Report

First Half 2020 Groundwater Monitoring Report

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

Prepared for

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Tables

Figures

Appendices

1. Introduction

This report presents the results of groundwater monitoring activities conducted in the first 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, 4 offsite wells including W-24, W-25, W-26 and W-29 were sampled in June 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 (delayed to June this year due to the novel coronavirus [COVID-19] pandemic) and September, and 13 additional wells annually in September. Wells are sampled for phenols by EPA method 8270c LL. This report summarizes the results of the June 2020 monitoring event and the groundwater extraction data through June 2020.

2. Monitoring Activities

The groundwater monitoring event was conducted on June 9, 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 a rental portable submersible pump that was decontaminated between each well. 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) by U.S. Environmental Protection Agency (EPA) Method 8270C Low Levels (LL)

Phenols were erroneously not analyzed in the first half 2020. Baxter will continue to work with the new laboratory to understand sampling requirements moving forward.

Groundwater levels were measured at 27 wells and groundwater samples were collected from 4 wells. The laboratory report is presented in Appendix A and groundwater sampling forms are presented in Appendix B.

On June 9, 2020, one field blind, or duplicate, was collected at well W-26 and one equipment blank was collected. The blind and equipment blank were analyzed for Pentachlorophenol.

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 of the source area.

4. Analytical Results

Groundwater samples for the June 2020 monitoring event were analyzed for PCP. The laboratory results are provided in Table 2. PCP results are presented in Figure 5 and time series plots are presented 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. Also note that the number of time series plots presented have been reduced for the first half of 2020 to only present plots of wells sampled in the first half.

4.1 Onsite Monitoring Wells

Onsite monitoring wells were not sampled during the June 2020 monitoring event.

4.2 Onsite Extraction Wells

Onsite extraction wells were not sampled during the June 2020 monitoring event.

4.3 Offsite Monitoring Wells

PCP was detected in all four of the off-site monitoring wells sampled during the June 2020 monitoring event. The concentrations ranged from 5.27 to 33.60 µg/L. The highest offsite concentration of PCP was in well W-26, which is located west of the Site.

While recent results have stayed within a steady state range, overall, offsite wells have shown a general decline in PCP concentration since 2011 (Figures C-1 and C-2).

4.4 Quality Assurance and Quality Control

Groundwater samples for the June 2020 monitoring event were analyzed by Analytical Laboratory Group. 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. The results are considered usable with no additional flags.

Sample coolers for the June 2020 monitoring event arrived at the laboratory in good condition, however, above EPA's 6 degrees Celsius (˚C) recommendation. Samples were submitted the same day as sampling occurred. Due to the large sample volume collected for 8270c analysis, samples were unable to cool down below 6 degrees Celsius before being submitted to the analytical laboratory. Samples were placed in a chilled refrigerator once received by NRC.

No samples required dilution before the EPA Method 8270C LL analysis.

All surrogate recoveries were met and no further qualification was applied.

An equipment rinsate blank was collected during the June 2020 monitoring event. The blank was analyzed for PCP. PCP was not detected above the MDL in the blank.

One blind sample was collected during the June 2020 monitoring event from W-26. The blind sample was analyzed for PCP. The parent sample and blind results were found to contain a 6 percent difference in values for PCP (Table 2). Based on the blind sample comparison, the data is acceptable for use.

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 180 days, from January 1, 2020 to June 30, 2020. The estimated pumping rates and extracted constituent mass are presented in Table 3.

During the first half of 2020, approximately 12.96 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 2019 analytical results for each extraction well (Table 3). In the first half of 2020, approximately 7.91 pounds of PCP was removed.

Since January 1994, approximately 658 MG of groundwater have been extracted and treated. Approximately 1,678 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. Second Half 2020 Activities

Semiannual groundwater monitoring will be conducted for the second half of 2020 in accordance with the *Revised Monitoring Program May 2015* (Baxter, 2015), and is planned to occur in September 2020.

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

Well ID	Top of Casing Elevation (ft msl)	Depth to Well Bottom (ft)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
			6/9/2020	
W-1S	395.91	28.5	11.10	384.81
W-2S	393.16	27.6	9.67	383.49
W-2I	394.23	81.71	8.44	385.79
W-3S	395.01	33	--	--
W-4S	396.56	22.3	11.48	385.08
W-5I	396.71	75.5	13.37	383.34
W-6I	397.77	70	13.73	384.04
W-7S	397.66	20	13.00	384.66
W-8S	395.90	20.17	7.20	388.70
W-8I	393.66	82.33	--	--
W-9S	396.45	25	8.80	387.65
W-9I	396.19	67	8.34	387.85
W-11S	394.17	24.85	9.16	385.01
W-11I	394.17	83	11.22	382.95
W-12I	395.62	78.5	14.41	381.21
W-12D	395.54	133.75	14.61	380.93
W-13S	396.71	29.02	--	--
W-13I	396.15	71.46	--	--
W-13D	396.40	133.51	15.48	380.92
W-14I	395.60	77.5	11.42	384.18
W-15S	396.62	28	12.63	383.99
W-16AS	391.86	24.98	--	--
W-16AI	391.86	81.85	--	--
W-17AS	390.29	23.67	7.36	382.93
W-17AI	390.80	87.42	9.84	380.96
W-17BI	392.08	84.88	10.32	381.76
W-18AS	392.84	25.05	8.49	384.35
W-18AI	393.70	86.81	11.90	381.80
W-18BI	391.98	88.6	--	--
W-19AS	393.82	23.66	10.10	383.72
W-20I	397.10	85	--	--
W-21S	393.80	16.75	--	--
W-21I	393.80	81.42	--	--
W-22S	396.72	19.38	10.58	386.14
W-23	396.16	55.5	13.01	383.15
W-24	391.64	65	--	--
W-25	389.92	64	--	--
W-26	390.14	79	--	--
W-28	390.01	84.42	--	--
W-29	388.56	74.83	--	--
W-32	388.35	74	8.00	380.35
W-34	389.17	76	8.46	380.71
W-35	391.46	77	--	--

Notes

-- = not measured.

ft amsl = feet above mean sea level.

Table 2. Phenol Analytical Results in Groundwater Samples

J.H. Baxter Wood Treating Facility

Eugene, Oregon

Well ID	Well Location	Sample Date	2,4,5-Trichlorophenol[1,2]	2,4,6-Trichlorophenol[1,2]	2,4-Dichlorophenol[1,2]	2,4-Dimethylphenol[1,2]	2,4-Dinitrophenol[1,2]	2,6-Dichlorophenol[1,2]	2-Chlorophenol[1,2]	2-Methylphenol[1,2]	2-Nitrophenol[1,2]	3 & 4 Methylphenol[1,2]	4-Chloro-3-methylphenol[1,2]	4-Methylphenol[1,2]	4-Nitrophenol[1,2]	Pentachlorophenol[1]	Phenol[1,2]
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
W-24	Off-Site	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**26.40**	NT
W-25	Off-Site	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**16.30**	NT
W-26	Off-Site	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**33.60**	NT
W-26 (Blind)	Off-Site	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**31.60**	NT
W-29	Off-Site	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**5.27**	NT
Equipment Rinsate Blank	--	6/9/2020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND	NT

Notes

[1] Analysis by EPA method 8270C Low Levels.

[2] Not measued in first half 2020

µg/L = micrograms per liter.

Blind = duplicate sample

J = Result is an estimated concentration that is less than the method reporting limit, but greater than or equal to the method detection limit.

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

NT = Not tested

Table 3. Groundwater Extraction System Summary

J.H. Baxter Wood Treating Facility

Eugene, Oregon

Observation Period	Well W-20I								
	Pumping Information			Average Concentrations[1,2,3]			Estimated Mass Extracted[4]		
	Days Pumping	Rate[5]	Volume	PCP	PAHs	Metals	PCP	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	0.03
01-Jan-14 to 30-Jun-14	181	35	9,122,400	33	0.09	2.55	2.47	0.01	0.19
01-July-14 to 31-Dec-14	183	35	9,223,200	11	0.00	2.61	0.85	0.00	0.20
01-Jan-15 to 30-Jun-15	180	35	9,072,000	47	0.00	0.55	3.56	0.00	0.04
01-Jul-15 to 31-Dec-15	183	35	9,223,200	28	--	--	2.16	--	--
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	183	35	9,223,200	25	--	--	1.92	--	--
01-Jan-18 to 30-Jun-18	180	35	9,072,000	25	--	--	1.89	--	--
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	--	--
Cumulative Amounts	--	--	446,940,000	--	--	--	238.50	0.98	1.06

Table 3. Groundwater Extraction System Summary

J.H. Baxter Wood Treating Facility

Eugene, Oregon

Observation Period	Well W-13S								
	Pumping Information			Average Concentrations[1,2,3]			Estimated Mass Extracted[4]		
	Days Pumping	Rate[5]	Volume	PCP	PAHs	Metals	PCP	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	--	--
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	--	--
Cumulative Amounts	--	--	68,140,800	--	--	--	650.79	1.40	2.26

Table 3. Groundwater Extraction System Summary

J.H. Baxter Wood Treating Facility

Eugene, Oregon

Observation Period	Well W-13I								
	Pumping Information			Average Concentrations[1,2,3]			Estimated Mass Extracted[4]		
	Days Pumping	Rate[5]	Volume	PCP	PAHs	Metals	PCP	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
01-Jan-13 to 30-Jun-13	176	10	2,534,400	1,050	1.1	2.55	22.21	0.02	0.05
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-14 to 30-Jun-14	181	10	2,606,400	533	0.29	1.95	11.58	0.01	0.04
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-15 to 30-Jun-15	180	10	2,592,000	385	0.20	0.00	8.33	0.00	0.00
01-Jul-15 to 31-Dec-15	183	10	2,635,200	490	--	--	10.78	--	--
01-Jan-16 to 30-Jun-16	181	10	2,606,400	490	--	--	10.66	--	--
01-Jul-16 to 31-Dec-16	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-17 to 31-Dec-17	183	10	2,635,200	350	--	--	7.70	--	--
01-Jan-18 to 30-Jun-18	181	10	2,606,400	350	--	--	7.61	--	--
01-Jul-18 to 31-Dec-18	184	10	2,649,600	370	--	--	8.18	--	--
01-Jan-19 to 30-Jun-19	180	10	2,592,000	370	--	--	8.00	--	--
01-Jul-19 to 31-Dec-19	184	10	2,649,600	290	--	--	6.41	--	--
01-Jan-20 to 30-Jun-20	180	10	2,592,000	290			6.27	--	--
Cumulative Amounts	--	--	143,172,000	--	--	--	789.11	2.05	0.27
TOTALS	--	--	**658,252,800**	--	--	--	**1,678.41**	**4.43**	**3.58**

Table 3. Groundwater Extraction System Summary

J.H. Baxter Wood Treating Facility

Eugene, Oregon

Notes

[1] 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 averageof the sum for each sampling event.

[2] Field duplicate values averaged with parent value before calculating the average concentration for the observation period.

[3] No value assigned to concentrations below the method reporting limit.

[4] Estimated mass calculated on the basis of corrected average concentrations.

[5] Flow rate estimated based upon pump capacity

-- = data not available or not applicable.

µg/L = micrograms per liter.

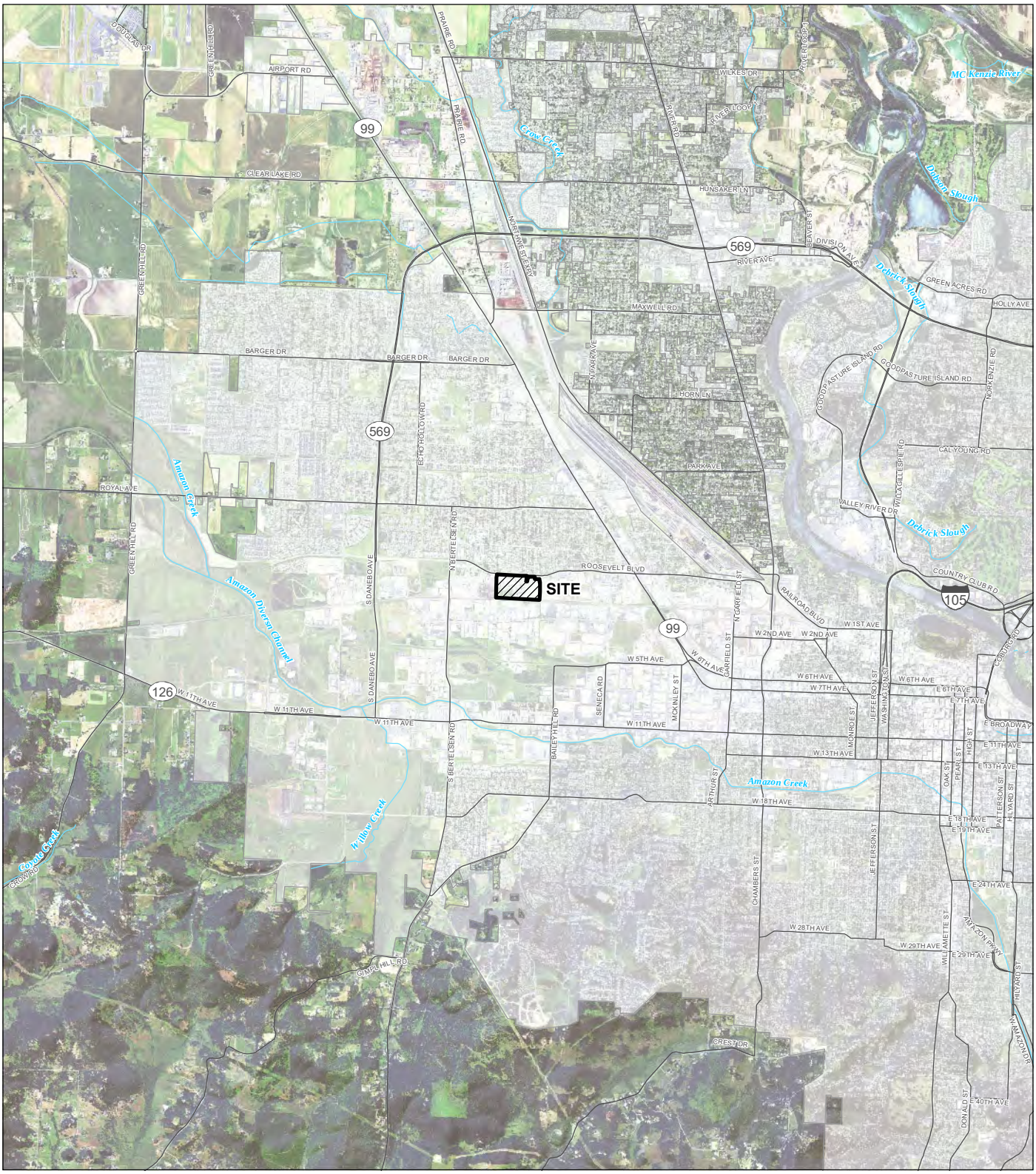
gpm = gallons per minute.

PCP = pentachlorophenol.

PAHs = polycyclic aromatic hydrocarbons.

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

Figures



LEGEND

- Eugene City Limits
- Major Roads
- Watercourses

MAP NOTES:
Date: July 25, 2016
Data Sources: Air photo taken on June 11, 2014 by the USDA

N

0 0.5 1
Miles

GSI Water Solutions, Inc.

FIGURE 1

Site Vicinity Map

J.H. Baxter Wood Treating Facility
Eugene, Oregon

Document Path: P:\Portland\302 - Baxter\GIS\Eugene\Project_mxds\2016_1h_Report\Figure1_Site_Vicinity_Map.mxd

FIGURE 2

Site Detail Map

J.H. Baxter Wood Treating Facility
Eugene, Oregon

LEGEND

- Facility Boundary
- Union Pacific Railroad

N

0 100 200 300
Feet

MAP NOTES:
Date: July 25, 2016
Data Sources: AMEC, OGIC, ESRI, Air photo taken on June 6, 2014 by Google Earth

GSI Water Solutions, Inc.

Document Path: P:\Portland\302 - Baxter\GIS\Eugene\Project_mxds\2016_1h_Report\Figure2_Site_Detail_Map.mxd

FIGURE 3

Shallow Zone Groundwater Elevation, First Half 2020

J.H. Baxter Wood Treating Facility
Eugene, Oregon

LEGEND

- Shallow Zone Monitoring Well (June 2020 Groundwater Elevation)
- Shallow Zone Extraction Well (June 2020 Groundwater Elevation)
- Groundwater Elevation Contours (dashed where inferred)
- Facility Boundary
- Union Pacific Railroad

NOTE:
NM = Not Measured

N

0 100 200 300
Feet

Date: August 7, 2020
Data Sources: AMEC, OGIC, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0302_Baxter\Source_Figures\Eugene\2020_Q2\Figure3_Shallow_Zone_Contours.mxd

FIGURE 4

Intermediate Zone Groundwater Elevation, First Half 2020

J.H. Baxter Wood Treating Facility
Eugene, Oregon

LEGEND

- Intermediate Zone Monitoring Well (First Half 2020 Groundwater Elevation)
- Intermediate Zone Extraction Well (First Half 2020 Groundwater Elevation)
- Groundwater Elevation Contours (dashed where inferred)
- Facility Boundary
- Union Pacific Railroad
- Ground Water Flow Direction

NOTE:
NM = Not Measured

N

0 100 200 300 400
Feet

Date: August 7, 2020
Data Sources: AMEC, OGIC, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0302_Baxter\Source_Figures\Eugene\2020_Q2\Figure4_Intermediate_Zone_Contours.mxd

FIGURE 5
Pentachlorophenol in Groundwater, First Half 2020
J.H. Baxter Wood Treating Facility
Eugene, Oregon

LEGEND

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

NOTE:
1. Results in µg/L (microgram per liter).
2. Samples taken June 9, 2020.

N

0 200 400
Feet

Date: August 6, 2020
Data Sources: AMEC, OGIC, ESRI

GSI Water Solutions, Inc.

Document Path: Y:\0302_Baxter\Source_Figures\Eugene\2020_Q2\Figure5_Pentachlorophenol_in_Groundwater.mxd

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.: 2006478

Dear Jeanne Olson:

Analytical Laboratory Group received 6 sample(s) on 6/9/2020 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 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#: **2006478**
Date:

CLIENT: J.H. Baxter & Co.
Project: Groundwater Wells

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 by EPA 8270C SIM was 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.

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

June 23, 2020

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

RE: 2006478 Order No.: 20060577

Dear Cynthia O Kelley:

Neilson Research Corporation received 6 sample(s) on 6/11/2020 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

Tamra Schmedemann

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

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

Case Narrative

WO#: **20060577**
Date: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Project: 2006478

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.

NEILSON RESEARCH CORPORATION

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

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-01
Client Sample ID 2006478-001A
Project: 2006478
Sample Location: W-29

Collection Date: 6/9/2020 11:55:00 AM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	5.27		1	0.0940	1.00	µg/L		06/18/20 15:00	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		109		1	0	60 - 130	%Rec		06/18/20 15:00	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

NELAP

NELAP A Accredited. ORELAP 100016, OR-028

NEILSON RESEARCH CORPORATION

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

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-02
Client Sample ID 2006478-002A
Project: 2006478
Sample Location: W-24

Collection Date: 6/9/2020 1:25:00 PM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	26.4		1	0.0940	1.00	µg/L		06/18/20 15:29	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		108		1	0	60 - 130	%Rec		06/18/20 15:29	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

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NEILSON RESEARCH CORPORATION

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

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-03
Client Sample ID 2006478-003A
Project: 2006478
Sample Location: W-25

Collection Date: 6/9/2020 2:45:00 PM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	16.3		1	0.0940	1.00	µg/L		06/18/20 15:58	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		105		1	0	60 - 130	%Rec		06/18/20 15:58	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

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Medford, OR 97501
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Website: www.nrclabs.com

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-04
Client Sample ID 2006478-004A
Project: 2006478
Sample Location: W-26

Collection Date: 6/9/2020 4:15:00 PM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	33.6		1	0.0940	1.00	µg/L		06/18/20 16:27	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		119		1	0	60 - 130	%Rec		06/18/20 16:27	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

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245 S Grape St
Medford, OR 97501
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Website: www.nrclabs.com

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-05
Client Sample ID 2006478-005A
Project: 2006478
Sample Location: Duplicate

Collection Date: 6/9/2020 4:20:00 PM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	31.6		1	0.0940	1.00	µg/L		06/18/20 16:56	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		100		1	0	60 - 130	%Rec		06/18/20 16:56	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

NELAP

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

Analytical Report

WO#: **20060577**
Date Reported: **6/23/2020**

CLIENT: Analytical Laboratory Group, Inc.
Lab ID: 20060577-06
Client Sample ID 2006478-006A
Project: 2006478
Sample Location: Equipment Blank

Collection Date: 6/9/2020 4:30:00 PM
Received Date: 6/11/2020 10:50:00 AM
Matrix: AQUEOUS

Analyses	Method	NELAP Status	Result	Qual	DF	MDL	RL	Units	MCL	Date Analyzed	Analyst
SEMIVOLATILE ORGANICS BY EPA 8270C SIM											
Pentachlorophenol	SW8270C	A	ND		1	0.0940	1.00	µg/L		06/18/20 17:25	TJW
Surr: 2,4,6-Tribromophenol	SW8270C		120		1	0	60 - 130	%Rec		06/18/20 17:25	TJW

QUALIFIERS

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded
MI	Recovery outside comtrol limits due to Matrix Interference	ND	Not Detected at the Reporting Limit
PL	Permit Limit		

Original

NELAP A Accredited. ORELAP 100016, OR-028

NEILSON RESEARCH CORPORATION

Neilson Research Corporation
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TEL: (541) 770-5678 FAX: (541) 770-2901
Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: **20060577**

23-Jun-20

Client: Analytical Laboratory Group, Inc.
Project: 2006478

TestCode: **EPA8270_PENTA**

Sample ID: **MB-5125** SampType: **MBLK** TestCode: **EPA8270_PE** Units: **µg/L** Prep Date: **6/16/2020** RunNo: **12548**
Client ID: **PBW** Batch ID: **5125** TestNo: **SW8270C** **E3510C** Analysis Date: **6/18/2020** SeqNo: **187785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	1.00									
Surr: 2,4,6-Tribromophenol	25.2		20.00		126	60	130				

Sample ID: **LCS-5125** SampType: **LCS** TestCode: **EPA8270_PE** Units: **µg/L** Prep Date: **6/16/2020** RunNo: **12548**
Client ID: **LCSW** Batch ID: **5125** TestNo: **SW8270C** **E3510C** Analysis Date: **6/18/2020** SeqNo: **187786**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	10.9	1.00	10.00	0	109	70	130				
Surr: 2,4,6-Tribromophenol	22.1		20.00		110	60	130				

Sample ID: **20060473-01AMS** SampType: **MS** TestCode: **EPA8270_PE** Units: **µg/L** Prep Date: **6/16/2020** RunNo: **12548**
Client ID: **BatchQC** Batch ID: **5125** TestNo: **SW8270C** **E3510C** Analysis Date: **6/18/2020** SeqNo: **187788**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	15.9	1.00	10.00	3.690	122	70	130				
Surr: 2,4,6-Tribromophenol	28.7		20.00		144	60	130				MI

Sample ID: **20060473-01AMSD** SampType: **MSD** TestCode: **EPA8270_PE** Units: **µg/L** Prep Date: **6/16/2020** RunNo: **12548**
Client ID: **BatchQC** Batch ID: **5125** TestNo: **SW8270C** **E3510C** Analysis Date: **6/18/2020** SeqNo: **187789**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	16.8	1.00	10.00	3.690	131	70	130	15.90	5.62	25	MI

Qualifiers:

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded	MI	Recovery outside comtrol limits due to Matrix In
ND	Not Detected at the Reporting Limit	PL	Permit Limit	RL	Reporting Detection Limit

Original

NEILSON RESEARCH CORPORATION

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

QC SUMMARY REPORT

WO#: **20060577**

23-Jun-20

Client: Analytical Laboratory Group, Inc.
Project: 2006478

TestCode: **EPA8270_PENTA**

Sample ID: **20060473-01AMSD** SampType: **MSD** TestCode: **EPA8270_PE** Units: **µg/L** Prep Date: **6/16/2020** RunNo: **12548**
Client ID: **BatchQC** Batch ID: **5125** TestNo: **SW8270C** **E3510C** Analysis Date: **6/18/2020** SeqNo: **187789**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	25.9		20.00		129	60	130		0	0	

Qualifiers:

C1	Sample container temperature is out of limit as specified at testcode	H	Holding times for preparation or analysis exceeded	MI	Recovery outside comtrol limits due to Matrix In
ND	Not Detected at the Reporting Limit	PL	Permit Limit	RL	Reporting Detection Limit

Original

NEILSON RESEARCH CORPORATION

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

Sample Log-In Check List

Client Name: **AnalyticalLab** Work Order Number: **20060577** RcptNo: **1**

Logged by:	**Vincenza Gill**	**6/11/2020 10:50:00 AM**	Vincenza Gill
Completed By:	**Tamra Schmedemann**	**6/11/2020 4:02:35 PM**	Tamra Schmedemann
Reviewed By:	**Tamra Schmedemann**	**6/11/2020 4:02:38 PM**	Tamra Schmedemann

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	UPS		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
	Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
	No. Seal Date:	Signed By:		
5.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
8.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9.	Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11.	Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes ☐	No ☐	No VOA Vials ☑
12.	Were any sample containers received broken?	Yes ☐	No ☑	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15.	Is it clear what analyses were requested?	Yes ☑	No ☐	
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

Special Handling (if applicable)

17.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				DLN

Lab Order Number 2006O577

Analytical Laboratory Group, Inc.

361 WEST FIFTH AVENUE
EUGENE, OREGON 97401
800-262-5973/541-485-8404 Fax 541-484-5995
Email: alglabs@alglabsinc.com

ALG ANALYTICAL LABORATORY GROUP — Delivering more than just test results

CHAIN OF CUSTODY

Attention:	Cynthia O'Kelley	Client:	Analytical Laboratory Group, Inc
Phone:	541-485-8404	Address:	361 West 5th Avenue
Fax:	541-484-5995		Eugene, OR 97401
Client Project:	Neilson Research	Source: Environmental	ALG PO# 200610-02

Lab ID	ALG Sample ID	ALG Sample Point	Sample Matrix & Description Grab/Comp	Collection Date	Collection Time	Bottles	Analysis Requested
01	2006478-001A	W-29	EW/Grab	6/9/20	1155	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*
02	2006478-002A	W-24	EW/Grab	6/9/20	1325	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*
03	2006478-003A	W-25	EW/Grab	6/9/20	1445	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*
04	2006478-004A	W-26	EW/Grab	6/9/20	1615	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*
05	2006478-005A	Duplicate	EW/Grab	6/9/20	1620	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*
06	2006478-006A	Equipment Bank	EW/Grab	6/9/20	1630	(3) 8270C	Pentachlorophenol by EPA 8270C SIM*

Notes:
Please Return Shipper
Include: MDL

*MDL = 0.65 ug/L

Turn Around Time Requested: Normal			Shipped Via: UPS		Refrigerated YES 3.4
COC and PO made by: Joshua DiCarlo	Date: 6/10/20	Time: 12:21	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Laboratory:	Date: 6/11/20	Time: 1050

Note: Standard Terms and Conditions on Reverse

NEILSON RESEARCH CORPORATION

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

Data Flags

WO#: **20060577**
Date: **6/23/2020**

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 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.

Work Order # 2006478

LIMS: MCV
Checked: CO

ALG
ANALYTICAL LABORATORY GROUP

361 WEST FIFTH AVENUE
EUGENE, OREGON 97401
Phone: 541-485-8404 Fax: 541-484-5995
Email: alglabs@alglabsinc.com

EW GENERAL CHAIN OF CUSTODY

Report to:	Jeanne Olson	Company:	J.H. Baxter & Co.
Phone:	541-689-3801	Address:	85 Baxter Street
Email:	jolson@jhbaxter.com	City, State, Zip:	Eugene, OR 97402
Client Project:	Groundwater wells	Sampler Name:	GSI

Sample Point	Sample Matrix & Grab/Comp	Collection Date	Collection Time	Analysis Requested	Bottles -Lab Use Only Type	#	Pres	T °C	Lab ID
W-29	EW/Grab	6/9/2020	1155	Penta 8270C LL	8270C	3		9.9 9.7 9.9	001A
W-24	EW/Grab		1325	Penta 8270C LL	8270C	3		10.6 8.4 8.3	002A
W-25	EW/Grab		1445	Penta 8270C LL	8270C	3		10.7 11.0 11.1	003A
W-26	EW/Grab		1615	Penta 8270C LL	8270C	3		11.5 13.2 12.0	004A
Duplicate	EW/Grab		1620	Penta 8270C LL	8270C	3		12.4 12.8 12.3	005A
Equipment Blank	EW/Grab	↓	1630	Penta 8270C LL	8270C	3		16.1 16.4 15.9	006A

Notes:

INCLUDE 4 LITER AMBER BOTTLES FILLED WITH DI WATER

MDL= 0.65 ug/L

Preservation Check

Lab ID	Date/Time	Pre-Preserved	pH	Tech

Turn Around Time Requested (Rush incurs a Surcharge): ☒ NORMAL ☐ RUSH

Shipped Via: Renee Fowler

Refrigerated: (Ice) None

Relinquished by:	Date	Time	Received by:	Date	Time
Renee Fowler	6/9/20	1655			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
			Cynthia O'Kelley	6/9/20	16:55

Appendix B

Groundwater Sampling Field Log

JH Baxter

Eugene, Oregon

Date: 6/9/2020

Spring 2020

Well ID: W-24

Total Depth: 65 (ft)	9.92 (-) DTW: (ft) 1236 Time	=	(x) 0.16 - 2" (x) 0.65 - 4" (x) 1.47 - 6" gal/feet	35.8 gal = Well Casing Volume

Field Conditions: cloudy, 70F

Decontamination: Alconox + tap wash; Tap rinse; DI rinse

PURGE INFORMATION

	Purge Method: GeoPump II peristaltic
X	Purge Method: Submersible pump (vertical)
X	Refer to calibration log this date, YSI # 1

Pump Suction Depth (ft BTOC): ~60 Purge water disposal:

Type of Flow Through Cell: [ ] 10 oz cup [X] YSI 556 Flow Through Cell

Comments/Exceptions to SAP:

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	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) 3 readings < 5 (NTU<5)
12:40	Pump On, Water Reaches the Purge Bucket						2250	Initial 9.92	clear, colorless
12:45	4	14.13	553	2.10	6.75	228.8		10.47	colorless, 1 NTU
12:55	~9.4	14.11	526	1.90	6.92	209.0		10.51	colorless, 2 NTU
13:00	12.5	14.11	509	1.96	6.93	203.1		10.51	colorless, 1 NTU
13:10	18.5	14.10	498	2.04	6.94	192.5		10.51	colorless, 1 NTU
13:15	21.5	14.10	491	1.98	6.95	188.8		10.51	colorless, 0 NTU
13:20	25	14.11	492	1.87	6.95	185.9		10.51	colorless, 0 NTU
13:25	28	14.10	489	1.86	6.95	173.2		10.51	colorless, 0 NTU
:									
:									
:									
13:25	Start Sampling								
:	End Sampling								

* **VC**=Very cloudy **Cl**=Cloudy **SC**=Slightly Cloudy **VSC**=Very Slightly Cloudy **AC**=Almost Clear **C**=Clear **CC**=Crystal Clear

JN

Laboratory Analytical Program
JH Baxter
Eugene, Oregon

Date: 6 / 9 / 2020	Time: 13 : 25				
Sampling Method (circle one):	(A) dedicated purge tube disconnected from flow through cell				
	B other:				
Sample I.D. W-24	Number of sample containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method
	(3) 2	1 L	Amber Glass	4°C	Phenols - 8270C LL
QAQC: **Sample ID & Time--->**					
Equipment Check					
Duplicate					

Sampling Criteria (circle one):

Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown	(1)
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:

COC Data: PM is Josh Bale, 55 SW Yamhill St, Portland 97204; 971.200.8511; rfowler@gsiws.com

Lab: ALG, 361 West Fifth Ave, Eugene, OR 97401; 541.485.8404

Lab PM: Jason Inman, JasonI@alglabsinc.com, 541.954.2317 (C)

Groundwater Sampling Field Log

JH Baxter

Eugene, Oregon

Date: 6/9/2020

Spring 2020

Well ID: N-25

Total Depth: 52 (ft)	8.14 (-) DTW: (ft)	1352 Time	=	(x) 0.16 - 2" (x) 0.65 - 4" (x) 1.47 - 6" gal/feet	28.5 = Well Casing Volume

Field Conditions: Misting, 65°F

Decontamination: Alconox + tap wash; Tap rinse; DI rinse

PURGE INFORMATION

	Purge Method: GeoPump II peristaltic
X	Purge Method: Submersible
X	Refer to calibration log this date, YSI # 1

Pump Suction Depth (ft BTOC): ~45 Purge water disposal:

Type of Flow Through Cell: [ ] 10 oz cup [X] YSI 556 Flow Through Cell

Comments/Exceptions to SAP:

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	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) 3 readings < 5 (NTU<5)
13:56	Pump On, Water Reaches the Purge Bucket						2700	Initial 8.12	Clear, ↑ rate to 3600 mL/min
14:15	15	14.88	610	1.88	6.96	177.4		8.45	colorless, 1NTU
14:20	20	14.82	609	1.64	6.95	170.9	3200	8.42	colorless, 1 NTU
14:25	~24.8	14.82	608	1.57	6.95	162.9		8.42	colorless, 1 NTU
14:30	~27.25	14.81	609	1.40	6.95	150.9	1900	8.32	colorless, 1 NTU
14:35	30	14.81	611	1.49	6.95	148.3		8.32	colorless, 1 NTU
14:40	32.75	14.80	611	1.44	6.95	146.0		8.32	colorless, 1 NTU
14:45	35.5	14.81	613	1.45	6.95	141.9		8.32	colorless, 0 NTU
:									
:									
:									
14:45	Start Sampling								
:	End Sampling								

* **VC**=Very cloudy **Cl**=Cloudy **SC**=Slightly Cloudy **VSC**=Very Slightly Cloudy **AC**=Almost Clear **C**=Clear **CC**=Crystal Clear

TNL 11

Laboratory Analytical Program
JH Baxter
Eugene, Oregon

Date: 6 / 9 / 2020	**Time:** 14 : 45				
Sampling Method (circle one):	(A) dedicated purge tube disconnected from flow through cell				
	B other:				
Sample I.D. MW-25	Number of sample containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method
	(3) ~~2~~	1 L	Amber Glass	4°C	Phenols - 8270C LL
QAQC: **Sample ID & Time--->**					
Equipment Check					
Duplicate					

Sampling Criteria (circle one):

Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown	(1)
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:

COC Data: PM is Josh Bale, 55 SW Yamhill St, Portland 97204; 971.200.8511; rfowler@gsiws.com

Lab: ALG, 361 West Fifth Ave, Eugene, OR 97401; 541.485.8404

Lab PM: Jason Inman, JasonI@alglabsinc.com, 541.954.2317 (C)

Groundwater Sampling Field Log

JH Baxter

Eugene, Oregon

Date: 6/9/2020

Spring 2020

Well ID: ~~PZ-29~~ W-26

Total Depth: 79 (ft)	8.10 (-) DTW: (ft)	1515 Time	=	(x) 0.16 - 2" (x) 0.65 - 4" (x) 1.47 - 6" gal/feet	46 = Well Casing Volume

Field Conditions: Cloudy, misty, 65/70 F

Decontamination: Alconox + tap wash; Tap rinse; DI rinse

PURGE INFORMATION

	Purge Method: GeoPump II peristaltic
X	Purge Method: Submersible pump (rental)
X	Refer to calibration log this date, YSI # 1

Pump Suction Depth (ft BTOC): ~75 Purge water disposal:

Type of Flow Through Cell: [ ] 10 oz cup [X] YSI 556 Flow Through Cell

Comments/Exceptions to SAP:

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	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) 3 readings < 5 (NTU<5)
15:25	Pump On, Water Reaches the Purge Bucket						4200	Initial 8.10	brown, VSC
15:44	20	14.67	401	1.85	7.14	179.3		8.32	VS gray, 5 NTU
15:49	31.5	14.66	401	1.74	7.15	171.5		8.32	" " , 5 NTU
15:54	36.5	14.63	401	1.71	7.16	165.0	3280	8.32	" " 5 NTU
15:59	40	14.62	402	1.67	7.16	159.0	2250	8.32	Clear, 8 NTU
16:04	43.5	14.63	402	1.68	7.16	157.0		8.32	Clear, 6 NTU
16:09	45.5	14.62	401	1.67	7.16	156.1		8.32	Clear, 5 NTU
16:14	48.5	14.62	401	1.67	7.16	152.8		8.32	Clear, 7 NTU
:									
:									
:									
16:15	Start Sampling								
:	End Sampling								

* **VC**=Very cloudy **Cl**=Cloudy **SC**=Slightly Cloudy **VSC**=Very Slightly Cloudy **AC**=Almost Clear **C**=Clear **CC**=Crystal Clear

LHT 111

Laboratory Analytical Program
JH Baxter
Eugene, Oregon

Date: 6 / 9 / 2020	Time: 16 : 15				
Sampling Method (circle one):	(A) B	dedicated purge tube disconnected from flow through cell other:			
Sample I.D. ~~K-29~~ N-26	Number of sample containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method
	(3) ~~2~~	1 L	Amber Glass	4°C	Phenols - 8270C LL
QAQC: **Sample ID & Time--->** Equipment Check Duplicate	Duplicate @ 1620 Equipment Blank @ 1630 in outside of pump				

Sampling Criteria (circle one):

Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown	(1)
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:

COC Data: PM is Josh Bale, 55 SW Yamhill St, Portland 97204; 971.200.8511; rfowler@gsiws.com

Lab: ALG, 361 West Fifth Ave, Eugene, OR 97401; 541.485.8404

Lab PM: Jason Inman, JasonI@alglabsinc.com, 541.954.2317 (C)

Groundwater Sampling Field Log

JH Baxter

Eugene, Oregon

Date: 6/9/2020

Spring 2020

Well ID: W-29

Total Depth: 74 (ft)	7.17 (-) DTW: (ft)	11:11 Time	=	(x) 0.16 - 2" (x) 0.65 - 4" (x) 1.47 - 6" gal/feet	43.5 gal = Well Casing Volume

Field Conditions: Cloudy, windy 10 mph NW, 62°F

Decontamination: Alconox + tap wash; Tap rinse; DI rinse

PURGE INFORMATION

	Purge Method: GeoPump II peristaltic
X	Purge Method: Submersible qwpump (rental)
X	Refer to calibration log this date, YSI # 1

Pump Suction Depth (ft BTOC): ~70 Purge water disposal:

Type of Flow Through Cell: [ ] 10 oz cup [X] YSI 556 Flow Through Cell

Comments/Exceptions to SAP:

Time	Purge Volume (gallons)	Temp. (°C)	SC (uS/cm)	DO (mg/L)	pH	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) 3 readings < 5 (NTU<5)
11:18	Pump On, Water Reaches the Purge Bucket						6000	Initial 7.11	Clear, cal YSI
11:28	25							7.60	Clear, back up YSI
11:34	31.5	15.53	471	1.93	6.95	227.8	3500	7.53	Clear, 1 NTU
11:~~39~~ 40	~~36~~ 35	15.53	471	1.56	7.05	220.9		7.53	clear, 1 NTU
11:45	40.75	15.52	471	1.49	7.07	217.2		7.53	clear, 0 NTU
11:~~50~~ 50	45.2	15.53	471	1.50	7.07	215.2		7.53	Clear, 0 NTU
11:~~55~~ 55	50	15.54	472	1.46	~~7.07~~ 7.07	213.0		7.53	Clear, 1 NTU
:									
:									
:									
:									
11:55	Start Sampling								
:	End Sampling								

* **VC**=Very cloudy **Cl**=Cloudy **SC**=Slightly Cloudy **VSC**=Very Slightly Cloudy **AC**=Almost Clear **C**=Clear **CC**=Crystal Clear

111 1/1

Laboratory Analytical Program
JH Baxter
Eugene, Oregon

Date: 6 / 9 / 2020	Time: 11 : 55				
Sampling Method (circle one):	(A) dedicated purge tube disconnected from flow through cell				
	B other:				
Sample I.D. W-29	Number of sample containers (circle)	Volume of each container	Container Type	Pres.	Analytical Method
	(3) ~~2~~	1 L	Amber Glass	4°C	Phenols - 8270C LL
QAQC: **Sample ID & Time--->**					
Equipment Check					
Duplicate					

Sampling Criteria (circle one):

Collect anytime: stabile parameters over 15 minutes(4 readings) with controlled drawdown	(1)
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:

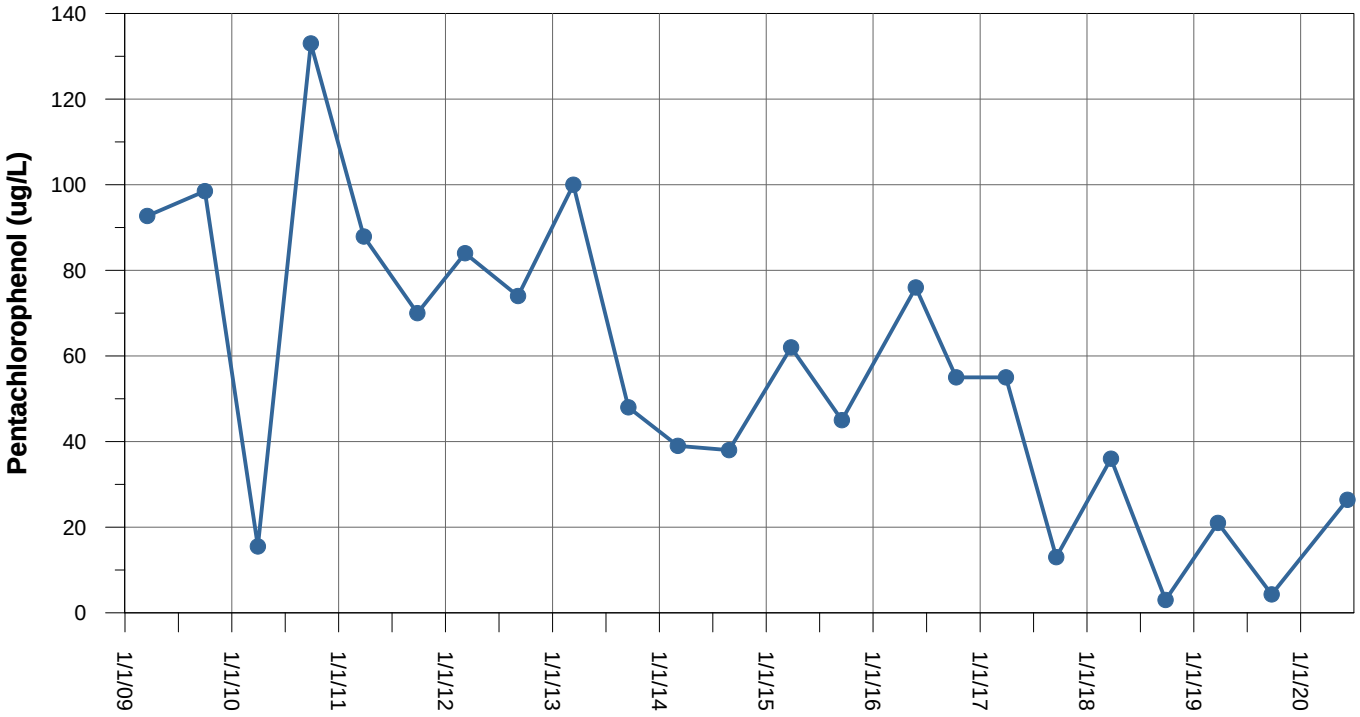
COC Data: PM is Josh Bale, 55 SW Yamhill St, Portland 97204; 971.200.8511; rfowler@gsiws.com

Lab: ALG, 361 West Fifth Ave, Eugene, OR 97401; 541.485.8404

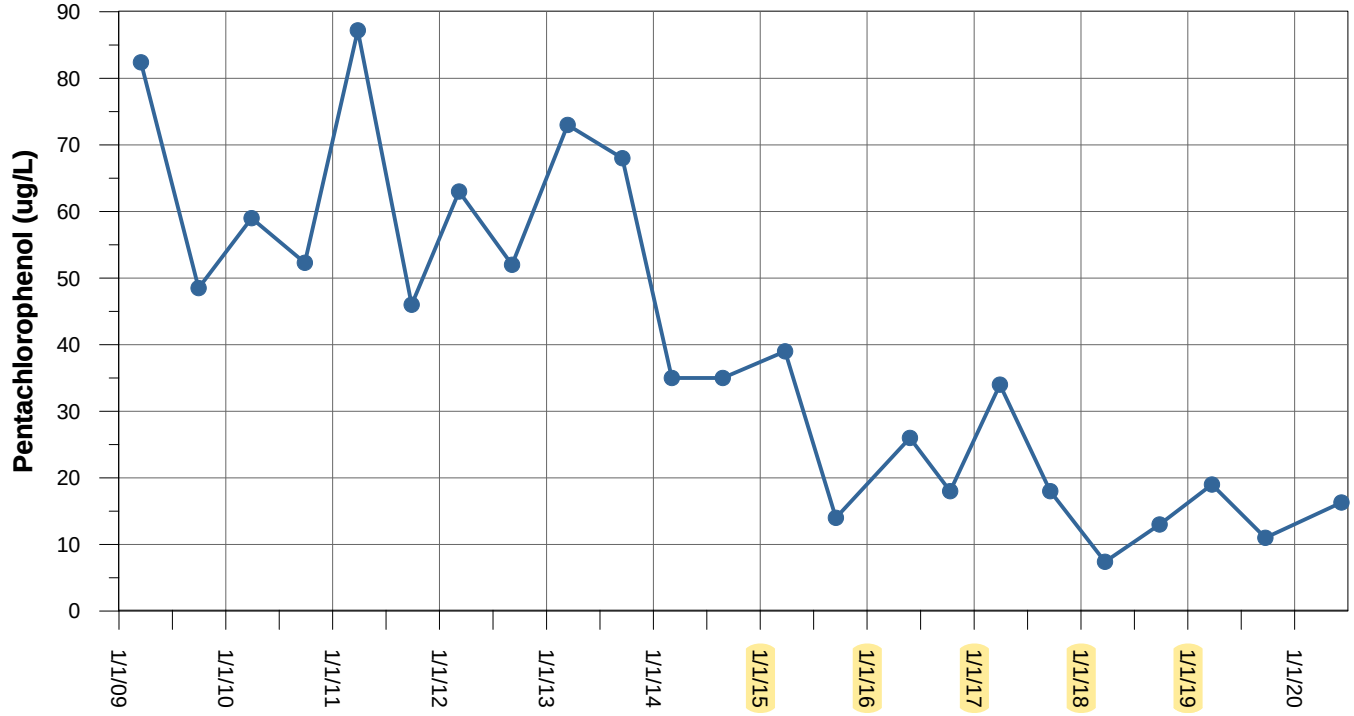
Lab PM: Jason Inman, JasonI@alglabsinc.com, 541.954.2317 (C)

Appendix C

W-24



W-25



Legend:

- Pentachlorophenol Detected Values
- Pentachlorophenol Non-Detected Values

FIGURE C-1

Pentachlorophenol Groundwater Concentrations in W-24 and W-25

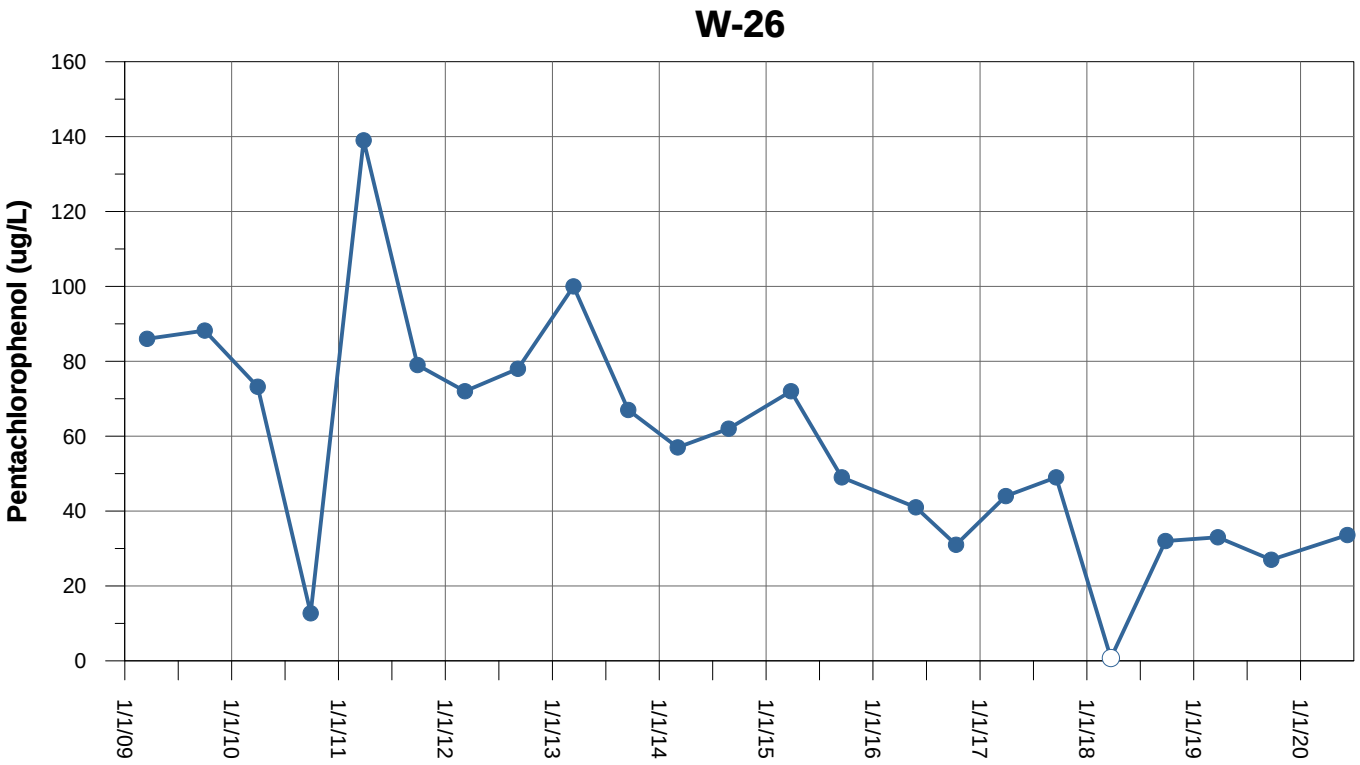
J.H. Baxter Wood Treating Facility

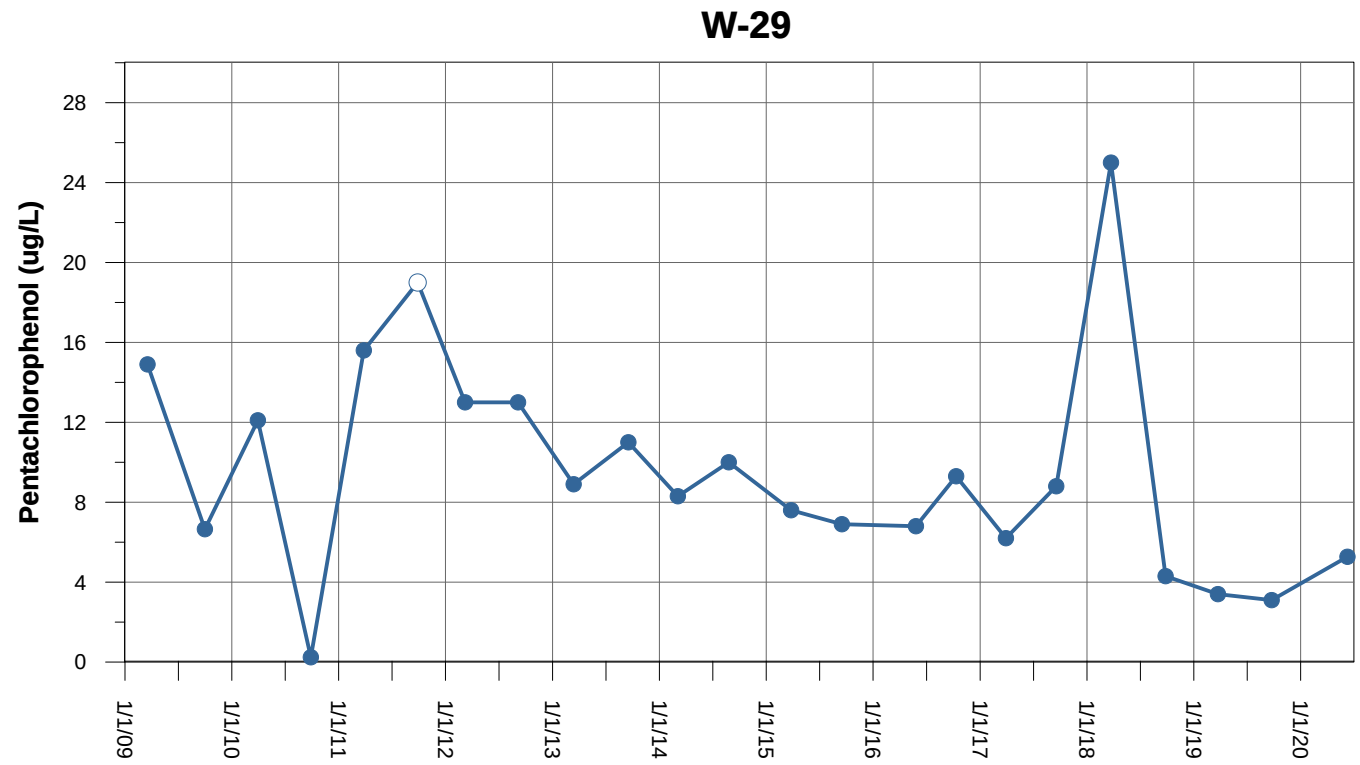
Eugene, Oregon

Notes:

ug/L = microgram per liter

GSI Water Solutions, Inc.





Legend:

- Pentachlorophenol Detected Values
- Pentachlorophenol Non-Detected Values

FIGURE C-2
Pentachlorophenol Groundwater Concentrations in W-26 and W-29
J.H. Baxter Wood Treating Facility
Eugene, Oregon

Notes:
ug/L = microgram per liter

GSI Water Solutions, Inc.