WSP GROUNDWATER MONITORING REPORT MAY 23 & 24, 2023

Under Agreed Order No. DE 13229, WSP is required to conduct groundwater monitoring to assess performance of the cleanup action in accordance with the Compliance Monitoring Plan approved by Ecology.

On May 23-24, 2023, groundwater monitoring well testing was conducted at the Washington State Penitentiary Landfill site by Sandra Treccani, Site Manager for the Department of Ecology and Darin Klein, Dean Smith, and Kelly Fulbright, representatives for the Department of Corrections. The weather was fair, mid-fifties to upper sixties, with a light breeze.

Six monitoring wells, MW-3, MW-5, MW-9, MW-11, MW-12, and MW-14 were chosen and approved by Ecology for testing. Groundwater levels were measured and noted on the attached field logs, as were the water quality parameters. Water parameters were obtained using a YSI Pro DSS Multiparameter Sampling Instrument.

A Geotech, Geocontrol PRO submersible bladder pump with dedicated bladders and tubing, was used for groundwater purging and sampling. The pump was decontaminated between monitoring wells with Liquinox and rinsed in distilled water. A new bladder was used at each well.

Water samples were sent to eurofins Environmental Testing for analysis of **Tetrachloroethene (PCE), Manganese**, and **Nitrate**. Due to holding time restrictions, samples were also sent to RJ Lee Group for analysis of **Hexavalent Chromium, Total Chromium**, and **Manganese**.

The samples sent to eurofins arrived within 24 hours but were outside the required temperature of $\leq 6^{\circ}$ C. Due to malfunctioning lab equipment, the samples for **Nitrate** were processed beyond the specified holding time.

All contaminates were below the cleanup levels, except **NITRATES** in monitoring wells MW-3, MW-11, MW-12, and MW-14. Nitrates increased by 2 ug/L in 3 of the four wells with a significant decrease in MW-12.

11-29-2023

Dean Smith

Environmental Specialist

Washington State Department of Corrections

(509) 386-0388

ANALYTICAL RESULTS

Site Clean	Up Levels		48	2240	5	2240	10
		ug/L	ug/L	ug/L	ug/L	ug/L	mg/L
Monitoring Well ID	Sample Collection Date	Hex Chrome	Total Chrome	RJ Lee Group Maganese	PCE	Eurofins Maganese	Nitrate
MW-3	5/24/2023	<pql< td=""><td>2.24</td><td>6.08</td><td>ND</td><td>ND</td><td>26</td></pql<>	2.24	6.08	ND	ND	26
MW-5	5/23/2023	<pql< td=""><td>4.11</td><td>11.23</td><td>0.9</td><td>8.1</td><td>1.8</td></pql<>	4.11	11.23	0.9	8.1	1.8
MW-9	5/24/2023	<pql< td=""><td>15.24</td><td>765.2</td><td>ND</td><td>180</td><td>10</td></pql<>	15.24	765.2	ND	180	10
MW-11	5/23/2023	<pql< td=""><td>5.67</td><td>224.3</td><td>0.71</td><td>62</td><td>24</td></pql<>	5.67	224.3	0.71	62	24
MW-12	5/23/2023	<pql< td=""><td>1.32</td><td>2.2</td><td>ND</td><td>ND</td><td>27</td></pql<>	1.32	2.2	ND	ND	27
MW-14	5/24/2023	<pql< td=""><td>1.47</td><td>2.3</td><td>ND</td><td>5.2</td><td>24</td></pql<>	1.47	2.3	ND	5.2	24
MW-3 Duplicate		<pql< td=""><td>1.1</td><td>2.07</td><td>ND</td><td>ND</td><td>26</td></pql<>	1.1	2.07	ND	ND	26

FAINAL WATER QUALITY PARAMETERS

Monitoring Well ID	Sample Collection Date	рН	Conductivity	Dissolved Oxygen	Temperature (°C)	Turbidity	ORP
	5/24/2023	6.77	857	68.4	15	2.01	164.2
MW-3				3	7		
	5/23/2023	7.4	194.5	81.3	19.4	149	179.7
MW-5							
	5/24/2023	6.92	498.6	97.9	14.9	223.6	156.6
MW-9							
ada yan bulla seriyata, ingkun salaman atatata	5/23/2023	6.89	887	82.3	18.1	94.6	188
MW-11			z.				
obdinos ara tire par exportes a tira	5/23/2023	6.97	888	86.3	17.3	1.75	178.5
MW-12							
	5/24/2023	6.74	1046	84.2	16	4.12	168
MW-14							

Hit well bottom.

Well / Water / Pump Depth

Monitoring Well ID	Sample Collection Date	Well .	Water	Pump
	5/24/2023	80'	72.73'	76¹
MW-3				
	```			
	5/23/2023	102'	81.63'	93'
MW-5				
	5/24/2023	90'	83.18'	87¹
	3/24/2023		93.10	67
MW-9				
:	, ,			
	5/23/2023	76'	71.3'	74'
MW-11				
10100 77		-		
			÷	
	5/23/2023	76'	70.8'	74'
0.004/ 40				· · · · · · · · · · · · · · · · · · ·
MW-12		•		
	5/24/2023	74.6'	68.43'	71'
MW-14				
14144 7-				·

Well Numl	ber MW-3	<b>5</b>	Date		= 14	-2023
Project Na		GW Monitoring		On/Off Location	0330	
Depth to V Depth of V Pump Dep	Well 80'	2.73	Sampl Sampl Sampl	ling Time	D Smith/S T	
Purge Time Purge Flov	· ·			irge Volume I Purge Volume		
Time 0852 0857 0902	pH 6.77 6.77	Cond 859 859 857	DO 76 68.7 68.4	Temp	Turb 5-18 2-12 2-01	ORP 153.7 161.1 164.2
2						
Notes	SA	IMPLE 2			and the second of the second o	Acceptance
Well Num Project Na		5 GW Monitoring	Date Time	On/Off Location	5-23	-2023
Depth to N Depth of N Pump Dep	Well 102'	3		led By ling Time le ID	D Smith/S 7	Ггессапі
			Est Pu	······································		
Purge Tim Purge Flov				irge Volume I Purge Volume		
Time 1032 1045 1052	pH 7.65 7.45 7.40	Cond 119.4 152 194		Temp	Turb 17-86 49.80 97	ORP /63.5 178-3 179
Time 1032 1045	pH 7.65 7.45	152	DO /08. 4 93 - 1	Temp 19.7	17-86	163.5
Time 1032 1045 1052 1057	pH 7.65 7.45 7.40	119.4 152 194 194-5	DO /08. 4 93 - 1	Temp	17-86 49.80 97	/63.5 178.3 179

Well Number Project Name	MW-9	Date Time	On/Off Location	5-24	-2023
Depth to Water Depth of Well Pump Depth	93.18 90' 87		led By ling Time le ID	D Smith/S T	
Purge Time Purge Flow Rate			ırge Volume I Purge Volume	3 <del></del>	
1108 6.	OH Cond 92 503 90 495-2 91 492 90 492-8 92 498-6	DO /03.6 98-8 97-8 97-6 97-9	Temp 17-5 15-2 14-9 14-8 14-9	Turb  58.10 17-89 8-97 571-8 223-6	ORP 169-8 172-7 173-9 177-3 156-6
				-	
Notes	SAMPLE 6	HIT	BOTTOM	HI TUI	ZB IN SAMPLE
Well Number Project Name	MW-11	Date Time	On/Off Location	5-23-	2023
Depth to Water Depth of Well Pump Depth	71.3 76'		led By ling Time le ID	D Smith/S T	000
Purge Time Purge Flow Rate			urge Volume al Purge Volume		
12/5 6. 1223 6. 1230 6-	OH Cond 91 893 89 895 89 887	DO 100 83-8 82-5 82-3	Temp 20.1 18.3 18	Turb 333 185 100 94-6	ORP   186. 3   185   188
Notes	SAMPLE 4	(HEI	WELL BOT	TOM)	
1210 STAIRT	SAMPLE 4 - PURGE		¥	PIS	clf 25

STAPT 1100 H20 1106

FILL 25 DESCH 25

Well Number MW-12 Project Name	Date Time On/Off Location	5-23-2023
Depth to Water Depth of Well Pump Depth 70 - 8 76' 74	Sampled By Sampling Time Sample ID	D Smith/S Treccani /340
Purge Time Purge Flow Rate	Est Purge Volume Actual Purge Volume	
1332 6.96 898	DO Temp  91.6  97.2  17.9  36.3  17.3	Turb ORP  4.02 168.8  3.63 172-5  2.40 176.2  1.75 178-3
Notes SAMPUE 3	STAIRT pump	1310 1430 1316
Well Number MW-14 Project Name	Date Time On/Off Location	5-24-2023
Depth to Water Depth of Well Pump Depth 71	Sampled By Sampling Time Sample ID	D Smith/S Treccani
Purge Time Purge Flow Rate	Est Purge Volume Actual Purge Volume	
	DO Temp  92 853 16.1 84-1 84-2 16.0	Turb ORP  8-7  110.2  5-57  152  1-86  163-3  4-12  168
Notes SAMPUE 5	START PURGE O	0944 H ² 0 0948

FILL 25 DISCH 25

# MW-3 DUPLICATE

Well Number	SDK-9	MW-IA	Date		5-24-	2023
Project Name			Time	On/Off Location	0830	
Depth to Water Depth of Well	211		Samp	led By ling Time	D Smith/S Tre	1000
Pump Depth			Samp	le ID	MBELED	1230
Purge Time Purge Flow Rate	-		ECHOLOGIC NE TEL	irge Volume I Purge Volume		
Time p	Н	Cond	DO	Temp	Turb	ORP
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Notes	SAM	PLE 7				

FIELD





# **YSI ProDSS Multiparameter Sampling Instrument**

The YSI ProDSS is a rugged single or multiparameter water quality instrument designed for use in applications that include surface water, groundwater, coastal, and agriculture. The ProDSS features optional user-replaceable digital smart sensors that are automatically recognized when connected to the instrument. The optional GPS function, a broad range of sensors, and varying cable options allow for complete customization of the ProDSS:

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- · Long-Life rechargeable lithium-ion battery
- Large Memory, >100,000 data sets with site list and data ID tag
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- KorDSS data management software with geomapping (GPS optional)
- User-replaceable cables and sensors
- Rugged, IP-67 rated waterproof case
- · Military-spec cable connectors
- · Titanium sensor bodies
- Multiple Languages; English, Spanish, Portuguese, French, German, Italian, Japanese, Norwegian, Chinese, Korean, and Thai
- 3-year handheld instrument warranty
- · 2-year cable assembly and sensor warranty
- · 1-year pH and ORP sensor warranty
- 6-month ammonium, nitrate, and chloride sensor warranty



# **SENSOR OPTIONS**

- Optical Dissolved Oxygen (ODO) & Temperature
- Optical Dissolved Oxygen (ODO) & Conductivity
- Turbidity
- Conductivity & Temperature
- pH
- pH/ORP
- Nitrate
- Chloride
- Total Algae (Fresh Water)
- Total Algae (Salt Water)
- Depth
- GPS

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# RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories

2710 North 20th Avenue, Pasco WA 99301

Tel: (509) 792-1955 | Fax: (509) 792-1934

WA State Penitentiary 1313 N 13th Avenue Walla Walla, WA 99362 SDG Number:

06/06/23

Contract: 310PO2315942

### Subject: Chemical Analysis Report:

Columbia Basin Analytical Laboratories received 6 sample(s) on 05/23/23 for analysis. These sample(s) have been assigned a login order number of W305183. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody. If provided by customer on COC, sample volume is recorded on the laboratory report and has been used to calculate final results.

## **General Lab Comments**

The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. Results included in the report apply to the sample as it was received. Information provided by customer can affect validity of results. The sample(s) were prepared and analyzed in compliance with EPA 6020B and EPA 7196A accordingly. This test report shall not be reproduced, except in full, without written approval of Columbia BasinAnalytical Laboratories. Any questions, please contact our office.

MW-511 MW-12 Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature.

06/06/23

Chemist I Sam Sears

If you have any questions please feel free to contact Sam Sears at SSears@rjleegroup.com or 509-792-1955.

This report has been reviewed and approved by the following individual:

Finlos

06/06/23

Project Manager JJ Furlong

Report Template: Anionreport.rpt

# ORJ LEE GROUP

Dean Smith WA State Penitentia  1313 N 13th Avenue Walla Walla, WA 99 Client Project: Chro	Lo 9362	aboratory Rep		RJ Lee Group Samples Received: analysis/Prep Date: Report Date:	No.: W305183 COC No: 05/23/23 16:00 05/24/23 09:54 06/06/23 17:20
Sample Name: RJ Lee Grp. ID:	MW-5 W305183-01	Batch No: Matrix: Non-Potab		Date Sampled: Date Analyzed:	05/23/23 11:00
Analyte	Method	Result (µg/L)	PQL (μg/L)	Dilution Factor	05/24/23 09:54 Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	U
Sample Name: RJ Lee Grp. ID:	MW-5 W305183-02	Batch No: Matrix: Non-Potab		Date Sampled: Date Analyzed:	05/23/23 11:00 06/05/23 14:07
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	4.11	1.00	17	
Manganese	EPA 6020B	11.23	1.00	1	
Sample Name: RJ Lee Grp. ID:	MW-11 W305183-03	Batch No: Matrix: Non-Potab		Date Sampled: Date Analyzed:	05/23/23 12:34 05/24/23 09:54
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1 1	U
Sample Name: RJ Lee Grp. ID:	MW-11 W305183-04	Batch No: Matrix: Non-Potab		Date Sampled: Date Analyzed:	05/23/23 12:34 06/05/23 14:08
Analyte	Method	Result (µg/L)	PQL (μg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	5.67	1.00	1	
Manganese	EPA 6020B	224.3	1.00	1	
Sample Name: RJ Lee Grp. ID:	MW-12 W305183-05	Batch No: Matrix: Non-Potab		Date Sampled: Date Analyzed:	05/23/23 13:40 05/24/23 09:54
Analyte	Method	Result (µg/L)	PQL (μg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	U

# ORJ LEE GROUP

Batch No: BE30121 Date Sampled: 05/23/23 13:40 MW-12 Sample Name: Date Analyzed: W305183-06 Matrix: Non-Potable Water RJ Lee Grp. ID: 06/05/23 14:10 PQL Dilution Qualifiers Method Result Analyte (µg/L)  $(\mu g/L)$ Factor 1.32 1.00 Chromium EPA 6020B 1.00 1 Manganese EPA 6020B 2.20



Dean Smith
WA State Penitentiary

**Quality Control** 

RJ Lee Group No.: W305183

COC No.:

Samples Received:

05/23/23 16:00

Analysis/Prep Date:

05/24/23 09:51

Report Date:

06/06/23 17:20

1313 N 13th Avenue Walla Walla, WA 99362 Client Project: Chrome

Analyte	CAS NO.	QC Sample ID	Expected µg/L	Result µg/L	RPD	% REC	Recovery Limits	Qualifier & Comments
Hexavalent Chromium	.18540-29-9	LRB	<5.00	< 5.00				U
Hexavalent Chromium	18540-29-9	LCS	250.00	252.00	Maria Cara	101	85 - 115	THE PARTY OF
Hexavalent Chromium	18540-29-9	RL	5.00	4.96		99.2	70 - 130	В
Hexavalent Chromium	18540-29-9	MS	51.96	54.50		109	85 - 115	W305183-01
Hexavalent Chromium	18540-29-9	MSD	51.96	52.20	4.20	104	85 - 115	W305183-01
Chromium	7440-47-3	LRB	<1.00	<1.00	TO THE	74714507		
Manganese	7439-96-5	LRB	<1.00	<1.00				
Chromium	7440-47-3	LCS	100.00	101.00		101	85 - 115	
Manganese	7439-96-5	LCS	100.00	102.00		102	85 - 115	_ ×
Ihromium	7440-47-3	DUP	<1.00	1.56	16.5			W305183-06
Manganese	7439-96-5	DUP	<1.00	2.06	6.35			W305183-06
Thromium	7440-47-3	MRL	1.00	1.07		107	70 - 130	
Manganese	7439-96-5	MRL	1.00	1.08		108	70 - 130	
Chromium	7440-47-3	MS	51.32	52.50		102	85 - 115	W305183-06
Manganese	7439-96-5	MS	52.20	52.40		100	85 - 115	W305183-06

### Report Qualifiers:

- A = Target Analyte media breakthrough suspected
- C = Aroclor/pesticide confirmation by GC/MS
- E = The concentration indicated for this analyte is an estimated Value above the calibration range of the instrument
- L = Sample condition at receipt out of compliance with defined method conditions
- R = RPD/RSD outside accepted recovery limits
- S = Spike Recovery outside accepted recovery limits
- V = Analyte detected at or above MRL on initial analysis, but below MRL on confirmation

- B = Analyte detected in the associated matrix blank
- D = Analyte analyzed in a dilution
- H = Sample holding time not met. Received outside of hold time.
- J = Detected but below the MRL. Result is an estimated concentration
- N = Specific analyte as a TIC
- P = Analyte detected at or above MRL on initial analysis. Analyte detected at greater than 40% RPD on confirmation
- U = Analyte analyzed for but not detected
- X = The result-specific translation of this qualifier code is provided in the hardcopy data report and/or case narrative.



### Chemist I Sam Sears

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under ORELAP Lab Code 4061 AIHA LAP, LLC Lab ID 178656 EPA ID WA01195 and WA DOE Lab ID C859. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid. Outsility control data is available upon request.

Columbia Basin Analytical Laboratories | 2710 North 20th Avenue, Pasco WA 93301 | 509.792.1955



**End of Report** 

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RJ LeeGroup , Inc. Columbia Basin Analytical Laboratories 2710 North 20th Avenue, Pasco, WA 93301 Tel: (509) 792-1955 1 Fax: (509) 792-1934

W305183

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# RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories

2710 North 20th Avenue, Pasco WA 99301

Tel: (509) 792-1955 | Fax: (509) 792-1934

WA State Penitentiary 1313 N 13th Avenue Walla Walla, WA 99362 SDG Number:

06/06/23

Contract: 310PO2315942

# Subject: Chemical Analysis Report:

Columbia Basin Analytical Laboratories received 8 sample(s) on 05/24/23 for analysis. These sample(s) have been assigned a login order number of W305194. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody. If provided by customer on COC, sample volume is recorded on the laboratory report and has been used to calculate final results.

## **General Lab Comments**

The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. Results included in the report apply to the sample as it was received. Information provided by customer can affect validity of results. The sample(s) were prepared and analyzed in compliance with EPA 6020B and EPA 7196A accordingly. This test report shall not be reproduced, except in full, without written approval of Columbia BasinAnalytical Laboratories. Any questions, please contact our office.

Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature.

06/06/23

Chemist I Sam Sears

If you have any questions please feel free to contact Sam Sears at SSears@rjleegroup.com or 509-792-1955.

This report has been reviewed and approved by the following individual:

Fuelon

06/06/23

Project Manager JJ Furlong

# ORJ LEE GROUP

Dean Smith WA State Penitentia		aboratory Repo	ort Samp	RJ Lee Group	No.: W305194 COC No: 05/24/23 13:33
1313 N 13th Avenu Walla Walla, WA 99 Client Project: Chro	9362		Analys	is/Prep Date: Report Date:	05/24/23 15:30 06/06/23 17:25
Sample Name: RJ Lee Grp. ID:	MW-3 W305194-01	Batch No: 1 Matrix: Non-Potable		Sampled: Analyzed:	05/24/23 09:05 05/24/23 15:30
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	L, U
Sample Name: RJ Lee Grp. ID:	MW-3 W305194-02	Batch No: 1 Matrix: Non-Potable		Sampled: Analyzed:	05/24/23 09:05 06/05/23 14:15
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	2.24	1.00	1	SOLUTION IN
Manganese	EPA 6020B	* 6.08	1.00	1	
Sample Name: RJ Lee Grp. ID:	MW-14 W305194-03	Batch No: ] Matrix: Non-Potable		Sampled: Analyzed:	05/24/23 09:40 05/24/23 15:30
Analyte	Method	Result (µg/L)	PQL (μg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	L, U
Sample Name: RJ Lee Grp. ID:	MW-14 W305194-04	Batch No: 1 Matrix: Non-Potable		Sampled: Analyzed:	05/24/23 09:40 06/05/23 14:21
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	1.47	1.00	1	
Manganese	EPA 6020B	2.30	1.00	1	
Sample Name: RJ Lee Grp. ID:	MW-9 W305194-05	Batch No: ] Matrix: Non-Potable		Sampled: Analyzed:	05/24/23 11:30 05/24/23 15:32
Analyte	Method	Result (µg/L)	PQL (μg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	L, U

# RJ LEE GROUP

Sample Name: RJ Lee Grp. ID:	MW-9 W305194-06	Batch No: Matrix: Non-Potal		Sampled: Analyzed:	05/24/23 11:30 06/05/23 14:25
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	15.24	1.00	1	
Manganese	EPA 6020B	765.2	2.00	2	D
Sample Name: RJ Lee Grp. ID:	MW-1A W305194-07	Batch No: Matrix: Non-Potal		Sampled: Analyzed:	05/24/23 12:30 05/24/23 15:32
Analyte	Method	Result (μg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Hexavalent Chromium	EPA 7196A	< 5.00	5.00	1	L, U
Sample Name: RJ Lee Grp. ID:	MW-1A W305194-08	Batch No: Matrix: Non-Pota		Sampled: Analyzed:	05/24/23 12:30 06/05/23 14:26
Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Chromium	EPA 6020B	1.10	1.00	1	
Manganese	EPA 6020B	2.07	1.00	1	



Dean Smith WA State Penitentiary

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**Quality Control** 

RJ Lee Group No.: W305194

COC No.:

Samples Received:

05/24/23 13:33

Analysis/Prep Date:

06/05/23 14:01

Report Date:

06/06/23 17:25

1313 N 13th Avenue
Walla Walla, WA 99362
Client Project: Chrome

Analyte	CAS NO.	QC Sample ID	Expected µg/L	Result µg/L	RPD	% REC	Recovery Limits	Qualifier & Comments
Chromium	7440-47-3	LRB	<1.00	<1.00				
Manganese	7439-96-5	LRB	<1.00	<1.00				
Chromium	7440-47-3	LCS	100.00	101.00		101	85 - 115	
Manganese	7439-96-5	LCS	100.00	102.00		102	85 - 115	
Chromium	7440-47-3	DUP	<1.00	1.56	16.5			W305183-06
Manganese	7439-96-5	DUP	<1.00	2.06	6.35			W305183-06
Chromium	7440-47-3	MRL	1.00	1.07		107	70 - 130	_ x
Manganese	7439-96-5	MRL	1.00	1.08		108	70 - 130	
Chromium	7440-47-3	MS	51.32	52.50		102	85 - 115	W305183-06
Manganese	7439-96-5	MS	52.20	52.40		100	85 - 115	W305183-06
Hexavalent Chromium	18540-29-9	LRB	< 5.00	<5.00				U
Hexavalent Chromium	18540-29-9	LCS	250.00	257.00		103	85 - 115	
Hexavalent Chromium	18540-29-9	RL	5.00	5.08		102	70 - 130	
Hexavalent Chromium	18540-29-9	MS	50.25	50.70		101	85 - 115	W305188-01
Hexavalent Chromium	18540-29-9	MSD	50.25	51.50	1.59	103	85 - 115	W305188-01

### Report Qualifiers:

- A = Target Analyte media breakthrough suspected
- C = Aroclor/pesticide confirmation by GC/MS
- E = The concentration indicated for this analyte is an estimatedValue above the calibration range of the instrument
- L = Sample condition at receipt out of compliance with defined method conditions
- R = RPD/RSD outside accepted recovery limits
- S = Spike Recovery outside accepted recovery limits
- V = Analyte detected at or above MRL on initial analysis, but below MRL on confirmation

- B = Analyte detected in the associated matrix blank
- D = Analyte analyzed in a dilution
- H = Sample holding time not met. Received outside of hold time.
- J = Detected but below the MRL. Result is an estimated concentration
- N = Specific analyte as a TIC
- P = Analyte detected at or above MRL on initial analysis. Analyte detected at greater than 40% RPD on confirmation
- U = Analyte analyzed for but not detected
- X = The result-specific translation of this qualifier code is provided in the hardcopy data report and/or case narrative.



### Chemist I Sam Sears

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under ORELAP Lab Code 4061 AIHA LAP, LLC Lab ID 178656 EPA ID WA01195 and WA DOE Lab ID C859. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid. Quality control data is available upon request.

Columbia Basin Analytical Laboratories | 2710 North 20th Avenue, Pasco WA 93301 | 509.792.1955



**End of Report** 

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W305194

RJ LeeGroup, Linc. Columbia Basin Analytical Laboratories 2710 North 20th Avenus. Essco, WA 99201 Tel: (509) 792-1935 | Fax: (509) 792-1934

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# PREPARED FOR

Attn: Dean Smith Washington State Dept of Corrections 1313 N 13th Ave - MS#37 Walla Walla, Washington 99362

**ANALYTICAL REPORT** 

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# JOB DESCRIPTION

Bi-Annual Monitoring - May

# JOB NUMBER

580-127560-1

**Eurofins Seattle** 5755 8th Street East Tacoma WA 98424



# **Eurofins Seattle**

# **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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**Authorization** 

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Authorized for release by Laura Schick, Project Manager Laura.Schick@et.eurofinsus.com (253)922-2310

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# **Case Narrative**

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Job ID: 580-127560-1

Job ID: 580-127560-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-127560-1

### Receipt

The samples were received on 5/24/2023 9:40 AM. The temperature of the cooler at receipt was 10.3° C.

The following samples were received at the laboratory outside the required temperature criteria of less than or equal to 6 degrees C: MW-5 (580-127560-1), MW-11 (580-127560-2) and MW-12 (580-127560-3). This did not meet regulatory requirements. The client was contacted and instructed the laboratory to proceed with the analyses.

### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## **General Chemistry**

Method 300.0: The following samples were prepared outside of preparation holding time due to being received when the Anions instrument was down. Client requested to proceed with the analysis: MW-5 (580-127560-1), MW-11 (580-127560-2) and MW-12 (580-127560-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **VOA Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Definitions/Glossary

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Job ID: 580-127560-1

2

# Qualifiers

## GC/MS VOA

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier Qualifier Description

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

# **General Chemistry**

Qualifier Qualifier Description

H Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

# Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
n	Listed under the "D" column to designate that the result is reported on a dry weight basis	- 00
0/=	D. I.B.	

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Seattle

# Client Sample Results

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Job ID: 580-127560-1

Client Sample ID: MW-5

Date Collected: 05/23/23 11:00 Date Received: 05/24/23 09:40 Lab Sample ID: 580-127560-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	0.90	J	1.0	0.41	ug/L			05/25/23 01:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Toluene-d8 (Surr)	98	7	80 - 120					05/25/23 01:26	- 1
4-Bromofluorobenzene (Surr)	93		80 - 120					05/25/23 01:26	1
Dibromofluoromethane (Surr)	106		80 - 120					05/25/23 01:26	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120					05/25/23 01:26	
Method: SW846 6010D - Me	etals (ICP) - To	al Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	8.1	J	20	1.7	ug/L		05/25/23 18:02	05/26/23 19:44	1
General Chemistry		4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	1.8	L	0.20	0.030	ma/l			05/26/23 12:55	-

# **Client Sample Results**

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May Job ID: 580-127560-1

9

Client Sample ID: MW-11

Lab Sample ID: 580-127560-2

Date Collected: 05/23/23 12:34 Date Received: 05/24/23 09:40 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	0.71	J	1.0	0.41	ug/L			05/25/23 01:50	
Surrogate	%Recovery	Qualifier	Limits	2			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120				7.00	05/25/23 01:50	
4-Bromofluorobenzene (Surr)	93		80 - 120					05/25/23 01:50	
Dibromofluoromethane (Surr)	107		80 - 120					05/25/23 01:50	9
1,2-Dichloroethane-d4 (Surr)	108		80 - 120					05/25/23 01:50	9
Method: SW846 6010D - Me	etals (ICP) - To	tal Recove	rable				10		
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	62		20	1.7	ug/L	-	05/25/23 18:02	05/26/23 19:47	3
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Nitrate as N (EPA 300.0)	24	H	1.0	0.15	mg/L			05/26/23 15:17	

# Client Sample Results

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Client Sample ID: MW-12

Date Collected: 05/23/23 13:46 Date Received: 05/24/23 09:40

Analyte

Nitrate as N (EPA 300.0)

Job ID: 580-127560-1

Lab Sample ID: 580-127560-3

Matrix: Water

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	ND	1	1.0	0.41	ug/L			05/25/23 02:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97	· · · · · · · · · · · · · · · · · · ·	80 - 120					05/25/23 02:14	1
4-Bromofluorobenzene (Surr)	94		80 - 120					05/25/23 02:14	1
Dibromofluoromethane (Surr)	110		80 - 120		36			05/25/23 02:14	1
1.2-Dichloroethane-d4 (Surr)	111	D 2.	80 - 120					05/25/23 02:14	1

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1,2-Dichloroethane-d4 (Surr)	111	80 - 120					05/25/23 02:14	1
1,2-Dichloroethane-d+ (Guir)	476							
Method: SW846 6010D - Me	tals (ICP) - Total Rec	coverable			8			
Analyte	Result Qualific		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND	20	1.7	ug/L		05/25/23 18:02	05/26/23 19:50	-1
General Chemistry		1200			-	-	Amalianad	Dil Foo

1.0

Result Qualifier

27 H

MDL Unit

0.15 mg/L

Prepared

Dil Fac

Analyzed

06/01/23 15:23

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Method: 8260D - Volatile	<b>Organic Compounds</b>	by GC/MS

Lab Sample ID: MB 580-426964/6

Matrix: Water

Analyte

Analysis Batch: 426964

Tetrachloroethene (PCE)

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Dil Fac Analyzed RL MDL Unit Prepared Result Qualifier 1.0 05/24/23 17:26 ND 0.41 ug/L

MB MB Dil Fac %Recovery Qualifier Limits Prepared Analyzed Surrogate 05/24/23 17:26 98 80 - 120 Toluene-d8 (Surr) 05/24/23 17:26 4-Bromofluorobenzene (Surr) 94 80 - 120 05/24/23 17:26 Dibromofluoromethane (Surr) 103 80 - 120 05/24/23 17:26 104 80 - 120 1,2-Dichloroethane-d4 (Surr)

Lab Sample ID: LCS 580-426964/7

Matrix: Water

Analysis Batch: 426964

%Rec Spike LCS LCS Limits Added Result Qualifier Unit D %Rec Analyte 10.0 9.93 ug/L 99 76-125 Tetrachloroethene (PCE)

LCS LCS %Recovery Qualifier Limits Surrogate 80 - 120 Toluene-d8 (Surr) 102 80 - 120 100 4-Bromofluorobenzene (Surr) 80 - 120 Dibromofluoromethane (Surr) 99 80 - 120 97 1,2-Dichloroethane-d4 (Surr)

Lab Sample ID: LCSD 580-426964/8

Matrix: Water

Analysis Batch: 426964

RPD %Rec LCSD LCSD Spike RPD Limit Limits Added Result Qualifier Unit %Rec Analyte 99 76 - 125 13 10.0 9.87 ug/L Tetrachloroethene (PCE)

LCSD LCSD Qualifier Limits Surrogate %Recovery 80 - 120 Toluene-d8 (Surr) 105 103 80 - 120 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr) 97 80 - 120 93 80 - 120 1,2-Dichloroethane-d4 (Surr)

# Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-427117/22-A

Matrix: Water

Analysis Batch: 427366

MB MB Prepared Analyzed Dil Fac RL MDL Unit Result Qualifier Analyte 20 05/25/23 18:02 05/26/23 17:37 1.7 ug/L ND Manganese

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 427117

# Method: 6010D - Metals (ICP) (Continued)

ab Sample ID: LCS 580-427117/23-A			Client Sample ID: Lab Control Sampl					
Matrix: Water			F	rep Ty	pe: Total Re	coverable		
Analysis Batch: 427366							Prep Bate	ch: 427117
170	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Manganese	1000	1060		ug/l		106	80 - 120	

			-3					
		(	Client Sa					
				r	rep ly			
							atch: 4	
Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1000	1030		ug/L		103	80 - 120	3	20
		Added Result	Spike LCSD LCSD Added Result Qualifier	Client Sa Spike LCSD LCSD Added Result Qualifier Unit	Client Sample F Spike LCSD LCSD Added Result Qualifier Unit D	Client Sample ID: Lab Prep Ty Spike LCSD LCSD Added Result Qualifier Unit D %Rec	Client Sample ID: Lab Control Prep Type: Total Prep Ba Spike LCSD LCSD %Rec Added Result Qualifier Unit D %Rec Limits	Added Result Qualifier Unit D %Rec Limits RPD

Analysis Batch: 427374

Analyte

Nitrate as N

b Sample ID: MB 580-4273	74/3							Clie	ent Sam	ple ID: Me		
trix: Water										Prep Typ	e: Tot	al/NA
alysis Batch: 427374												
		MB I										
llyte	Re	months and	Qualifier		177000	MDL Unit		D P	repared	Analyz		Dil Fa
afe as N		ND			0.20	0.030 mg/L				05/25/23 1	16:43	
Sample ID: LCS 580-4273	374/4						Clie	ent Sa	mple ID	: Lab Con	trol Sa	ample
trix: Water										Prep Typ	e: Tot	al/NA
I I M . I IOMOMI												
alysis Batch: 427374				Company of the Control of the Contro	1.00	LCS				%Rec		
alysis Batch: 427374				Spike	LUS	LUU				70 Kec		
alysis Batch: 427374				Added		Qualifier	Unit	D	%Rec	Limits		
		o <del></del>		E-18 (1000)		Qualifier	Unit mg/L	<u>D</u>	%Rec 99	3000000 T		
alyte as N	7374/5	o <del>.              </del>		Added	Result	Qualifier	mg/L		99	<b>Limits</b> 90 - 110	Sample	e Dup
lyte	7374/5	c <del></del>		Added	Result	Qualifier	mg/L		99	Limits 90 - 110 Control S		
olyte ate as N o Sample ID: LCSD 580-427 trix: Water	7374/5			Added	Result	Qualifier	mg/L		99	<b>Limits</b> 90 - 110		
olyte ate as N o Sample ID: LCSD 580-427	7374/5			5.00	Result 4.93	Qualifier	mg/L		99	Limits 90 - 110 Control S		al/NA
olyte ate as N o Sample ID: LCSD 580-427 trix: Water	7374/5			Added	Result 4.93	Qualifier	mg/L		99	Limits 90 - 110 Control S Prep Typ		
o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374	7374/5			Added 5.00 Spike	Result 4.93	Qualifier	mg/L	ample	99 ID: Lab	Limits 90 - 110 Control S Prep Typ	e: Tot	al/NA RPC Limi
o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374				5.00 Spike Added	Result 4.93 LCSD Result	Qualifier	mg/L Client Sa	ample	99 ID: Lab	Limits 90 - 110 Control S Prep Typ %Rec Limits 90 - 110	RPD 0	RPE Limi
o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374				5.00 Spike Added	Result 4.93 LCSD Result	Qualifier	mg/L Client Sa	ample	99 ID: Lab	Limits 90 - 110 Control S Prep Typ %Rec Limits 90 - 110	RPD 0	RPE Limi 15
olyte ate as N o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374 lyte ate as N o Sample ID: 580-127560-1 trix: Water				5.00 Spike Added	Result 4.93 LCSD Result	Qualifier	mg/L Client Sa	ample	99 ID: Lab	Limits 90 - 110 Control S Prep Typ %Rec Limits 90 - 110	RPD 0	RPE Limi 15
o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374 llyte ate as N		Samr	ole	5.00 Spike Added	LCSD Result 4.91	Qualifier	mg/L Client Sa	ample	99 ID: Lab	Limits 90 - 110 Control S Prep Typ %Rec Limits 90 - 110	RPD 0	RPE Limi 15
olyte ate as N o Sample ID: LCSD 580-427 trix: Water alysis Batch: 427374 lyte ate as N o Sample ID: 580-127560-1 trix: Water	MS	-		Spike Added 5.00	LCSD Result 4.91	Qualifier  Cualifier  LCSD  Qualifier	mg/L Client Sa	ample	99 ID: Lab  **Rec 98 CI	Limits 90 - 110 Control S Prep Typ  %Rec Limits 90 - 110 ient Samp Prep Typ	RPD 0	RPE Limi 15

	fin	- 0		
=u	niioi	5 0	eattle	3

RPD

%Rec

Limits

90 - 110

D %Rec

98

Spike

Added

5.00

Sample Sample

1.8 H

Result Qualifier

MSD MSD

6.66

Result Qualifier Unit

mg/L

RPD

Limit

# QC Sample Results

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Job ID: 580-127560-1

Client Sample ID: Method Blank



Method: 300	0 - Anions,	lon	Chromatography	(Continued)
		_		

Lab Sample ID: MB 580-427897/3

Matrix: Water

Lab Sample ID: LCS 580-427897/4

Analysis Batch: 427897

Analysis Batch: 427897

Nitrate as N

Matrix: Water

MB MB

Analyte

Result Qualifier ND

RL 0.20

Spike

Added

5.00

MDL Unit 0.030 mg/L

LCS LCS

5.06

Result Qualifier

Unit

mg/L

Prepared

Dil Fac Analyzed 06/01/23 14:48

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Prep Type: Total/NA

%Rec

D %Rec

101

Nitrate as N Lab Sample ID: LCSD 580-427897/5

Matrix: Water Analysis Batch: 427897

Client Sample ID: Lab Control Sample Dup

Limits

90 - 110

Prep Type: Total/NA

# Lab Chronicle

Dilution

Run

Factor

1

1

5

Batch

Number Analyst

426964 ITR

427117 TMH

427366 JLS

427374 CA

427374 CA

Lab

**EET SEA** 

**EET SEA** 

**EET SEA** 

**EET SEA** 

EET SEA

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Batch

Type

Prep

Analysis

Analysis

Analysis

Analysis

Batch

Method

8260D

3005A

6010D

300.0

300.0

Client Sample ID: MW-5

Prep Type

Total Recoverable

Total Recoverable

Total/NA

Total/NA

Total/NA

Date Collected: 05/23/23 11:00 Date Received: 05/24/23 09:40

Client Sample ID: MW-11

Date Collected: 05/23/23 12:34 Date Received: 05/24/23 09:40

Job ID: 580-127560-1

Matrix: Water

Lab Sample ID: 580-127560-2 Matrix: Water

Lab Sample ID: 580-127560-1

Prepared

or Analyzed

05/25/23 01:26

05/25/23 18:02

05/26/23 19:44

05/26/23 12:55

05/26/23 15:17

Prepared Dilution Batch Batch ·Batch or Analyzed Factor Number Analyst Lab Method Run Туре **Prep Type** 05/25/23 01:50 426964 ITR EET SEA 8260D 1 Total/NA Analysis 05/25/23 18:02 427117 TMH **EET SEA** Prep 3005A Total Recoverable 1 427366 JLS **EET SEA** 05/26/23 19:47 Total Recoverable Analysis 6010D

Client Sample ID: MW-12

Date Collected: 05/23/23 13:46 Date Received: 05/24/23 09:40 Lab Sample ID: 580-127560-3

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	426964	ITR	EET SEA	05/25/23 02:14
Total Recoverable	Prep	3005A			427117	TMH	EET SEA	05/25/23 18:02
Total Recoverable	Analysis	6010D		1	427366	JLS	EET SEA	05/26/23 19:50
Total/NA	Analysis	300.0		5	427897	CA	EET SEA	06/01/23 15:23

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# **Accreditation/Certification Summary**

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which

**Identification Number** 

C788

Analyte

Nitrate as N

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Matrix

Water

Program

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Laboratory: Eurofins Seattle

the agency does not offer certification.

Prep Method

Authority

Washington

300.0

Analysis Method

Job ID: 580-127560-1

**Expiration Date** 07-13-23



### Sample Summary

Matrix

Water

Water

Water

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring - May

Client Sample ID

MW-5

MW-11

MW-12

Lab Sample ID

580-127560-1

580-127560-2

580-127560-3

Job ID: 580-127560-1

Received

05/23/23 11:00 05/24/23 09:40

05/23/23 12:34 05/24/23 09:40

05/23/23 13:46 05/24/23 09:40

Collected

1

6

3

4

5

6

8

9

10

### **Eurofins Seattle**

5755 8th Street East Tacoma, WA 98424 Phone (253) 922-2310

## **Chain of Custody Record**

 eu	ro	TI	ns	

Environment Testing

Client Information	Sampler: D	SMF	-11+	Lab I Sch	PM: ick, La	ıura						Carrier	Trackin	g No(s)	c T	545 TATE 180	COC No: 580-55682-	17316.1
Client Contact: Dean Smith	Phone: 50 9	384	0388	E-Ma Lau		ick@e	et.eu	rofinsu	s.com	i		State of	Origin:			•	Page: Page 1 of 1	V - 1110 (011) - 1110 (111)
Company: Washington State Dept of Corrections			PWSID:		T				Ana	lysis	Rea	uesta	h	377		Political de la Company de	Job#:	*
Address: 1313 N 13th Ave - MS#37	Due Date Requeste	ed:						П		T			T	015			Preservation	
Sity: Valla Walla	TAT Requested (di	ays):	THE STATE OF THE S	*								,					A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
tate, Zip: VA, 99362	Compliance Project	t: A Yes	Δ No										1			300	D - Nitric Acid E - NaHSO4	Q - Na2SQ3
hone:	PO#: Purchase Order	Requester	d	and the consequence				2									F - MeOH G - Amchlor H - Ascorbic A	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrat
mall: ean.smith@doc.wa.gov	WO #:		OT O TOTAL OF STREET,	W-111-25-210	No.			E) only									I - Ice J - DI Water	U - Acetone V - MCAA
roject Name: Bi-Annual Monitoring - May	Project #:		TO SECURITION OF THE SECURITIO	************	Yes or A			ie (PCE)								S S	K - EDTA L - EDA	W - pH 4-5 Y - Trizma
le:	58019384 \$SOW#:		*		Sample (Yes or No SD (Yes or No)	e only	se only	roethen								fconta	Other:	Z - other (specify)
		Sample	Type (w (C=comp, o=v	atrix *water, =solid, reste/oil,	Hd Filtered S rform MSMS	t - Nitr	6010D - Manganese only	8260D • Tetrachloroethene								Total Number of		400000000000000000000000000000000000000
ample Identification	Sample Date	Time	G=grab) BT=TB Preservation I	Tode				85 A			de Silvani			MSH	- 1 1869 2	2	Speci	al Instructions/Note:
MW-5	5-23-23	1100	MERCHANIST BURNING HOLDER	/ater	$\rightarrow$	X		4		525				10/2000		+	STATE OF THE PARTY	
Mu - II	5-23-27	1234	l w	ater	+		,	+	+	+ +		$\dashv$			$\dashv$			
MW-5 MW-11 MW-12	5-23-23	1346	l w	ater	十	7	4	7	1	+	$\dashv$	+	1	$\Box$	$\dashv$			- Professional Company
			N	ater	$\top$				7		$\Box$	$\top$	1.		$\dashv$			
		T-AVUIL A	W W	ater	$\top$				1						7			
			W	ater														TI TI
			w	ater														
			W	ater													-10 - 2-mag	
			v	ater														
													T					
ossible Hazard Identification  Non-Hazard Flammable Skin Irrita.	nt Poison B Unkno	wn 🗆 p	Radiological		Sai	mple i	Disp turn	osal ( . To Clie	A fee	may b	e ass	sessed soosal	if Bv	 58	0-12	7560	Chain of Cus	tody
eliverable Requested: I, II, III, IV, Other (specify)	The second secon		THE RESERVE THE PERSON NAMED IN COLUMN	M				ctions/						- Anna Anna	~~,~,~,			
mpty Kit Relinquished by:	1	Date: 5	-23-2083	T	Time:	15	20	, ·			(130 <del>20</del> -149 <del>40</del> )	Met	hod of S	Shipme	nt:	NOTE THE BOOK	·	
linquished by: DSMITH	Date/Time:		Compa &	ny		Recei	ed by	DU	10	1	100	- A STATE OF THE PERSON NAMED IN	MATS AND	Date/T	me:	h-	194	Company )
linquished by:	5 - 23 - 23 Date/Time:		Compa			Recei	en by	art.	4	-				Date/Fi	me:	G.	0-17	Company
linquished by:	Date/Time:		Compa	ny		Receiv	ed by:				-			Date/Ti	me:			Company
Custody Seals Intact: Custody Seal No.:																		

SP/BILA/Gel/()K)DA

### Login Sample Receipt Checklist

Client: Washington State Dept of Corrections

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

Sample containers have legible labels.

Sample collection date/times are provided.

Appropriate sample containers are used.

Containers are not broken or leaking.

Sample bottles are completely filled.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Sample Preservation Verified.

Residual Chlorine Checked.

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Login Number: 127560 List Number: 1

Creator: Presley, Kim A

HTs)

MS/MSDs

<6mm (1/4").

Job Number: 580-127560-1

List Source: Eurofins Seattle

155	αŃ	ı	Ė	st	
	342				
g.	à				
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к	w,				

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	

True

True

True True

True

True

True

True

True

True

True

True

True

True

N/A



May 24 May 29 Ma

## PREPARED FOR

Attn: Dean Smith Washington State Dept of Corrections 1313 N 13th Ave - MS#37 Walla Walla, Washington 99362 Generated 6/5/2023 5:34:52 PM

**ANALYTICAL REPORT** 

## JOB DESCRIPTION

Bi-Annual Monitoring-May

## JOB NUMBER

580-127628-1

**Eurofins Seattle** 5755 8th Street East Tacoma WA 98424

## **Eurofins Seattle**

### **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

**Authorization** 

Generated 6/5/2023 5:34:52 PM

Authorized for release by Laura Schick, Project Manager

Laura.Schick@et.eurofinsus.com (253)922-2310

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QC Sample Results	10
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Receipt Checklists	













### Case Narrative

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1





Job ID: 580-127628-1

Laboratory: Eurofins Seattle

Narrative

**Job Narrative** 580-127628-1

### Receipt

The samples were received on 5/25/2023 9:40 AM. The temperature of the cooler at receipt was 9.1° C.

### Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria of less than or equal to 6 degrees C: MW-3 (580-127628-1), MW-9 (580-127628-2), MW-14 (580-127628-3) and MW-1A (580-127628-4). This did not meet regulatory requirements. The temperature blank A3 was 9.1/9.1 and the sample containers temp with IR10 was 7.9/8.1. The client was contacted and instructed the laboratory to proceed with the analyses.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-14 (580-127628-3). The container label listed 10:07 for sample time collected, while the COC listed 09:40 for sample time collected. The client instructed the laboratory to use the sample collection time listed on the container label.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### **General Chemistry**

Method 300.0: The following sample was analyzed outside of holding time due to being received while instrument was down. Client requested to proceed with analysis. : MW-3 (580-127628-1).

Method 300.0: Reanalysis of the following sample was performed outside of the analytical holding time due to requiring a dilution. Original sample was analyzed within holding time but the result exceeded the high end of the instrument calibration curve. Results concurred therefore both sets of data have been reported: MW-14 (580-127628-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Definitions/Glossary

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May Job ID: 580-127628-1

### Qualifiers

### Metals

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### **General Chemistry**

Qualifier Qualifier Description

H Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

3

3

4

5

(;)

9

9

And

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

Client Sample ID: MW-3

Date Collected: 05/24/23 09:05 Date Received: 05/25/23 09:40

Lab Sample ID: 580-127628-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	ND		1.0	0.41	ug/L			05/27/23 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97	( <del></del>	80 - 120					05/27/23 00:32	1
4-Bromofluorobenzene (Surr)	102		80 - 120					05/27/23 00:32	1
Dibromofluoromethane (Surr)	101		80 - 120					05/27/23 00:32	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					05/27/23 00:32	1
Method: SW846 6010D - Me	etals (ICP) - To	tal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		20	1.7	ug/L		05/30/23 16:58	05/31/23 20:13	-
General Chemistry		K						2	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	26	H	2.0	0.30	mg/L			05/26/23 12:43	10

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

2

Lab Sample ID: 580-127628-2

Client Sample ID: MW-9
Date Collected: 05/24/23 11:30
Date Received: 05/25/23 09:40

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	ND	1	1.0	0.41	ug/L			05/27/23 00:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120					05/27/23 00:56	
4-Bromofluorobenzene (Surr)	95		80 - 120					05/27/23 00:56	ara e
Dibromofluoromethane (Surr)	104		80 - 120					05/27/23 00:56	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120					05/27/23 00:56	
Method: SW846 6010D - Me	etals (ICP) - To	tal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	180	1	20	1.7	ug/L		05/30/23 16:58	05/31/23 20:16	
General Chemistry									12752 227
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Nitrate as N (EPA 300.0)	10		0.20	0.030	mg/L			05/26/23 10:07	=

Client: Washington State Dept of Corrections

Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

Lab Sample ID: 580-127628-3

05/26/23 10:31

10

Matrix: Water

Clie	nt Sample ID: MW-14
Date	Collected: 05/24/23 10:07
Date	Received: 05/25/23 09:40

Nitrate as N (EPA 300.0)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	ND		1.0	0.41	ug/L			05/27/23 01:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120					05/27/23 01:20	1
4-Bromofluorobenzene (Surr)	97		80 - 120					05/27/23 01:20	1
Dibromofluoromethane (Surr)	105		80 - 120					05/27/23 01:20	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120					05/27/23 01:20	1
Method: SW846 6010D - Me	etals (ICP) - To	tal Recove	rable						*
Analyte	Result	Qualifier	ŔL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	5.2	J	20	1.7	ug/L		05/30/23 16:58	05/31/23 20:20	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N (EPA 300.0)	24		0.20	0.030	ma/L			05/26/23 09:36	1

2.0

25 H

0.30 mg/L

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

Lab Sample ID: 580-127628-4

Matrix: Water

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.44		173
1	Dil Fac	
:44	1	W A
:44	1	
:44	1	(0)
:44	1	(0)
:23	Dil Fac	9
i :42	Dil Fac	

Client Sample ID: MW-1A Date Collected: 05/24/23 12:30

Date Received: 05/25/23 09:40 Method: SW846 8260D - Volatile Organic Compounds by GC/MS

MDL Unit D Analyzed Dil Fac Prepared Result Qualifier Analyte 05/27/23 01:44 1.0 0.41 ug/L Tetrachloroethene (PCE) ND Analyzed Limits Prepared Surrogate %Recovery Qualifier 05/27/23 01. 80 - 120 99 Toluene-d8 (Surr) 05/27/23 01. 95 80 - 120 4-Bromofluorobenzene (Surr) 05/27/23 01 80 - 120 102 Dibromofluoromethane (Surr) 05/27/23 01 1,2-Dichloroethane-d4 (Surr) 80 - 120 98 Method: SW846 6010D - Metals (ICP) - Total Recoverable D Prepared Analyzed Result Qualifier RL MDL Unit Analyte 05/30/23 16:58 05/31/23 20 ND 20 1.7 ug/L Manganese **General Chemistry** Analyzed Result Qualifier RL MDL Unit D Prepared Analyte 05/26/23 10: 2.0 26 0.30 mg/L Nitrate as N (EPA 300.0)

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Method: 8260D - Volatile Organic Compounds by GC/MS

Client Sample ID: Method Blank Prep Type: Total/NA

Lab Sample ID: MB 580-427262/6 Matrix: Water Analysis Batch: 427262

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	ND		1.0	0.41	ug/L			05/26/23 19:21	1

	MB MB				et.	
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97	80 - 120			05/26/23 19:21	1
4-Bromofluorobenzene (Surr)	98	80 - 120	16		05/26/23 19:21	1
Dibromofluoromethane (Surr)	104	80 - 120			05/26/23 19:21	1
1,2-Dichloroethane-d4 (Surr)	104	80 - 120			05/26/23 19:21	1

Lab Sample ID: LCS 580-427262/7

Matrix: Water

Analysis Batch: 427262

Client Sample ID	: Lab Control Sample
	Prep Type: Total/NA



%Rec Spike LCS LCS Limits Added Result Qualifier Unit %Rec Analyte 76 - 125 95 10.0 9.54 ug/L Tetrachloroethene (PCE)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	92		80 - 120
1,2-Dichloroethane-d4 (Surr)	92		80 - 120

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Water

Analysis Batch: 427262

Lab Sample ID: LCSD 580-427262/8

· ·	Spike	LCSD	LCSD		- 40		%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Tetrachloroethene (PCE)	10.0	9.81		ug/L		98	76 - 125	3	13

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	95		80 - 120

## Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-427404/22-A

Matrix: Water

Analysis Batch: 427605

Client Sa	ample ID: Method Blank
Prep 1	Type: Total Recoverable
	Prep Batch: 427404

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		20	1.7	ug/L	erines (e.d)	05/30/23 16:58	05/31/23 19:36	1

## QC Sample Results

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

Client Sample ID: Lab Control Sample

95

98

Prep Type: Total Recoverable

%Rec

Limits

80 - 120

80 - 120

Client Sample ID: Method Blank





6



Lab Sample ID: LCS 580-427404/23-A

Matrix: Water

Analysis Batch: 427605

Analysis Batch: 427605

Lab Sample ID: LCSD 580-427404/24-A

Spike Analyte Manganese

LCS LCS Added 1000

Spike

Added

1000

Result Qualifier 948

LCSD LCSD

975

Result Qualifier

Unit %Rec ug/L

> D %Rec

Unit

ug/L

Client Sample ID: Lab Control Sample Dup Prep Type: Total Recoverable

Prep Batch: 427404 %Rec Limits

Prep Batch: 427404

RPD RPD Limit 3 20



Lab Sample ID: MB 580-427374/3

Matrix: Water

Matrix: Water

Analyte

Manganese

Analysis Batch: 427374

MB MB

Analyte Result Qualifier ND Nitrate as N

0.20

Spike

Added

5.00

RL

MDL Unit 0.030 mg/L

LCS LCS

LCSD LCSD

4.91

Result Qualifier

Unit

mg/L

4.93

D

Prepared

Analyzed Dil Fac 05/25/23 16:43

Prep Type: Total/NA

Lab Sample ID: LCS 580-427374/4

Matrix: Water

Nitrate as N

Analysis Batch: 427374

Analyte

Lab Sample ID: LCSD 580-427374/5 Matrix: Water

Analysis Batch: 427374

Spike Added Analyte Nitrate as N 5.00 Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec

90 - 110

Result Qualifier Unit %Rec Limits D 90 - 110 mg/L

Client Sample ID: Lab Control Sample Dup

98

Prep Type: Total/NA

%Rec RPD Limits RPD Limit %Rec

0

15

### Lab Chronicle

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

2

Lab Sample ID: 580-127628-1

Matrix: Water

4

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	427262	JBT	EET SEA	05/27/23 00:32
Total Recoverable	Prep	3005A			427404	TMH	EET SEA	05/30/23 16:58
Total Recoverable	Analysis	6010D		1	427605	JLS	EET SEA	05/31/23 20:13
Total/NA	Analysis	300.0		10	427374	CA	EET SEA	05/26/23 12:43

6

Lab Sample ID: 580-127628-2 Matrix: Water 8

Client Sample ID: MW-9 Date Collected: 05/24/23 11:30 Date Received: 05/25/23 09:40

Client Sample ID: MW-3

Date Collected: 05/24/23 09:05 Date Received: 05/25/23 09:40

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	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D	and the second s	1	427262	JBT	EET SEA	05/27/23 00:56
Total Recoverable	Prep	3005A	÷		427404	TMH	EET SEA	05/30/23 16:58
Total Recoverable	Analysis	6010D		1	427605	JLS	EET SEA	05/31/23 20:16
Total/NA	Analysis	300.0		1	427374	CA	EET SEA	05/26/23 10:07

1(1)

Client Sample ID: MW-14
Date Collected: 05/24/23 10:07
Date Received: 05/25/23 09:40

Lab Sample ID: 580-127628-3

Matrix: Water

red lyzed

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D	A Vanishmen		427262	JBT	EET SEA	05/27/23 01:20
Total Recoverable	Prep	3005A			427404	TMH	EET SEA	05/30/23 16:58
Total Recoverable	Analysis	6010D		1	427605	JLS	EET SEA	05/31/23 20:20
Total/NA	Analysis	300.0		1	427374	CA	EET SEA	05/26/23 09:36
Total/NA	Analysis	300.0		10	427374	CA	EET SEA	05/26/23 10:31

Client Sample ID: MW-1A Date Collected: 05/24/23 12:30 Lab Sample ID: 580-127628-4

Matrix: Water

Date Received: 05/25/23 09:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8260D		1	427262	JBT	EET SEA	05/27/23 01:44
Total Recoverable	Prep	3005A			427404	TMH	EET SEA	05/30/23 16:58
Total Recoverable	Analysis	6010D		1	427605	JLS	EET SEA	05/31/23 20:23
Total/NA	Analysis	300.0		10	427374	CA	EET SEA	05/26/23 10:42

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

## **Accreditation/Certification Summary**

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Job ID: 580-127628-1

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date	
Washington	St	ate	C788	07-13-23	
			20 4V 4 5 5 6 8 80 8		2 13 1
The following analytes the agency does not on		ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes	for which
		ort, but the laboratory is r Matrix	not certified by the governing authority.  Analyte	This list may include analytes	for which

### Sample Summary

Matrix

Water

Water

Water Water Collected

05/24/23 09:05 05/25/23 09:40

05/24/23 11:30 05/25/23 09:40

05/24/23 10:07 05/25/23 09:40

05/24/23 12:30 05/25/23 09:40

Received

Client: Washington State Dept of Corrections Project/Site: Bi-Annual Monitoring-May

Client Sample ID

MW-3

MW-9

MW-14

MW-1A

Lab Sample ID

580-127628-1

580-127628-2

580-127628-3

580-127628-4

Job ID: 580-127628-1

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### **Eurofins Seattle**

5755 8th Street East Tacoma, WA 98424

## Chain of Custody Record

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4 8	eurofins	

Environment Testing

Client Information	Sampler: D. SA	nITH	Lab PM: Schick	Laura				Carrier T	racking No(s	i,	COC No: 580-55682-17	316.1
Client Contact: Dean Smith	Phone: 509 38	36 0388	E-Mail: Laura.	Schick@	et.eurofir	nsus.com		State of 0	Origin;		Page: Page 1 of 1	
Company: Washington State Depit of Corrections		PWSID:			and the standard from the standard and stand	Ana	vsis Re	queste	d	W.M. akap	Jab#:	
Address: 1313 N 13th Ave - MS#37	Due Date Requested:			Addr 18	TT	TT		17	TT		Preservation C	
Dity: Walla Walla	TAT Requested (days):	A(0) 19									A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
State. Zip: NA, 99362	Compliance Project:	Δ Yes Δ No									D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3
Phone:	PO#: Purchase Order Red	quested									F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate
mall: dean.smith@doc.wa.gov	WO #:	Post of the second seco	or No		CE) only						H - Ascorbic Acid I - Ice J - DI Water	U - Acetone V - MCAA
Project Name: Bi-Annual Monitoring - May	Project #: 58019384	7****	Cyes Cyes	8	ne (PC						K - EDTA L - EDA	W - pH 4-5 Y - Trizma Z - other (specify)
Site:	ssow#:		eduk	D (%)	se only roether						Other:	2 - other (specify)
Sample Identification		Sample Type (C=comp,	Matrix ,(Wawater, Sasolid, Oewaste/oll.	Pertorn MS/MSC 300_48HR - Nitrate	6010D - Manganese only 8260D - Tetrachloroethene (PCE)							
sample identification	Sample Date 7	Fime G=grab) BT	n Code:	X N	2 2 Q						Special I	nstructions/Note:
MW-3	5-24-23 09	705	Water	X	XX	10100 X020		C SISSES SCIEN				
MW-9	5-24-23 11.		Water	×	4 1							
MW-3 MW-9 MW-14	5-24-23 09		Water	×	11					. 8		
MW-IA	5-24-23 12		Water	1	イイ							TOTAL PROPERTY.
			Water						: 4			· · · · · · · · · · · · · · · · · · ·
			Water									The state of the s
			Water				BEN 1138 61 111	   #   #   #   #  #	(			*
(4)			Water									
			Water							# A		1 1 Commonwell
					580-1	27628 C	hain of (	Dustody				•
ossible Hazard Identification Non-Hazard Flammable Skin Irritan eliverable Requested: I, II, III, IV, Other (specify)	t Poison B Unknown	Radiological		$\sqcup_{R_{\epsilon}}$	eturn To	I ( A fee i Client ns/QC Re		Disposal E	if sample: ly Lab	are retain	ed longer than 1 hive For	month) Months
	IDate			era ya eta era era era era era era era era era er		15/QC Ne	quiterner		od of Shipme	ati	The second secon	The state of the s
Inquished by: D SMITTH	Date/Time: 5 - 24 - 23	5-24-20	pany cu-5/		ved by:	11 /	7	lineum				Company
linguished by:	5-24-23 Date/Time:		npany	Recei	ved by:	hose	100		5 Date/	25/23	09400	Company
linquished by:	Date/Time:	Cor	прапу	Receiv	red by:		112-115-		Date/T	me:		Company
Custody Seals Intact: Custody Seal No.:				Cooler	Temperatu	ıre(s) °C an	d Other Re	narks:	91	19.1	Nice in the state	
	······································		Page 15	- Indian	-		17	7212:	antiqualità i 🕈	8.1		Ver: 01/16/2019 6

Ver: 01/16/2019 6/5/2023

## Login Sample Receipt Checklist

Client: Washington State Dept of Corrections

Job Number: 580-127628-1

Login Number: 127628

List Number: 1

Creator: Prigge Madison

List Source: Eurofins Seattle

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Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	· · · · · · · · · · · · · · · · · · ·
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Refer to Job Narrative for details.
Cooler Temperature is recorded.	True	x a
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	