

September 9, 2022

Christer Loftenius Washington State Department of Ecology – Eastern Regional Office 4601 North Monroe Street Spokane, WA 99205-3543

Subject: Progress Report for August 2022, Warden City Water Supply Wells No. 4 and 5.

Washington Facility Site ID No. 2802409; Cleanup Site ID: 1618

Agreed Order No. DE 16890

Dear Christer:

The J.R. Simplot Company (Simplot) entered into an Agreed Order (AO) (No. DE 16890) with the Washington State Department of Ecology (Ecology) to provide remedial action at 1800 W. 1st Street, Warden WA, 98857.

Per the AO, Simplot shall submit to Ecology written monthly progress reports that describe the actions taken during the previous month to implement the requirements of the AO.

The AO requires that the progress reports include the following:

- a. A list of on-site activities that have taken place during the previous month;
- b. Detailed description of any deviations from required tasks not otherwise documented in project plans or amendment requests;
- Description of all deviations from the scope of work and schedule during the previous quarter and any planned deviations in the upcoming quarter;
- d. For any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule;
- e. All raw data (including laboratory analyses) received by Simplot during the past quarter and an identification of the source of the sample; and
- f. A list of deliverables for the upcoming quarter if different from the schedule.

#### **Activities in August 2022**

- Simplot continued SVE operations per the Cleanup Action Implementation Compliance Monitoring Plan (CAICMP; HDR revised May 2022) and SVE Performance Test Plan (PTP; HDR May 2022).
- Full-scale implementation of performance field data and sample collection has been ongoing since June 8, 2022 and will continue in accordance with PTP (HDR May 2022). Pre-treatment sampling consisting of four discrete core soil samples and the associated quality control (QC) samples are collected prior to treatment of each treatment batch and analyzed for EDB by Eurofins in Spokane, Washington on a rush 24-hour turnaround basis. Eurofins has reported all samples to date as non-detect for EDB. EDB analytical results for treatment batches 16 through 26 are attached to this memo. The pilot study and treatment batches 1 through 8 are described in the June 2022 Progress Report. Treatment batches 9 through 15 are described in the July 2022 Progress Report.
- Simplot/HDR coordinated with GrayMar to remove Treatment Batch soils 16 through 26 for use as on-site backfill based on non-detect soil sample analytical results, in accordance with the CAIMP and PTP.
- During last week of August, HDR coordinated with GrayMar in ongoing effort to reassess project estimates of remaining volume of soil stockpile requiring treatment and the volume of soil treated per batch. Volume of soil remaining to be treated could be in excess of 2,000 cubic yards (CY). The volume of soil per batch varies and could be in the range of 115-130 CY. Using these updated values, HDR estimates volume of soil treated (through Batch 26) is approx. 2,990-3,380 CY. Based on an assumed volume of 2,000 CY requiring treatment, the remaining duration of treatment is approximately 8 weeks.
- Simplot/HDR are working on the draft cleanup action report to summarize the remedial action (impacted soils excavation) to date.

#### **Anticipated Activities for September 2022**

- Simplot/HDR implementing full-scale implementation of ex-situ SVE. Full-scale performance field data and sample collection will continue in accordance with PTP (HDR May 2022).
- Simplot/HDR to evaluate soil batches within treatment cell for removal and use as on-site backfill
  in accordance with CAICMP and PTP.

If you have questions please feel free to contact me at (208) 387-7018 or at <a href="mailto:tyler.allen@hdrinc.com">tyler.allen@hdrinc.com</a> or Molly Dimick of Simplot at (208) 220-6597 or at molly.dimick@simplot.com.

Respectfully,

HDR Engineering, Inc.

Tyler Allen

Senior Environmental Scientist

Attachments: Batch 16 Pretreatment EDB 8-2-2022 (J18216-1) Lab Report.pdf

Batch 17 Pretreatment EDB 8-4-2022 (J18252-1) Lab Report.pdf

Batch 18 Pretreatment 8-8-2022 (J18283-1) Lab Report Batch 19 Pretreatment 8-10-2022 (J18300-1) Lab Report

Batch 20 Pretreatment EDB 8-12-22 (J18326-1) Lab Report.pdf Batch 21 Pretreatment 8-16-2022 (J18339-1) Lab Report.pdf Batch 22 Pretreatment EDB 8-18-2022 (J18372-1 ) Lab Report.pdf

Batch 23 Pretreatment EDB 8-22-2022 (J18391-1) Lab Report.pdf Batch 24 Pretreatment EDB 8-24-2022 (J18410-1) Lab Report.pdf Batch 25 Pretreatment EDB 8-25-2022 (J18432-1) Lab Report.pdf

Batch 26 Pretreatment 8-30-2022 (J18480-1) Lab Report.pdf

CC: Molly Dimick, J.R. Simplot Company

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18216-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:

8/3/2022 5:10:44 PM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

..... Links .....

Review your project results through

Have a Question?



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18216-1

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Job ID: 590-18216-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

#### Receipt

The samples were received on 8/2/2022 2:24 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.4° C.

#### GC Semi VOA

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

#### **General Chemistry**

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

#### **Organic Prep**

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

# **Sample Summary**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18216-1	SVE-Soil-Aug2-16Pre1	Solid	08/02/22 12:31	08/02/22 14:24
590-18216-2	SVE-Soil-Aug2-16Pre2	Solid	08/02/22 12:33	08/02/22 14:24
590-18216-3	SVE-Soil-Aug2-16Pre3	Solid	08/02/22 12:35	08/02/22 14:24
590-18216-4	SVE-Soil-Aug2-16Pre4	Solid	08/02/22 12:37	08/02/22 14:24
590-18216-5	Trip Blank	Solid	08/02/22 00:00	08/02/22 14:24

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

#### Glossary

DL

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
%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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDI	Estimated Datastian Limit (Diavin)

Detection Limit (DoD/DOE)

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) Most Probable Number MPN 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

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# Client Sample Results

Client: HDR Inc Job ID: 590-18216-1 Project/Site: Simplot Warden Lab Sample ID: 590-18216-1 Client Sample ID: SVE-Soil-Aug2-16Pre1 Date Collected: 08/02/22 12:31 Matrix: Solid Date Received: 08/02/22 14:24 **General Chemistry** Analyte RL **RL** Unit D Result Qualifier Prepared Analyzed Dil Fac 0.01 0.01 % 08/02/22 14:46 **Percent Moisture** 11.4 0.01 0.01 % 08/02/22 14:46 **Percent Solids** 88.6 Client Sample ID: SVE-Soil-Aug2-16Pre1 Lab Sample ID: 590-18216-1 Date Collected: 08/02/22 12:31 Matrix: Solid Date Received: 08/02/22 14:24 Percent Solids: 88.6 Method: 8011 - EDB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac <u>~</u> 1,2-Dibromoethane (EDB) ND 0.055 0.039 ug/Kg 08/02/22 16:33 08/02/22 18:47 Client Sample ID: SVE-Soil-Aug2-16Pre2 Lab Sample ID: 590-18216-2 Date Collected: 08/02/22 12:33 **Matrix: Solid** Date Received: 08/02/22 14:24 **General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.01 0.01 % 08/02/22 14:46 **Percent Moisture** 9.6 0.01 % **Percent Solids** 90.4 0.01 08/02/22 14:46 Client Sample ID: SVE-Soil-Aug2-16Pre2 Lab Sample ID: 590-18216-2 Date Collected: 08/02/22 12:33 Matrix: Solid Date Received: 08/02/22 14:24 Percent Solids: 90.4 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 08/02/22 16:33 08/02/22 19:36 1.2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.055 0.038 ug/Kg Client Sample ID: SVE-Soil-Aug2-16Pre3 Lab Sample ID: 590-18216-3 Date Collected: 08/02/22 12:35 Matrix: Solid Date Received: 08/02/22 14:24 **General Chemistry** Analyte Result Qualifier RL **RL** Unit D Prepared Analyzed Dil Fac 0.01 0.01 % 08/02/22 14:46 **Percent Moisture** 9.4 **Percent Solids** 90.6 0.01 0.01 % 08/02/22 14:46 Client Sample ID: SVE-Soil-Aug2-16Pre3 Lab Sample ID: 590-18216-3 Date Collected: 08/02/22 12:35 **Matrix: Solid** Date Received: 08/02/22 14:24 Percent Solids: 90.6 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 08/02/22 16:33 08/02/22 19:53 1,2-Dibromoethane (EDB) ND 0.055 0.039 ug/Kg Client Sample ID: SVE-Soil-Aug2-16Pre4 Lab Sample ID: 590-18216-4 Date Collected: 08/02/22 12:37 Matrix: Solid Date Received: 08/02/22 14:24 **General Chemistry** Analyte Result Qualifier RL **RL Unit** D Prepared Analyzed Dil Fac

**Eurofins Spokane** 

08/02/22 14:46

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0.01

10.3

**Percent Moisture** 

0.01 %

6

8/3/2022

# **Client Sample Results**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug2-16Pre4

Lab Sample ID: 590-18216-4 Date Collected: 08/02/22 12:37

**Matrix: Solid** 

Date Received: 08/02/22 14:24

**General Chemistry (Continued)** 

Analyte RL **RL** Unit Analyzed Dil Fac Result Qualifier D Prepared **Percent Solids** 0.01 0.01 % 08/02/22 14:46 89.7

Client Sample ID: SVE-Soil-Aug2-16Pre4

Lab Sample ID: 590-18216-4 Date Collected: 08/02/22 12:37 **Matrix: Solid** 

Date Received: 08/02/22 14:24 Percent Solids: 89.7

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.053 0.037 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18216-5

Date Collected: 08/02/22 00:00 **Matrix: Solid** 

Date Received: 08/02/22 14:24

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed 0.048 08/02/22 16:34 08/02/22 20:26 1,2-Dibromoethane (EDB) ND 0.033 ug/Kg

**Eurofins Spokane** 

## QC Sample Results

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37367/2-A

**Matrix: Solid** 

**Analysis Batch: 37368** 

MB MB

Analyte

1,2-Dibromoethane (EDB) ND

Result Qualifier

RL 0.050

**MDL** Unit 0.035 ug/Kg

**Prepared** 

08/02/22 16:33 08/02/22 18:13

Client Sample ID: Method Blank

Analyzed Dil Fac

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 37367

**RPD** 

Prep Batch: 37367

Prep Batch: 37367

Prep Type: Total/NA

Prep Batch: 37367

Lab Sample ID: LCS 590-37367/3-A

**Matrix: Solid** 

**Analysis Batch: 37368** 

Spike Added 1.00 LCS LCS 1.17

MS MS

Result Qualifier

Result Qualifier

Unit ug/Kg

Unit

ug/Kg

D %Rec Limits 117

%Rec

D

60 - 140

%Rec

Limits

%Rec

Client Sample ID: SVE-Soil-Aug2-16Pre1

%Rec

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: 590-18216-1 MS Client Sample ID: SVE-Soil-Aug2-16Pre1

**Matrix: Solid** 

1,2-Dibromoethane (EDB)

**Analysis Batch: 37368** 

Analyte

1,2-Dibromoethane (EDB) Lab Sample ID: 590-18216-1 MSD

**Matrix: Solid Analysis Batch: 37368** 

Analyte 1,2-Dibromoethane (EDB) Sample Sample Spike Result Qualifier Added ND 1.09

Sample Sample

ND

Result Qualifier

1.12

Spike Added

MSD MSD Result Qualifier 0.969

0.907

Unit ug/Kg

%Rec 86

Limits RPD Limit 60 - 140

Job ID: 590-18216-1

Client: HDR Inc

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug2-16Pre1 Lab Sample ID: 590-18216-1

Date Collected: 08/02/22 12:31 Date Received: 08/02/22 14:24 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37359	08/02/22 14:46	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre1

Lab Sample ID: 590-18216-1 **Matrix: Solid** 

Date Collected: 08/02/22 12:31 Date Received: 08/02/22 14:24 Percent Solids: 88.6

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011	- <u></u>		10.22 g	2 mL	37367	08/02/22 16:33	NMI	TAL SPK
Total/NA	Analysis	8011		1			37368	08/02/22 18:47	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre2

Lab Sample ID: 590-18216-2

Date Collected: 08/02/22 12:33 **Matrix: Solid** 

Date Received: 08/02/22 14:24

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37359	08/02/22 14:46	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre2

Lab Sample ID: 590-18216-2 Date Collected: 08/02/22 12:33 **Matrix: Solid** 

Date Received: 08/02/22 14:24 Percent Solids: 90.4

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011	·		10.08 g	2 mL	37367	08/02/22 16:33	NMI	TAL SPK
Total/NA	Analysis	8011		1			37368	08/02/22 19:36	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre3

Lab Sample ID: 590-18216-3 Date Collected: 08/02/22 12:35 **Matrix: Solid** 

Date Received: 08/02/22 14:24

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37359	08/02/22 14:46	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre3 Lab Sample ID: 590-18216-3

Date Collected: 08/02/22 12:35 Matrix: Solid Date Received: 08/02/22 14:24 Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.00 g	2 mL	37367	08/02/22 16:33	NMI	TAL SPK
Total/NA	Analysis	8011		1			37368	08/02/22 19:53	NMI	TAL SPK

Client Sample ID: SVE-Soil-Aug2-16Pre4

Lab Sample ID: 590-18216-4 Date Collected: 08/02/22 12:37 Matrix: Solid

Date Received: 08/02/22 14:24

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture					37359	08/02/22 14:46	NMI	TAL SPK

**Eurofins Spokane** 

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#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Date Received: 08/02/22 14:24

Client Sample ID: SVE-Soil-Aug2-16Pre4

Lab Sample ID: 590-18216-4 Date Collected: 08/02/22 12:37 **Matrix: Solid** 

Percent Solids: 89.7

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method **Factor** Number or Analyzed Analyst Type Run **Amount Amount** Prep Total/NA 8011 10.56 g 37367 08/02/22 16:33 NMI TAL SPK 2 mL Total/NA 8011 37368 08/02/22 20:09 NMI Analysis TAL SPK 1

Client Sample ID: Trip Blank Lab Sample ID: 590-18216-5

Date Collected: 08/02/22 00:00 **Matrix: Solid** 

Date Received: 08/02/22 14:24

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.46 g	2 mL	37367	08/02/22 16:34	NMI	TAL SPK
Total/NA	Analysis	8011		1			37368	08/02/22 20:26	NMI	TAL SPK

**Laboratory References:** 

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	S	tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

2

- 0

4

7

g

10

11

# **Method Summary**

Client: HDR Inc Job ID: 590-18216-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK
8011	Microextraction	SW846	TAL SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

7

8

10

10

# **Chain of Custody Record**

11922 East 1st Ave Spokane WA 99206

Phone (509) 924-9200 Phone (509) 924-9290

Environment fest ng America

Client Information	Sampler Jered Newcomb	, JAN			ь Рм: rrington	. Ran	dee E					Cami	er Trac	king N	lo(s):			٦	COC No:	
Client Contact: Jered Newcomb	Phone: 509-899-4371	•		E	Mail: andee.				insu	s.com		State	of Ori	gin:					Page: Page 1 of 1	
Company: HDR Inc			PWSID:	<u>I</u> -						lysis	Re	•		***************************************				┫	Job#:	
Address: 835 N Post St. Ste. 101	Due Date Requeste	d:					Т	Π		1	T	T				T	T		Preservation Codes	<b>.</b>
City: Spokane	TAT Requested (da	nys): 24 ho	ur		11													1	B NaOH N	# Hexane   None   AsNaO2
State, Zip: WA, 99202	Compliance Projec	et: A Yes	Δ <b>No</b>			-										١			D Nitric Acid F E NaHSO4 C	Na204S Na2SO3
Phone: 509-899-4371	PO#: Purchase Order	Requested			$\Box_{\mathfrak{s}}$														G Amchlor S	R Na2S2O3 B H2SO4 F TSP Dodecahydra
Email: jered.newcomb@hdrinc.com	WO #:				s or No	2												Š	J Dì Water \	Acetone / MCAA
Project Name: Simplot Warden	Project #: 59002373				Je (Ye	8				-								containers	L EDA Z	V pH 4-5 Z other (specify)
Site: Warden WA	SSOW#:			- RHAVIII	Sam	5													Other	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	A	Field Filtered	Perform MS/												X Total Number of	Special Inst	ructions/Note
SVE-Soil-Aug 7 16Pre1	8/ 2 /2022	1231	G	ation Code	N	X N N >						+		111414						
SVE-Soil-Aug ) 16Pre2	8/ ) /2022	1333	G	s	N		+		+		_	-	<del>  -</del>				1			
SVE-Soil-Aug ) 16Pre3	8/ ) /2022	13.35	G	S	N		<del>(</del>	$\dagger \dagger$				1								
SVE-Soil-Aug ) 16Pre4	8/ 2 /2022	1237	G	s	N	N >	<										,,,	77.1		
Trip Blank				s	N	N >	<			* 1311(1	1 mm 1	18 <b>1 10</b> 311		. , 	. , HIILDI	,,, 1169111		""( !!		
					_		_			590	-182	16 Cł			stody	· · · · · ·				
					-	+		-	_		-	+								,
					-	-		+	+	+		-					-	-		
Possible Hazard Identification  Non-Hazard ammable Si itant Pois	on B	own [	Radiologica	al		Samp	-	posal n To C	•	ee ma		asse Dispo			-	s are			ed longer than 1 n ive For	nonth) _ Months
Deliverable Requested: I II III IV Other (specify)					5	Speci	al Insi	ructions	s/QC	Requ	irem	ents								
Empty Kit Relinquished by		Date:		Ĭa.	Tim						/		Meth		Shipme					
Relinquished by: Jered Newcomb	Pate/Time:	14	<del>3</del> 3	Company			eceived		,	_					Date/					Company
Relinquished by:	Date/Time:			Company		1	ceived	///	_	_/					Date/	Time:				Company
Refinquished by:	Date/Time:			Company				4//	4	N					D46)	1/me: 2	12	Z	14:M	CENTA
Custody Seals Intact: Custody Seal No.				Page 1	3 of 1	4 Cc	oler Te	mperatu	e(s) °	C and O	ther R	emark	s:		10/	_	0	α	006 SIL 6	8/3/20

Client: HDR Inc Job Number: 590-18216-1

Login Number: 18216 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

Creator. Vaugnan, Madison 1		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	

**Eurofins Spokane** 



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18252-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by: 8/5/2022 2:20:09 PM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

Review your project results through EOL.

Have a Question?

Ask
The
Expert

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18252-1

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18252-1	SVE-Soil-Aug4-17Pre1	Solid	08/04/22 10:25	08/04/22 12:17
590-18252-2	SVE-Soil-Aug4-17Pre2	Solid	08/04/22 10:27	08/04/22 12:17
590-18252-3	SVE-Soil-Aug4-17Pre3	Solid	08/04/22 10:29	08/04/22 12:17
590-18252-4	SVE-Soil-Aug4-17Pre4	Solid	08/04/22 10:31	08/04/22 12:17
590-18252-5	Trip Blank	Solid	08/04/22 00:00	08/04/22 12:17

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

### 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
%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 Spokane** 

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Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE-Soil-Aug4-17Pre1

Date Collected: 08/04/22 10:25 Date Received: 08/04/22 12:17

Lab Sample ID: 590-18252-1

**Matrix: Solid** 

**Matrix: Solid** 

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
Percent Moisture	10.2		0.01	0.01	%			08/04/22 17:42	
Percent Solids	89.8		0.01	0.01	%			08/04/22 17:42	

Client Sample ID: SVE-Soil-Aug4-17Pre1 Lab Sample ID: 590-18252-1

Date Collected: 08/04/22 10:25 **Matrix: Solid** Date Received: 08/04/22 12:17 Percent Solids: 89.8

Method: 8011 - EDB							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND —	0.055	0.039 ug/K	g $\overline{\ }$	08/04/22 16:55	08/04/22 18:29	1

Client Sample ID: SVE-Soil-Aug4-17Pre2 Lab Sample ID: 590-18252-2

Date Collected: 08/04/22 10:27 Date Received: 08/04/22 12:17

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.01	0.01	%			08/04/22 17:42	1
Percent Solids	90.6		0.01	0.01	%			08/04/22 17:42	1

Client Sample ID: SVE-Soil-Aug4-17Pre2 Lab Sample ID: 590-18252-2

Date Collected: 08/04/22 10:27 **Matrix: Solid** Date Received: 08/04/22 12:17 Percent Solids: 90.6

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ua/Ka	<u> </u>	08/04/22 16:55	08/04/22 19:19	1

Lab Sample ID: 590-18252-3 Client Sample ID: SVE-Soil-Aug4-17Pre3 Date Collected: 08/04/22 10:29 Matrix: Solid

Date Received: 08/04/22 12:17

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7		0.01	0.01	%			08/04/22 17:42	1
Percent Solids	90.3		0.01	0.01	%			08/04/22 17:42	1

Client Sample ID: SVE-Soil-Aug4-17Pre3 Lab Sample ID: 590-18252-3

Date Collected: 08/04/22 10:29 **Matrix: Solid** Date Received: 08/04/22 12:17 Percent Solids: 90.3

Method: 8011 - EDB							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND ND	0.052	0.036 ug/Kg	<u></u>	08/04/22 16:55	08/04/22 19:36	1

Client Sample ID: SVE-Soil-Aug4-17Pre4 Lab Sample ID: 590-18252-4

Date Collected: 08/04/22 10:31 Matrix: Solid Date Received: 08/04/22 12:17

General Chemistry Analyte	Result C	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.0		0.01	0.01	%			08/04/22 17:42	1

**Eurofins Spokane** 

# **Client Sample Results**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug4-17Pre4

Lab Sample ID: 590-18252-4

Date Collected: 08/04/22 10:31 **Matrix: Solid** Date Received: 08/04/22 12:17

**General Chemistry (Continued)** 

Analyte RL **RL** Unit D Analyzed Dil Fac Result Qualifier Prepared **Percent Solids** 0.01 0.01 % 08/04/22 17:42 91.0

Client Sample ID: SVE-Soil-Aug4-17Pre4

Lab Sample ID: 590-18252-4 Date Collected: 08/04/22 10:31 **Matrix: Solid** 

Date Received: 08/04/22 12:17 Percent Solids: 91.0

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 08/04/22 16:55 08/04/22 19:52 1,2-Dibromoethane (EDB) ND 0.055 0.038 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18252-5

Date Collected: 08/04/22 00:00 Matrix: Solid

Date Received: 08/04/22 12:17

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) 0.048 08/04/22 16:55 08/04/22 20:09 ND 0.034 ug/Kg

**Eurofins Spokane** 

## QC Sample Results

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37429/2-A

**Matrix: Solid** 

Analyte

**Analysis Batch: 37430** 

1,2-Dibromoethane (EDB)

MB MB

Sample Sample

Sample Sample

 $\overline{\mathsf{ND}}$ 

Result Qualifier

ND

Result Qualifier

Result Qualifier 0.050 ND

RL **MDL** Unit

0.035 ug/Kg

**Prepared** 

Analyzed

Client Sample ID: Method Blank

08/04/22 16:55 08/04/22 17:40

Prep Type: Total/NA

Prep Batch: 37429

Prep Type: Total/NA

Prep Batch: 37429

Lab Sample ID: LCS 590-37429/3-A

**Matrix: Solid** 

**Analysis Batch: 37430** 

Spike Added 1.00

Spike

Added

1.03

Spike

Added

1.11

1.21

LCS LCS

MS MS

MSD MSD

DU DU

9.7

90.3

Result Qualifier

0.944

0.856

Result Qualifier

Result Qualifier Unit ug/Kg

Unit

Unit

ug/Kg

%

D %Rec 121

D

**Client Sample ID: Lab Control Sample** 

Limits

%Rec

60 - 140

Lab Sample ID: 590-18252-1 MS

**Matrix: Solid** 

**Analysis Batch: 37430** 

1,2-Dibromoethane (EDB)

Analyte

1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18252-1 MSD **Matrix: Solid** 

**Analysis Batch: 37430** 

Analyte 1,2-Dibromoethane (EDB)

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18252-1 DU **Matrix: Solid** 

**Analysis Batch: 37431** 

Sample Sample Analyte Result Qualifier Percent Moisture 10.2 89.8 Percent Solids

Client Sample ID: SVE-Soil-Aug4-17Pre1

Prep Type: Total/NA Prep Batch: 37429

%Rec Limits

60 - 140 ug/Kg

%Rec

%Rec

Client Sample ID: SVE-Soil-Aug4-17Pre1

Prep Type: Total/NA

Prep Batch: 37429 %Rec **RPD** 

Limits **RPD** Limit 60 - 140 20

0.6

20

Client Sample ID: SVE-Soil-Aug4-17Pre1

Prep Type: Total/NA

**RPD** Result Qualifier Unit D **RPD** Limit % 5 20

**Eurofins Spokane** 

8/5/2022

Dil Fac

Job ID: 590-18252-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE-Soil-Aug4-17Pre1

Date Collected: 08/04/22 10:25 Date Received: 08/04/22 12:17

Lab Sample ID: 590-18252-1

**Matrix: Solid** 

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
l	Total/NA	Analysis	Moisture		1			37431	08/04/22 17:42	NMI	EETNW SP

Client Sample ID: SVE-Soil-Aug4-17Pre1

Date Collected: 08/04/22 10:25 Date Received: 08/04/22 12:17

Lab Sample ID: 590-18252-1

Lab Sample ID: 590-18252-2

**Matrix: Solid** Percent Solids: 89.8

**Matrix: Solid** 

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.12 g	2 mL	37429	08/04/22 16:55	NMI	EETNW SP
Total/NA	Analysis	8011		1			37430	08/04/22 18:29	NMI	EETNW S

Initial

Client Sample ID: SVE-Soil-Aug4-17Pre2

Batch

Method

Moisture

Batch

Type

Analysis

Date Collected: 08/04/22 10:27

**Prep Type** 

Total/NA

Date Received: 08/04/22 12:17

Run

Dil

**Factor** 

Final **Batch** Prepared Amount Number or Analyzed **Amount Analyst** Lab 37431 08/04/22 17:42 NMI **EETNW SP** 

Client Sample ID: SVE-Soil-Aug4-17Pre2

Date Collected: 08/04/22 10:27 Date Received: 08/04/22 12:17

Lab Sample ID: 590-18252-2 Matrix: Solid Percent Solids: 90.6

Lab Sample ID: 590-18252-3

Lab Sample ID: 590-18252-3

Lab Sample ID: 590-18252-4

Batch Batch Dil Initial Final Batch Prepared Method Amount Amount Number or Analyzed Analyst **Prep Type** Type Run **Factor** Lab 37429 Total/NA 8011 08/04/22 16:55 NMI **EETNW SP** Prep 10.22 g 2 ml Total/NA Analysis 8011 37430 08/04/22 19:19 NMI **EETNW S** 1

Client Sample ID: SVE-Soil-Aug4-17Pre3

Date Collected: 08/04/22 10:29

Date Received: 08/04/22 12:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture					37431	08/04/22 17:42	NMI	EETNW SP

Client Sample ID: SVE-Soil-Aug4-17Pre3

Date Collected: 08/04/22 10:29

Matrix: Solid Date Received: 08/04/22 12:17 Percent Solids: 90.3

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.73 g	2 mL	37429	08/04/22 16:55	NMI	EETNW SP
Total/NA	Analysis	8011		1			37430	08/04/22 19:36	NMI	EETNW S

Client Sample ID: SVE-Soil-Aug4-17Pre4

Date Collected: 08/04/22 10:31

Date Received: 08/04/22 12:17

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37431	08/04/22 17:42	NMI	EETNW SP

**Eurofins Spokane** 

Matrix: Solid

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#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug4-17Pre4

Date Collected: 08/04/22 10:31

Date Received: 08/04/22 12:17

Lab Sample ID: 590-18252-4

Matrix: Solid

Matrix: Solid

Percent Solids: 91.0

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.06 g	2 mL	37429	08/04/22 16:55	NMI	EETNW SP
Total/NA	Analysis	8011		1			37430	08/04/22 19:52	NMI	EETNW S

Client Sample ID: Trip Blank Lab Sample ID: 590-18252-5

Date Collected: 08/04/22 00:00 Date Received: 08/04/22 12:17

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor Amount Amount** Number or Analyzed Analyst Lab Total/NA 8011 Prep 10.42 g 37429 08/04/22 16:55 NMI **EETNW SP** EETNW S Total/NA Analysis 8011 37430 08/04/22 20:09 NMI

Laboratory References:

EETNW SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	S	tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18252-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EETNW SPK
Moisture	Percent Moisture	EPA	EETNW SPK
8011	Microextraction	SW846	EETNW SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EETNW SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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**Eurofins Spokane** 

Environment Testing America

#### 11922 East 1st Ave Spokane, WA 99206 Phone (509) 924-9200 Phone (509) 924-9290

# **Chain of Custody Record**

Client Information	Sampler Jered Newcomb	, JAN			ь РМ: ringto	n, R	andı	ee E				ľ	arner i	racking	140(\$):				JC No:		
Client Contact: Jered Newcomb	Phone: 509-899-4371				Mail: andee	Arri	noto	on@et.e	entotic	ารบรา	om		State of	Origin:					ge: age 1 of 1		
Company:	000-000-401 I		PWSID:	IK	11066		. igic	, new or re										_	b#:		
HDR Inc						natriamen i		,	Α	naly	sis f	₹eqı	ieste	d	· · · · · ·		1000	_			
Address: 835 N Post St. Ste. 101	Due Date Requeste	ed:			7														eservation Cod HCL	es M Hexane	
City:	TAT Requested (da																	B	NaOH	N None	
Spokane State, Zip:		24 ho	ur		(2) 25 (c)				Į				Į		1 1	Į.			Zn Acetate Nitric Acid	O AsNaO2 P Na2O4S	
WA, 99202	Compliance Projec	t: A Yes	ΔNo														Š.		NaHSO4 MeOH	Q Na2SO3 R Na2S2O3	
Phone: 509-899-4371	PO#: Purchase Order	Requested	<b> </b>							İ								G	Amchlor Ascorbic Acid	S H2SO4 T TSP Dodecahy	virate
Email:	WO#:	, , , , , , , , , , , , , , , , , , , ,			၂월								l					1	lce	U Acetone	
jered.newcomb@hdrinc.com	Desired #				\s	ŝ										Ì	5	ľκ	DI Water EDTA	V MCAA W pH 4-5	
Project Name: Simplot Warden	Project #: 59002373				2	ŝ		1						ĺ	1 1		contain	L	EDA	Z other (specify)	
Site:	SSOW#:					盲								İ			680000	2.3	her.		
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			Sample	(W≂water, S=solid,	Tere	S	EDB										Numb	33/05/K/05			
		Sample	Type (C=comp,	O=waste/oil BT=Tissue,		Perform			İ					ŀ			Z 3				
Sample Identification	Sample Date	Time	G=grab)	A=Air)	Ľ	8	8011					ZAROUNES ES		200 (02/02/03			E C		Special in	structions/Note	):
		<u> </u>	Preserva	ation Code	:_X	X	N							4			_ 2	4_			
SVE-Soil-Aug 4 17Pre1	81 L( 12022	1029	G	s	N	Ν	Х										Ĺ	7			
SVE-Soil-Aug 4 17Pre2	8/ <b>U</b> /2022	1027	G	S	N	N	Х						1				duto				
SVE-Soil-Aug 4 17Pre3	8/4/2022	1029	G	s	N	N	х											S			
SVE-Soil-Aug L( 17Pre4	8/ L /2022	16071	G	s	N	N	X					•	Hun		1			1			
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Possible Hazard Identification			<u> </u>			Sar	mple	e Dispo	sal ( .	A fee	mav	be as	sesse	ed if s	ample	s are	retai	<u>a</u> neo	l longer than 1	month)	
	on B Unki	nown 🛮	Radiologic	al			_	Return T			Ĭ		isposa				7		e For	Months	
Deliverable Requested I, II, III, IV Other (specify)						Spe		Instruc			equire	emen	ts								
Empty Kit Relinquished by		Date:			Tì	me:			11	/			M	einod o	Shipme	ent:					
Refinquished by: Jered Newcomb	Date/Time: 8/4/	12 10	2-16	Company			Rec	ever f	Va	Z	人		1		Date	14/	12	-	12:17	Composition	90
Relinquished by:	Date/Time:	<u> </u>		Company			Rece	eived by:							Date/1					Company	
Relinquished by:	Date/Time:	······································		Company			Rec	eived by:							Date/	Time:				Company	
Custody Seals Intact: Custody Seal No.							Cool	er Temp	erature(	(s) °C a	nd Oth	er Ren	narks:		<u></u>		. ^	6	>1	1D4- 4	
Δ Yes Δ No				Page 1	1 <u>2 o</u>	f 13	<u> </u>	,						4	3,		<u>1-8</u>	7	[ (DV/ ()	1 <b>K00</b> 6 8/9	5/202

# **Login Sample Receipt Checklist**

Client: HDR Inc Job Number: 590-18252-1

Login Number: 18252 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

oreator. Vaugitari, Mauisori i		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	

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# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18283-1 Client Project/Site: Simplot Warden

For:
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Attn: Jered Newcomb

Cardut Timington

Authorized for release by: 8/9/2022 12:30:05 PM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

..... Links .....

Review your project results through

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18283-1

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Job ID: 590-18283-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

#### Receipt

The samples were received on 8/8/2022 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.6° C.

#### GC Semi VOA

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-37472 and analytical batch 590-37474 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18283-1	SVE_Soil-Aug8-18Pre1	Solid	08/08/22 10:58	08/08/22 13:30
590-18283-2	SVE_Soil-Aug8-18Pre2	Solid	08/08/22 11:00	08/08/22 13:30
590-18283-3	SVE_Soil-Aug8-18Pre3	Solid	08/08/22 11:02	08/08/22 13:30
590-18283-4	SVE_Soil-Aug8-18Pre4	Solid	08/08/22 11:05	08/08/22 13:30
590-18283-5	SVE_Soil-Aug8-18DUP	Solid	08/08/22 10:30	08/08/22 13:30
590-18283-6	Trip Blank	Solid	08/08/22 00:00	08/08/22 13:30

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### **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

#### **Qualifiers**

#### **GC Semi VOA**

Qualifier **Qualifier Description** 

MS and/or MSD recovery exceeds control limits.

#### **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

Duplicate Error Ratio (normalized absolute difference) **DER** 

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)

Estimated Detection Limit (Dioxin) **EDL** 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 MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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** 

Relative Error Ratio (Radiochemistry) **RER** 

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

Too Numerous To Count **TNTC** 

Client Sample Results Client: HDR Inc Job ID: 590-18283-1 Project/Site: Simplot Warden Lab Sample ID: 590-18283-1 Client Sample ID: SVE Soil-Aug8-18Pre1 Date Collected: 08/08/22 10:58 Matrix: Solid Date Received: 08/08/22 13:30 **General Chemistry** Analyte RL **MDL** Unit Result Qualifier D Prepared Analyzed Dil Fac 0.01 0.01 % 08/08/22 16:14 **Percent Moisture** 9.3 0.01 0.01 % 08/08/22 16:14 **Percent Solids** 90.7 Client Sample ID: SVE\_Soil-Aug8-18Pre1 Lab Sample ID: 590-18283-1 Date Collected: 08/08/22 10:58 Matrix: Solid Date Received: 08/08/22 13:30 Percent Solids: 90.7 Method: 8011 - EDB Result Qualifier Analyte RL **MDL** Unit D Prepared Analyzed Dil Fac <u>~</u> 1,2-Dibromoethane (EDB) ND F1 0.054 0.038 ug/Kg 08/08/22 15:21 08/08/22 18:10 Client Sample ID: SVE Soil-Aug8-18Pre2 Lab Sample ID: 590-18283-2 Date Collected: 08/08/22 11:00 **Matrix: Solid** Date Received: 08/08/22 13:30 **General Chemistry** Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.01 0.01 % 08/08/22 16:14 **Percent Moisture** 9.3 0.01 % **Percent Solids** 90.7 0.01 08/08/22 16:14 Client Sample ID: SVE\_Soil-Aug8-18Pre2 Lab Sample ID: 590-18283-2 Date Collected: 08/08/22 11:00 **Matrix: Solid** Date Received: 08/08/22 13:30 Percent Solids: 90.7 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 08/08/22 15:21 08/08/22 18:59 1.2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.054 0.037 ug/Kg Client Sample ID: SVE\_Soil-Aug8-18Pre3 Lab Sample ID: 590-18283-3 Date Collected: 08/08/22 11:02 Matrix: Solid Date Received: 08/08/22 13:30 **General Chemistry** Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 0.01 0.01 % 08/08/22 16:14 **Percent Moisture** 10.8 **Percent Solids** 89.2 0.01 0.01 % 08/08/22 16:14 Client Sample ID: SVE Soil-Aug8-18Pre3 Lab Sample ID: 590-18283-3 Date Collected: 08/08/22 11:02 **Matrix: Solid** Date Received: 08/08/22 13:30 Percent Solids: 89.2 Method: 8011 - EDB Analyzed Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared 08/08/22 15:21 08/08/22 19:16 1,2-Dibromoethane (EDB) 0.055 ND 0.038 ug/Kg Client Sample ID: SVE Soil-Aug8-18Pre4 Lab Sample ID: 590-18283-4 Date Collected: 08/08/22 11:05 Matrix: Solid Date Received: 08/08/22 13:30

RL

0.01

MDL Unit

0.01 %

Result Qualifier

9.1

**General Chemistry** 

**Percent Moisture** 

Analyte

**Eurofins Spokane** 

Dil Fac

Analyzed

08/08/22 16:14

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Page 6 of 14 8/9/2022

D

Prepared

# Client Sample Results

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Client Sample ID: SVE Soil-Aug8-18Pre4

Date Collected: 08/08/22 11:05

Lab Sample ID: 590-18283-4 Matrix: Solid

Date Received: 08/08/22 13:30

**General Chemistry (Continued)** 

Analyte RL **MDL** Unit Result Qualifier D Prepared Analyzed Dil Fac **Percent Solids** 0.01 0.01 % 08/08/22 16:14 90.9

Client Sample ID: SVE Soil-Aug8-18Pre4

89.5

Lab Sample ID: 590-18283-4 Date Collected: 08/08/22 11:05 Matrix: Solid

Date Received: 08/08/22 13:30 Percent Solids: 90.9

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.054 0.038 ug/Kg 08/08/22 15:21 08/08/22 19:32

Lab Sample ID: 590-18283-5 Client Sample ID: SVE\_Soil-Aug8-18DUP

Date Collected: 08/08/22 10:30 Matrix: Solid

Date Received: 08/08/22 13:30

**General Chemistry** Analyte Result Qualifier RL **MDL** Unit D Dil Fac Prepared Analyzed **Percent Moisture** 10.5 0.01 0.01 % 08/08/22 16:14 08/08/22 16:14

Client Sample ID: SVE\_Soil-Aug8-18DUP Lab Sample ID: 590-18283-5

Date Collected: 08/08/22 10:30 Matrix: Solid

0.01

0.01 %

Date Received: 08/08/22 13:30 Percent Solids: 89.5

Method: 8011 - EDB

**Percent Solids** 

Result Qualifier Analyte RL **MDL** Unit D Analyzed Dil Fac Prepared 08/08/22 15:21 08/08/22 19:49 1,2-Dibromoethane (EDB) 0.055 ND 0.038 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18283-6

Date Collected: 08/08/22 00:00

Date Received: 08/08/22 13:30

Method: 8011 - EDB

Analyte Result Qualifier RLMDL Unit Prepared Analyzed 0.050 1,2-Dibromoethane (EDB) ND 0.035 ug/Kg 08/08/22 15:21 08/08/22 20:05

**Matrix: Solid** 

# QC Sample Results

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37472/2-A

**Matrix: Solid** 

**Analysis Batch: 37474** 

1,2-Dibromoethane (EDB)

1,2-Dibromoethane (EDB)

MB MB

Analyte

Result Qualifier ND

RL 0.050

**MDL** Unit 0.035 ug/Kg **Prepared** 

%Rec

Limits

%Rec

Limits

Limits

60 - 140

60 - 140

Client Sample ID: SVE\_Soil-Aug8-18Pre1

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Method Blank

Analyzed Dil Fac 08/08/22 15:21 08/08/22 17:36

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 37472

Prep Batch: 37472

Prep Type: Total/NA

Prep Batch: 37472

Lab Sample ID: LCS 590-37472/3-A

**Matrix: Solid** 

**Analysis Batch: 37474** 

Spike Added 1.00

LCS LCS 0.991

Result Qualifier

Unit ug/Kg D %Rec 99

60 - 140

Lab Sample ID: 590-18283-1 MS

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 37474** 

1,2-Dibromoethane (EDB)

Analyte

Sample Sample Result Qualifier

Spike Added ND F1 1.07

Result Qualifier 0.653

MS MS

MSD MSD

0.635 F1

DU DU

9.3

90.7

Result Qualifier

Unit D ug/Kg

Unit

ug/Kg

%Rec

%Rec

D

Client Sample ID: SVE\_Soil-Aug8-18Pre1 Prep Type: Total/NA

Prep Batch: 37472 %Rec **RPD** 

**RPD** 

Limit

**RPD** 

Limit

20

20

20

Analyte

**Analysis Batch: 37474** 

Lab Sample ID: 590-18283-1 DU

Lab Sample ID: 590-18283-1 MSD

1,2-Dibromoethane (EDB)

Spike Sample Sample Result Qualifier Added ND F1 1.08

**Method: Moisture - Percent Moisture** 

Client Sample ID: SVE\_Soil-Aug8-18Pre1

Prep Type: Total/NA

0

**Matrix: Solid** 

Percent Moisture

Percent Solids

**Analysis Batch: 37473** 

Analyte

Sample Sample Result Qualifier 9.3 90.7

Result Qualifier Unit %

%

RPD 0.09

Job ID: 590-18283-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE Soil-Aug8-18Pre1

Date Collected: 08/08/22 10:58 Date Received: 08/08/22 13:30 Lab Sample ID: 590-18283-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37473	08/08/22 16:14	NMI	EETNW SP

Client Sample ID: SVE Soil-Aug8-18Pre1

Date Collected: 08/08/22 10:58 Date Received: 08/08/22 13:30

Lab Sample ID: 590-18283-1 **Matrix: Solid** 

Percent Solids: 90.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.27 g	2 mL	37472	08/08/22 15:21	NMI	EETNW SP
Total/NA	Analysis	8011		1			37474	08/08/22 18:10	NMI	EETNW S

Client Sample ID: SVE Soil-Aug8-18Pre2

Date Collected: 08/08/22 11:00 Date Received: 08/08/22 13:30 Lab Sample ID: 590-18283-2

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37473	08/08/22 16:14	NMI	EETNW SP

Client Sample ID: SVE\_Soil-Aug8-18Pre2

Date Collected: 08/08/22 11:00 Date Received: 08/08/22 13:30

Lab Sample ID: 590-18283-2 **Matrix: Solid** Percent Solids: 90.7

Batch Batch Dil Initial Final Batch Prepared Method Amount Amount Number or Analyzed Analyst **Prep Type** Type **Factor** Run Lab 37472 Total/NA 8011 08/08/22 15:21 NMI **EETNW SP** Prep 10.30 g 2 ml Total/NA Analysis 8011 37474 08/08/22 18:59 NMI **EETNW S** 1

Client Sample ID: SVE Soil-Aug8-18Pre3

Date Received: 08/08/22 13:30

Lab Sample ID: 590-18283-3 Date Collected: 08/08/22 11:02 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37473	08/08/22 16:14	NMI	EETNW SP

Client Sample ID: SVE Soil-Aug8-18Pre3 Date Collected: 08/08/22 11:02

Lab Sample ID: 590-18283-3 Matrix: Solid

Percent Solids: 89.2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.20 g	2 mL	37472	08/08/22 15:21	NMI	EETNW SP
Total/NA	Analysis	8011		1			37474	08/08/22 19:16	NMI	EETNW S

Client Sample ID: SVE\_Soil-Aug8-18Pre4

Lab Sample ID: 590-18283-4 Date Collected: 08/08/22 11:05 Matrix: Solid

Date Received: 08/08/22 13:30

Date Received: 08/08/22 13:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37473	08/08/22 16:14	NMI	EETNW SP

**Eurofins Spokane** 

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8/9/2022

#### Lab Chronicle

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Client Sample ID: SVE Soil-Aug8-18Pre4

Lab Sample ID: 590-18283-4 Date Collected: 08/08/22 11:05 Matrix: Solid

Percent Solids: 90.9

Date Received: 08/08/22 13:30 Batch Batch Batch Dil Initial Final

Prepared Method or Analyzed **Prep Type** Type Run **Factor Amount** Amount Number Analyst Lab Total/NA 8011 37472 08/08/22 15:21 EETNW SP Prep 10.16 g 2 mL NMI 08/08/22 19:32 NMI Total/NA 8011 37474 **EETNW S** Analysis 1

Lab Sample ID: 590-18283-5 Client Sample ID: SVE\_Soil-Aug8-18DUP

Matrix: Solid

Date Collected: 08/08/22 10:30 Date Received: 08/08/22 13:30

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Run **Amount Amount** Number or Analyzed Type **Factor** Analyst Lab Total/NA Analysis Moisture 37473 08/08/22 16:14 NMI **EETNW SP** 

Client Sample ID: SVE Soil-Aug8-18DUP Lab Sample ID: 590-18283-5

Date Collected: 08/08/22 10:30 **Matrix: Solid** 

Date Received: 08/08/22 13:30 Percent Solids: 89.5

Batch Batch Dil Initial Final **Batch Prepared** Method **Factor Amount** Number or Analyzed **Prep Type** Type Run Amount Analyst Lab Total/NA Prep 8011 37472 08/08/22 15:21 EETNW SP 10.24 g 2 mL NMI Total/NA Analysis 8011 1 37474 08/08/22 19:49 NMI **EETNW S** 

Client Sample ID: Trip Blank Lab Sample ID: 590-18283-6

Date Collected: 08/08/22 00:00 **Matrix: Solid** Date Received: 08/08/22 13:30

Dil Batch Initial Final Batch **Batch** Prepared **Prep Type** Type Method **Factor** Amount **Amount** Number or Analyzed Run Analyst Lab Prep Total/NA 8011 10.03 g 2 mL 37472 08/08/22 15:21 NMI **EETNW SP** Analysis 8011 Total/NA 1 37474 08/08/22 20:05 NMI **EETNW S** 

**Laboratory References:** 

EETNW SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	St	tate	C569	01-06-23
The following analytes the agency does not do		ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18283-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EETNW SPK
Moisture	Percent Moisture	EPA	EETNW SPK
8011	Microextraction	SW846	EETNW SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EETNW SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Phone (509) 924-9200 Phone (509) 924-9290

11922 East 1st Ave

Spokane, WA 99206

Client Information

835 N Post St. Ste. 101

jered.newcomb@hdrinc.com

Client Contact.

Company: HDR Inc

Address:

Spokane

State, Zip:

Phone:

Email:

WA, 99202

509-899-4371

Project Name:

Warden WA

Simplot Warden

Sample Identification

SVE-Soil-Aug 🌾 18Pre2

SVE-Soil-Aug 7 18Pre3

SVE-Soil-Aug 🎖 18Pre4

SVE-Soil-Aug 🎖 18DUP

18Pre1

SVE-Soil-Aug 🏋

Trip Blank

Jered Newcomb

**Chain of Custody Record** 

matrix

(W=water,

Szeolid,

O=waste/olf,

BT=Tissue,

A=Alr Preservation Code:

s

S

S

S

s

S

PWSID:

Sample

Type

(C=comp,

G=grab)

G

G

G

G

24 hour

Sample

Time

058

1100

102

1105

1030

Arrington, Randee E

EDB

8011

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Х

Х

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N N Х

N N Х

NN

N N

NI N Х

Randee.Arrington@et.eurofinsus.com

Sampler

Phone: 509-899-4371

WO#:

Project #:

SSOW#:

59002373

Sample Date

/2022

/2022

/2022

/2022

8/ 🗸 /2022

Jered Newcomb, JAN

Due Date Requested

TAT Requested (days):

Compliance Project: A Yes A No

Purchase Order Requested

 eu	roi	fi	ns
 			, , ,

COC No:

Job#:

B NaOH

C Zn Acetate

D Nitric Acid

E NaHSO4

F MeOH

G Amchlor

K EDTA

L EDA

Other

1 Ice J DI Water

H Ascorbic Acid

Page 1 of 1

Preservation Codes

Carrier Tracking No(s):

State of Origin:

WA

**Analysis Requested** 

S H2SO4

U Acetone

V MCAA

W pH 4-5

Special Instructions/Note:

Z other (specify)

T TSP Dodecahydrate

	invironment Testing America	1
es		
M N		5
P	AsNaO2 Na2O4S Na2SO3 Na2S2O3	6

Possible Hazard Identification			Sample Disposal ( A fee may be a	ssessed if samples are retained long	ger than 1 month)
Non-Hazard ammable S itant Pois	on B nown Radiologic			Disposal By Lab	Months
Deliverable Requested: I, II III IV Other (specify)			Special Instructions/QC Requiremen	nts.	
Empty Kit Relinquished by	Date:	Tim	ne:	Method of Shipment:	~ 30
Relinquished by: Jered Newcomb	Date/Time: 13-30	Company	Regerred by:	Dalactifie: /2	130 Company SPV
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Retinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No. Δ Yes Δ No		Page 13 of	14Cooler Temperature(s) °C and Other Rea	marks: 4.6°C Cory	1/2006 8/9/2022

Client: HDR Inc Job Number: 590-18283-1

Login Number: 18283 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

oroator. Vaugnan, maaioon 1		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18300-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:

8/11/2022 11:00:41 AM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

Links

Review your project results through

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18300-1

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Chronicle	9
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Method Summary	12
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Receint Checklists	14

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Job ID: 590-18300-1

**Laboratory: Eurofins Spokane** 

Narrative

Job Narrative 590-18300-1

#### **Comments**

No additional comments.

#### Receipt

The samples were received on 8/10/2022 12:37 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

#### GC Semi VOA

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-37525 and analytical batch 590-37526 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
590-18300-1	SVE-Soil-Aug10-19Pre1	Solid	08/10/22 09:32	08/10/22 12:37	
590-18300-2	SVE-Soil-Aug10-19Pre2	Solid	08/10/22 09:34	08/10/22 12:37	
590-18300-3	SVE-Soil-Aug10-19Pre3	Solid	08/10/22 09:36	08/10/22 12:37	
590-18300-4	SVE-Soil-Aug10-19Pre4	Solid	08/10/22 09:38	08/10/22 12:37	
590-18300-5	Trip Blank	Solid	08/10/22 00:00	08/10/22 12:37	

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# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

#### **Qualifiers**

#### **GC Semi VOA**

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

#### **Glossary**

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

Example 2 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

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**Eurofins Spokane** 

Matrix: Solid

Lab Sample ID: 590-18300-4

Analyzed

08/10/22 16:30

RL

0.01

**RL Unit** 

0.01 %

D

Prepared

Result Qualifier

9.9

Client Sample ID: SVE-Soil-Aug10-19Pre4

Date Collected: 08/10/22 09:38

Date Received: 08/10/22 12:37

**General Chemistry** 

**Percent Moisture** 

Analyte

Dil Fac

# **Client Sample Results**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug10-19Pre4

Lab Sample ID: 590-18300-4

Date Collected: 08/10/22 09:38 **Matrix: Solid** Date Received: 08/10/22 12:37

**General Chemistry (Continued)** 

Analyte RL **RL** Unit D Analyzed Result Qualifier Prepared Dil Fac **Percent Solids** 0.01 0.01 % 08/10/22 16:30 90.1

Lab Sample ID: 590-18300-4 Client Sample ID: SVE-Soil-Aug10-19Pre4

Date Collected: 08/10/22 09:38 **Matrix: Solid** 

Date Received: 08/10/22 12:37 Percent Solids: 90.1

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.053 0.037 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18300-5

Date Collected: 08/10/22 00:00 **Matrix: Solid** 

Date Received: 08/10/22 12:37

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed 1,2-Dibromoethane (EDB) 0.046 08/10/22 15:49 08/10/22 18:54 ND 0.032 ug/Kg

# QC Sample Results

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37525/2-A

**Matrix: Solid** 

**Analysis Batch: 37526** 

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

Prep Batch: 37525

Prep Type: Total/NA

Prep Batch: 37525

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte **Prepared** 0.050 0.035 ug/Kg 08/10/22 15:49 08/10/22 16:44 1,2-Dibromoethane (EDB) ND

Lab Sample ID: LCS 590-37525/3-A

**Matrix: Solid** 

**Analysis Batch: 37526** 

1,2-Dibromoethane (EDB)

Spike Added

Spike

Added

1.10

Spike

Added

1.10

MB MB

Sample Sample

Result Qualifier

ND F1 F2

Sample Sample

Sample Sample

Result Qualifier

ND F1 F2

1.00

1.11

MS MS

MSD MSD

0.613 F1 F2

DU DU

13.5

86.5

Result Qualifier

0.844

Result Qualifier

LCS LCS Result Qualifier

Unit

Unit

ug/Kg

Unit

ug/Kg

%

D %Rec ug/Kg

D

111

**Client Sample ID: Lab Control Sample** 

%Rec Limits 60 - 140

Lab Sample ID: 590-18300-1 MS

**Matrix: Solid** 

**Analysis Batch: 37526** 

Analyte

1,2-Dibromoethane (EDB) Lab Sample ID: 590-18300-1 MSD

**Matrix: Solid Analysis Batch: 37526** 

Analyte 1,2-Dibromoethane (EDB)

**Method: Moisture - Percent Moisture** Lab Sample ID: 590-18300-1 DU

**Matrix: Solid** 

**Analysis Batch: 37528** 

Analyte Result Qualifier Percent Moisture 11.9 88.1 Percent Solids

Client Sample ID: SVE-Soil-Aug10-19Pre1

Prep Type: Total/NA

Prep Batch: 37525 %Rec

Limits %Rec 60 - 140

Client Sample ID: SVE-Soil-Aug10-19Pre1

%Rec

**Prep Type: Total/NA** Prep Batch: 37525

%Rec **RPD** Limits **RPD** Limit

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60 - 140

Client Sample ID: SVE-Soil-Aug10-19Pre1 Prep Type: Total/NA

**RPD** Result Qualifier Unit D **RPD** Limit % 12 20

**Eurofins Spokane** 

8/11/2022

Job ID: 590-18300-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE-Soil-Aug10-19Pre1

Lab Sample ID: 590-18300-1 Date Collected: 08/10/22 09:32

Matrix: Solid

Date Received: 08/10/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37528	08/10/22 16:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre1

Lab Sample ID: 590-18300-1

Date Collected: 08/10/22 09:32 Date Received: 08/10/22 12:37

**Matrix: Solid** Percent Solids: 88.1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011	·		10.59 g	2 mL	37525	08/10/22 15:49	NMI	EET SPK
Total/NA	Analysis	8011		1			37526	08/10/22 17:16	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre2

Lab Sample ID: 590-18300-2

Date Collected: 08/10/22 09:34 Date Received: 08/10/22 12:37

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37528	08/10/22 16:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre2

Lab Sample ID: 590-18300-2

Date Collected: 08/10/22 09:34 Date Received: 08/10/22 12:37

**Matrix: Solid** Percent Solids: 88.0

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.69 g	2 mL	37525	08/10/22 15:49	NMI	EET SPK
Total/NA	Analysis	8011		1			37526	08/10/22 18:05	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre3

Lab Sample ID: 590-18300-3

Date Collected: 08/10/22 09:36 Date Received: 08/10/22 12:37

**Matrix: Solid** 

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37528	08/10/22 16:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre3

Lab Sample ID: 590-18300-3

Date Collected: 08/10/22 09:36 Date Received: 08/10/22 12:37

**Matrix: Solid** Percent Solids: 90.0

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.58 g	2 mL	37525	08/10/22 15:49	NMI	EET SPK
Total/NA	Analysis	8011		1			37526	08/10/22 18:21	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug10-19Pre4

Lab Sample ID: 590-18300-4

Date Collected: 08/10/22 09:38 Date Received: 08/10/22 12:37

Matrix: Solid

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	Moisture					37528	08/10/22 16:30	NMI	EET SPK	

**Eurofins Spokane** 

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#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug10-19Pre4

Lab Sample ID: 590-18300-4 Date Collected: 08/10/22 09:38 **Matrix: Solid** 

Percent Solids: 90.1

Date Received: 08/10/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.38 g	2 mL	37525	08/10/22 15:49	NMI	EET SPK
Total/NA	Analysis	8011		1			37526	08/10/22 18:37	NMI	EET SPK

Lab Sample ID: 590-18300-5 **Client Sample ID: Trip Blank** 

Date Collected: 08/10/22 00:00 **Matrix: Solid** 

Date Received: 08/10/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.82 g	2 mL	37525	08/10/22 15:49	NMI	EET SPK
Total/NA	Analysis	8011		1			37526	08/10/22 18:54	NMI	EET SPK

**Laboratory References:** 

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	State C569		C569	01-06-23
The following analyte the agency does not		oort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
	B 11 11 1			
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18300-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Phone (509) 924-9200 Phone (509) 924-9290

11922 East 1st Ave

Spokane WA 99206

**Chain of Custody Record** 

eurofins	
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Environment Testing America

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Client Information Sampler Jered Newcomb, JAN					b PM: rington.	PM: Carrier Trackington, Randee E					r Tracking No(s):				COC No:			
Client Contact:	Phone:	2, 47.03		E-1	vlait:							tate of	Origin:				Page:	<u></u>
Jered Newcomb Company:	509-899-4371		PWSID:	R	andee.A	rringte	on@et.				_	VA					Page 1 of 1 Job #:	
HDR Inc	In				2,000	***	<del>, ,</del>	A	nalys	sis F	lequ	este	d		- 1	1	<b>D</b>	
Address. 835 N Post St. Ste. 101	Due Dale Request	ed:															Preservation Cod	es M Hexane
City: Spokane	TAT Requested (da	ays): 24 ho	ur														B NaOH C Zn Acetate	N None O AsNaO2
State, Zip: WA, 99202	Compliance Projec	ct: A Yes	A No														D Nitric Acid E NaHSO4 F MeOH	P Na2O4S Q Na2SO3 R Na2S2O3
Phone: 509-899-4371	P0#: Purchase Orde	r Requested			<u> </u>												G Amchlor H Ascorbic Acid	S H2SO4 T TSP Dodecahydrate
Emait: jered.newcomb@hdrinc.com	WO #:				S or N											2	I Ice J DI Water K EDTA	U Acetone V MCAA W pH 4-5
Project Name: Simplot Warden	Project #: 59002373				Se Ge											containers	L EDA	Z other (specify)
Site: Warden WA	SSOW#:				Sample											100223	St. 7	
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Sample Identification	Sample Date	Time	G=grab)	A=Alr)	-		-			1	I	1	1 5000			Į.	Special in	structions/Note
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SVE-Soil-Aug   O 19Pre3	8/ 10 12022	936	G	s	N	1 X				유			_					
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Client: HDR Inc Job Number: 590-18300-1

List Source: Eurofins Spokane Login Number: 18300

List Number: 1

Creator: Vaughan, Madison 1

oreator. Vaugitari, Mauisori i		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18326-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Kristiene D. allen

Authorized for release by: 8/15/2022 1:52:51 PM Kristine Allen, Client Service Manager (253)433-0390 Kristine.Allen@et.eurofinsus.com

Designee for

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com



www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18326-1

# **Table of Contents**

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Job ID: 590-18326-1

**Laboratory: Eurofins Spokane** 

Narrative

#### Receipt

The samples were received on 8/12/2022 1:46 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

#### GC Semi VOA

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-37574 and analytical batch 590-37575 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18326-1	SVE_Soil-Aug12-20Pre1	Solid	08/12/22 10:55	08/12/22 13:46
590-18326-2	SVE_Soil-Aug12-20Pre2	Solid	08/12/22 10:57	08/12/22 13:46
590-18326-3	SVE_Soil-Aug12-20Pre3	Solid	08/12/22 10:59	08/12/22 13:46
590-18326-4	SVE_Soil-Aug12-20Pre4	Solid	08/12/22 11:01	08/12/22 13:46
590-18326-5	Trip Blank	Solid	08/12/22 00:00	08/12/22 13:46

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#### **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

#### **Qualifiers**

#### **GC Semi VOA**

Qualifier **Qualifier Description** 

MS and/or MSD recovery exceeds control limits.

#### Glossary

DLC

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

Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

Decision Level Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive **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

Page 5 of 14

Client: HDR Inc

Client Sample	· ID: SVE_	_Soil-Aug12-20Pre1
---------------	------------	--------------------

Date Collected: 08/12/22 10:55 Date Received: 08/12/22 13:46 Lab Sample ID: 590-18326-1

Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		0.01	0.01	%			08/12/22 14:12	1
Percent Solids	89.7		0.01	0.01	%			08/12/22 14:12	1

#### Client Sample ID: SVE\_Soil-Aug12-20Pre1

Date Collected: 08/12/22 10:55 Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-1

Matrix: Solid Percent Solids: 89.7

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F1	0.055	0.038	ug/Kg	₽	08/12/22 14:22	08/12/22 21:33	1

#### Client Sample ID: SVE\_Soil-Aug12-20Pre2

Date Collected: 08/12/22 10:57 Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-2

**Matrix: Solid** 

# **General Chemistry**

Concrar Chomically									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.5		0.01	0.01	%			08/12/22 14:12	1
Percent Solids	90.5		0.01	0.01	%			08/12/22 14:12	1

RL

0.055

MDL Unit

0.038 ug/Kg

Result Qualifier

ND

#### Client Sample ID: SVE\_Soil-Aug12-20Pre2

Date Collected: 08/12/22 10:57 Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-2

**Matrix: Solid** Percent Solids: 90.5

Dil Fac

#### Method: 8011 - EDB Analyte 1,2-Dibromoethane (EDB)

Date Collected: 08/12/22 10:59

Prepared

#### Client Sample ID: SVE\_Soil-Aug12-20Pre3

Date Received: 08/12/22 13:46

Lab Sample	ID:	590-18326-3
		Matrix: Solid

Analyzed

#### **General Chemistry** Analyte RLDil Fac Result Qualifier **RL** Unit D Prepared Analyzed **Percent Moisture** 11.3 0.01 0.01 % 08/12/22 14:12 **Percent Solids** 0.01 08/12/22 14:12 88.7 0.01 %

#### Client Sample ID: SVE Soil-Aug12-20Pre3

Date Collected: 08/12/22 10:59 Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-3

**Matrix: Solid** Percent Solids: 88.7

# Method: 8011 - EDB

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	0.055	0.039	ug/Kg	*	08/12/22 14:22	08/12/22 22:39	1

#### Client Sample ID: SVE\_Soil-Aug12-20Pre4

Date Collected: 08/12/22 11:01

Lab Sample ID: 590-18326-4

Date Received: 08/12/22 13:46

General	Chan	nietry

Contra Chomica y									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.01	0.01	%			08/12/22 14:12	1

Eurofins Spokane

**Matrix: Solid** 

#### **Client Sample Results**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Client Sample ID: SVE\_Soil-Aug12-20Pre4

Lab Sample ID: 590-18326-4 Date Collected: 08/12/22 11:01

Matrix: Solid

Analyzed

Date Received: 08/12/22 13:46

**General Chemistry (Continued)** 

Analyte Result Qualifier RLRL Unit D Prepared Analyzed Dil Fac 0.01 0.01 08/12/22 14:12 **Percent Solids** 89.4

Client Sample ID: SVE\_Soil-Aug12-20Pre4 Lab Sample ID: 590-18326-4

Date Collected: 08/12/22 11:01 **Matrix: Solid** 

Date Received: 08/12/22 13:46 Percent Solids: 89.4

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Prepared

0.054 1,2-Dibromoethane (EDB) ND 08/12/22 14:22 08/12/22 22:55 0.038 ug/Kg

Client Sample ID: Trip Blank Lab Sample ID: 590-18326-5

Date Collected: 08/12/22 00:00 **Matrix: Solid** 

Date Received: 08/12/22 13:46

Method: 8011 - EDB Analyte Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.047 0.033 ug/Kg 08/12/22 14:22 08/12/22 23:12

Dil Fac

#### QC Sample Results

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37574/2-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 37575** 

Prep Type: Total/NA

Prep Batch: 37574

Prep Batch: 37574

Prep Type: Total/NA

мв мв Analyte Result Qualifier

Dil Fac RL MDL Unit D Prepared Analyzed 1,2-Dibromoethane (EDB) ND 0.050 0.035 ug/Kg 08/12/22 14:22 08/12/22 21:00

Lab Sample ID: LCS 590-37574/3-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 37575** Spike LCS LCS %Rec

Added Result Qualifier Unit D %Rec Limits 1,2-Dibromoethane (EDB) 1.00 0.970 ug/Kg 97 60 - 140

Lab Sample ID: 590-18326-1 MS Client Sample ID: SVE\_Soil-Aug12-20Pre1

**Matrix: Solid** 

**Analysis Batch: 37575** Prep Batch: 37574 MS MS Sample Sample Spike %Rec

Result Qualifier Added Result Qualifier Unit Limits 1,2-Dibromoethane (EDB) ND F1 1.11 0.651 F1 60 - 140 ug/Kg

Lab Sample ID: 590-18326-1 MSD Client Sample ID: SVE\_Soil-Aug12-20Pre1 Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 37575** Prep Batch: 37574

MSD MSD Sample Sample Spike %Rec **RPD** 

Analyte Result Qualifier Added Result Qualifier %Rec Limit Unit D Limits 0.537 F1 1,2-Dibromoethane (EDB) ND F1 1.06 60 - 140 20 ug/Kg Ö 19

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18326-1 DU Client Sample ID: SVE\_Soil-Aug12-20Pre1 Matrix: Solid Prep Type: Total/NA

**Analysis Batch: 37572** 

Sample Sample DU DU RPD Analyte Result Qualifier Qualifier Limit Result Unit Percent Moisture 10.3 10.3 % 0 20

Percent Solids 89.7 89.7 % 0 20

8/15/2022

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE\_Soil-Aug12-20Pre1

Date Collected: 08/12/22 10:55 Date Received: 08/12/22 13:46 Lab Sample ID: 590-18326-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37572	08/12/22 14:12	NMI	EET SPK

Client Sample ID: SVE\_Soil-Aug12-20Pre1

Date Collected: 08/12/22 10:55 Date Received: 08/12/22 13:46 Lab Sample ID: 590-18326-1

**Matrix: Solid** Percent Solids: 89.7

	_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	8011			10.15 g	2 mL	37574	08/12/22 14:22	NMI	EET SPK
l	Total/NA	Analysis	8011		1			37575	08/12/22 21:33	NMI	EET SPK

Client Sample ID: SVE\_Soil-Aug12-20Pre2

Date Collected: 08/12/22 10:57 Date Received: 08/12/22 13:46 Lab Sample ID: 590-18326-2

**Matrix: Solid** 

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37572	08/12/22 14:12	NMI	EET SPK

Client Sample ID: SVE\_Soil-Aug12-20Pre2

Date Collected: 08/12/22 10:57 Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-2 **Matrix: Solid** 

Percent Solids: 90.5

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.04 g	2 mL	37574	08/12/22 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1			37575	08/12/22 22:22	NMI	EET SPK

Client Sample ID: SVE\_Soil-Aug12-20Pre3

Date Collected: 08/12/22 10:59 Date Received: 08/12/22 13:46 Lab Sample ID: 590-18326-3 **Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Method Run Prep Type Type Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Analysis Moisture 37572 08/12/22 14:12 NMI **EET SPK** 

Client Sample ID: SVE\_Soil-Aug12-20Pre3

Date Collected: 08/12/22 10:59

Date Received: 08/12/22 13:46

Lab Sample ID: 590-18326-3

Lab Sample ID: 590-18326-4

Matrix: Solid Percent Solids: 88.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.17 g	2 mL	37574	08/12/22 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1			37575	08/12/22 22:39	NMI	EET SPK

Client Sample ID: SVE\_Soil-Aug12-20Pre4

Date Collected: 08/12/22 11:01

Date Received: 08/12/22 13:46

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37572	08/12/22 14:12	NMI	EET SPK

**Eurofins Spokane** 

**Matrix: Solid** 

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Date Received: 08/12/22 13:46

Client Sample ID: SVE\_Soil-Aug12-20Pre4

Date Collected: 08/12/22 11:01

Lab Sample ID: 590-18326-4

Matrix: Solid

Percent Solids: 89.4

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8011 37574 Prep 10.37 g 2 mL 08/12/22 14:22 NMI **EET SPK** 8011 08/12/22 22:55 Total/NA Analysis 1 37575 NMI **EET SPK** 

Client Sample ID: Trip Blank Lab Sample ID: 590-18326-5

Date Collected: 08/12/22 00:00 Matrix: Solid

Date Collected: 08/12/22 00:00 Ma
Date Received: 08/12/22 13:46

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.59 g	2 mL	37574	08/12/22 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1			37575	08/12/22 23:12	NMI	EET SPK

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

#### **Laboratory: Eurofins Spokane**

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

Authority	F	Program	Identification Number	<b>Expiration Date</b>
Washington	S	State	C569	01-06-23
The following analytes the agency does not of	' '	out the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for wh
the agency does not of	ici oci illication.			
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18326-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Spokane, WA 99206

**Chain of Custody Record** 

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Environ - nt Tisting Ar - ric

Phone (509) 924-9200 Phone (509) 924-9290	InI												- 10									
Client Information	Sampler Jered Newcomb, JAN				Arring	ъ РМ: rrington, Randee E							Cai	Carrier Tracking No(s):					C	COC No:		
Client Contact: Jered Newcomb	Phone: 509-899-4371				E-Mail: Rande	Mail: andee.Arrington@et.eurofinsus.com								State of Origin: WA						Page: Page 1 of 1		
Company: HDR Inc	PWSID:									is R	Requested						J	Job#:				
Address: 835 N Post St. Ste. 101	Due Date Requeste	ed:			_			1		1	T		1	T	$\overline{\Box}$	ľ			F	Preservation Code	es	
City:	TAT Requested (days):				$\dashv$															A HCL B NaOH	M Hexane N None	
Spokane State, Zip:	24 hour  Compliance Project: Δ Yes Δ No																	C Zn Acetate D Nitric Acid	O AsNaO2 P Na2O4S			
WA, 99202											- 1					E	E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3	3				
Phone: 509-899-4371	Po #: Purchase Order Requested				3	8					İ								1	G Amchlor	S H2SO4 T TSP Dod	
Email: jered.newcomb@hdrinc.com	WO #:					5 2					-								1	i ice J Di Water	U Acetone V MCAA	
Project Name: Simplot Warden	Project #: 59002373				1													ingr		K EDTA L EDA	W pH 4-5 Z other (sp	ecify)
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		Sample	Sample Type (C=comp,	(W=wate S=solid O=waste/ BT=Tisso	loli, 2	rieid rillered Samp Perform MS/MSD (Y	8011 EDB											Total Numbe	Tal Numb			
Sample Identification	Sample Date	Time	G=grab) A=A Preservation Co			枈	N S				_	1						卡	扌	Special Instructions/Note		
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SVE-Soil-Aug/) -20Pre2	8/   2 /2022	1057	G	s	1,	N N	ı x			十	100				-			175	+		•	
SVE-Soil-Aug/) -20Pre3	8// ) /2022	1059	G	s	1	N N	ı x			$\top$	326							-				
SVE-Soil-Aug 7 -20Pre4	t *	1101	G	s	٦,	N N	ı x			$\top$	. [ <u>유</u>											
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Non-Hazard ammable Slitant Pois	bn Bn	own [	Radiological					Returr	n To Ci	lient			Disp	osalı	By Lal	b .		$\exists_{rc}$	hiv	ve For	Months	
Deliverable Requested: I II III, IV Other (specify)						Sp	ecia	l Instr	uctions	s/QC	Req	uiren	nents:									
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Relinquished by: Jered Newcomb	Date/Time:	134	4	Company			Rec	eived b	vi vou	VF	3n4	0-1		_		Date/I	me:    2 2	 12	_/	1346	Company (	Spo Kanto
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Custody Seals Intact: Custody Seal No				Dago 1	2 04	: 11	Coo	ler Ten	nperatur	e(s) °C	and	Other	Remark	ks:	10	29	·c				Ω / ·	15/2022

Client: HDR Inc Job Number: 590-18326-1

Login Number: 18326 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

Cleator. Vaugnan, Mauison i		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18339-1 Client Project/Site: Simplot Warden

For:
HDR Inc
1401 E. Trent Ave
Suite 101
Spokane, Washington 99202

Attn: Jered Newcomb

Knistène D. allen

Authorized for release by: 8/17/2022 4:35:51 PM Kristine Allen, Client Service Manager (253)433-0390 Kristine.Allen@et.eurofinsus.com

Designee for

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com



This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18339-1

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Job ID: 590-18339-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

Job Narrative 590-18339-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/16/2022 1:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

#### GC Semi VOA

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-37616 and analytical batch 590-37607 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18339-1	SVE_Soil-Aug16-21Pre1	Solid	08/16/22 10:31	08/16/22 13:55
590-18339-2	SVE_Soil-Aug16-21Pre2	Solid	08/16/22 10:33	08/16/22 13:55
590-18339-3	SVE_Soil-Aug16-21Pre3	Solid	08/16/22 10:35	08/16/22 13:55
590-18339-4	SVE_Soil-Aug16-21Pre4	Solid	08/16/22 10:38	08/16/22 13:55
590-18339-5	Trip Blank	Solid	08/16/22 00:00	08/16/22 13:55

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#### **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

#### **Qualifiers**

#### **GC Semi VOA**

Qualifier **Qualifier Description** 

MS and/or MSD recovery exceeds control limits.

#### Glossary

DLC

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

Decision Level Concentration (Radiochemistry) Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive **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 Spokane** 

Job ID: 590-18339-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE	Soil-Aug16-21Pre1
-----------------------	-------------------

Date Collected: 08/16/22 10:31 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-1

Matrix: Solid

General Chemistry								
Analyte	Result Qualifi	ier RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.8	0.01	0.01	%			08/16/22 15:45	1
Percent Solids	89.2	0.01	0.01	%			08/16/22 15:45	1
Percent Solids	89.2	0.01	0.01	%			08/16/22 15:45	

#### Client Sample ID: SVE\_Soil-Aug16-21Pre1

Date Collected: 08/16/22 10:31 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-1

**Matrix: Solid** Percent Solids: 89.2

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F1	0.055	0.039	ug/Kg	*	08/17/22 08:51	08/17/22 10:24	1

#### Client Sample ID: SVE\_Soil-Aug16-21Pre2

Date Collected: 08/16/22 10:33 Date Received: 08/16/22 13:55

Lab Sample ID: 590-18339-2

**Matrix: Solid** 

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.3		0.01	0.01	%			08/16/22 15:45	1
Percent Solids	87.7		0.01	0.01	%			08/16/22 15:45	1

#### Client Sample ID: SVE\_Soil-Aug16-21Pre2

Date Collected: 08/16/22 10:33 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-2

**Matrix: Solid** Percent Solids: 87.7

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.040	ug/Kg	<del></del>	08/17/22 08:51	08/17/22 11:14	1

#### Client Sample ID: SVE\_Soil-Aug16-21Pre3

Date Collected: 08/16/22 10:35 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-3

Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.5		0.01	0.01	%			08/16/22 15:45	1
Percent Solids	84.5		0.01	0.01	%			08/16/22 15:45	1

#### Client Sample ID: SVE\_Soil-Aug16-21Pre3

Date Collected: 08/16/22 10:35 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-3

**Matrix: Solid** Percent Solids: 84.5

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.055	0.039	ug/Kg	<del>*</del>	08/17/22 08:51	08/17/22 11:30	1

#### Client Sample ID: SVE\_Soil-Aug16-21Pre4

Date Collected: 08/16/22 10:38 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-4

**Matrix: Solid** 

General	Chemistry

Ochiciai Olicinistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.0		0.01	0.01	%			08/16/22 15:45	1

**Eurofins Spokane** 

#### **Client Sample Results**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Client Sample ID: SVE\_Soil-Aug16-21Pre4

Date Collected: 08/16/22 10:38 Date Received: 08/16/22 13:55

Lab Sample ID: 590-18339-4

Matrix: Solid

**General Chemistry (Continued)** 

Analyte Result Qualifier RLRL Unit D Prepared Analyzed Dil Fac 0.01 0.01 08/16/22 15:45 **Percent Solids** 86.0

Client Sample ID: SVE\_Soil-Aug16-21Pre4

Date Collected: 08/16/22 10:38

Date Received: 08/16/22 13:55

Lab Sample ID: 590-18339-4

**Matrix: Solid** Percent Solids: 86.0

Method: 8011 - EDB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.058 08/17/22 08:51 08/17/22 11:47 0.040 ug/Kg

Client Sample ID: Trip Blank

Date Collected: 08/16/22 00:00

Date Received: 08/16/22 13:55

Lab Sample ID: 590-18339-5

**Matrix: Solid** 

Dil Fac

Method: 8011 - EDB

Analyte Result Qualifier 1,2-Dibromoethane (EDB) ND 0.046 0.032 ug/Kg

RL MDL Unit

Prepared 08/17/22 08:51

Analyzed 08/17/22 12:03

#### QC Sample Results

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37616/2-A

**Matrix: Solid** 

**Analysis Batch: 37607** 

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

Prep Batch: 37616

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: SVE\_Soil-Aug16-21Pre1

MB MB

Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 1,2-Dibromoethane (EDB) ND 0.050 0.035 ug/Kg 08/17/22 08:51 08/17/22 09:52

Lab Sample ID: LCS 590-37616/3-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 37607** Prep Batch: 37616 Spike LCS LCS %Rec

Added Result Qualifier Unit D %Rec Limits 1,2-Dibromoethane (EDB) 1.00 0.965 ug/Kg 97 60 - 140

Lab Sample ID: 590-18339-1 MS Client Sample ID: SVE\_Soil-Aug16-21Pre1

**Matrix: Solid** 

Analysis Batch: 37607

Prep Batch: 37616 MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit Limits

1,2-Dibromoethane (EDB) ND F1 1.10 0.607 F1 60 - 140 ug/Kg

Lab Sample ID: 590-18339-1 MSD Client Sample ID: SVE\_Soil-Aug16-21Pre1 Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 37607** 

Prep Batch: 37616 MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Limit Unit D Limits 0.638 F1 1,2-Dibromoethane (EDB) ND F1 1.09 60 - 140 20 ug/Kg Ö

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18339-1 DU

**Matrix: Solid** 

**Analysis Batch: 37606** 

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Moisture	10.8		11.0		%		 2	20
Percent Solids	89.2		89.0		%		0.2	20

#### Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE\_Soil-Aug16-21Pre1

Date Collected: 08/16/22 10:31 Date Received: 08/16/22 13:55

Lab Sample	ID:	590-1	8339-1
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Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37606	08/16/22 15:45	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre1

Date Collected: 08/16/22 10:31 Date Received: 08/16/22 13:55

L	ab Sa	mple ID:	590-18339-1

**Matrix: Solid** Percent Solids: 89.2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.15 g	2 mL	37616	08/17/22 08:51	NMI	EET SPK
Total/NA	Analysis	8011		1			37607	08/17/22 10:24	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre2

Date Collected: 08/16/22 10:33 Date Received: 08/16/22 13:55

Lab	Sample	ID:	590-1	8339-
-----	--------	-----	-------	-------

Matrix: Solid

ſ	_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	Moisture		1			37606	08/16/22 15:45	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre2

Date Collected: 08/16/22 10:33 Date Received: 08/16/22 13:55

Lab	Sample	ID:	590-18339-2
			Matrix: Solid

Lab Sample ID: 590-18339-3

Percent Solids: 87.7

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.10 g	2 mL	37616	08/17/22 08:51	NMI	EET SPK
Total/NA	Analysis	8011		1			37607	08/17/22 11:14	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre3

Date Collected: 08/16/22 10:35

Date Received: 08/16/22 13:55

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1		-	37606	08/16/22 15:45	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre3

Date Collected: 08/16/22 10:35

er	or Analyzed	Analyst	Lab	
i	08/16/22 15:45	NMI	EET SPK	
	Lab Samp	ole ID: 59	90-18339-3	

Lab Sample ID: 590-18339-4

#### **Matrix: Solid** Date Received: 08/16/22 13:55 Percent Solids: 84.5

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.67 g	2 mL	37616	08/17/22 08:51	NMI	EET SPK
Total/NA	Analysis	8011		1			37607	08/17/22 11:30	NMI	EET SPK

#### Client Sample ID: SVE\_Soil-Aug16-21Pre4

Date Collected: 08/16/22 10:38

Date Received: 08/16/22 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	Moisture		1			37606	08/16/22 15:45	NMI	EET SPK	

Eurofins Spokane

**Matrix: Solid** 

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Client Sample ID: SVE\_Soil-Aug16-21Pre4

Date Collected: 08/16/22 10:38 Date Received: 08/16/22 13:55 Lab Sample ID: 590-18339-4

Matrix: Solid

Percent Solids: 86.0

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.07 g	2 mL	37616	08/17/22 08:51	NMI	EET SPK
Total/NA	Analysis	8011		1			37607	08/17/22 11:47	NMI	EET SPK

Client Sample ID: Trip Blank

Lab Sample ID: 590-18339-5

Date Collected: 08/16/22 00:00

Matrix: Solid

Date Received: 08/16/22 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.84 g	2 mL	37616	08/17/22 08:51	NMI	EET SPK
Total/NA	Analysis	8011		1			37607	08/17/22 12:03	NMI	EET SPK

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

#### **Laboratory: Eurofins Spokane**

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

Authority	Р	rogram	Identification Number	Expiration Date	
Washington		tate	C569	01-06-23	
The following analytes the agency does not of	• •	out the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for whic	
Analysis Method	Prep Method	Matrix	Analyte		
Moisture		Solid	Percent Moisture		
Moisture		Solid	Percent Solids		

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# **Method Summary**

Client: HDR Inc Job ID: 590-18339-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Custody Seals Intact:

Δ Yes Δ No

Custody Seal No.

11922 East 1st Ave

# **Chain of Custody Record**

♦ eurofins

Environment Testing

Spokane WA 99206 Phone (509) 924-9200 Phone (509) 924-9290 Carrier Tracking No(s): COC No: Arrington, Randee E Jered Newcomb, JAN Client Information Client Contact: Phone: State of Origin: Page: Randee, Arrington@et, eurofinsus.com Page 1 of 1 Jered Newcomb 509-899-4371 Job #: Company: PWSID: **Analysis Requested** HDR Inc Address: Due Date Requested. Preservation Codes 835 N Post St. Ste. 101 A HCL M Hexane TAT Requested (days): B NaOH N None Spokane 24 hour C Zn Acetate O AsNaO2 D Nitric Acid P Na204S State, Zip: E NaHSO4 Q Na2SO3 Compliance Project: A Yes A No WA, 99202 F MeOH R Na2S2O3 Phone: S H2SO4 G Amchlor 509-899-4371 Purchase Order Requested H Ascorbic Acid T TSP Dodecahydrate U Acetone DI Water V MCAA jered.newcomb@hdrinc.com K EDTA W pH 4-5 Project Name: Project #: EDA Z other (specify) Simplot Warden 59002373 Other' SSOW#: Warden WA Matrix Sample W=water. Type O=waste/ol Sample (C=comp. 8011 Special Instructions/Note: Sample Date G=grab) Sample Identification Time A=Air) Preservation Code: C61SVE-Soil-Aug / -21Pre1 8/ 6 /2022 G S NN Х SVE-Soil-Aug 2 -21Pre2 /, /2022 G S N N Х SVE-Soil-Aug / 2-21Pre3 s N N Х /2022 G SVE-Soil-Aug') & -21Pre4 8/ / /2022 s ΝN Х G s N N Trip Blank Х Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Radiological Return To Client S itant Poison B Non-Hazard Lammable \_\_\_nown Disposal By Lab ....Archive For Months Deliverable Requested: I II III, IV Other (specify) Special Instructions/QC Requirements. Method of Shipment: Empty Kit Relinquished by Date: Time: Relinquished by: Jered Newcomb Date/Time: Company Received by: Date/Time: Company Date/Time: Relinquished by: Date/Time: Company Receive by: Company Date/Time: Relinquished by: Company Company

Page 13 of 14

Cooler Temperature(s) C and Other Remarks:

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8/17/2022

Client: HDR Inc Job Number: 590-18339-1

Login Number: 18339 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

Creator: Vaughan, Madison 1		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18372-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Knistène D. allen

Authorized for release by: 8/19/2022 1:32:44 PM Kristine Allen, Client Service Manager (253)433-0390 Kristine.Allen@et.eurofinsus.com

Designee for

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com



www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18372-1

# **Table of Contents**

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Job ID: 590-18372-1

**Laboratory: Eurofins Spokane** 

Narrative

Job Narrative 590-18372-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/18/2022 2:22 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8° C.

#### GC Semi VOA

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received		
590-18372-1	SVE-Soil-Aug18-22Pre1	Solid	08/18/22 12:22	08/18/22 14:22		
590-18372-2	SVE-Soil-Aug18-22Pre2	Solid	08/18/22 12:24	08/18/22 14:22		
590-18372-3	SVE-Soil-Aug18-22Pre3	Solid	08/18/22 12:26	08/18/22 14:22		
590-18372-4	SVE-Soil-Aug18-22Pre4	Solid	08/18/22 12:28	08/18/22 14:22		
590-18372-5	Trip Blank	Solid	08/18/22 00:00	08/18/22 14:22		

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# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

#### **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
%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

MQL NC

ML

MPN

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 **Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

Minimum Level (Dioxin)

Most Probable Number

Method Quantitation Limit

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Job ID: 590-18372-1

Client: HDR Inc Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug18-22Pre1

Lab Sample ID: 590-18372-1 Date Collected: 08/18/22 12:22

Matrix: Solid

Date Received: 08/18/22 14:22

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		0.01	0.01	%			08/18/22 16:17	1
Percent Solids	89.7		0.01	0.01	%			08/18/22 16:17	1
<del>-</del>									

Client Sample ID: SVE-Soil-Aug18-22Pre1 Lab Sample ID: 590-18372-1

Date Collected: 08/18/22 12:22 Matrix: Solid Date Received: 08/18/22 14:22 Percent Solids: 89.7

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) 0.054 0.038 ₩ 08/18/22 16:34 08/18/22 18:12 ND ug/Kg

Client Sample ID: SVE-Soil-Aug18-22Pre2 Lab Sample ID: 590-18372-2 Date Collected: 08/18/22 12:24 **Matrix: Solid** 

Date Received: 08/18/22 14:22

**General Chemistry** Analyte Result Qualifier RL RL Unit D Prepared Analyzed Dil Fac 10 0.01 0.01 % 08/18/22 16:17 **Percent Moisture** 0.01 0.01 % 08/18/22 16:17 **Percent Solids** 90.0

Client Sample ID: SVE-Soil-Aug18-22Pre2 Lab Sample ID: 590-18372-2 Date Collected: 08/18/22 12:24 **Matrix: Solid** 

Date Received: 08/18/22 14:22 Percent Solids: 90.0

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) 0.054 08/18/22 16:34 08/18/22 19:00 ND 0.038 ug/Kg

Client Sample ID: SVE-Soil-Aug18-22Pre3 Lab Sample ID: 590-18372-3 Date Collected: 08/18/22 12:26 **Matrix: Solid** 

Date Received: 08/18/22 14:22

**General Chemistry** Analyte RLDil Fac Result Qualifier RL Unit D Prepared Analyzed **Percent Moisture** 10.7 0.01 0.01 % 08/18/22 16:17 **Percent Solids** 0.01 08/18/22 16:17 89.3 0.01 %

Client Sample ID: SVE-Soil-Aug18-22Pre3 Lab Sample ID: 590-18372-3

Date Collected: 08/18/22 12:26 **Matrix: Solid** Date Received: 08/18/22 14:22 Percent Solids: 89.3

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.055 0.038 ug/Kg 08/18/22 16:34 08/18/22 19:17

Client Sample ID: SVE-Soil-Aug18-22Pre4 Lab Sample ID: 590-18372-4

Date Collected: 08/18/22 12:28 **Matrix: Solid** 

Date Received: 08/18/22 14:22

General Chemistry							
Analyte	Result Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3	0.01	0.01 %			08/18/22 16:17	1

**Eurofins Spokane** 

#### **Client Sample Results**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug18-22Pre4

Lab Sample ID: 590-18372-4 Date Collected: 08/18/22 12:28

Matrix: Solid

Date Received: 08/18/22 14:22 **General Chemistry (Continued)** 

Analyte Result Qualifier RLRL Unit D Prepared Analyzed Dil Fac 0.01 0.01 08/18/22 16:17 **Percent Solids** 89.7

Client Sample ID: SVE-Soil-Aug18-22Pre4 Lab Sample ID: 590-18372-4

Date Collected: 08/18/22 12:28 **Matrix: Solid** 

Date Received: 08/18/22 14:22 Percent Solids: 89.7

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.052 08/18/22 16:34 08/18/22 19:33 0.036 ug/Kg

Client Sample ID: Trip Blank Lab Sample ID: 590-18372-5

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/18/22 14:22

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.049 0.035 ug/Kg 08/18/22 16:34 08/18/22 19:49

#### QC Sample Results

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37655/2-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 37656

1,2-Dibromoethane (EDB)

Prep Batch: 37655 MB MB Dil Fac Result Qualifier RL MDL Unit Prepared Analyzed ND 0.050 0.035 ug/Kg 08/18/22 16:34 08/18/22 17:39

Lab Sample ID: LCS 590-37655/3-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analyte

**Analysis Batch: 37656** 

Prep Batch: 37655 Spike LCS LCS %Rec Added Result Qualifier Unit D %Rec Limits 1,2-Dibromoethane (EDB) 1.00 1.13 ug/Kg 113 60 - 140

Lab Sample ID: 590-18372-1 MS Client Sample ID: SVE-Soil-Aug18-22Pre1

**Matrix: Solid** 

Analysis Batch: 37656

Prep Batch: 37655 MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Unit Limits 1,2-Dibromoethane (EDB) ND 1.08 0.808 60 - 140 ug/Kg

Lab Sample ID: 590-18372-1 MSD Client Sample ID: SVE-Soil-Aug18-22Pre1 Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 37656** Prep Batch: 37655 MSD MSD Sample Sample Spike %Rec **RPD** Analyte Result Qualifier Added Result Qualifier %Rec Limit Unit D Limits 1,2-Dibromoethane (EDB) ND 1.08 0.851 60 - 140 20 ug/Kg Ö

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18372-1 DU Client Sample ID: SVE-Soil-Aug18-22Pre1 Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 37652

	Sample	Sample	DU	DU				RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
Percent Moisture	10.3		10.6		%	_	 2	20	
Percent Solids	89.7		89.4		%		0.3	20	

**Eurofins Spokane** 

8/19/2022

Prep Type: Total/NA

Prep Type: Total/NA

#### Client: HDR Inc

Project/Site: Simplot Warden

#### Client Sample ID: SVE-Soil-Aug18-22Pre1

Date Collected: 08/18/22 12:22 Date Received: 08/18/22 14:22 Lab Sample ID: 590-18372-1

Matrix: Solid

Job ID: 590-18372-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37652	08/18/22 16:17	NMI	EET SPK

#### Client Sample ID: SVE-Soil-Aug18-22Pre1

Date Collected: 08/18/22 12:22 Date Received: 08/18/22 14:22

Lab Sample ID: 590-18372-1 **Matrix: Solid** 

Percent Solids: 89.7

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.34 g	2 mL	37655	08/18/22 16:34	NMI	EET SPK
Total/NA	Analysis	8011		1			37656	08/18/22 18:12	NMI	EET SPK

#### Client Sample ID: SVE-Soil-Aug18-22Pre2

Date Collected: 08/18/22 12:24 Date Received: 08/18/22 14:22

Lab Sample ID: 590-18372-2

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	Moisture					37652	08/18/22 16:17	NMI	EET SPK	-

#### Client Sample ID: SVE-Soil-Aug18-22Pre2

Date Collected: 08/18/22 12:24 Date Received: 08/18/22 14:22

**Matrix: Solid** Percent Solids: 90.0

Lab Sample ID: 590-18372-2

Batch Dil Initial Final Batch Batch Prepared Method Number **Prep Type** Type Run Factor Amount **Amount** or Analyzed Analyst Lab Total/NA Prep 8011 10.25 g 2 mL 37655 08/18/22 16:34 NMI EET SPK Total/NA 37656 08/18/22 19:00 Analysis 8011 NMI FFT SPK 1

Date Received: 08/18/22 14:22

Client Sample ID: SVE-Soil-Aug18-22Pre3	Lab Sample ID: 590-18372-3
Date Collected: 08/18/22 12:26	Matrix: Solid
D / D / L 00/40/00 / 4 00	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37652	08/18/22 16:17	NMI	EET SPK

#### Client Sample ID: SVE-Soil-Aug18-22Pre3

Date Collected: 08/18/22 12:26

Date Received: 08/18/22 14:22

Lab Sample ID: 590-183	372-3
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Lab Sample ID: 590-18372-4

**Matrix: Solid** Percent Solids: 89.3

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.23 g	2 mL	37655	08/18/22 16:34	NMI	EET SPK
Total/NA	Analysis	8011		1			37656	08/18/22 19:17	NMI	EET SPK

#### Client Sample ID: SVE-Soil-Aug18-22Pre4

Date Collected: 08/18/22 12:28

Date Received: 08/18/22 14:22

Date Hoodiffour Cor										
Г	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Daton	Duton			minua		Duto	rioparoa		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37652	08/18/22 16:17	NMI	EET SPK

**Eurofins Spokane** 

**Matrix: Solid** 

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug18-22Pre4

Date Collected: 08/18/22 12:28 Date Received: 08/18/22 14:22 Lab Sample ID: 590-18372-4 Matrix: Solid

Percent Solids: 89.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.78 g	2 mL	37655	08/18/22 16:34	NMI	EET SPK
Total/NA	Analysis	8011		1			37656	08/18/22 19:33	NMI	EET SPK

**Client Sample ID: Trip Blank** 

Date Collected: 08/18/22 00:00

Date Received: 08/18/22 14:22

Lab Samp	le ID:	590-	183	72-5

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.13 g	2 mL	37655	08/18/22 16:34	NMI	EET SPK
Total/NA	Analysis	8011		1			37656	08/18/22 19:49	NMI	EET SPK

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

#### **Laboratory: Eurofins Spokane**

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

Authority	F	Program	Identification Number	Expiration Date
Washington	S	State	C569	01-06-23
The following analytes the agency does not of	' '	out the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for wh
the agency does not of	ici oci illication.			
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18372-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Phone (509) 924-9200 Phone (509) 924-9290

Spokane, WA 99206

**Chain of Custody Record** 

🦓 eurofins

**Environment Testing** Americ

	Jered Newcomb	, JAN		An	ringto	n, R	ando	ee E					Carrie	n Inac	Kiliy r	vo(s).			ľ	COC No.	
Client Contact:	Phone: 509-899-4371				dail:	Δrri	nata	n@e	t.eurofi	ineus	com		State of Origin: WA						Page: Page 1 of 1		
Company:	000-000-4011		PWSID:		T	,,, st ( (	rigio	11(0)0					•							Job #:	
HDR Inc Address:	Due Date Requeste	.d.			+	E1502			- 1	Anal	ysis	Req	ues	ted	- 1					Dragonation Code	
835 N Post St. Ste. 101					2005															Preservation Code  A HCL	M Hexane
City: Spokane	TAT Requested (da	ys): 24 ho	ur																	B NaOH C Zn Acetate	N None O AsNaO2
State, Zip: WA, 99202	Compliance Projec	t: A Yes	Λ <b>N</b> o		- 1															E NaHSO4	P Na2O4S Q Na2SO3
Phone:	PO #:				7													1		G Amchlor	R Na2S2O3 S H2SO4
509-899-4371 Email:	Purchase Order Wo#:	Requested			–2									1							T TSP Dodecahydrate U Acetone
jered.newcomb@hdrinc.com						9													2		V MCAA W pH 4-5
Project Name: Simplot Warden	Project #: 59002373				Š	o se			İ									ŀ	container		Z other (specify)
Site: Warden WA	SSOW#:				Sampl	ν) as													of cor	Other <sup>.</sup>	
		Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue,	eld Filtered	Perform MS/M	8011 EDB				1								Total Number		
Sample Identification	Sample Date	Time	G=grab)	A=Air) ition Code:	岁	*	₩ N				-			<del></del>				-	Š	Special Ins	tructions/Note
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SVE-Soil-Aug   5 -22Pre2	8/   3 /2022	1777	G	S	N.	N	<u></u>				1-			-						<del></del>	
SVE-Soil-Aug 🖔 -22Pre3	8/ 7 /2022	1726	G	s	N		Х			$\top$	+	ļ									
SVE-Soil-Aug / -22Pre4	8/ 8 /2022	1978	G	S	N	1	Х			+				1			<del>                                     </del>				
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Deliverable Requested I II III IV Other (specify)	<i></i>	Om	Madiologica	<u>.</u>		Spe			uctions			emei		30, 2	y Lui				1011	70 7 07	
Empty Kit Relinquished by		Date:			Tir	me.			, .		//	1		Metho	od of S	Shipm	ent:				
Relinquished by: Jered Newcomb	Date/Time:	143	) )	Company			Rece	lve b	1/	hi.	Ø	e				Date	MS	1.	2	14:22	Company
Refinquished by:	Date/Time:	<u> </u>	·	Company	***************************************		Rece	ived b				***************************************				Date	Time:			, , ,	Company
Relinquished by:	Date/Time:			Company			Rece	eived b	y:							Date	Time:				Company
Custody Seals Intact: Custody Seal No.			F	Page 13	of '	14	Cool	er Tem	perature	(s) °C a	and Ol?	ner Rei	marks:		2	18	عر	U	5//	3 1808	8/19/202

Job Number: 590-18372-1

Client: HDR Inc

Login Number: 18372 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

Creator. Vaugnan, Mauison 1		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18391-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by: 8/23/2022 4:08:38 PM

Randee Arrington, Lab Director

(509)924-9200

Randee.Arrington@et.eurofinsus.com

----- LINKS -----**Review your project** results through EOL **Have a Question?** Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18391-1

# **Table of Contents**

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# **Sample Summary**

Job ID: 590-18391-1 Client: HDR Inc

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18391-1	SVE-Soil-Aug-22-23Pre1	Solid	08/22/22 12:00	08/22/22 14:20
590-18391-2	SVE-Soil-Aug-22-23Pre2	Solid	08/22/22 12:02	08/22/22 14:20
590-18391-3	SVE-Soil-Aug-22-23Pre3	Solid	08/22/22 12:04	08/22/22 14:20
590-18391-4	SVE-Soil-Aug-22-23Pre4	Solid	08/22/22 12:06	08/22/22 14:20
590-18391-5	SVE-Soil-Aug-22-23DUP	Solid	08/22/22 11:55	08/22/22 14:20
590-18391-6	Trip Blank	Solid	08/22/22 00:00	08/22/22 14:20

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

#### Glossarv

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) Most Probable Number MPN 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

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Client: HDR Inc

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug-22-23Pre1

Date Collected: 08/22/22 12:00 Date Received: 08/22/22 14:20 Lab Sample ID: 590-18391-1

Lab Sample ID: 590-18391-2

**Matrix: Solid** 

**Matrix: Solid** 

Job ID: 590-18391-1

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.9		0.01	0.01	%			08/22/22 16:48	1
Percent Solids	89.1		0.01	0.01	%			08/22/22 16:48	1

Client Sample ID: SVE-Soil-Aug-22-23Pre1 Lab Sample ID: 590-18391-1

Date Collected: 08/22/22 12:00 **Matrix: Solid** Date Received: 08/22/22 14:20 Percent Solids: 89.1

Method: 8011 - EDB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.051	0.036	ug/Kg	<u></u>	08/22/22 16:30	08/22/22 18:44	1

Client Sample ID: SVE-Soil-Aug-22-23Pre2

Date Collected: 08/22/22 12:02

Date Received: 08/22/22 14:20

General Chemistry Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.5		0.01	0.01	%			08/22/22 16:48	1
Percent Solids	90.5		0.01	0.01	%			08/22/22 16:48	1

Lab Sample ID: 590-18391-2 Client Sample ID: SVE-Soil-Aug-22-23Pre2

Date Collected: 08/22/22 12:02 **Matrix: Solid** Date Received: 08/22/22 14:20 Percent Solids: 90.5

Method: 8011 - EDB							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	0.052	0.036 ug/Kg	⊅	08/22/22 16:30	08/22/22 19:34	1

Client Sample ID: SVE-Soil-Aug-22-23Pre3 Lab Sample ID: 590-18391-3 Date Collected: 08/22/22 12:04 **Matrix: Solid** 

Date Received: 08/22/22 14:20

<b>General Chemistry</b>									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7		0.01	0.01	%			08/22/22 16:48	1
Percent Solids	90.3		0.01	0.01	%			08/22/22 16:48	1

Client Sample ID: SVE-Soil-Aug-22-23Pre3 Lab Sample ID: 590-18391-3

Date Collected: 08/22/22 12:04 **Matrix: Solid** Date Received: 08/22/22 14:20 Percent Solids: 90.3

Method: 8011 - EDB							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	0.055	0.038 ug/Kg	<del>*</del>	08/22/22 16:30	08/22/22 19:50	1

Client Sample ID: SVE-Soil-Aug-22-23Pre4 Lab Sample ID: 590-18391-4 Date Collected: 08/22/22 12:06 Matrix: Solid

Date Received: 08/22/22 14:20

General Chemistry Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		0.01	0.01	%			08/22/22 16:48	1

**Eurofins Spokane** 

### Client Sample Results

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug-22-23Pre4

Lab Sample ID: 590-18391-4 **Matrix: Solid** 

Date Collected: 08/22/22 12:06 Date Received: 08/22/22 14:20

**General Chemistry (Continued)** 

Analyte RL **RL** Unit Result Qualifier D Prepared Analyzed Dil Fac **Percent Solids** 0.01 0.01 % 08/22/22 16:48 90.7

Client Sample ID: SVE-Soil-Aug-22-23Pre4 Lab Sample ID: 590-18391-4

Date Collected: 08/22/22 12:06 **Matrix: Solid** Date Received: 08/22/22 14:20 Percent Solids: 90.7

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.054 0.038 ug/Kg 08/22/22 16:30 08/22/22 20:07

Lab Sample ID: 590-18391-5 Client Sample ID: SVE-Soil-Aug-22-23DUP

Date Collected: 08/22/22 11:55 Matrix: Solid

Date Received: 08/22/22 14:20

**General Chemistry** Analyte Result Qualifier RL **RL Unit** D Prepared Analyzed Dil Fac **Percent Moisture** 11.7 0.01 0.01 % 08/22/22 16:48 **Percent Solids** 88.3 0.01 0.01 % 08/22/22 16:48

Client Sample ID: SVE-Soil-Aug-22-23DUP Lab Sample ID: 590-18391-5

Date Collected: 08/22/22 11:55 Matrix: Solid Date Received: 08/22/22 14:20 Percent Solids: 88.3

Method: 8011 - EDB Result Qualifier Dil Fac Analyte RL **MDL** Unit D Analyzed Prepared 08/22/22 16:30 08/22/22 20:23 1,2-Dibromoethane (EDB) 0.056 ND 0.039 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18391-6

Date Collected: 08/22/22 00:00 **Matrix: Solid** Date Received: 08/22/22 14:20

Method: 8011 - EDB Analyte Result Qualifier RLMDL Unit Prepared Analyzed 0.049 1,2-Dibromoethane (EDB) ND 0.034 ug/Kg 08/22/22 16:30 08/22/22 20:40

8/23/2022

### QC Sample Results

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37696/2-A

**Matrix: Solid** 

**Analysis Batch: 37698** 

1,2-Dibromoethane (EDB)

1,2-Dibromoethane (EDB)

MB MB

Analyte

Result Qualifier ND

RL 0.050

**MDL** Unit 0.035 ug/Kg

**Prepared** 08/22/22 16:30 08/22/22 18:11

Client Sample ID: Method Blank

Analyzed Dil Fac

Prep Type: Total/NA

Prep Batch: 37696

Prep Type: Total/NA

Prep Batch: 37696

Lab Sample ID: LCS 590-37696/3-A

**Matrix: Solid** 

**Analysis Batch: 37698** 

Spike Added

Sample Sample

Sample Sample

 $\overline{\mathsf{ND}}$ 

Result Qualifier

ND

Result Qualifier

1.00

Spike

Added

1.03

Spike

Added

1.09

LCS LCS 0.994

MS MS

MSD MSD

Result Qualifier

0.657

0.710

9.7

90.3

Result Qualifier

Unit ug/Kg

Unit

ug/Kg

D %Rec 99

Limits 60 - 140

%Rec

%Rec

60 - 140

Lab Sample ID: 590-18391-1 MS

**Matrix: Solid** 

**Analysis Batch: 37698** 

Analyte 1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18391-1 MSD

**Matrix: Solid Analysis Batch: 37698** 

Analyte

1,2-Dibromoethane (EDB) **Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18391-1 DU

**Matrix: Solid** 

**Analysis Batch: 37697** Sample Sample

Analyte Result Qualifier Percent Moisture 10.9 89.1 Percent Solids

**Client Sample ID: Lab Control Sample** 

Client Sample ID: SVE-Soil-Aug-22-23Pre1

Prep Type: Total/NA Prep Batch: 37696

Result Qualifier Limits Unit D %Rec 60 - 140 ug/Kg

D

%Rec

Client Sample ID: SVE-Soil-Aug-22-23Pre1

Prep Type: Total/NA Prep Batch: 37696

%Rec **RPD** Limits **RPD** Limit

Client Sample ID: SVE-Soil-Aug-22-23Pre1 Prep Type: Total/NA

DU DU **RPD** Result Qualifier Unit D **RPD** Limit % 11 20 % 20

**Eurofins Spokane** 

8/23/2022

Job ID: 590-18391-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE-Soil-Aug-22-23Pre1

Date Collected: 08/22/22 12:00 Date Received: 08/22/22 14:20

Lab Sample ID: 590-18391-1

**Matrix: Solid** 

Batch Ratch Dil Initial Final Batch Prepared Method Factor **Prep Type** Type Run **Amount** Amount Number or Analyzed **Analyst** Lab Total/NA 37697 08/22/22 16:48 EET SPK Analysis Moisture NMI

Client Sample ID: SVE-Soil-Aug-22-23Pre1

Date Collected: 08/22/22 12:00 Date Received: 08/22/22 14:20

Lab Sample ID: 590-18391-1 **Matrix: Solid** 

Lab Sample ID: 590-18391-2

Percent Solids: 89.1

**Matrix: Solid** 

Matrix: Solid

Batch Batch Dil Initial Final Batch **Prepared Prep Type** Type Method Run **Factor** Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 8011 10.99 g 2 mL 37696 08/22/22 16:30 NMI **EET SPK** Total/NA Analysis 8011 37698 08/22/22 18:44 **EET SPK** 1

Client Sample ID: SVE-Soil-Aug-22-23Pre2

Date Collected: 08/22/22 12:02

Date Received: 08/22/22 14:20

Batch

Dil Initial Final **Batch** Prepared Number

Method **Factor Prep Type** Type Run **Amount** Amount or Analyzed Analyst Lab Total/NA 37697 08/22/22 16:48 NMI Analysis Moisture **EET SPK** Lab Sample ID: 590-18391-2

Client Sample ID: SVE-Soil-Aug-22-23Pre2

Batch

Date Collected: 08/22/22 12:02 Date Received: 08/22/22 14:20

**Matrix: Solid** Percent Solids: 90.5

Lab Sample ID: 590-18391-3

Lab Sample ID: 590-18391-4

Batch Batch Dil Initial Final Batch **Prepared** Method **Amount** Amount Number or Analyzed **Prep Type** Type Run **Factor** Analyst Lab 37696 8011 08/22/22 16:30 NMI Total/NA Prep 10.67 g 2 mL EET SPK Total/NA Analysis 8011 37698 08/22/22 19:34 NMI EET SPK 1

Client Sample ID: SVE-Soil-Aug-22-23Pre3

Date Collected: 08/22/22 12:04

Date Received: 08/22/22 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37697	08/22/22 16:48	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-22-23Pre3

Date Collected: 08/22/22 12:04

Lab Sample ID: 590-18391-3 Matrix: Solid Date Received: 08/22/22 14:20 Percent Solids: 90.3

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run Factor Amount Amount Number or Analyzed Analyst Lab 37696 Total/NA Prep 8011 10.09 g 2 mL 08/22/22 16:30 NMI EET SPK 8011 Total/NA Analysis 1 37698 08/22/22 19:50 NMI **EET SPK** 

Client Sample ID: SVE-Soil-Aug-22-23Pre4

Date Collected: 08/22/22 12:06

Date Received: 08/22/22 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37697	08/22/22 16:48	NMI	EET SPK

**Eurofins Spokane** 

Matrix: Solid

Page 8 of 13

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug-22-23Pre4

Lab Sample ID: 590-18391-4 Date Collected: 08/22/22 12:06 **Matrix: Solid** 

Date Received: 08/22/22 14:20 Percent Solids: 90.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.18 g	2 mL	37696	08/22/22 16:30	NMI	EET SPK
Total/NA	Analysis	8011		1			37698	08/22/22 20:07	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-22-23DUP

Lab Sample ID: 590-18391-5 Date Collected: 08/22/22 11:55 Matrix: Solid

Date Received: 08/22/22 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37697	08/22/22 16:48	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-22-23DUP

Lab Sample ID: 590-18391-5 Date Collected: 08/22/22 11:55 **Matrix: Solid** 

Date Received: 08/22/22 14:20 Percent Solids: 88.3

Γ		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
ı	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	8011			10.17 g	2 mL	37696	08/22/22 16:30	NMI	EET SPK
1	Total/NA	Analysis	8011		1			37698	08/22/22 20:23	NMI	EET SPK

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18391-6 **Matrix: Solid** 

Date Collected: 08/22/22 00:00 Date Received: 08/22/22 14:20

Dil Initial Batch Batch Final Batch Prepared **Prep Type** Type Method **Factor Amount** Amount Number or Analyzed Run Analyst Lab 8011 37696 Total/NA Prep 10.23 g 2 mL 08/22/22 16:30 NMI EET SPK Total/NA Analysis 8011 37698 1 08/22/22 20:40 NMI **EET SPK** 

**Laboratory References:** 

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

**Eurofins Spokane** 

8/23/2022

Page 9 of 13

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	S	tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18391-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Phone (509) 924-9200 Phone (509) 924-9290

Spokane WA 99206

Client Information

# **Chain of Custody Record**

Sampler Jered Newcomb, JAN

Lab PM<sup>.</sup> Arrington, Randee E

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 -	•	•	•	•	۰	۰	۰	-

COC No:

Carrier Tracking No(s):

Environment Test ng America

Stent Contact: Jered Newcomb	Phone: 509-899-4371			E-Mi Rar		.Arr	ingto	n@el	.euro	finsus	s.con	n		iate of IA	f Origi	n:					Page: Page 1 of 1		
Company: HDR Inc			PWSID:							Ana	lysi	is R	egu	este	ed					J	lob #:		
Address: 335 N Post St. Ste. 101 Sity:	Due Date Requesto TAT Requested (d:					ne i	••••													1	Preservation Cod	M Hexa	
ory. Spokane State, Zip:	TAT Requestes (u	24 ho	our		Organization To						ĺ						***		l	1	B NaOH C Zn Acetate D Nitric Acid	N None O AsNa P Na20	aO2
NA, 99202	Compliance Projec	t: A Yes	Λ No		7															- [1	E NaHSO4 F MeOH	Q Na25 R Na25	SO3
Phone: 509-899-4371	PO#: Purchase Order	Requested	3		8												-				G Amchlor H Ascerble Acid	S H2SC	
:mail: ered.newcomb@hdrinc.com	WO #:				7 N S	(ON														2	I ice J Di Water	U Aceto V MCA	one A
Project Name: Simplot Warden	Project #: 59002373				غ و	50 S										-				tame	K EDTA L EDA	W pH 4 Z other	I-5 (specify)
Site: Warden WA	SSOW#:				Tidues	W as											-			ទ្ធី៤	Other:		
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue,	leld Filtered S	Eb- 500	8011 EDB													Total Number of containers	Succial lu		
Jampa destinettion	Calliple Date		Preservati	A=Alı) ion Code;	犮	Ż	N N									77			肯	₹t	Special In	Structio	nsmote:
SVE-Soil-Aug ) 2-23Pre1	8/ 🕽 ڪِ /2022	1200	G	S	Ν	Ν		100000000000000000000000000000000000000	District Co. Co.			Ť	And back	iotic il ioc	:Amadelma	fazorate Paza	mumfető fitas	non-little (mili	efficación (* 150			Allen Arthur Control	
SVE-Soil-Aug 🔾 -23Pre2	8/ ጋጋ /2022	1202	G	S	N	N	Х							T									
SVE-Soil-Aug 💥 -23Pre3	8/ <u>)</u> ე /2022	1204	G	s	N	N	Х																
SVE-Soil-Aug_)_2-23Pre4	8/22 /2022	1206	G	s	N	Z	Х									1	- 1	,		-81			
SVE-Soil-Aug ), -23DUP	8/ Q) 12022	1155	G	s	N	Z	Х				1!	1 <b>11 11</b>	111 <b>1</b> 110							$\mathbb{I}$			
Гrip Blank				S	N	N	Х				1	$\mathbb{W}$								M			
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Possible Hazard Identification  Non-Hazard ammable Sitiant Pois Deliverable Requested: I, II III, IV Other (specify)	on Bn	own [	Radiological				<u></u> },	eturn	To C		$\angle$		jsj	posa			ples	are r	_		d longer than 1 e For	month) Mont	
mpty Kit Relinquished by		Date:			Tir	ne:			_	/	9				elhod	of Sh	iomen	1:		_			
telinquished by: Jered Newcomb	Date/Time:	14,	<u>^\</u>	Company	1:"		Rece	ker by	1/	4	7						-	-27	7.7	<u>_</u>	- 14:20	Company	× 200
refinquished by:	O/スかみ』 Date/Time:	17,0		ompany			Fece	ived by	<u> </u>							D	ale/Ti	ne:			14.00	Company	
telinquished by:	Date/Time:		C	Company			Rece	ived by	-//							D	ate/Ti	ne:		—		Company	у
Custody Seals Intact: Custody Seal No.	L			Page 1	2 0			er Temp	eratur	e(s) °C	and C	Other	Remar	rks:				ム	7	70/	(maid h	1 ()03L	8/23/20

# **Login Sample Receipt Checklist**

Client: HDR Inc Job Number: 590-18391-1

Login Number: 18391 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

oreator. Vaugilan, Mauison i		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	



# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Spokane** 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18410-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by: 8/25/2022 10:32:32 AM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

----- LINKS -----

**Review your project** results through EOL

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18410-1

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Sample Summary	
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Client Sample Results	6
QC Sample Results	8
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Method Summary	12
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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

Job ID: 590-18410-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

#### Receipt

The samples were received on 8/24/2022 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

#### GC Semi VOA

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

#### **General Chemistry**

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

#### **Organic Prep**

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

# **Sample Summary**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18410-1	SVE-Soil-Aug-24-24Pre1	Solid	08/24/22 11:13	08/24/22 13:00
590-18410-2	SVE-Soil-Aug-24-24Pre2	Solid	08/24/22 11:15	08/24/22 13:00
590-18410-3	SVE-Soil-Aug-24-24Pre3	Solid	08/24/22 11:17	08/24/22 13:00
590-18410-4	SVE-Soil-Aug-24-24Pre4	Solid	08/24/22 11:19	08/24/22 13:00
590-18410-5	Trip Blank	Solid	08/24/22 11:13	08/24/22 13:00

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

#### Glossary

DL

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

Detection Limit (DoD/DOE)

**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) Most Probable Number MPN 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

Page 5 of 14

Client Sample Results Client: HDR Inc Job ID: 590-18410-1 Project/Site: Simplot Warden Lab Sample ID: 590-18410-1 Client Sample ID: SVE-Soil-Aug-24-24Pre1 Date Collected: 08/24/22 11:13 Matrix: Solid Date Received: 08/24/22 13:00 **General Chemistry** Analyte RL **RL** Unit D Result Qualifier Prepared Analyzed Dil Fac 0.01 0.01 % 08/24/22 15:30 **Percent Moisture** 9.7 0.01 0.01 % 08/24/22 15:30 **Percent Solids** 90.3 Client Sample ID: SVE-Soil-Aug-24-24Pre1 Lab Sample ID: 590-18410-1 Date Collected: 08/24/22 11:13 Matrix: Solid Date Received: 08/24/22 13:00 Percent Solids: 90.3 Method: 8011 - EDB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac <u>~</u> 1,2-Dibromoethane (EDB) ND 0.054 0.038 ug/Kg 08/24/22 16:08 08/24/22 17:40 Client Sample ID: SVE-Soil-Aug-24-24Pre2 Lab Sample ID: 590-18410-2 Date Collected: 08/24/22 11:15 **Matrix: Solid** Date Received: 08/24/22 13:00 **General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.01 0.01 % 08/24/22 15:30 **Percent Moisture** 11.2 0.01 % **Percent Solids** 88.8 0.01 08/24/22 15:30 Client Sample ID: SVE-Soil-Aug-24-24Pre2 Lab Sample ID: 590-18410-2 Date Collected: 08/24/22 11:15 Matrix: Solid Date Received: 08/24/22 13:00 Percent Solids: 88.8 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 08/24/22 16:08 08/24/22 18:29 1.2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.056 0.039 ug/Kg Client Sample ID: SVE-Soil-Aug-24-24Pre3 Lab Sample ID: 590-18410-3 Date Collected: 08/24/22 11:17 Matrix: Solid Date Received: 08/24/22 13:00 **General Chemistry** Analyte Result Qualifier RL **RL** Unit D Prepared Analyzed Dil Fac 0.01 0.01 % 08/24/22 15:30 **Percent Moisture** 10.2 **Percent Solids** 89.8 0.01 0.01 % 08/24/22 15:30 Client Sample ID: SVE-Soil-Aug-24-24Pre3 Lab Sample ID: 590-18410-3 Date Collected: 08/24/22 11:17 **Matrix: Solid** Date Received: 08/24/22 13:00 Percent Solids: 89.8 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 1,2-Dibromoethane (EDB) 0.053 08/24/22 16:08 08/24/22 18:46 ND 0.037 ug/Kg Client Sample ID: SVE-Soil-Aug-24-24Pre4 Lab Sample ID: 590-18410-4 Date Collected: 08/24/22 11:19 Matrix: Solid Date Received: 08/24/22 13:00

RL

0.01

**RL Unit** 

0.01 %

Result Qualifier

10.6

**General Chemistry** 

**Percent Moisture** 

Analyte

**Eurofins Spokane** 

Dil Fac

Analyzed

08/24/22 15:30

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Page 6 of 14 8/25/2022

D

Prepared

# **Client Sample Results**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug-24-24Pre4

Lab Sample ID: 590-18410-4

Date Collected: 08/24/22 11:19 **Matrix: Solid** Date Received: 08/24/22 13:00

**General Chemistry (Continued)** 

Analyte RL **RL** Unit Analyzed Result Qualifier D Prepared Dil Fac **Percent Solids** 0.01 0.01 % 08/24/22 15:30 89.4

Lab Sample ID: 590-18410-4 Client Sample ID: SVE-Soil-Aug-24-24Pre4

Date Collected: 08/24/22 11:19 **Matrix: Solid** 

Date Received: 08/24/22 13:00 Percent Solids: 89.4

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.055 0.038 ug/Kg

**Client Sample ID: Trip Blank** Lab Sample ID: 590-18410-5

Date Collected: 08/24/22 11:13 **Matrix: Solid** 

Date Received: 08/24/22 13:00

Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed 0.049 08/24/22 16:08 08/24/22 19:19 1,2-Dibromoethane (EDB) ND 0.035 ug/Kg

## QC Sample Results

Client: HDR Inc Job ID: 590-18410-1

RL

0.050

Spike

Added

1.00

Spike

Added

1.09

Spike

Added

1.07

**MDL** Unit

0.035 ug/Kg

LCS LCS

MS MS

MSD MSD

Result Qualifier

Result Qualifier

0.926

0.725

0.668

90.8

Result Qualifier

Unit

ug/Kg

Unit

ug/Kg

Unit

%

ug/Kg

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37732/2-A

**Matrix: Solid** 

**Analysis Batch: 37734** 

1,2-Dibromoethane (EDB)

MB MB

ND

Sample Sample

Sample Sample

 $\overline{\mathsf{ND}}$ 

Result Qualifier

ND

Result Qualifier

Analyte

Result Qualifier

Lab Sample ID: LCS 590-37732/3-A

**Matrix: Solid Analysis Batch: 37734** 

1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18410-1 MS **Matrix: Solid** 

**Analysis Batch: 37734** 

Analyte

1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18410-1 MSD

**Matrix: Solid** 

**Analysis Batch: 37734** 

Analyte

1,2-Dibromoethane (EDB)

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18410-1 DU

**Matrix: Solid** 

**Analysis Batch: 37730** 

Sample Sample Analyte Result Qualifier Percent Moisture 9.7 90.3 Percent Solids

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37732

Analyzed Dil Fac **Prepared** 08/24/22 16:08 08/24/22 17:06

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 37732

%Rec Limits

60 - 140

Client Sample ID: SVE-Soil-Aug-24-24Pre1

D %Rec

D

D

93

%Rec

Prep Type: Total/NA

Prep Batch: 37732

%Rec

Limits

60 - 140

Client Sample ID: SVE-Soil-Aug-24-24Pre1

Prep Type: Total/NA

Prep Batch: 37732

%Rec **RPD** 

Limits **RPD** Limit

60 - 140 20

%Rec

Client Sample ID: SVE-Soil-Aug-24-24Pre1

Prep Type: Total/NA

0.6

20

DU DU **RPD** Result Qualifier Unit D **RPD** Limit 9.2 % 6 20

**Eurofins Spokane** 

2

Job ID: 590-18410-1

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

Percent Solids: 88.8

Percent Solids: 90.3

Lab Sample ID: 590-18410-1

Lab Sample ID: 590-18410-1

Lab Sample ID: 590-18410-2

Lab Sample ID: 590-18410-2

Lab Sample ID: 590-18410-3

Lab Sample ID: 590-18410-3

Lab Sample ID: 590-18410-4

Project/Site: Simplot Warden

Client: HDR Inc

011 1 0 1 1 1 0 1 1 0

Client Sample ID: SVE-Soil-Aug-24-24Pre1

Date Collected: 08/24/22 11:13 Date Received: 08/24/22 13:00

	Batch	Batch	Dil		Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37730	08/24/22 15:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-24-24Pre1

Date Collected: 08/24/22 11:13 Date Received: 08/24/22 13:00

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.28 g	2 mL	37732	08/24/22 16:08	NMI	EET SPK
Total/NA	Analysis	8011		1			37734	08/24/22 17:40	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-24-24Pre2

Date Collected: 08/24/22 11:15 Date Received: 08/24/22 13:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37730	08/24/22 15:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-24-24Pre2

Date Collected: 08/24/22 11:15 Date Received: 08/24/22 13:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	8011			10.13 g	2 mL	37732	08/24/22 16:08	NMI	EET SPK	
Total/NA	Analysis	8011		1			37734	08/24/22 18:29	NMI	EET SPK	

Client Sample ID: SVE-Soil-Aug-24-24Pre3

Date Collected: 08/24/22 11:17

Date Received: 08/24/22 13:00

_											
		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep	Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total	NA	Analysis	Moisture		1			37730	08/24/22 15:30	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-24-24Pre3

Choint Campio 121 CT Con 7 tag 21 2 in 100	
Date Collected: 08/24/22 11:17	Matrix: Solid
Date Received: 08/24/22 13:00	Percent Solids: 89.8

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.51 g	2 mL	37732	08/24/22 16:08	NMI	EET SPK
Total/NA	Analysis	8011		1			37734	08/24/22 18:46	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug-24-24Pre4

Date Collected: 08/24/22 11:19

Date Received: 08/24/22 13:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37730	08/24/22 15:30	NMI	EET SPK

**Eurofins Spokane** 

8/25/2022

Matrix: Solid

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6

8

10

11

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug-24-24Pre4

Lab Sample ID: 590-18410-4 Date Collected: 08/24/22 11:19 **Matrix: Solid** Date Received: 08/24/22 13:00

Percent Solids: 89.4

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method **Factor** Number or Analyzed Analyst Type Run **Amount Amount** Prep Total/NA 8011 10.26 g 37732 08/24/22 16:08 NMI EET SPK 2 mL Total/NA 8011 08/24/22 19:02 NMI Analysis 37734 **EET SPK** 1

Client Sample ID: Trip Blank Lab Sample ID: 590-18410-5

Date Collected: 08/24/22 11:13 **Matrix: Solid** 

Date Received: 08/24/22 13:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.13 g	2 mL	37732	08/24/22 16:08	NMI	EET SPK
Total/NA	Analysis	8011		1			37734	08/24/22 19:19	NMI	EET SPK

**Laboratory References:** 

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	S	tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18410-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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11922 East 1st Ave

Spokane, WA 99206

💸 eurofins **Chain of Custody Record** Environ nent Testing An er Phone (509) 924-9200 Phone (509) 924-9290

Client Information	JAN Arrington, Randee E											COC NO:								
Client Contact: Jered Newcomb	Phone: 509-899-4371			E-M Rai		rring	ton@	et.euro	finsus	s.com		State of	of Orig	in:				Page: Page 1 of 1		
Company: HDR inc		_	PWSID:							alysis	Rec	ues	ted					Job#:		
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State, Zip: WA, 99202	Compliance Project	: Δ Yes /	\ No		4													D Nitric Acid E NaHSO4	P Na2O4S Q Na2SO3	
Phone: 509-899-4371	PO#: Purchase Order				٦												İ	F MeOH G Amchlor H Ascorbic Acid	R Na2S2O3 S H2SO4 T TSP Dodecahy	wkata
Email: jered.newcomb@hdrinc.com	WO #:				Or No	2	590-18410 Chain of						JIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII					l Ice J DIWater	U Acetone V MCAA	Jurate
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Deliverable Requested: I, II III IV Other (specify)					s	Specia	al Ins	truction	s/QC	Requi	ireme	nts:								
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Client: HDR Inc Job Number: 590-18410-1

Login Number: 18410 List Source: Eurofins Spokane

List Number: 1 Creator: Fettig, Riley

Radioactivity wasn't checked or is = background as measured by a survey meter.  The cooler's custody seal, if present, is intact.  Sample custody seals, if present, are intact.  N/A  The cooler or samples do not appear to have been compromised or tampered with.  Samples were received on ice.  Cooler Temperature is acceptable.  Cooler Temperature is recorded.  True  COC is present.  True  COC is filled out in ink and legible.  True  COC is filled out with all pertinent information.  Is the Field Sampler's name present on COC?  There are no discrepancies between the containers received and the COC.  Samples are received within Holding Time (excluding tests with immediate HTS)  Sample containers have legible labels.  Containers are not broken or leaking.  Sample collection date/times are provided.  Appropriate sample containers are used.  True  Sample Preservation Verified.  There is sufficient vol. for all requested analyses, incl. any requested  MS/MSDs  Containers requiring zero headspace have no headspace or bubble is  4000 400 400 400 400 400 400 400 400 4</th <th>Creator: rettig, Riley</th> <th></th> <th></th>	Creator: rettig, Riley		
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	Multiphasic samples are not present.	True	
Residual Chlorine Checked. N/A	Samples do not require splitting or compositing.	True	
	Residual Chlorine Checked.	N/A	

**Eurofins Spokane** 



# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Spokane** 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18432-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:

8/29/2022 3:47:45 PM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

----- LINKS -----



**Have a Question?** 



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18432-1

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

Job ID: 590-18432-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

#### Receipt

The samples were received on 8/25/2022 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was  $4.5^{\circ}$  C.

#### GC Semi VOA

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
590-18432-1	SVE-Soil-Aug25-25Pre1	Solid	08/25/22 14:50	08/25/22 16:50	
590-18432-2	SVE-Soil-Aug25-25Pre2	Solid	08/25/22 14:52	08/25/22 16:50	
590-18432-3	SVE-Soil-Aug25-25Pre3	Solid	08/25/22 14:54	08/25/22 16:50	
590-18432-4	SVE-Soil-Aug25-25Pre4	Solid	08/25/22 14:58	08/25/22 16:50	
590-18432-5	Trip Blank	Solid	08/25/22 08:00	08/25/22 16:50	

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

#### **Glossary**

DL

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

Detection Limit (DoD/DOE)

**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) Most Probable Number MPN 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

## Client Sample Results

Client: HDR Inc Job ID: 590-18432-1 Project/Site: Simplot Warden Lab Sample ID: 590-18432-1 Client Sample ID: SVE-Soil-Aug25-25Pre1 Date Collected: 08/25/22 14:50 Matrix: Solid Date Received: 08/25/22 16:50 **General Chemistry** Analyte RL **RL** Unit D Dil Fac Result Qualifier Prepared Analyzed 0.01 0.01 % 08/26/22 10:59 **Percent Moisture** 8.8 0.01 0.01 % 08/26/22 10:59 **Percent Solids** 91.2 Client Sample ID: SVE-Soil-Aug25-25Pre1 Lab Sample ID: 590-18432-1 Date Collected: 08/25/22 14:50 Matrix: Solid Date Received: 08/25/22 16:50 Percent Solids: 91.2 Method: 8011 - EDB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac <u>~</u> 08/26/22 11:45 08/26/22 13:32 1,2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.053 0.037 ug/Kg Client Sample ID: SVE-Soil-Aug25-25Pre2 Lab Sample ID: 590-18432-2 Date Collected: 08/25/22 14:52 **Matrix: Solid** Date Received: 08/25/22 16:50 **General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.01 0.01 % 08/26/22 10:59 **Percent Moisture** 10.8 0.01 % **Percent Solids** 89.2 0.01 08/26/22 10:59 Client Sample ID: SVE-Soil-Aug25-25Pre2 Lab Sample ID: 590-18432-2 Date Collected: 08/25/22 14:52 Matrix: Solid Date Received: 08/25/22 16:50 Percent Solids: 89.2 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 08/26/22 11:45 08/26/22 14:21 1.2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.053 0.037 ug/Kg Client Sample ID: SVE-Soil-Aug25-25Pre3 Lab Sample ID: 590-18432-3 Date Collected: 08/25/22 14:54 Matrix: Solid Date Received: 08/25/22 16:50 **General Chemistry** Analyte Result Qualifier RL **RL** Unit D Prepared Analyzed Dil Fac 0.01 0.01 % 08/26/22 10:59 **Percent Moisture** 11.7 **Percent Solids** 88.3 0.01 0.01 % 08/26/22 10:59 Client Sample ID: SVE-Soil-Aug25-25Pre3 Lab Sample ID: 590-18432-3 Date Collected: 08/25/22 14:54 **Matrix: Solid** Date Received: 08/25/22 16:50 Percent Solids: 88.3 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 1,2-Dibromoethane (EDB) ND 0.056 08/26/22 11:45 08/26/22 14:38 0.039 ug/Kg Client Sample ID: SVE-Soil-Aug25-25Pre4 Lab Sample ID: 590-18432-4 Date Collected: 08/25/22 14:58 Matrix: Solid Date Received: 08/25/22 16:50 **General Chemistry** Analyte Result Qualifier RL **RL Unit** D Prepared Analyzed Dil Fac **Percent Moisture** 0.01 0.01 % 08/26/22 10:59 14.6

**Eurofins Spokane** 

8/29/2022

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# **Client Sample Results**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug25-25Pre4

Lab Sample ID: 590-18432-4

Date Received: 08/25/22 16:50

Date Collected: 08/25/22 14:58 **Matrix: Solid** 

**General Chemistry (Continued)** 

Analyte RL **RL** Unit Analyzed Result Qualifier D Prepared Dil Fac **Percent Solids** 0.01 0.01 % 08/26/22 10:59 85.4

Client Sample ID: SVE-Soil-Aug25-25Pre4

Lab Sample ID: 590-18432-4

Date Collected: 08/25/22 14:58 **Matrix: Solid** Date Received: 08/25/22 16:50 Percent Solids: 85.4

Method: 8011 - EDB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 08/26/22 11:45 08/26/22 14:54 1,2-Dibromoethane (EDB) ND 0.055 0.039 ug/Kg

**Client Sample ID: Trip Blank** 

Lab Sample ID: 590-18432-5 Date Collected: 08/25/22 08:00 **Matrix: Solid** 

Date Received: 08/25/22 16:50

Method: 8011 - EDB

Analyte Result Qualifier RL MDL Unit Prepared Dil Fac Analyzed 0.049 08/26/22 11:45 08/26/22 15:10 1,2-Dibromoethane (EDB) ND 0.034 ug/Kg

8/29/2022

## QC Sample Results

Client: HDR Inc Job ID: 590-18432-1

RL

0.050

Spike

Added

1.00

Spike

Added

1.07

Spike

Added

1.03

**MDL** Unit

0.035 ug/Kg

LCS LCS

MS MS

MSD MSD

DU DU

8.2

91.8

Result Qualifier

Unit

ug/Kg

%

%

0.981

0.716

0.777

Result Qualifier

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37757/2-A

**Matrix: Solid** 

**Analysis Batch: 37758** 

Result Qualifier Analyte 1,2-Dibromoethane (EDB) ND

MB MB

Sample Sample

Sample Sample

Sample Sample

8.8

91.2

Result Qualifier

 $\overline{\mathsf{ND}}$ 

Result Qualifier

ND

Result Qualifier

Lab Sample ID: LCS 590-37757/3-A **Matrix: Solid** 

**Analysis Batch: 37758** 

1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18432-1 MS

**Matrix: Solid** 

**Analysis Batch: 37758** 

Analyte 1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18432-1 MSD

**Matrix: Solid** 

**Analysis Batch: 37758** 

Analyte 1,2-Dibromoethane (EDB)

**Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18432-1 DU

**Matrix: Solid** 

Percent Moisture

Percent Solids

**Analysis Batch: 37756** 

Analyte

Lab Sample ID: 590-18432-2 DU

**Matrix: Solid** 

Percent Moisture 10.8 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37757

Analyzed Dil Fac Prepared 08/26/22 11:45 08/26/22 12:59

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 37757

%Rec

Unit D %Rec Limits 60 - 140 ug/Kg 98

Client Sample ID: SVE-Soil-Aug25-25Pre1

Prep Type: Total/NA

Prep Batch: 37757

%Rec Result Qualifier Limits Unit D %Rec 67 60 - 140 ug/Kg

D

Client Sample ID: SVE-Soil-Aug25-25Pre1

**Prep Type: Total/NA** 

Prep Batch: 37757 %Rec **RPD** 

%Rec Limits **RPD** Limit 60 - 140 20

Client Sample ID: SVE-Soil-Aug25-25Pre1

Prep Type: Total/NA

**RPD** Result Qualifier Unit **RPD** Limit

Client Sample ID: SVE-Soil-Aug25-25Pre2

Prep Type: Total/NA

0.7

20

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**Analysis Batch: 37756** DU DU **RPD** Sample Sample Result Qualifier Result Qualifier RPD Limit Analyte Unit D 10.6 % 20 Percent Solids 89.2 89.4 % 0.2 20

8/29/2022

Client: HDR Inc

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug25-25Pre1

Date Collected: 08/25/22 14:50 Date Received: 08/25/22 16:50

Lab Sample ID: 590-18432-1

Lab Sample ID: 590-18432-2

Lab Sample ID: 590-18432-3

Lab Sample ID: 590-18432-3

Lab Sample ID: 590-18432-4

**Matrix: Solid** 

**Matrix: Solid** 

Job ID: 590-18432-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37756	08/26/22 10:59	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug25-25Pre1

Date Collected: 08/25/22 14:50 Date Received: 08/25/22 16:50

Lab Sample ID: 590-18432-1 **Matrix: Solid** Percent Solids: 91.2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.34 g	2 mL	37757	08/26/22 11:45	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37758	08/26/22 13:32	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug25-25Pre2

Date Collected: 08/25/22 14:52

Date Received: 08/25/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37756	08/26/22 10:59	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug25-25Pre2	Lab Sample ID: 590-18432-2
Date Collected: 08/25/22 14:52	Matrix: Solid
Date Received: 08/25/22 16:50	Percent Solids: 89.2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.56 g	2 mL	37757	08/26/22 11:45	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37758	08/26/22 14:21	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug25-25Pre3

Date Collected: 08/25/22 14:54

**Matrix: Solid** Date Received: 08/25/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37756	08/26/22 10:59	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug25-25Pre3

Date Collected: 08/25/22 14:54

Date Received: 08/25/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37756	08/26/22 10:59	NMI	EET SPK

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run Factor Amount Amount Number or Analyzed Analyst 8011 37757 Total/NA Prep 10.15 g 2 mL 08/26/22 11:45 NMI EET SPK Total/NA 8011 37758 08/26/22 14:38 NMI Analysis 1 1 mL 1 mL **EET SPK** 

Client Sample ID: SVE-Soil-Aug25-25Pre4

Date Collected: 08/25/22 14:58

Date Received: 08/25/22 16:50

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37756	08/26/22 10:59	NMI	EET SPK

**Eurofins Spokane** 

Matrix: Solid

Matrix: Solid

Percent Solids: 88.3

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8/29/2022

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug25-25Pre4

Lab Sample ID: 590-18432-4 Date Collected: 08/25/22 14:58 **Matrix: Solid** 

Date Received: 08/25/22 16:50 Percent Solids: 85.4

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.60 g	2 mL	37757	08/26/22 11:45	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37758	08/26/22 14:54	NMI	EET SPK

Lab Sample ID: 590-18432-5 **Client Sample ID: Trip Blank** 

Date Collected: 08/25/22 08:00 **Matrix: Solid** 

Date Received: 08/25/22 16:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.23 g	2 mL	37757	08/26/22 11:45	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37758	08/26/22 15:10	NMI	EET SPK

**Laboratory References:** 

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority Washington		rogram	Identification Number	Expiration Date
		tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

- 0

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# **Method Summary**

Client: HDR Inc Job ID: 590-18432-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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Phone (509) 924-9200 Phone (509) 924-9290

11922 East 1st Ave Spokane, WA 99206

#### **Chain of Custody Record**

🔅 eurofins

Environment T sting

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Lab PM: COC No: Carrier Tracking No(s): Jered Newcomb, JAN Client Information Arrington, Randee E Client Contact: Phone: State of Origin: Page: Jered Newcomb 509-899-4371 Randee.Arrington@et.eurofinsus.com Page 1 of 1 Company: PWSID: Job#: HDR Inc **Analysis Requested** Address: Due Date Requested. Preservation Codes 835 N Post St. Ste. 101 M Hexane TAT Requested (days): B NaOH N None Spokane 24 hour C Zn Acetate O AsNaO2 D Nitric Acid P Na204S State, Zip: Compliance Project: A Yes A No E NaHSO4 WA, 99202 Q Na2SO3 F MeOH R Na2S2O3 Phone: G Amchlor S H2SO4 509-899-4371 Purchase Order Requested H Ascorbic Acid T TSP Dodecahydrate U Acetone jered.newcomb@hdrinc.com J DI Water V MCAA K EDTA W pH 4-5 Project Name: Project#: L EDA Z other (specify) Simplot Warden 59002373 SSOW#: Other Warden WA **Total Number** Sample W≃water EDB S=solid, Type O=waste/olf, (C≃comp, Sample BT=Tissue. 8011 Sample Identification Sample Date Time G=grab) Special Instructions/Note: A=Air) Preservation Code: N 81 25 12022 Х SVE-Soil-Aug 🗁 25Pre1 G S Ν 8/ )5/2022 S Х SVE-Soil-Aug 25-25Pre2 G N 8/35 /2022 SVE-Soil-Aug ) -25Pre3 G S Х Ν SVE-Soil-Aug 15-25Pre4 8/25 /2022 S G Ν Х Trip Blank S Ν Х Possible Hazard Identification Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Radiological ☐ Non-Hazard L Poison B \_lammable Return To Client Disposal By Lab Archive For nown Months Deliverable Requested: I, II III IV Other (specify) Special Instructions/QC Requirements. Empty Kit Relinquished by Method of Shipment: Date: Time: Relinquished by: Jered Newcomb Company Company ER 88K Relinquished by: Company Received by Relinquished by: Date/Time: Company Received by: Date/Time: Company Page 13 of 14 Cooler Temperature(s) °C and Other Remarks: Custody Seal No. 8/29/2022 Custody Seals Intact: Δ Yes Δ No

Client: HDR Inc Job Number: 590-18432-1

Login Number: 18432 List Source: Eurofins Spokane

List Number: 1 Creator: Fettig, Riley

Creator: Fettig, Riley		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
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.	True	
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.	N/A	
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	

**Eurofins Spokane** 



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Spokane 11922 East 1st Ave Spokane, WA 99206 Tel: (509)924-9200

Laboratory Job ID: 590-18480-1 Client Project/Site: Simplot Warden

For: HDR Inc 1401 E. Trent Ave Suite 101 Spokane, Washington 99202

Attn: Jered Newcomb

Authorized for release by:

8/31/2022 3:24:10 PM

Randee Arrington, Lab Director (509)924-9200

Randee.Arrington@et.eurofinsus.com

LINKS .....



Have a Question?



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: HDR Inc Project/Site: Simplot Warden Laboratory Job ID: 590-18480-1

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#### **Case Narrative**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Job ID: 590-18480-1

**Laboratory: Eurofins Spokane** 

**Narrative** 

#### Receipt

The samples were received on 8/30/2022 1:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was  $3.8^{\circ}$  C.

#### GC Semi VOA

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

#### **General Chemistry**

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

#### **Organic Prep**

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

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# **Sample Summary**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18480-1	SVE-Soil-Aug30-26Pre1	Solid	08/30/22 11:15	08/30/22 13:45
590-18480-2	SVE-Soil-Aug30-26Pre2	Solid	08/30/22 11:17	08/30/22 13:45
590-18480-3	SVE-Soil-Aug30-26Pre3	Solid	08/30/22 11:19	08/30/22 13:45
590-18480-4	SVE-Soil-Aug30-26Pre4	Solid	08/30/22 11:21	08/30/22 13:45
590-18480-5	Trip Blank	Solid	08/30/22 00:00	08/30/22 13:45

# **Definitions/Glossary**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

#### Glossarv

DL

<b>,</b>										
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)

Detection Limit (DoD/DOE)

**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) Most Probable Number MPN 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

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Client Sample Results Client: HDR Inc Job ID: 590-18480-1 Project/Site: Simplot Warden Lab Sample ID: 590-18480-1 Client Sample ID: SVE-Soil-Aug30-26Pre1 Date Collected: 08/30/22 11:15 Matrix: Solid Date Received: 08/30/22 13:45 **General Chemistry** Analyte RL **RL** Unit D Result Qualifier Prepared Analyzed Dil Fac 0.01 0.01 % 08/30/22 17:30 **Percent Moisture** 11.0 0.01 0.01 % 08/30/22 17:30 **Percent Solids** 89.0 Client Sample ID: SVE-Soil-Aug30-26Pre1 Lab Sample ID: 590-18480-1 Date Collected: 08/30/22 11:15 Matrix: Solid Date Received: 08/30/22 13:45 Percent Solids: 89.0 Method: 8011 - EDB Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac <u>~</u> 08/30/22 16:47 08/30/22 19:16 1,2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.054 0.038 ug/Kg Client Sample ID: SVE-Soil-Aug30-26Pre2 Lab Sample ID: 590-18480-2 Date Collected: 08/30/22 11:17 **Matrix: Solid** Date Received: 08/30/22 13:45 **General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.01 0.01 % 08/30/22 17:30 **Percent Moisture** 13.3 0.01 % **Percent Solids** 86.7 0.01 08/30/22 17:30 Client Sample ID: SVE-Soil-Aug30-26Pre2 Lab Sample ID: 590-18480-2 Date Collected: 08/30/22 11:17 Matrix: Solid Date Received: 08/30/22 13:45 Percent Solids: 86.7 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 08/30/22 16:47 08/30/22 20:05 1.2-Dibromoethane (EDB)  $\overline{\mathsf{ND}}$ 0.056 0.039 ug/Kg Client Sample ID: SVE-Soil-Aug30-26Pre3 Lab Sample ID: 590-18480-3 Date Collected: 08/30/22 11:19 Matrix: Solid Date Received: 08/30/22 13:45 **General Chemistry** Analyte Result Qualifier RL **RL** Unit D Prepared Analyzed Dil Fac 0.01 0.01 % 08/30/22 17:30 **Percent Moisture** 12.1 **Percent Solids** 87.9 0.01 0.01 % 08/30/22 17:30 Client Sample ID: SVE-Soil-Aug30-26Pre3 Lab Sample ID: 590-18480-3 Date Collected: 08/30/22 11:19 **Matrix: Solid** Date Received: 08/30/22 13:45 Percent Solids: 87.9 Method: 8011 - EDB Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 08/30/22 16:47 08/30/22 20:22 1,2-Dibromoethane (EDB) ND 0.056 0.039 ug/Kg Client Sample ID: SVE-Soil-Aug30-26Pre4 Lab Sample ID: 590-18480-4 Date Collected: 08/30/22 11:21 Matrix: Solid Date Received: 08/30/22 13:45

**Eurofins Spokane** 

Analyzed

08/30/22 17:30

RL

0.01

**RL Unit** 

0.01 %

D

Prepared

Result Qualifier

11.8

**General Chemistry** 

**Percent Moisture** 

Analyte

Dil Fac

# **Client Sample Results**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug30-26Pre4

Date Collected: 08/30/22 11:21

Date Received: 08/30/22 13:45

Lab Sample ID: 590-18480-4

**Matrix: Solid** 

**General Chemistry (Continued)** 

 Analyte
 Result Percent Solids
 Qualifier
 RL O.01
 RL O.01
 Unit O.01
 D O.01
 Prepared O.03/30/22 17:30
 Analyzed Oil Factor
 D O.01
 Prepared Oil Factor

Client Sample ID: SVE-Soil-Aug30-26Pre4

Date Collected: 08/30/22 11:21

Date Received: 08/30/22 13:45

Lab Sample ID: 590-18480-4 Matrix: Solid

Percent Solids: 88.2

Method: 8011 - EDB

 Analyte
 Result 1,2-Dibromoethane (EDB)
 Result ND
 Qualifier ND
 RL 0.056
 MDL 0.056
 Unit ug/Kg
 D 08/30/22 16:47
 Prepared 08/30/22 16:47
 Analyzed 08/30/22 20:39
 Dil Fac 08/30/22 16:47

**Client Sample ID: Trip Blank** 

Date Collected: 08/30/22 00:00

Date Received: 08/30/22 13:45

Lab Sample ID: 590-18480-5

**Matrix: Solid** 

Method: 8011 - EDB

 Analyte
 Result 1,2-Dibromoethane (EDB)
 ND
 Qualifier
 RL 0.046
 MDL 0.032
 Unit ug/Kg
 D 08/30/22 16:47
 Analyzed 08/30/22 20:55
 Dil Fac 08/30/22 20:55

**Eurofins Spokane** 

## QC Sample Results

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Method: 8011 - EDB

Lab Sample ID: MB 590-37816/2-A

**Matrix: Solid** 

**Analysis Batch: 37815** 

MB MB

Result Qualifier Analyte 1,2-Dibromoethane (EDB)

RL 0.050 ND

**MDL** Unit 0.035 ug/Kg

Prepared

**Client Sample ID: Lab Control Sample** 

%Rec

Client Sample ID: Method Blank

Analyzed Dil Fac 08/30/22 16:47 08/30/22 18:43

> Prep Type: Total/NA Prep Batch: 37816

> Prep Type: Total/NA

Prep Batch: 37816

Lab Sample ID: LCS 590-37816/3-A

**Matrix: Solid** 

**Analysis Batch: 37815** 

Sample Sample

Sample Sample

Sample Sample

Sample Sample

11.0

89.0

Result Qualifier

 $\overline{\mathsf{ND}}$ 

Result Qualifier

ND

Result Qualifier

Spike Added 1.00

Spike

Added

1.10

Spike

Added

1.07

1.03

LCS LCS

MS MS

MSD MSD

DU DU

DU DU

13.0

87.0

11.3

88.7

Result Qualifier

Unit

ug/Kg

%

0.686

0.711

Result Qualifier

Result Qualifier

Unit D %Rec ug/Kg

60 - 140 103

Limits

Lab Sample ID: 590-18480-1 MS

**Matrix: Solid** 

**Analysis Batch: 37815** 

1,2-Dibromoethane (EDB)

Analyte 1,2-Dibromoethane (EDB)

Lab Sample ID: 590-18480-1 MSD **Matrix: Solid** 

**Analysis Batch: 37815** 

Analyte

1,2-Dibromoethane (EDB) **Method: Moisture - Percent Moisture** 

Lab Sample ID: 590-18480-1 DU

**Matrix: Solid Analysis Batch: 37817** 

Percent Solids

Percent Moisture

Analyte

**Analysis Batch: 37817** 

Lab Sample ID: 590-18480-2 DU **Matrix: Solid** 

Result Qualifier Analyte Percent Moisture 13.3 Percent Solids 86.7

Client Sample ID: SVE-Soil-Aug30-26Pre1

Prep Type: Total/NA Prep Batch: 37816 %Rec

Limits Unit D %Rec 63 60 - 140 ug/Kg

D

Client Sample ID: SVE-Soil-Aug30-26Pre1

**Prep Type: Total/NA** Prep Batch: 37816

%Rec **RPD** %Rec Limits **RPD** Limit 60 - 140 20

Client Sample ID: SVE-Soil-Aug30-26Pre1

Prep Type: Total/NA

**RPD** 

Result Qualifier Unit **RPD** Limit % 3 20 % 0.4 20

Client Sample ID: SVE-Soil-Aug30-26Pre2

Prep Type: Total/NA

**RPD** Result Qualifier RPD Limit Unit D % 20

**Eurofins Spokane** 

0.3

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Job ID: 590-18480-1

Project/Site: Simplot Warden

Client: HDR Inc

Client Sample ID: SVE-Soil-Aug30-26Pre1

Date Collected: 08/30/22 11:15 Date Received: 08/30/22 13:45 Lab Sample ID: 590-18480-1

**Matrix: Solid** 

Batch Dil Initial Batch Final Prepared Method **Factor** Number or Analyzed **Prep Type** Type Run Amount Amount Analyst Lab Total/NA Analysis Moisture 37817 08/30/22 17:30 NMI EET SPK

Client Sample ID: SVE-Soil-Aug30-26Pre1

Lab Sample ID: 590-18480-1 **Matrix: Solid** 

Date Collected: 08/30/22 11:15 Date Received: 08/30/22 13:45 Percent Solids: 89.0

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.38 g	2 mL	37816	08/30/22 16:47	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37815	08/30/22 19:16	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug30-26Pre2

Lab Sample ID: 590-18480-2

**Matrix: Solid** 

Date Collected: 08/30/22 11:17 Date Received: 08/30/22 13:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	Moisture		1			37817	08/30/22 17:30	NMI	EET SPK	

Client Sample ID: SVE-Soil-Aug30-26Pre2

Lab Sample ID: 590-18480-2 **Matrix: Solid** 

Date Collected: 08/30/22 11:17 Date Received: 08/30/22 13:45

Percent Solids: 86.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.38 g	2 mL	37816	08/30/22 16:47	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37815	08/30/22 20:05	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug30-26Pre3

Lab Sample ID: 590-18480-3

Date Collected: 08/30/22 11:19 Date Received: 08/30/22 13:45

		Batch	Batch		ווט	initiai	Finai	Batch	Prepared			
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
l	Total/NA	Analysis	Moisture		1			37817	08/30/22 17:30	NMI	EET SPK	

Client Sample ID: SVE-Soil-Aug30-26Pre3

Lab Sample ID: 590-18480-3

Date Collected: 08/30/22 11:19 Date Received: 08/30/22 13:45

Matrix: Solid Percent Solids: 87.9

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.21 g	2 mL	37816	08/30/22 16:47	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37815	08/30/22 20:22	NMI	EET SPK

Client Sample ID: SVE-Soil-Aug30-26Pre4

Lab Sample ID: 590-18480-4 Date Collected: 08/30/22 11:21 Matrix: Solid

Date Received: 08/30/22 13:45

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture					37817	08/30/22 17:30	NMI	EET SPK

**Eurofins Spokane** 

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8/31/2022

#### **Lab Chronicle**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Client Sample ID: SVE-Soil-Aug30-26Pre4

Lab Sample ID: 590-18480-4 Date Collected: 08/30/22 11:21 **Matrix: Solid** 

Date Received: 08/30/22 13:45 Percent Solids: 88.2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.05 g	2 mL	37816	08/30/22 16:47	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37815	08/30/22 20:39	NMI	EET SPK

Lab Sample ID: 590-18480-5 **Client Sample ID: Trip Blank** 

Date Collected: 08/30/22 00:00 **Matrix: Solid** 

Date Received: 08/30/22 13:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.84 g	2 mL	37816	08/30/22 16:47	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37815	08/30/22 20:55	NMI	EET SPK

**Laboratory References:** 

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# **Accreditation/Certification Summary**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

# **Laboratory: Eurofins Spokane**

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

Authority	P	rogram	Identification Number	Expiration Date
Washington	S	tate	C569	01-06-23
The following analyte the agency does not	•	ort, but the laboratory is n	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method Moisture	Prep Method	Matrix Solid	Analyte Percent Moisture	

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# **Method Summary**

Client: HDR Inc Job ID: 590-18480-1

Project/Site: Simplot Warden

Method	Method Description	Protocol	Laboratory
8011	EDB	EPA	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
8011	Microextraction	SW846	EET SPK

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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11922 East 1st Ave

Spokane WA 99206

**Chain of Custody Record** 

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Anterica

**Environment festing** 

Phone (509) 924-9200 Phone (509) 924-9290																					
Client Information	Sampler Jered Newcomb,	JAN			b PM: rringto:	n, Ra	ander	e E				Carrie	er Trac	king N	Vo(s):				COC No:		
Client Information Client Contact: Jered Newcomb	Phone: 509-899-4371		,		Mail: andee.	.Arrir	ngton	n@et.eur	rofins	us.com		State WA	of Ori	gin:					Page: Page 1 of 1		
Company: HDR Inc			PWSID:						An	alysis	Rec	ques	sted					٦	Job#:		
Address: 835 N Post St. Ste 101	Due Date Requested	•					$\top$												Preservation Code	ıs.	
City	TAT Requested (day	s):			- 1		- 1												A HCL B NaOH	M Hexane N None	
Spokane State, Zip:	, , ,	24 ho	ur							İ							l		C Zn Acetate D Nitric Acid	O AsNaO2 P Na2O4S	
WA, 99202	Compliance Project:	A Yes	A No		<b>]</b>												:		E NaHSO4 F MeOH	Q Na2SO3 R Na2S2O3	
Phone: 509-899-4371		urchase Order Requested												ł	· ·	G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecah					
Email: jered.newcomb@hdrinc.com	WO #: Project #: 59002373 SSOW#			O#:												2	I Ice J DI Water	U Acelone V MCAA			
Project Name: Simplot Warden										Taliner							taine	K EDTA W pH 4-5 L EDA Z other (specify)			
Site Warden WA					<b>-   1                                   </b>													Olpet.			
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Watrix (W=water S=sotie/oi O=waste/oi BT=Tissue A=Air)	- I Filtere	600000	8011 EDB											Total Number of	Special Ins	tructions/Note:	
		$\geq \leq$	Preserva	ilion Code	: X	$\mathbf{X}$	N											${f x}$			
SVE-Soil-Aug-y -26Pre1	8/ 3() /2022	115	G	s	N	Ν	x														
SVE-Soil-Aug ეტ -26Pre2	81 30 12022	1117	G	S	N	N	x														
SVE-Soil-Aug分()-26Pre3	8/ 30 /2022	119	G	S	N	N	X														
SVE-Soil-Aug.}Ó -26Pre4	8/3 6/2022	121	G	s	N	N	X					1									
Trip Blank				S	N	N	х				111101		HELLINE			eine no	i i i tosu	ı <b>a t</b> in s	itu		
											590-1							Ш			
										5	590-1	8480	Cha	in of	Cus	tody		145334	1))	-	
				***************************************														Villa (			
Possible Hazard Identification						San										es ar			ed longer than 1	month)	
	on Bno	wn L	Radiologica	1		L		eturn To					sal B	y La	b	L	h	rchi	ive For	Months	
Deliverable Requested: I II, III, IV Other (specify)						Spe	cial li	instructio	yns/Q	C Requi	ireme	nts.									
Empty Kit Relinquished by		Date:			Tir	me:				1			Meth		Shipm						
Relinquished by: Jered Newcomb	8/30/22 13 92			Company	Received by: Date/Time:						1245	Company CAIMA									
Relinquished by:	Datertime: Company			Received by: Date/Time:								Company									
Relinquished by:	Date/Time: Company			any Received by: Date/Time: Company						Company											
Custody Seals Intact: Custody Seal No.  Δ Yes Δ No Page 13 o					2 of		Cooler	r Tempera	ture(s)	°C and O	ther Re	marks	s:		3:	7 °C	•	A.	•	8/21/2022	

Client: HDR Inc Job Number: 590-18480-1

Login Number: 18480 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison 1

orono. Vaugnan, maaioon 1		
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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
ls the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
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.	N/A	
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	

**Eurofins Spokane**