H 2020 Well ID: W-UI										
Total			13.	42		(x) 0.1 <u>6 - 2</u> (x) 0.65 - 4				
Depth: (ft)			(-) DTW: (ft)		Time	=	(x) 1.47 - 6	gal/feet	= Well Casing Volume	
	ondition	s:	( ) ( ,		-			gal/teet		
Decont	aminatio	on: Alco	nox + tap wa	ash; Tap	rinse; l	DI rinse				
				PU	RGE IN	FORMA	TION			
$\checkmark$	Purge N	/lethod:	Submersibl	e Pump						
	Purge N	/lethod:								
	Refer to	o calibra	tion log this	date, Y	SI # 2	>				
Pump S	uction D	Depth (fi	t BTOC):		_		Purge	water di	sposal: Extraction System	
Type of	Type of Measurement Method: 10 oz cup VSI 556 Flow Through Cell									
Comme	ents/Exc	eptions	to SAP:							
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)	
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	± 0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)	
10 :25	Pump On	, Water F	leaches the Pu	rge Bucke	et			Initial	clearing	
10:32	3. ZS	(5.3	199.9	J. (G	7.40	-38.0	600	13.93	clean, C	
/o : 3S	4.00	15.3	(82.3	0.12	7.4o	-41.0	1)	13.96	clem 3	
<b>10</b> : 38	5.00	15.2	9.87)	0.(S	7. ZB	-4(.5	(	(1	clem'z	
(0:4(	6.00	15.3	178.S	0.13	7.37	-42.4	L	()	den, 2	
:									t	
:										
:										
:										
:										
:										
: Start Sampling										
:	End Sam	oling								

JH Baxter - Eugene, Oregon											
Q		1. 2									
Date: $\frac{9}{20}$ / $\frac{30}{20}$	Time:	: 42		had from flour							
Sampling Method (circle one):	(A) B	dedicated purg	e tube disconnect	ted from flow i	through cell						
	C	other:									
Sample I.D.	Number of sample										
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method						
		Site \	Nide								
W-11 I	3	IL	amber	NA	Phenols fPCP SZZO LC						
QAQC: Sample ID & Time>											
Dups = GW-Dup-X-MMYY											
MS/MSD = same sample ID											
Sampling Criteria (circle one):					$\widehat{}$						
Collect anytime: stabile parameter		· –	-		$\begin{pmatrix} 1 \end{pmatrix}$						
After 3 well casing volumes: stabil	-		-		2						
After 5 well casing volumes: unsta	-				3						
Pump dry: return anytime if there	is adequate	volume for cont	ainers within 24 ł	nours	4						
Comments:											

	Groundwater Sampling Field Log										
D	JH Baxter - Eugene, Oregon Dedicated PUMP Date: F130/20										
1-											
2H 2020		Well ID: Wーl (S									
Total	$(1 \leq 2)$ $(1 \leq 1)$										
Depth: (ft)			(-) DTW: (ft)	· · ·	Time	_	(x) 1.47 - 6		= Well Casing Volume		
(π) (-) DTW: (π) Time = gal/feet = Well Casing Volume											
		-	nox + tap w	ash; Tap	rinse;	DI rinse	1				
	/		·	-	IRGE IN						
$\square$	Purge N	/lethod:	Submersibl	e Pump							
	Purge N	/lethod:									
	Refer to	o calibra	tion log this	date, Y	si # 3						
Pump S	uction D	Depth (f	t BTOC):		_		Purge	water di	sposal: Extraction System		
Type of	Measur	rement	Method:		10 oz cu	р		YSI 556 Fl	ow Through Cell		
Comme	ents/Exce	eptions	to SAP:								
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	рН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)		
Stabilizati	on Criteria	± 0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)		
o2:0)	Pump On	, Water F	Reaches the Pu	irge Bucke	et			Initial	dark, cleaning		
1º:58	2.5	16.2	695.1	8.0g	7. og	1.01	2600 ×	[1.39	clear, 23		
11 :01	3.4	16.2		7.86	7.08	7.1	( (	()	11, 18		
11 :04	4.3	16.3	607	7.50	7.00	3.6	L(	(I	() [4		
:07	5.2	16.5	614	7.30	7.5	1.8	<i>l</i> (	()	6		
6]: []	6.1	(6.3	6(9)	7.07	7.08	03	()	()	ι, iο		
(1:13	2.5	16.3	626	6.90	7.08	-2.4	1	(1	(1)		
:									, •		
:											
:											
:											
:	Start Sam	npling			<u> </u>						
:	End Samp										

JH Baxter - Eugene, Oregon							
- Q / 2- / 7-	(	100					
Date: 7 / 30 / 20 Sampling Method (circle one):	Time: (	: 14 dadiaatad purg	e tube disconnec	tod from flow t	through call		
Sampling Method (circle one):	(A)	dedicated purg		ted from flow t	through cell		
C other:							
Sample I.D.	Number of sample						
GW-Well ID-MMYY	containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method		
Site Wide							
w-lls	3	12	amber	NIA	Phenols, PCP Sozo CC		
QAQC: Sample ID & Time>							
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID							
Sampling Criteria (circle one):					$\boldsymbol{\lambda}$		
Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown							
After 3 well casing volumes: stabile parameters but uncontrolled/falling water level2							
After 5 well casing volumes: unstabile parameters with or without drawdown control3							
Pump dry: return anytime if there is adequate volume for containers within 24 hours 4							
Comments:							

Groundwater Sampling Field Log JH Baxter - Eugene, Oregon									
Ĩ.	Dedicated pump					Date: 4/30/20			
2H 2020	2H 2020						Well ID: W- (2工		
Total Depth: (ft)	Depth: ( 6 . 6 6			=	(x) 0 16 - 2 (x) 0.65 - 4 (x) 1.47 - 6		= Well Casing Volume		
Field Co	Field Conditions:								
Decont	aminatio	on: Alco	nox + tap wa	ash; Tap	rinse;	DI rinse			
				PU	IRGE IN	FORMA	TION		
	V Purge Method: Submersible Pump								
	Purge Method:								
	Refer to calibration log this date, YSI # 3								
Pump S	uction D	Depth (f	t BTOC):	_			Purge	water di	sposal: Extraction System
						YSI 556 Flo	ow Through Cell		
Comme	ents/Exc	eptions	to SAP:						
Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pН	ORP (mV)	Purge Rate (mL/min)	DTW (ft BTOC)	Pump Speed/*Clarity/ Color/Remarks (NTU)
Stabilizati	on Criteria	±0.2	±3% (SC>100) ±5% (SC≤100)	± 0.3	±0.1	± 10			± 10% (NTU>5) 3 readings < 5 (NTU<5)
: Pump On, Water Reaches the Purge Bucket						Initial			
12:00	3.00	15.0	393.0	0.63	7.05	4s.3	600	16.47	den (
12:03	4.00	15.0	391.7	0.3	7.05	35.2	U	h	clear. I
12: Ge	5.00	15.0	393.4	0.13	7.06	23.4	11	11	0
12:09	6.00	15.0	391.6	0.[0	7.05	17.5	()	(1	11 0
12:12	7.00	15.0		0.08	7.05	13.9		(1	
:				0					
:									
:									
:	Ctort Corr	nlina							
:	Start Sampling								
L ·	End Sampling								

JH Baxter - Eugene, Oregon								
Date: 7/30/20	Time: ( て	: 13						
Sampling Method (circle one): B dedicated purge tube disconnected from flow through cell dedicated sampling port C other:								
Sample I.D.	Number of sample							
GW-Well ID-MMYY	containers (circle)		Container Type	Pres.	Analytical Method			
Site Wide								
W-12I	δ	12	amber	NIA	Phenols + 1900 9,270 0			
					_			
QAQC: Sample ID & Time>		1						
Dups = GW-Dup-X-MMYY MS/MSD = same sample ID								
Sampling Criteria (circle one):								
Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown								
After 3 well casing volumes: stabile parameters but uncontrolled/falling water level 2								
After 5 well casing volumes: unstabile parameters with or without drawdown control 3								
Pump dry: return anytime if there is adequate volume for containers within 24 hours 4								
Comments:								

Appendix C







Water Solutions, Inc.





Water Solutions, Inc.





Notes: ug/L = microgram per liter \*W-24 was not sampled in September 2020

Water Solutions, Inc.





## Legend:

Pentachlorophenol Detected Values

FIGURE C-9 Pentachlorophenol Groundwater Concentrations

in W-32 J.H. Baxter Wood Treating Facility Eugene, Oregon



Pentachlorophenol Non-Detected Values

**Notes:** ug/L = microgram per liter