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

01/31/21
Contract: 74392

Subject: Chemical Analysis Report, SDG Number: RJLG21C0009

Columbia Basin Analytical Laboratories received 4 sample(s) on 01/06/21 for analysis. These sample(s) have been assigned a login order number of W101031, SDG number RJLG21C0009. 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:

01/15/21

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:

01/31/21

Project Manager JJ Furlong

RJ LEE GROUP

Heather Medley
CH2M Hill Plateau Remediation
Company - C01282F
825 Jadwin Avenue
Richland, WA 99352
Client Project: Anions

Laboratory Report

RJ Lee Group No.: W101031
SDG No: RJLG21C0009
Samples Received: 01/06/21 14:30
Analysis/Prep Date: 01/06/21 20:57
Report Date: 01/31/21 15:54

Sample Name: B3YLC3 **Batch No:** BA10025 **Date Sampled:** **01/06/21 06:45**
RJ Lee Grp. ID: W101031-01 **Matrix:** Water **Date Analyzed:** **01/06/21 20:57**

Analyte	Method	Result µg/mL	PQL µg/mL	MDL µg/mL	Dilution Factors	Qualifiers
Chloride	EPA 9056	< 0.03	0.06	0.03	2	U, D
Fluoride	EPA 9056	< 0.02	0.04	0.02	2	U, D
Nitrate as NO3-N	EPA 9056	< 0.02	0.05	0.02	2	U, D
Nitrite as NO2-N	EPA 9056	< 0.03	0.06	0.03	2	U, D
Sulfate	EPA 9056	< 0.15	0.30	0.15	2	U, D

Sample Name: B3YLC4 **Batch No:** BA10025 **Date Sampled:** **01/06/21 08:08**
RJ Lee Grp. ID: W101031-02 **Matrix:** Water **Date Analyzed:** **01/06/21 22:04**

Analyte	Method	Result µg/mL	PQL µg/mL	MDL µg/mL	Dilution Factors	Qualifiers
Chloride	EPA 9056	17.5	1.50	0.75	50	D
Fluoride	EPA 9056	0.30	0.04	0.02	2	D
Nitrate as NO3-N	EPA 9056	27.4	1.15	0.60	50	D
Nitrite as NO2-N	EPA 9056	< 0.03	0.06	0.03	2	U, D
Sulfate	EPA 9056	105	7.50	3.75	50	D

Sample Name: B3YK48 **Batch No:** BA10025 **Date Sampled:** **01/06/21 08:31**
RJ Lee Grp. ID: W101031-03 **Matrix:** Water **Date Analyzed:** **01/06/21 22:26**

Analyte	Method	Result µg/mL	PQL µg/mL	MDL µg/mL	Dilution Factors	Qualifiers
Chloride	EPA 9056	68.4	3.00	1.50	100	D
Fluoride	EPA 9056	0.34	0.04	0.02	2	D
Nitrate as NO3-N	EPA 9056	25.3	2.30	1.20	100	D
Nitrite as NO2-N	EPA 9056	< 0.03	0.06	0.03	2	U, D
Sulfate	EPA 9056	188	15.0	7.50	100	D

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Sample Name: B3YLD5 **Batch No:** BA10025 **Date Sampled:** 01/06/21 09:34

RJ Lee Grp. ID: W101031-04 **Matrix:** Water **Date Analyzed:** 01/06/21 22:48

Analyte	Method	Result µg/mL	PQL µg/mL	MDL µg/mL	Dilution Factors	Qualifiers
Chloride	EPA 9056	15.6	0.60	0.30	20	D
Fluoride	EPA 9056	0.37	0.04	0.02	2	D
Nitrate as NO3-N	EPA 9056	16.0	0.46	0.24	20	D
Nitrite as NO2-N	EPA 9056	< 0.03	0.06	0.03	2	D, U
Sulfate	EPA 9056	79.7	3.00	1.50	20	D

RJ LEE GROUP

Heather Medley
CH2M Hill Plateau
Remediation Company -
825 Jadwin Avenue
Richland, WA 99352
Client Project: Anions

Quality Control

Water

RJ Lee Group No.: W101031
SDG No.: RJLG21C0009
Samples Received: 01/06/21 14:30
Analysis/Prep Date: 01/11/21 16:10
Report Date: 01/31/21 15:54

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 BA10025
Fluoride	16984-48-8	Blank	<0.01	<0.01	0.01	0.02				U BA10025
Nitrate as NO3-N	14797-55-8	Blank	<0.01	<0.01	0.01	0.02				U BA10025
Nitrite as NO2-N	14797-65-0	Blank	<0.02	<0.02	0.02	0.03				U BA10025
Sulfate	14808-79-8	Blank	<0.08	<0.08	0.08	0.15				U BA10025
Chloride	16887-00-6	LCS	1.50	1.49	0.02	0.03		99.4	80 - 120	BA10025
Fluoride	16984-48-8	LCS	1.00	1.00	0.01	0.02		99.5	80 - 120	BA10025
Nitrate as NO3-N	14797-55-8	LCS	1.13	1.13	0.01	0.02		99.6	80 - 120	BA10025
Nitrite as NO2-N	14797-65-0	LCS	1.52	1.53	0.02	0.03		101	80 - 120	BA10025
Sulfate	14808-79-8	LCS	7.50	7.51	0.08	0.15		100	80 - 120	BA10025
Chloride	16887-00-6	Matrix Spike	1.81	1.83	0.75	1.50		101	75 - 125	D BA10025, W101031-04
Fluoride	16984-48-8	Matrix Spike	1.19	1.28	0.02	0.04		109	75 - 125	D BA10025, W101031-04
Nitrate as NO3-N	14797-55-8	Matrix Spike	1.45	1.46	0.60	1.15		101	75 - 125	D BA10025, W101031-04
Nitrite as NO2-N	14797-65-0	Matrix Spike	1.52	1.62	0.03	0.06		106	75 - 125	D BA10025, W101031-04
Sulfate	14808-79-8	Matrix Spike	9.09	9.20	3.75	7.50		102	75 - 125	D BA10025, W101031-04
Chloride	16887-00-6	Matrix Spike Dup	1.81	1.84	0.75	1.50	0.49	102	75 - 125	D BA10025, W101031-04
Fluoride	16984-48-8	Matrix Spike Dup	1.19	1.24	0.02	0.04	3.03	105	75 - 125	D BA10025, W101031-04
Nitrate as NO3-N	14797-55-8	Matrix Spike Dup	1.45	1.47	0.60	1.15	0.40	101	75 - 125	D BA10025, W101031-04
Nitrite as NO2-N	14797-65-0	Matrix Spike Dup	1.52	1.60	0.03	0.06	0.89	105	75 - 125	D BA10025, W101031-04
Sulfate	14808-79-8	Matrix Spike Dup	9.09	9.28	3.75	7.50	0.69	102	75 - 125	D BA10025, W101031-04

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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 ≥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.

Inorganics Manager Krystin Gilman

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.

Rev. 0

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST W101031	C.O.C. # W21-001-276
		Page 1 of 1

Collector: Juan Aguilar CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650 3.4
SAF No.: W21-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2021	**Logbook No.:** HNF-N-506 -12019	**Ice Chest No.:** N/A
Shipped To (Lab): RJ Lee Group, Inc/Center for L	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.:** N/A
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

SDG # RJLG21C0009

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3YLC3	N		JAN 0 6 2021	0645	1x125-mL G/P	9056_ANIONS_IC: COMMON	48 Hours	Cool <=6C

(6 of 10)

January 31, 2021

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Juan Aguilar CHPRC		JAN 0 6 2021 0910	Janelle Zunker CHPRC		JAN 0 6 2021 0910
Janelle Zunker CHPRC		JAN 0 6 2021 1430	JLBarker@RJLG RJLG		JAN 0 6 2021 1430

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

RJLG21C0009

Rev. 0

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST W101031	C.O.C. # W21-001-278 Page 1 of 1

Collector: Juan Aguilar CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650 4.4
SAF No.: W21-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2021	**Logbook No.:** HNF-N-506-12018	**Ice Chest No.:** N/A
Shipped To (Lab): RJ Lee Group, Inc/Center for L	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.:** N/A
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

SDG # RJLG21C0009

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3YLC4	N	W	JAN 0 6 2021	0808	1x125-mL G/P	9056_ANIONS_IC: COMMON	48 Hours	Cool <=6C

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Juan Aguilar CHPRC		JAN 0 6 2021 0910	Janelle Zunker CHPRC		JAN 0 6 2021 0910
Janelle Zunker CHPRC		JAN 0 6 2021 1430	JL Porter	JS Porter	JAN 0 6 2021 1430

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

January 31, 2021
RJLG21C0009
(7 of 10)

Rev. 0

January 31, 2021

(8 of 10)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST W101031	C.O.C. # W21-001-302 Page 1 of 1

Collector: CHRIS FULTON CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650 5.0
SAF No.: W21-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2021	**Logbook No.:** HNF-N-506 -119-13	**Ice Chest No.:** N/A
Shipped To (Lab): RJ Lee Group, Inc/Center for L	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.:** N/A
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A NA

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

SDG# RJLG21C0009

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3YK48	N	W	1-6-21	0831	1x125-mL G/P	9056_ANIONS_IC: COMMON	48 Hours	Cool <=6C

Relinquished By			Received By		
Print First and Last Name	Signature	Date/Time	Print First and Last Name	Signature	Date/Time
CHRIS FULTON CHPRC		JAN 0 6 2021	Janelle Zunker CHPRC		JAN 0 6 2021
Janelle Zunker CHPRC		JAN 0 6 2021 1430	JL Porter	JL Porter	JAN 0 6 2021 1430

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

RJLG21C0009

Printed On 12/14/2020

FSR ID = FSR101269

A-6004-842 (REV 4)

Rev. 0

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST W101031	C.O.C. # W21-001-280 Page 1 of 1

Collector: Juan Aguilar CHPRC	**Contact/Requester:** Karen Waters-Husted	**Telephone No.:** 509-376-4650 2.8
SAF No.: W21-001	**Sampling Origin:** Hanford Site	**Purchase Order/Charge Code:** 300071
Project Title: RCRA, JANUARY 2021	**Logbook No.:** HNF-N-506-12018	**Ice Chest No.:** N/A
Shipped To (Lab): RJ Lee Group, Inc/Center for L	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.:** N/A
Protocol: RCRA	**Priority:** 30 Days	**Offsite Property No.:** N/A

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

SDG # RJLG21C0009

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3YLD5	N	W	JAN 0 6 2021	0934	1x125-mL G/P	9056_ANIONS_IC: COMMON	48 Hours	Cool <=6C

(9 of 10)

January 31, 2021

Relinquished By			Received By		
Print First and Last Name	*Signature*	*Date/Time*	*Print First and Last Name*	*Signature*	*Date/Time*
Juan Aguilar CHPRC	JAN 0 6 2021	1110	Janelle Zunker CHPRC	JAN 0 6 2021	1110
Janelle Zunker CHPRC	JAN 0 6 2021	1430	JL PORTER	JAN 0 6 2021	1430

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

RJLG21C0009

WORK ORDER

Printed: 1/7/2021 1:25:42PM

W101031

RJ Lee Group Inc

Client: CH2M Hill Plateau Remediation Company - C01282F
Project: Anions
COC #: W21-001 **PO #:** 300071
Project Manager: Krystin Gilman
Project Number: 74392
SDG Number: RJLG21C0009

Report To:
CH2M Hill Plateau Remediation Company - C01282F
Heather Medley
825 Jadwin Avenue
Richland, WA 99352
Phone: (509) 373-6909
Fax:

Invoice To:
CH2M Hill Plateau Remediation Company - C01282F
Sample Management
825 Jadwin Avenue
Richland, WA 99352
Phone: (509) 376-6427
Fax:

Date Due: 2/4/2021 (21 day TAT)
Received By: Lynn Porter
Date Received: 01/06/21 14:30
Logged In By: Lynn Porter
Date Logged In: 01/06/21 14:35

Samples Received at:	**3.4°C**
Custody Seals	Yes
Containers Intact	Yes
COC/Labels Agree	Yes
Preservation Confirmed	No
Received On Ice	Yes

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W101031-01	B3YLC3 W21-001-276	Anions by EPA 300	Non-Potable Water	01/06/21 06:45	21	2/4/2021
W101031-02	B3YLC4 W21-001-278	Anions by EPA 300	Non-Potable Water	01/06/21 08:08	21	2/4/2021
W101031-03	B3YK48 W21-001-302	Anions by EPA 300	Non-Potable Water	01/06/21 08:31	21	2/4/2021
W101031-04	B3YLD5 W21-001-280	Anions by EPA 300	Non-Potable Water	01/06/21 09:34	21	2/4/2021