

RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories

2710 North 20th Avenue, Pasco WA 99301 Tel: (509) 545-4989 | Fax: (509) 544-6010

CH2M Hill Plateau Remediation Company - C01282F 825 Jadwin Avenue Richland, WA 99352

01/13/21

Contract: 74392

### Subject: Chemical Analysis Report, SDG Number: RJLG20C0210

Columbia Basin Analytical Laboratories received 1 sample(s) on 12/16/20 for analysis. These sample(s) have been assigned a login order number of W012136, SDG number RJLG20C0210. 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 300.0. The working analytical concentration for samples prepared by this method is a 2x dilution of the digestate. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratories. Any questions, please contact our office.

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all data deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this data package has been authorized by the Laboratory Director or a designee and the laboratory's client service representative as verified by their signatures on this report. This report has been technically reviewed by the following individual:

Krystin Tlinen

If Fuelor

12/21/20

01/13/21

Inorganics Manager Krystin Gilman

If you have any questions please feel free to contact Krystin Gilman at kgilman@rjleegroup.com or 509-545-4989.

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

Project Manager JJ Furlong

Report Template: Environmental A.rpt

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Approved: 12/21/20 15:26 Report Time Stamp: 01/13/21 08:42

(1 of 6)



Heather Medley RJ Lee Group No.: W012136

CH2M Hill Plateau Remediation

Company - C01282F

Laboratory Report

Samples Received: 12/16/20 08:28

825 Jadwin Avenue Analysis/Prep Date: 12/16/20 14:08

Richland, WA 99352
Client Project: Anions

Report Date: 01/13/21 08:42

Sample Name: B3VBF4 **Batch No:** Date Sampled: BL00070 12/15/20 13:56 RJ Lee Grp. ID: W012136-01 **Matrix:** Water Date Analyzed: 12/16/20 14:08 **Analyte** Method Result **PQL MDL Dilution Qualifiers** μg/mL μg/mL  $\mu g/mL$ **Factors** Chloride EPA 9056 3.06 0.06 0.03 2 D Nitrate as NO3-N EPA 9056 0.25 0.05 0.02 2 D Orthophosphate PO4-P EPA 9056 < 0.05 0.10 0.05 2 D, U Sulfate EPA 9056 44.3 0.75 0.38 5 D

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Heather Medley CH2M Hill Plateau Remediation Company -825 Jadwin Avenue Richland, WA 99352

Report Template: Environmental A.rpt

**Quality Control** 

ty Contro Water RJ Lee Group No.: W012136

SDG No.: RJLG20C0210

Samples Received: 12/16/20 08:28

Analysis/Prep Date: 12/16/20 11:11

Client Project: Anions Report Date: 01/13/21 08:42

Chefit I Toject.	7 HHOHS								Report Date:	01/13/21 08:42
Analyte	CAS NO.	QC Sample ID	Expected µg/mL	Result µg/mL	MDL μg/mL	PQL μg/mL	RPD	% REC	Recovery Limits	Qualifier & Comments
Chloride	16887-00-6	Blank	< 0.02	< 0.02	0.02	0.03				U BL00070
Nitrate as NO3-N	14797-55-8	Blank	< 0.01	< 0.01	0.01	0.02				U BL00070
Orthophosphate PO4-P	14265-44-2	Blank	< 0.03	< 0.03	0.03	0.05				U BL00070
Sulfate	14808-79-8	Blank	< 0.08	< 0.08	0.08	0.15				U BL00070
Chloride	16887-00-6	LCS	1.50	1.42	0.02	0.03		94.7	80 - 120	BL00070
Nitrate as NO3-N	14797-55-8	LCS	1.13	1.07	0.01	0.02		94.4	80 - 120	BL00070
Orthophosphate PO4-P	14265-44-2	LCS	2.45	2.32	0.03	0.05		94.6	80 - 120	BL00070
Sulfate	14808-79-8	LCS	7.50	7.10	0.08	0.15		94.7	80 - 120	BL00070
Chloride	16887-00-6	Matrix Spike	1.81	1.88	0.15	0.30		105	75 - 125	D BL00070, W012136-01
Nitrate as NO3-N	14797-55-8	Matrix Spike	1.26	1.24	0.02	0.05		98.8	75 - 125	D BL00070, W012136-01
Orthophosphate PO4-P	14265-44-2	Matrix Spike	2.44	2.40	0.05	0.10		98.0	75 - 125	D BL00070, W012136-01
Sulfate	14808-79-8	Matrix Spike	11.93	11.60	0.75	1.50		95.4	75 - 125	D BL00070, W012136-01
Chloride	16887-00-6	Matrix Spike Dup	1.81	1.77	0.15	0.30	6.20	97.3	75 - 125	D BL00070, W012136-01
Nitrate as NO3-N	14797-55-8	Matrix Spike Dup	1.26	1.24	0.02	0.05	0.64	98.1	75 - 125	D BL00070, W012136-01
Orthophosphate PO4-P	14265-44-2	Matrix Spike Dup	2.44	2.39	0.05	0.10	0.49	97.5	75 - 125	D BL00070, W012136-01
Sulfate	14808-79-8	Matrix Spike Dup	11.93	11.60	0.75	1.50	0.23	95.8	75 - 125	D BL00070, W012136-01

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Report Qualifiers:

- > = Result greater than quantifiable range or greater than upper limit of the analysis range
- B = Inorganics and Wetchem: The analyte was detected at a value <RDL, but ≥ IDL/MDL (as appropriate)

  Organics: The analyte was detected in both the associated QC blank and in the sample, and the blank concentration exceeded the customer's contractual requirements
- C = The analyte was detected in both the sample and the associated QC blank, and the sample concentration was <= 5X the blank concentration
- D = Analyte was reported at a secondary dilution factor
- $J = Organics: Estimated \ value; \ (1) \ constituent \ detected \ at \ a \ level < RDL \ or \ PQL \ and \ \geq MDL \ and \ estimated \ concentrations \ of \ TICs$
- o = All: The associated LCS recovery is outside control limits
- $N = Spike \ and/or \ spike \ duplicate \ sample \ recovery \ is \ outside \ control \ limits$
- U = Analyzed for but not detected above limiting criteria
- X or Y or Z = The result-specific translation of this qualifier code is provided in the hardcopy data report and/or case narrative. Additional result-specific translation information may also be found in the RESULT\_COMMENT field for this record.

Kupstin Telman

Inorganics Manager Krystin Gilman

Report Template: Environmental A.rpt

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.

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Report Time Stamp: 01/13/21 08:42

DATE/TIME	DISPOSED BY	DISPO			<b>ТНО</b> В	DISPOSAL METHOD	DISPOSITION
		16/2020 828	T.	0828 JL Perter OSPOR	-BEC 16 2020 082	MINI	CHPRC
e, Nitrogen in Nitrate, Sulfate}; hosphorus in phosphate};	SPECIAL INSTRUCTIONS TRVL-20-037 (1) 9056_ANIONS_IC: COMMON {Chloride, Nitrogen in Nitrate, Sulfate}; 9056_ANIONS_IC: COMMON (Add-on) {Phosphorus in phosphate};	15 2020 16 2020 16 2020 οφ50	DEC	SIGN/ PRINT NAMES RECEIVED BY/STORED IN SSU-1 Roy Shepard CHPRC RJ-1	1 5 2020	NOVED FROM	Roy Shepard
			<	DEC 15 7070 1354	WATER	N/A	98VBF4 <b>★</b>
\$			П	SAMPLE DATE SAMPLE TIME	MATRIX*	FILTERED	SAMPLE NO.
		ITONS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SAMPLE ANALYSIS	SPECIAL HANDLING AND/OR STORAGE N/A	CIAL HANDLIN	x=other SPEC
			125mL	VOLUME	20		W=Water WI=Wipe
			1	NO. OF CONTAINER(S)		3	SE=Sediment T=Tissue V=Vegetation
			G/P	TYPE OF CONTAINER			S=Soil
		vi	48 Hours	HOLDING TIME	Goods Regulations but are not releasable per DOE Order 458.1.	Goods Regulations DOE Order 458.1.	Solids Go L=Liquid DC
	509 # RUG 2000210		Cool <=6C	PRESERVATION	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous	OSSIBLE SAMPLE HAZARDS/ *Contains Radioactive Material at concentrations that are not be regarders apportation per 49 CFR/IATA D	m m X
	BILL OF LADING/AIR BILL NO.			OFFSLIE PROPERTY NO.	Lee	\$## 20 Ccc	GEL taboratories, LLC
METHOD OF SHIPMENT FEDERAL EXPRESS	PURCHASE ORDER/CHARGE CODE 300115	ACTUAL SAMPLE DEPTH $f$ +		HNF-N-645 4 - 47			CANKS-18/
ORIGINAL	<b>SAF NO.</b> F20-013	ost Development	ng FY19 - Po	PROJECT DESIGNATION  100-HR3 Well Installation sampling FY19 - Post Development		LOPMENT	C9721 POST DEVELOPMENT
REQUIRED TAT 30 Days	PROJECT COORDINATOR SUMNER, LC	<b>TELEPHONE NO.</b> 376-3922		SUMNER, LC	CHPRC		Cev. Collector
F20-013-004 PAGE 1 OF 1	DEICION ISAN	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	OF COST				

TRVL NUM = TRVL-20-037

A-6003-618 (REV 3)

Project: Anions

# January 13, 2021 WORK ORDER

Rev. 0 Printed: 12/17/2020 8:33:02AM

## W012136

### **RJ Lee Group Inc**

Client: CH2M Hill Plateau Remediation Company - C01282F

Project Manager: Krystin Gilman

Project Number: 74392

COC #: F20-013 PO #: 300115

CH2M Hill Plateau Remediation Company - C01282F

SDG Number: RJLG20C0210

Report To: <u>Invoice To:</u>

CH2M Hill Plateau Remediation Company - C01282F

Heather Medley Sample Management
825 Jadwin Avenue
Richland, WA 99352 Richland, WA 99352
Phone: (509) 373-6909 Phone: (509) 376-6427

Fax:

Date Due: 1/19/2021 (21 day TAT)

Received By: Lynn Porter Date Received: 12/16/20 08:28 Logged In By: Lynn Porter Date Logged In: 12/16/20 08:38

Samples Received at:
Custody Seals
Containers Intact
COC/Labels Agree
Preservation Confirmed
Received On Ice
Yes

2.9°C
Yes
Yes

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W012136-01	B3VBF4	Anions by EPA 300	Non-Potable Water	12/15/20 13:56	21	1/19/2021
	F20-013-004	Comments: 9056 ANIONS IC				