



October 7, 2022

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

**Subject: Progress Report for September 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. 1<sup>st</sup> 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;
- c. 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 September 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 through September 2022 as non-detect for EDB with the exception of one detection in Batch 31. Pretreatment sample SVE-Soil-Sept15-31Pre4 results detected 0.062 µg/Kg EDB, which is below the CUL of 0.27 µg/Kg. EDB analytical results for treatment batches 27 through 36 are attached to this memo. The pilot study and treatment batches 1 through 8 are described in the June 2022 Progress Report. Treatment batches 16 through 26 are described in the August 2022 Progress Report.
- Simplot/HDR coordinated with GrayMar to remove Treatment Batch soils 27 through 36 for use as on-site backfill based on non-detect soil sample analytical results, in accordance with the CAICMP and PTP.
- On September 29, 2022, HDR was notified by GrayMar that the estimated remaining volume of soil stockpile requiring treatment was approximately 1,670 cubic yards after Batch 35. The volume of soil per batch varies and could be in the range of 80-115 CY.
- On October 6, ABHL surveyed the project location and determined that the impacted soil stockpile is 1,520 cubic yards. Simplot currently estimates that this is a maximum of 19 remaining batches, and that treatment could be completed by the second week of November.

### Anticipated Activities for October 2022

- Simplot/HDR will continue 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 will move forward and implement a plan to increase frequency of treatment batch rotations. Treatment batches will be swapped on a frequency of every 48 hours, including weekends. On weekend batch swaps the remediation contractor (GrayMar) will be tasked with conducting soil sampling on Simplot's behalf; HDR to provide sample media. Simplot will task the remediation contractor with the responsibility to manage soils removed from treatment cell prior to receipt of laboratory analytical results including proper segregation, stockpile location tracking, and confirmation that results <CUL prior reuse as on-site backfill. If pre-treatment results are > CUL, the segregated will be re-sampled; if post-treatment sample results are also > CUL, the batch will be placed back into the cell for additional treatment.
- Simplot/HDR to evaluate soil batches for use as on-site backfill in accordance with CAICMP and PTP.
- Simplot/HDR will incorporate SVE remedial activities into the draft cleanup action report and submit to Ecology once SVE operations cease.

If you have questions please feel free to contact me at (208) 387-7018 or at [tyler.allen@hdrinc.com](mailto:tyler.allen@hdrinc.com) or Molly Dimick of Simplot at (208) 220-6597 or at [molly.dimick@simplot.com](mailto:molly.dimick@simplot.com).

Respectfully,  
**HDR Engineering, Inc.**



Tyler Allen  
Senior Environmental Scientist

Attachments:      Batch 27 Pretreatment EDB 9-2-2022 (J18519-1) Lab Report.pdf  
                          Batch 28 Pretreatment EDB 9-7-2022 (J18541-1) Lab Report.pdf  
                          Batch 29 Pretreatment EDB 9-9-2022 (J18592-1) Lab Report.pdf  
                          Batch 30 Pretreatment EDB 9-13-2022 (J18606-1) Lab Report.pdf  
                          Batch 31 Pretreatment EDB 9-15-2022 (J18636-1) Lab Report.pdf  
                          Batch 32 Pretreatment EDB 9-19-2022 (J18652-1) Lab Report.pdf  
                          Batch 33 Pretreatment EDB 9-21-2022 (J18671-1) Lab Report.pdf  
                          Batch 34 Pretreatment EDB 9-23-2022 (J18719-1) Lab Report.pdf  
                          Batch 35 Pretreatment EDB 9-27-2022 (J18744-1) Lab Report.pdf  
                          Batch 36 Pretreatment EDB 9-29-2022 (J18784-1) Lab Report.pdf

CC:                    Molly Dimick, J.R. Simplot Company

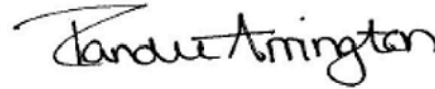
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18519-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/6/2022 3:52:21 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

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**Job ID: 590-18519-1**

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**Laboratory: Eurofins Spokane**

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## Narrative

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### Receipt

The samples were received on 9/2/2022 11:55 AM. 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 3.3° C.

### GC Semi VOA

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-37908 and analytical batch 590-37909 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  
Project/Site: Simplot Warden

Job ID: 590-18519-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18519-1	SVE-Soil-Sept 2-27Pre1	Solid	09/02/22 09:45	09/02/22 11:55
590-18519-2	SVE-Soil-Sept 2-27Pre2	Solid	09/02/22 09:47	09/02/22 11:55
590-18519-3	SVE-Soil-Sept 2-27Pre3	Solid	09/02/22 09:49	09/02/22 11:55
590-18519-4	SVE-Soil-Sept 2-27Pre4	Solid	09/02/22 09:51	09/02/22 11:55
590-18519-5	Trip Blank	Solid	09/02/22 09:45	09/02/22 11:55

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

## Glossary

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



# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**  
Date Collected: 09/02/22 09:45  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-1**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.9		0.01	0.01	%			09/02/22 14:18	1
Percent Solids	89.1		0.01	0.01	%			09/02/22 14:18	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**  
Date Collected: 09/02/22 09:45  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-1**  
Matrix: Solid  
Percent Solids: 89.1

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F1	0.052	0.037	ug/Kg	☼	09/02/22 15:52	09/02/22 18:12	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre2**  
Date Collected: 09/02/22 09:47  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-2**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.8		0.01	0.01	%			09/02/22 14:18	1
Percent Solids	84.2		0.01	0.01	%			09/02/22 14:18	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre2**  
Date Collected: 09/02/22 09:47  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-2**  
Matrix: Solid  
Percent Solids: 84.2

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ug/Kg	☼	09/02/22 15:52	09/02/22 19:02	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre3**  
Date Collected: 09/02/22 09:49  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-3**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.1		0.01	0.01	%			09/02/22 14:18	1
Percent Solids	89.9		0.01	0.01	%			09/02/22 14:18	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre3**  
Date Collected: 09/02/22 09:49  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-3**  
Matrix: Solid  
Percent Solids: 89.9

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ug/Kg	☼	09/02/22 15:52	09/02/22 19:18	1

**Client Sample ID: SVE-Soil-Sept 2-27Pre4**  
Date Collected: 09/02/22 09:51  
Date Received: 09/02/22 11:55

**Lab Sample ID: 590-18519-4**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.9		0.01	0.01	%			09/02/22 14:18	1

Eurofins Spokane

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

Client Sample ID: SVE-Soil-Sept 2-27Pre4

Lab Sample ID: 590-18519-4

Date Collected: 09/02/22 09:51

Matrix: Solid

Date Received: 09/02/22 11:55

## General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90.1		0.01	0.01	%			09/02/22 14:18	1

Client Sample ID: SVE-Soil-Sept 2-27Pre4

Lab Sample ID: 590-18519-4

Date Collected: 09/02/22 09:51

Matrix: Solid

Date Received: 09/02/22 11:55

Percent Solids: 90.1

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	✱	09/02/22 15:52	09/02/22 19:35	1

Client Sample ID: Trip Blank

Lab Sample ID: 590-18519-5

Date Collected: 09/02/22 09:45

Matrix: Solid

Date Received: 09/02/22 11:55

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.047	0.033	ug/Kg		09/02/22 15:52	09/02/22 19:51	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-37908/1-A**  
**Matrix: Solid**  
**Analysis Batch: 37909**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 37908**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/02/22 15:52	09/02/22 17:39	1

**Lab Sample ID: LCS 590-37908/2-A**  
**Matrix: Solid**  
**Analysis Batch: 37909**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 37908**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.972		ug/Kg		97	60 - 140

**Lab Sample ID: 590-18519-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 37909**

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 37908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND	F1	1.10	0.620	F1	ug/Kg	⊛	57	60 - 140

**Lab Sample ID: 590-18519-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 37909**

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 37908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND	F1	1.11	0.675		ug/Kg	⊛	61	60 - 140	8	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18519-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 37896**

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.9		11.3		%		4	20
Percent Solids	89.1		88.7		%		0.5	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**

**Lab Sample ID: 590-18519-1**

Date Collected: 09/02/22 09:45

Matrix: Solid

Date Received: 09/02/22 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37896	09/02/22 14:18	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre1**

**Lab Sample ID: 590-18519-1**

Date Collected: 09/02/22 09:45

Matrix: Solid

Date Received: 09/02/22 11:55

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.74 g	2 mL	37908	09/02/22 15:52	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37909	09/02/22 18:12	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre2**

**Lab Sample ID: 590-18519-2**

Date Collected: 09/02/22 09:47

Matrix: Solid

Date Received: 09/02/22 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37896	09/02/22 14:18	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre2**

**Lab Sample ID: 590-18519-2**

Date Collected: 09/02/22 09:47

Matrix: Solid

Date Received: 09/02/22 11:55

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.95 g	2 mL	37908	09/02/22 15:52	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37909	09/02/22 19:02	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre3**

**Lab Sample ID: 590-18519-3**

Date Collected: 09/02/22 09:49

Matrix: Solid

Date Received: 09/02/22 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37896	09/02/22 14:18	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre3**

**Lab Sample ID: 590-18519-3**

Date Collected: 09/02/22 09:49

Matrix: Solid

Date Received: 09/02/22 11:55

Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.36 g	2 mL	37908	09/02/22 15:52	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37909	09/02/22 19:18	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept 2-27Pre4**

**Lab Sample ID: 590-18519-4**

Date Collected: 09/02/22 09:51

Matrix: Solid

Date Received: 09/02/22 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37896	09/02/22 14:18	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

**Client Sample ID: SVE-Soil-Sept 2-27Pre4**

**Lab Sample ID: 590-18519-4**

**Date Collected: 09/02/22 09:51**

**Matrix: Solid**

**Date Received: 09/02/22 11:55**

**Percent Solids: 90.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.40 g	2 mL	37908	09/02/22 15:52	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37909	09/02/22 19:35	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18519-5**

**Date Collected: 09/02/22 09:45**

**Matrix: Solid**

**Date Received: 09/02/22 11:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.64 g	2 mL	37908	09/02/22 15:52	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37909	09/02/22 19:51	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  
Project/Site: Simplot Warden

Job ID: 590-18519-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18519-1

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.

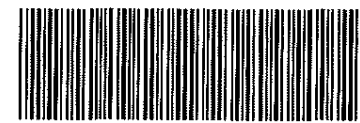
**Laboratory References:**

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



# Chain of Custody Record

<b>Client Information</b>		Sampler: Jered Newcomb, JAN		Lab PM: Arrington, Randee E		Carrier Tracking No(s):		COC No:			
Client Contact: Jered Newcomb		Phone: 509-899-4371		E-Mail: Randee.Arrington@et.eurolinsus.com		State of Origin: WA		Page: Page 1 of 1			
Company: HDR Inc		PWSID:		<b>Analysis Requested</b>						Job #:	
Address: 835 N Post St Ste. 101		Due Date Requested								Preservation Codes	
City: Spokane		TAT Requested (days): 24 hour		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8011 EDB		Total Number of Containers		A HCL M Hexane			
State, Zip: WA, 99202		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						B NaOH N None			
Phone: 509-899-4371		PO #: Purchase Order Requested						C Zn Acetate O AsNaO2			
Email: jered.newcomb@hdrinc.com		WO #:						D Nitric Acid P Na2O4S			
Project Name: Simplot Warden		Project #: 59002373		E NaHSO4 Q Na2SO3		F MeOH R Na2S2O3		G Amchlor S H2SO4			
Site: Warden WA		SSOW#:		H Ascorbic Acid T TSP Dodecahydrate		I Ice U Acetone		J DI Water V MCAA			
				K EDTA W pH 4-5		L EDA Z other (specify)		Other:			
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)			
								Special Instructions/Note:			
						Preservation Code:					
SVE-Soil-Sept 2 -27Pre1		9/2 /2022		945		G S		N N X			
SVE-Soil-Sept 2 -27Pre2		9/2 /2022		947		G S		N N X			
SVE-Soil-Sept 2 -27Pre3		9/2 /2022		949		G S		N N X			
SVE-Soil-Sept 2 -27Pre4		9/2 /2022		951		G S		N N X			
Trip Blank						S		N N X			



590-18519 Chain of Custody

<b>Possible Hazard Identification</b>				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>			
<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Corrosive		<input type="checkbox"/> Toxic	
<input type="checkbox"/> Volatile		<input type="checkbox"/> Poison B		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Deliverable Requested: I II, III IV Other (specify)				Special Instructions/QC Requirements.			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: Jered Newcomb		Date/Time: 9/2/22 1152		Company:		Received by: [Signature]	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.		Cooler Temperature(s) °C and Other Remarks: 23 10000 vol 5 3 <sup>0</sup>		9/6/2022	

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# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18519-1

**Login Number: 18519**

**List Source: Eurofins Spokane**

**List Number: 1**

**Creator: Vaughan, Madison 1**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



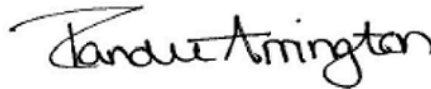
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18541-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/8/2022 12:50:16 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

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**Job ID: 590-18541-1**

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**Laboratory: Eurofins Spokane**

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## Narrative

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### Receipt

The samples were received on 9/7/2022 2:05 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 2.1° 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  
Project/Site: Simplot Warden

Job ID: 590-18541-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18541-1	SVE_Soil-Sept7-28Pre1	Solid	09/07/22 12:08	09/07/22 14:05
590-18541-2	SVE_Soil-Sept7-28Pre2	Solid	09/07/22 12:10	09/07/22 14:05
590-18541-3	SVE_Soil-Sept7-28Pre3	Solid	09/07/22 12:12	09/07/22 14:05
590-18541-4	SVE_Soil-Sept7-28Pre4	Solid	09/07/22 12:14	09/07/22 14:05
590-18541-5	Trip Blank	Solid	09/07/22 00:00	09/07/22 14:05

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

## Glossary

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

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**  
Date Collected: 09/07/22 12:08  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-1**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7		0.01	0.01	%			09/07/22 16:20	1
Percent Solids	90.3		0.01	0.01	%			09/07/22 16:20	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**  
Date Collected: 09/07/22 12:08  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-1**  
Matrix: Solid  
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	0.039	ug/Kg	☼	09/07/22 16:09	09/07/22 18:01	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre2**  
Date Collected: 09/07/22 12:10  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-2**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.9		0.01	0.01	%			09/07/22 16:20	1
Percent Solids	92.1		0.01	0.01	%			09/07/22 16:20	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre2**  
Date Collected: 09/07/22 12:10  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-2**  
Matrix: Solid  
Percent Solids: 92.1

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☼	09/07/22 16:09	09/07/22 18:50	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre3**  
Date Collected: 09/07/22 12:12  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-3**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.0		0.01	0.01	%			09/07/22 16:20	1
Percent Solids	89.0		0.01	0.01	%			09/07/22 16:20	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre3**  
Date Collected: 09/07/22 12:12  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-3**  
Matrix: Solid  
Percent Solids: 89.0

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/07/22 16:09	09/07/22 19:07	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre4**  
Date Collected: 09/07/22 12:14  
Date Received: 09/07/22 14:05

**Lab Sample ID: 590-18541-4**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.5		0.01	0.01	%			09/07/22 16:20	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

**Client Sample ID: SVE\_Soil-Sept7-28Pre4**

**Lab Sample ID: 590-18541-4**

Date Collected: 09/07/22 12:14

Matrix: Solid

Date Received: 09/07/22 14:05

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.5		0.01	0.01	%			09/07/22 16:20	1

**Client Sample ID: SVE\_Soil-Sept7-28Pre4**

**Lab Sample ID: 590-18541-4**

Date Collected: 09/07/22 12:14

Matrix: Solid

Date Received: 09/07/22 14:05

Percent Solids: 88.5

**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	✱	09/07/22 16:09	09/07/22 19:23	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18541-5**

Date Collected: 09/07/22 00:00

Matrix: Solid

Date Received: 09/07/22 14:05

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.048	0.034	ug/Kg		09/07/22 16:09	09/07/22 19:40	1



# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-37951/2-A**  
**Matrix: Solid**  
**Analysis Batch: 37953**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 37951**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/07/22 16:09	09/07/22 17:28	1

**Lab Sample ID: LCS 590-37951/3-A**  
**Matrix: Solid**  
**Analysis Batch: 37953**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 37951**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.01		ug/Kg		101	60 - 140

**Lab Sample ID: 590-18541-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 37953**

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 37951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.09	0.671		ug/Kg	⊛	61	60 - 140

**Lab Sample ID: 590-18541-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 37953**

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 37951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.09	0.778		ug/Kg	⊛	71	60 - 140	15	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18541-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 37952**

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.7		10.1		%		4	20
Percent Solids	90.3		89.9		%		0.4	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**

**Lab Sample ID: 590-18541-1**

Date Collected: 09/07/22 12:08

Matrix: Solid

Date Received: 09/07/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37952	09/07/22 16:20	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre1**

**Lab Sample ID: 590-18541-1**

Date Collected: 09/07/22 12:08

Matrix: Solid

Date Received: 09/07/22 14:05

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.04 g	2 mL	37951	09/07/22 16:09	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37953	09/07/22 18:01	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre2**

**Lab Sample ID: 590-18541-2**

Date Collected: 09/07/22 12:10

Matrix: Solid

Date Received: 09/07/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37952	09/07/22 16:20	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre2**

**Lab Sample ID: 590-18541-2**

Date Collected: 09/07/22 12:10

Matrix: Solid

Date Received: 09/07/22 14:05

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.19 g	2 mL	37951	09/07/22 16:09	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37953	09/07/22 18:50	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre3**

**Lab Sample ID: 590-18541-3**

Date Collected: 09/07/22 12:12

Matrix: Solid

Date Received: 09/07/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37952	09/07/22 16:20	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre3**

**Lab Sample ID: 590-18541-3**

Date Collected: 09/07/22 12:12

Matrix: Solid

Date Received: 09/07/22 14:05

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.02 g	2 mL	37951	09/07/22 16:09	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37953	09/07/22 19:07	NMI	EET SPK

**Client Sample ID: SVE\_Soil-Sept7-28Pre4**

**Lab Sample ID: 590-18541-4**

Date Collected: 09/07/22 12:14

Matrix: Solid

Date Received: 09/07/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37952	09/07/22 16:20	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

**Client Sample ID: SVE\_Soil-Sept7-28Pre4**

**Lab Sample ID: 590-18541-4**

**Date Collected: 09/07/22 12:14**

**Matrix: Solid**

**Date Received: 09/07/22 14:05**

**Percent Solids: 88.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.98 g	2 mL	37951	09/07/22 16:09	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37953	09/07/22 19:23	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18541-5**

**Date Collected: 09/07/22 00:00**

**Matrix: Solid**

**Date Received: 09/07/22 14:05**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.37 g	2 mL	37951	09/07/22 16:09	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37953	09/07/22 19:40	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  
Project/Site: Simplot Warden

Job ID: 590-18541-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12

# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18541-1

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.

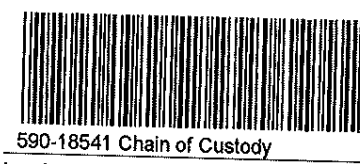
**Laboratory References:**

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



# Chain of Custody Record

<b>Client Information</b>		Sampler: Jered Newcomb, JAN		Lab PM: Arrington, Randee E		Carrier Tracking No(s):		COC No:							
Client Contact: Jered Newcomb		Phone: 509-899-4371		E-Mail: Randee.Arrington@et.eurofinsus.com		State of Origin: WA		Page: Page 1 of 1							
Company: HDR Inc		PWSID:		<b>Analysis Requested</b>						Job #:					
Address: 835 N Post St. Ste. 101		Due Date Requested		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8011 EDB						Total Number of Containers		Preservation Codes.			
City: Spokane		TAT Requested (days): 24 hour										A HCL		M Hexane	
State, Zip: WA, 99202		Compliance Project. <input type="checkbox"/> Yes <input type="checkbox"/> No										B NaOH		N None	
Phone: 509-899-4371		PO #: Purchase Order Requested										C Zn Acetate		O AsNaO2	
Email: jered.newcomb@hdrinc.com		WO #:										D Nitric Acid		P Na2O4S	
Project Name: Simplot Warden		Project #: 59002373				E NaHSO4		Q Na2SO3							
Site: Warden WA		SSOW#:				F MeOH		R Na2S2O3							
						G Amchlor		S H2SO4							
						H Ascorbic Acid		T TSP Dodecahydrate							
						I Ice		U Acetone							
						J DI Water		V MCAA							
						K EDTA		W pH 4-5							
						L EDA		Z other (specify)							
										Other:					
												Special Instructions/Note:			
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (W=water, S=solid, O=waste/oi, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB							
				Preservation Code:											
SVE-Soil-Sept 7 -28Pre1		9/7/2022	1208	G	S	N	N	X							
SVE-Soil-Sept 7 -28Pre2		9/7/2022	1210	G	S	N	N	X							
SVE-Soil-Sept 7 -28Pre3		9/7/2022	1212	G	S	N	N	X							
SVE-Soil-Sept 7 -28Pre4		9/7/2022	1214	G	S	N	N	X							
Trip Blank					S	N	N	X							



<b>Possible Hazard Identification</b>				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>							
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Volatile <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I II III, IV Other (specify)				Special Instructions/QC Requirements.							
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:				
Relinquished by: Jered Newcomb <i>[Signature]</i>			Date/Time: 9/7/22 1402		Company:		Received by: <i>[Signature]</i>		Date/Time: 9/7/22 1405		
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:		
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Page 13 of 14				Cooler Temperature(s) °C and Other Remarks: 16.2 / 7.0 F 2006		9/8/2022	

# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18541-1

**Login Number: 18541**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



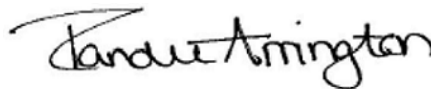
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18592-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/12/2022 3:49:15 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

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**Job ID: 590-18592-1**

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**Laboratory: Eurofins Spokane**

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**Narrative**

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**Receipt**

The samples were received on 9/9/2022 3:25 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 5.7° 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  
Project/Site: Simplot Warden

Job ID: 590-18592-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18592-1	SVE-Soil-Sept9-29Pre1	Solid	09/09/22 13:34	09/09/22 15:25
590-18592-2	SVE-Soil-Sept9-29Pre2	Solid	09/09/22 13:36	09/09/22 15:25
590-18592-3	SVE-Soil-Sept9-29Pre3	Solid	09/09/22 13:38	09/09/22 15:25
590-18592-4	SVE-Soil-Sept9-29Pre4	Solid	09/09/22 13:40	09/09/22 15:25
590-18592-5	Trip Blank	Solid	09/09/22 00:00	09/09/22 15:25

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

## Glossary

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

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

**Client Sample ID: SVE-Soil-Sept9-29Pre1**

**Lab Sample ID: 590-18592-1**

Date Collected: 09/09/22 13:34

Matrix: Solid

Date Received: 09/09/22 15:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.8		0.01	0.01	%			09/12/22 08:40	1
Percent Solids	90.2		0.01	0.01	%			09/12/22 08:40	1

**Client Sample ID: SVE-Soil-Sept9-29Pre1**

**Lab Sample ID: 590-18592-1**

Date Collected: 09/09/22 13:34

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 90.2

**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	☼	09/12/22 09:29	09/12/22 10:50	1

**Client Sample ID: SVE-Soil-Sept9-29Pre2**

**Lab Sample ID: 590-18592-2**

Date Collected: 09/09/22 13:36

Matrix: Solid

Date Received: 09/09/22 15:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.01	0.01	%			09/12/22 08:40	1
Percent Solids	89.4		0.01	0.01	%			09/12/22 08:40	1

**Client Sample ID: SVE-Soil-Sept9-29Pre2**

**Lab Sample ID: 590-18592-2**

Date Collected: 09/09/22 13:36

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 89.4

**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	☼	09/12/22 09:29	09/12/22 11:39	1

**Client Sample ID: SVE-Soil-Sept9-29Pre3**

**Lab Sample ID: 590-18592-3**

Date Collected: 09/09/22 13:38

Matrix: Solid

Date Received: 09/09/22 15:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		0.01	0.01	%			09/12/22 08:40	1
Percent Solids	87.4		0.01	0.01	%			09/12/22 08:40	1

**Client Sample ID: SVE-Soil-Sept9-29Pre3**

**Lab Sample ID: 590-18592-3**

Date Collected: 09/09/22 13:38

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 87.4

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.052	0.037	ug/Kg	☼	09/12/22 09:29	09/12/22 11:55	1

**Client Sample ID: SVE-Soil-Sept9-29Pre4**

**Lab Sample ID: 590-18592-4**

Date Collected: 09/09/22 13:40

Matrix: Solid

Date Received: 09/09/22 15:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.4		0.01	0.01	%			09/12/22 08:40	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

**Client Sample ID: SVE-Soil-Sept9-29Pre4**

**Lab Sample ID: 590-18592-4**

Date Collected: 09/09/22 13:40

Matrix: Solid

Date Received: 09/09/22 15:25

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.6		0.01	0.01	%			09/12/22 08:40	1

**Client Sample ID: SVE-Soil-Sept9-29Pre4**

**Lab Sample ID: 590-18592-4**

Date Collected: 09/09/22 13:40

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 89.6

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☆	09/12/22 09:29	09/12/22 12:12	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18592-5**

Date Collected: 09/09/22 00:00

Matrix: Solid

Date Received: 09/09/22 15:25

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/12/22 09:29	09/12/22 12:28	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38001/2-A**  
**Matrix: Solid**  
**Analysis Batch: 37999**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38001**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/12/22 09:29	09/12/22 10:18	1

**Lab Sample ID: LCS 590-38001/3-A**  
**Matrix: Solid**  
**Analysis Batch: 37999**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38001**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.991		ug/Kg		99	60 - 140

**Lab Sample ID: 590-18592-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 37999**

**Client Sample ID: SVE-Soil-Sept9-29Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38001**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.10	0.802		ug/Kg	⊛	73	60 - 140

**Lab Sample ID: 590-18592-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 37999**

**Client Sample ID: SVE-Soil-Sept9-29Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38001**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.09	0.700		ug/Kg	⊛	64	60 - 140	14	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

**Client Sample ID: SVE-Soil-Sept9-29Pre1**

**Lab Sample ID: 590-18592-1**

Date Collected: 09/09/22 13:34

Matrix: Solid

Date Received: 09/09/22 15:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37998	09/12/22 08:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre1**

**Lab Sample ID: 590-18592-1**

Date Collected: 09/09/22 13:34

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.65 g	2 mL	38001	09/12/22 09:29	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37999	09/12/22 10:50	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre2**

**Lab Sample ID: 590-18592-2**

Date Collected: 09/09/22 13:36

Matrix: Solid

Date Received: 09/09/22 15:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37998	09/12/22 08:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre2**

**Lab Sample ID: 590-18592-2**

Date Collected: 09/09/22 13:36

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.80 g	2 mL	38001	09/12/22 09:29	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37999	09/12/22 11:39	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre3**

**Lab Sample ID: 590-18592-3**

Date Collected: 09/09/22 13:38

Matrix: Solid

Date Received: 09/09/22 15:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37998	09/12/22 08:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre3**

**Lab Sample ID: 590-18592-3**

Date Collected: 09/09/22 13:38

Matrix: Solid

Date Received: 09/09/22 15:25

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.92 g	2 mL	38001	09/12/22 09:29	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37999	09/12/22 11:55	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept9-29Pre4**

**Lab Sample ID: 590-18592-4**

Date Collected: 09/09/22 13:40

Matrix: Solid

Date Received: 09/09/22 15:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			37998	09/12/22 08:40	NMI	EET SPK

Eurofins Spokane



# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

**Client Sample ID: SVE-Soil-Sept9-29Pre4**

**Lab Sample ID: 590-18592-4**

**Date Collected: 09/09/22 13:40**

**Matrix: Solid**

**Date Received: 09/09/22 15:25**

**Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.49 g	2 mL	38001	09/12/22 09:29	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37999	09/12/22 12:12	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18592-5**

**Date Collected: 09/09/22 00:00**

**Matrix: Solid**

**Date Received: 09/09/22 15:25**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.01 g	2 mL	38001	09/12/22 09:29	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	37999	09/12/22 12:28	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  
Project/Site: Simplot Warden

Job ID: 590-18592-1

## Laboratory: Eurofins Spokane

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

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Washington	State	C569	01-06-23

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

<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18592-1

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.

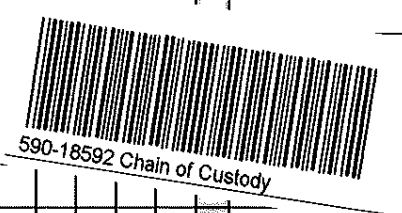
**Laboratory References:**

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



# Chain of Custody Record

<b>Client Information</b>		Sampler: Jered Newcomb, JAN		Lab PM: Arrington Randee E		Carrier Tracking No(s):		COC No:																																																								
Client Contact: Jered Newcomb		Phone: 509-899-4371		E-Mail: Randee.Arrington@et.eurofinsus.com		State of Origin: WA		Page: Page 1 of 1																																																								
Company: HDR Inc		PWSID:		<b>Analysis Requested</b>					Job #:																																																							
Address: 835 N Post St. Ste 101		Due Date Requested:																																																														
City: Spokane		TAT Requested (days): 24 hour		<table border="1"> <tr><td>Field Filtered Sample (Yes or No)</td></tr> <tr><td>Perform MS/MSD (Yes or No)</td></tr> <tr><td>8011 EDB</td></tr> <tr><td>Total Number of Containers:</td></tr> </table>					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB	Total Number of Containers:	<b>Preservation Codes.</b> A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDTA Z other (specify)  Other:																																																			
Field Filtered Sample (Yes or No)																																																																
Perform MS/MSD (Yes or No)																																																																
8011 EDB																																																																
Total Number of Containers:																																																																
State, Zip: WA, 99202		Compliance Project: Δ Yes Δ No																																																														
Phone: 509-899-4371		PO #: Purchase Order Requested																																																														
Email: jered.newcomb@hdrinc.com		WO #:																																																														
Project Name: Simplot Warden		Project #: 59002373		<table border="1"> <tr><td>Sample Date</td><td>Sample Time</td><td>Sample Type (C=Comp, G=grab)</td><td>MATRIX (W=water, S=solid, O=wastefol, BT=Tissue, A=Air)</td><td>Field Filtered Sample (Yes or No)</td><td>Perform MS/MSD (Yes or No)</td><td>8011 EDB</td><td>Total Number of Containers:</td></tr> <tr><td colspan="2"><b>Sample Identification</b></td><td colspan="2"><b>Preservation Code:</b></td><td>X</td><td>X</td><td>N</td><td>X</td></tr> <tr><td>SVE-Soil-Sept 9 -29Pre1</td><td>9/9/2022</td><td>1334</td><td>G S</td><td>N</td><td>N</td><td>X</td><td></td></tr> <tr><td>SVE-Soil-Sept 9 -29Pre2</td><td>9/9/2022</td><td>1336</td><td>G S</td><td>N</td><td>N</td><td>X</td><td></td></tr> <tr><td>SVE-Soil-Sept 9 -29Pre3</td><td>9/9/2022</td><td>1338</td><td>G S</td><td>N</td><td>N</td><td>X</td><td></td></tr> <tr><td>SVE-Soil-Sept 9 -29Pre4</td><td>9/9/2022</td><td>1340</td><td>G S</td><td>N</td><td>N</td><td>X</td><td></td></tr> <tr><td>Trip Blank</td><td></td><td></td><td>S</td><td>N</td><td>N</td><td>X</td><td></td></tr> </table>					Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (W=water, S=solid, O=wastefol, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB	Total Number of Containers:	<b>Sample Identification</b>		<b>Preservation Code:</b>		X	X	N	X	SVE-Soil-Sept 9 -29Pre1	9/9/2022	1334	G S	N	N	X		SVE-Soil-Sept 9 -29Pre2	9/9/2022	1336	G S	N	N	X		SVE-Soil-Sept 9 -29Pre3	9/9/2022	1338	G S	N	N	X		SVE-Soil-Sept 9 -29Pre4	9/9/2022	1340	G S	N	N	X		Trip Blank			S	N	N	X	
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	MATRIX (W=water, S=solid, O=wastefol, BT=Tissue, A=Air)						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB	Total Number of Containers:																																																				
<b>Sample Identification</b>		<b>Preservation Code:</b>							X	X	N	X																																																				
SVE-Soil-Sept 9 -29Pre1	9/9/2022	1334	G S						N	N	X																																																					
SVE-Soil-Sept 9 -29Pre2	9/9/2022	1336	G S						N	N	X																																																					
SVE-Soil-Sept 9 -29Pre3	9/9/2022	1338	G S	N	N	X																																																										
SVE-Soil-Sept 9 -29Pre4	9/9/2022	1340	G S	N	N	X																																																										
Trip Blank			S	N	N	X																																																										
Site: Warden WA		SSOW#:																																																														
Special Instructions/Note:																																																																
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Corrosive <input type="checkbox"/> Toxic <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																												
Deliverable Requested: I II III, IV Other (specify)		Special Instructions/QC Requirements																																																														
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:																																																										
Relinquished by: Jered Newcomb		Date/Time: 9/9/22 15:25		Company:		Received by: [Signature]		Date/Time: 9/9/22 15:25		Company: EET880																																																						
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Custody Seals Intact: Δ Yes Δ No		Custody Seal No.		Page 13 of 14 Cooler Temperature(s) °C and Other Remarks: 52 5.7 1000 Co				9/12/2022																																																								



# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18592-1

**Login Number: 18592**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	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	

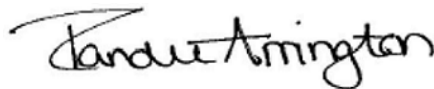
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18606-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:*  
9/14/2022 4:32:03 PM

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

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**Job ID: 590-18606-1**

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**Laboratory: Eurofins Spokane**

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**Narrative**

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**Receipt**

The samples were received on 9/13/2022 2:30 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 3.6° 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  
Project/Site: Simplot Warden

Job ID: 590-18606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18606-1	SVE-Soil-Sept13-30Pre1	Solid	09/13/22 12:46	09/13/22 14:30
590-18606-2	SVE-Soil-Sept13-30Pre2	Solid	09/13/22 12:48	09/13/22 14:30
590-18606-3	SVE-Soil-Sept13-30Pre3	Solid	09/13/22 12:50	09/13/22 14:30
590-18606-4	SVE-Soil-Sept13-30Pre4	Solid	09/13/22 12:52	09/13/22 14:30
590-18606-5	Trip Blank	Solid	09/13/22 00:00	09/13/22 14:30

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

**Client Sample ID: SVE-Soil-Sept13-30Pre1**

**Lab Sample ID: 590-18606-1**

Date Collected: 09/13/22 12:46

Matrix: Solid

Date Received: 09/13/22 14:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.8		0.01	0.01	%			09/14/22 08:38	1
Percent Solids	90.2		0.01	0.01	%			09/14/22 08:38	1

**Client Sample ID: SVE-Soil-Sept13-30Pre1**

**Lab Sample ID: 590-18606-1**

Date Collected: 09/13/22 12:46

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 90.2

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ug/Kg	☼	09/14/22 08:48	09/14/22 10:21	1

**Client Sample ID: SVE-Soil-Sept13-30Pre2**

**Lab Sample ID: 590-18606-2**

Date Collected: 09/13/22 12:48

Matrix: Solid

Date Received: 09/13/22 14:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.2		0.01	0.01	%			09/14/22 08:38	1
Percent Solids	88.8		0.01	0.01	%			09/14/22 08:38	1

**Client Sample ID: SVE-Soil-Sept13-30Pre2**

**Lab Sample ID: 590-18606-2**

Date Collected: 09/13/22 12:48

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 88.8

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.052	0.037	ug/Kg	☼	09/14/22 08:48	09/14/22 11:09	1

**Client Sample ID: SVE-Soil-Sept13-30Pre3**

**Lab Sample ID: 590-18606-3**

Date Collected: 09/13/22 12:50

Matrix: Solid

Date Received: 09/13/22 14:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.6		0.01	0.01	%			09/14/22 08:38	1
Percent Solids	84.4		0.01	0.01	%			09/14/22 08:38	1

**Client Sample ID: SVE-Soil-Sept13-30Pre3**

**Lab Sample ID: 590-18606-3**

Date Collected: 09/13/22 12:50

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 84.4

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/14/22 08:48	09/14/22 11:25	1

**Client Sample ID: SVE-Soil-Sept13-30Pre4**

**Lab Sample ID: 590-18606-4**

Date Collected: 09/13/22 12:52

Matrix: Solid

Date Received: 09/13/22 14:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.8		0.01	0.01	%			09/14/22 08:38	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

**Client Sample ID: SVE-Soil-Sept13-30Pre4**

**Lab Sample ID: 590-18606-4**

Date Collected: 09/13/22 12:52

Matrix: Solid

Date Received: 09/13/22 14:30

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.2		0.01	0.01	%			09/14/22 08:38	1

**Client Sample ID: SVE-Soil-Sept13-30Pre4**

**Lab Sample ID: 590-18606-4**

Date Collected: 09/13/22 12:52

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 86.2

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.057	0.040	ug/Kg	✱	09/14/22 08:48	09/14/22 11:41	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18606-5**

Date Collected: 09/13/22 00:00

Matrix: Solid

Date Received: 09/13/22 14:30

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.047	0.033	ug/Kg		09/14/22 08:48	09/14/22 11:57	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38053/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38054**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38053**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/14/22 08:48	09/14/22 09:49	1

**Lab Sample ID: LCS 590-38053/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38054**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38053**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.05		ug/Kg		105	60 - 140

**Lab Sample ID: 590-18606-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38054**

**Client Sample ID: SVE-Soil-Sept13-30Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38053**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.08	0.829		ug/Kg	⊛	77	60 - 140

**Lab Sample ID: 590-18606-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38054**

**Client Sample ID: SVE-Soil-Sept13-30Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38053**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.04	0.711		ug/Kg	⊛	68	60 - 140	15	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18606-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 38052**

**Client Sample ID: SVE-Soil-Sept13-30Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.8		9.8		%		0.5	20
Percent Solids	90.2		90.2		%		0.05	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

**Client Sample ID: SVE-Soil-Sept13-30Pre1**

**Lab Sample ID: 590-18606-1**

Date Collected: 09/13/22 12:46

Matrix: Solid

Date Received: 09/13/22 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38052	09/14/22 08:38	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre1**

**Lab Sample ID: 590-18606-1**

Date Collected: 09/13/22 12:46

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.27 g	2 mL	38053	09/14/22 08:48	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38054	09/14/22 10:21	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre2**

**Lab Sample ID: 590-18606-2**

Date Collected: 09/13/22 12:48

Matrix: Solid

Date Received: 09/13/22 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38052	09/14/22 08:38	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre2**

**Lab Sample ID: 590-18606-2**

Date Collected: 09/13/22 12:48

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.78 g	2 mL	38053	09/14/22 08:48	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38054	09/14/22 11:09	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre3**

**Lab Sample ID: 590-18606-3**

Date Collected: 09/13/22 12:50

Matrix: Solid

Date Received: 09/13/22 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38052	09/14/22 08:38	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre3**

**Lab Sample ID: 590-18606-3**

Date Collected: 09/13/22 12:50

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.54 g	2 mL	38053	09/14/22 08:48	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38054	09/14/22 11:25	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept13-30Pre4**

**Lab Sample ID: 590-18606-4**

Date Collected: 09/13/22 12:52

Matrix: Solid

Date Received: 09/13/22 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38052	09/14/22 08:38	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

**Client Sample ID: SVE-Soil-Sept13-30Pre4**

**Lab Sample ID: 590-18606-4**

Date Collected: 09/13/22 12:52

Matrix: Solid

Date Received: 09/13/22 14:30

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.09 g	2 mL	38053	09/14/22 08:48	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38054	09/14/22 11:41	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18606-5**

Date Collected: 09/13/22 00:00

Matrix: Solid

Date Received: 09/13/22 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.56 g	2 mL	38053	09/14/22 08:48	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38054	09/14/22 11:57	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  
Project/Site: Simplot Warden

Job ID: 590-18606-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids





# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18606-1

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

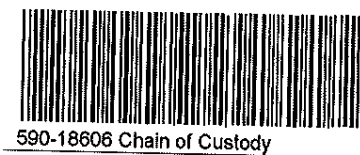


# Chain of Custody Record

<b>Client Information</b>	Sampler: Jered Newcomb, JAN	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No:
Client Contact: Jered Newcomb	Phone: 509-899-4371	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: WA	Page: Page 1 of 1

Company: HDR Inc	PWSID:	<b>Analysis Requested</b>		Job #:
Address: 835 N Post St. Ste. 101	Due Date Requested	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8011 EDB	Total Number of Containers	<b>Preservation Codes</b> A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other:
City: Spokane	TAT Requested (days): 24 hour			
State, Zip: WA, 99202	Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Phone: 509-899-4371	PO #: Purchase Order Requested			
Email: jered.newcomb@hdrinc.com	WO #:			
Project Name: Simplot Warden	Project #: 59002373			
Site: Warden WA	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011 EDB	Total Number of Containers	Special Instructions/Note:
SVE-Soil-Sept 13-30Pre1	9/13/2022	1246	G	S	N	N	X		
SVE-Soil-Sept 13-30Pre2	9/13/2022	1248	G	S	N	N	X		
SVE-Soil-Sept 13-30Pre3	9/13/2022	1250	G	S	N	N	X		
SVE-Soil-Sept 13-30Pre4	9/13/2022	1252	G	S	N	N	X		
Trip Blank				S	N	N	X		



<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Volatile <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I II III, IV Other (specify)	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Jered Newcomb <i>[Signature]</i>	Date/Time: 9/13/22 14:36	Company:	Received by: <i>[Signature]</i> Date/Time: 9/13/22 14:30 Company: <i>[Signature]</i>
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.	Page 13 of 14	Cooler Temperature(s) °C and Other Remarks: 3.1° 3.6° cool 1800 6	9/14/2022
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## Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18606-1

**Login Number: 18606**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	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	

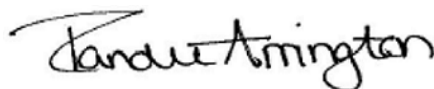
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18636-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/16/2022 4:46:13 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

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**Job ID: 590-18636-1**

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**Laboratory: Eurofins Spokane**

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## Narrative

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### Receipt

The samples were received on 9/16/2022 8:30 AM. 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 1.7° 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  
Project/Site: Simplot Warden

Job ID: 590-18636-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18636-1	SVE-Soil-Sept15-31Pre1	Solid	09/15/22 16:33	09/16/22 08:30
590-18636-2	SVE-Soil-Sept15-31Pre2	Solid	09/15/22 16:35	09/16/22 08:30
590-18636-3	SVE-Soil-Sept15-31Pre3	Solid	09/15/22 16:39	09/16/22 08:30
590-18636-4	SVE-Soil-Sept15-31Pre4	Solid	09/15/22 16:41	09/16/22 08:30
590-18636-5	SVE-Soil-Sept15-31DUP	Solid	09/15/22 16:30	09/16/22 08:30
590-18636-6	Trip Blank	Solid	09/15/22 00:00	09/16/22 08:30

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

## Glossary

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



# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

**Client Sample ID: SVE-Soil-Sept15-31Pre1**

**Lab Sample ID: 590-18636-1**

Date Collected: 09/15/22 16:33

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.0		0.01	0.01	%			09/16/22 08:35	1
Percent Solids	89.0		0.01	0.01	%			09/16/22 08:35	1

**Client Sample ID: SVE-Soil-Sept15-31Pre1**

**Lab Sample ID: 590-18636-1**

Date Collected: 09/15/22 16:33

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 89.0

**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	☼	09/16/22 08:49	09/16/22 11:10	1

**Client Sample ID: SVE-Soil-Sept15-31Pre2**

**Lab Sample ID: 590-18636-2**

Date Collected: 09/15/22 16:35

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.0		0.01	0.01	%			09/16/22 08:35	1
Percent Solids	88.0		0.01	0.01	%			09/16/22 08:35	1

**Client Sample ID: SVE-Soil-Sept15-31Pre2**

**Lab Sample ID: 590-18636-2**

Date Collected: 09/15/22 16:35

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 88.0

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/16/22 08:49	09/16/22 11:58	1

**Client Sample ID: SVE-Soil-Sept15-31Pre3**

**Lab Sample ID: 590-18636-3**

Date Collected: 09/15/22 16:39

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.9		0.01	0.01	%			09/16/22 08:35	1
Percent Solids	87.1		0.01	0.01	%			09/16/22 08:35	1

**Client Sample ID: SVE-Soil-Sept15-31Pre3**

**Lab Sample ID: 590-18636-3**

Date Collected: 09/15/22 16:39

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 87.1

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.057	0.040	ug/Kg	☼	09/16/22 08:49	09/16/22 12:15	1

**Client Sample ID: SVE-Soil-Sept15-31Pre4**

**Lab Sample ID: 590-18636-4**

Date Collected: 09/15/22 16:41

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.4		0.01	0.01	%			09/16/22 08:35	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

**Client Sample ID: SVE-Soil-Sept15-31Pre4**

**Lab Sample ID: 590-18636-4**

Date Collected: 09/15/22 16:41

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86.6		0.01	0.01	%			09/16/22 08:35	1

**Client Sample ID: SVE-Soil-Sept15-31Pre4**

**Lab Sample ID: 590-18636-4**

Date Collected: 09/15/22 16:41

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 86.6

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	0.062		0.057	0.040	ug/Kg	☼	09/16/22 08:49	09/16/22 12:31	1

**Client Sample ID: SVE-Soil-Sept15-31DUP**

**Lab Sample ID: 590-18636-5**

Date Collected: 09/15/22 16:30

Matrix: Solid

Date Received: 09/16/22 08:30

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.5		0.01	0.01	%			09/16/22 08:35	1
Percent Solids	87.5		0.01	0.01	%			09/16/22 08:35	1

**Client Sample ID: SVE-Soil-Sept15-31DUP**

**Lab Sample ID: 590-18636-5**

Date Collected: 09/15/22 16:30

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 87.5

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/16/22 08:49	09/16/22 12:47	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18636-6**

Date Collected: 09/15/22 00:00

Matrix: Solid

Date Received: 09/16/22 08:30

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/16/22 08:49	09/16/22 13:03	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38097/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38100**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38097**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/16/22 08:49	09/16/22 10:37	1

**Lab Sample ID: LCS 590-38097/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38100**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.966		ug/Kg		97	60 - 140

**Lab Sample ID: 590-18636-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38100**

**Client Sample ID: SVE-Soil-Sept15-31Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.07	0.836		ug/Kg	☼	78	60 - 140

**Lab Sample ID: 590-18636-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38100**

**Client Sample ID: SVE-Soil-Sept15-31Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.06	0.824		ug/Kg	☼	77	60 - 140	1	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18636-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 38094**

**Client Sample ID: SVE-Soil-Sept15-31Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	11.0		10.9		%		1	20
Percent Solids	89.0		89.1		%		0.2	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

**Client Sample ID: SVE-Soil-Sept15-31Pre1**

**Lab Sample ID: 590-18636-1**

Date Collected: 09/15/22 16:33

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38094	09/16/22 08:35	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre1**

**Lab Sample ID: 590-18636-1**

Date Collected: 09/15/22 16:33

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.80 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 11:10	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre2**

**Lab Sample ID: 590-18636-2**

Date Collected: 09/15/22 16:35

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38094	09/16/22 08:35	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre2**

**Lab Sample ID: 590-18636-2**

Date Collected: 09/15/22 16:35

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.07 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 11:58	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre3**

**Lab Sample ID: 590-18636-3**

Date Collected: 09/15/22 16:39

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38094	09/16/22 08:35	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre3**

**Lab Sample ID: 590-18636-3**

Date Collected: 09/15/22 16:39

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.12 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 12:15	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31Pre4**

**Lab Sample ID: 590-18636-4**

Date Collected: 09/15/22 16:41

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38094	09/16/22 08:35	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

**Client Sample ID: SVE-Soil-Sept15-31Pre4**

**Lab Sample ID: 590-18636-4**

Date Collected: 09/15/22 16:41

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.21 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 12:31	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31DUP**

**Lab Sample ID: 590-18636-5**

Date Collected: 09/15/22 16:30

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38094	09/16/22 08:35	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept15-31DUP**

**Lab Sample ID: 590-18636-5**

Date Collected: 09/15/22 16:30

Matrix: Solid

Date Received: 09/16/22 08:30

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.19 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 12:47	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18636-6**

Date Collected: 09/15/22 00:00

Matrix: Solid

Date Received: 09/16/22 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.08 g	2 mL	38097	09/16/22 08:49	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38100	09/16/22 13:03	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  
Project/Site: Simplot Warden

Job ID: 590-18636-1

## Laboratory: Eurofins Spokane

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

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Washington	State	C569	01-06-23

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

<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18636-1

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


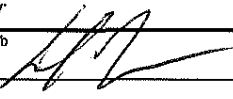

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

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



# Chain of Custody Record

<b>Client Information</b>			Sampler: Jered Newcomb, JAN		Lab PM: Arrington, Randee E		Carrier Tracking No(s):		COC No:																																
Client Contact: Jered Newcomb			Phone: 509-899-4371		E-Mail: Randee.Arrington@et.eurolinsus.com		State of Origin: WA		Page: Page 1 of 1																																
Company: HDR Inc			PWSID:		<b>Analysis Requested</b>																																				
Address: 835 N Post St. Ste 101			Due Date Requested		<table border="1"> <tr> <td rowspan="6">Total Number of Containers:</td> <td colspan="2">Preservation Codes</td> </tr> <tr> <td>A HCL</td> <td>M Hexane</td> </tr> <tr> <td>B NaOH</td> <td>N None</td> </tr> <tr> <td>C Zn Acetate</td> <td>O AsNaO2</td> </tr> <tr> <td>D Nitric Acid</td> <td>P Na2O4S</td> </tr> <tr> <td>E NaHSO4</td> <td>Q Na2SO3</td> </tr> <tr> <td>F MeOH</td> <td>R Na2S2O3</td> </tr> <tr> <td>G Amchlor</td> <td>S H2SO4</td> </tr> <tr> <td>H Ascorbic Acid</td> <td>T TSP Dodecahydrate</td> </tr> <tr> <td>I Ice</td> <td>U Acetone</td> </tr> <tr> <td>J DI Water</td> <td>V MCAA</td> </tr> <tr> <td>K EDTA</td> <td>W pH 4-5</td> </tr> <tr> <td>L EDA</td> <td>Z other (specify)</td> </tr> <tr> <td colspan="2">Other:</td> <td></td> </tr> </table>							Total Number of Containers:	Preservation Codes		A HCL	M Hexane	B NaOH	N None	C Zn Acetate	O AsNaO2	D Nitric Acid	P Na2O4S	E NaHSO4	Q Na2SO3	F MeOH	R Na2S2O3	G Amchlor	S H2SO4	H Ascorbic Acid	T TSP Dodecahydrate	I Ice	U Acetone	J DI Water	V MCAA	K EDTA	W pH 4-5	L EDA	Z other (specify)	Other:		
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	A HCL	M Hexane																																							
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J DI Water	V MCAA																																								
K EDTA	W pH 4-5																																								
L EDA	Z other (specify)																																								
Other:																																									
City: Spokane			TAT Requested (days): 24 hour																																						
State, Zip: WA, 99202			Compliance Project: A Yes A No																																						
Phone: 509-899-4371			PO #: Purchase Order Requested																																						
Email: jered.newcomb@hdrinc.com			WO #:																																						
Project Name: Simplot Warden			Project #: 59002373																																						
Site: Warden WA			SSOW#:																																						
<b>Sample Identification</b>			<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/ol, BT=Tissue, A=Air)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>8011 EDB</b>		<b>Special Instructions/Note:</b>																								
											X		X																												
SVE-Soil-Sept 15-31Pre1			9/15/2022		1633		G		S		N		N		X																										
SVE-Soil-Sept 15-31Pre2			9/15/2022		1635		G		S		N		N		X																										
SVE-Soil-Sept 15-31Pre3			9/15/2022		1639		G		S		N		N		X																										
SVE-Soil-Sept 15-31Pre4			9/15/2022		1641		G		S		N		N		X																										
SVE-Soil-Sept 15-31DUP			9/15/2022		1630		G		S		N		N		X																										
Trip Blank									S		N		N		X																										
																		590-18636 Chain of Custody																							
<b>Possible Hazard Identification</b>										<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>																															
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Volatile <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological										<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																															
Deliverable Requested: I, II, III, IV Other (specify)										Special Instructions/QC Requirements:																															
Empty Kit Relinquished by:					Date:					Time:					Method of Shipment:																										
Relinquished by: Jered Newcomb 					Date/Time: 9/15/22 18:30					Company:					Received by: 					Date/Time: 9/16/22 8:30					Company: EETSPO																
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:																
Relinquished by:					Date/Time:					Company:					Received by:					Date/Time:					Company:																
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. 1766691		Page 13 of 14				Cooler Temperature(s) °C and Other Remarks: 1.2, 1.7°C cor: 9/15/2022																																	

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# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18636-1

**Login Number: 18636**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	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	

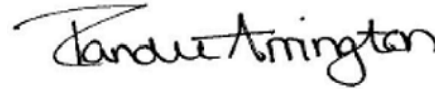
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18652-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/20/2022 5:48:30 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

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**Job ID: 590-18652-1**

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**Laboratory: Eurofins Spokane**

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## Narrative

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### Receipt

The samples were received on 9/19/2022 4:59 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 590-38140 and analytical batch 590-38143 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.

# Sample Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18652-1	SVE-Soil-Sept19-32Pre1	Solid	09/19/22 15:05	09/19/22 16:59
590-18652-2	SVE-Soil-Sept19-32Pre2	Solid	09/19/22 15:07	09/19/22 16:59
590-18652-3	SVE-Soil-Sept19-32Pre3	Solid	09/19/22 15:09	09/19/22 16:59
590-18652-4	SVE-Soil-Sept19-32Pre4	Solid	09/19/22 15:11	09/19/22 16:59
590-18652-5	Trip Blank	Solid	09/19/22 00:00	09/19/22 16:59

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

### General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

**Client Sample ID: SVE-Soil-Sept19-32Pre1**  
Date Collected: 09/19/22 15:05  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-1**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.0		0.01	0.01	%			09/20/22 08:25	1
Percent Solids	83.0		0.01	0.01	%			09/20/22 08:25	1

**Client Sample ID: SVE-Soil-Sept19-32Pre1**  
Date Collected: 09/19/22 15:05  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-1**  
Matrix: Solid  
Percent Solids: 83.0

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F1 F2	0.059	0.042	ug/Kg	☼	09/20/22 08:11	09/20/22 09:56	1

**Client Sample ID: SVE-Soil-Sept19-32Pre2**  
Date Collected: 09/19/22 15:07  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-2**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.01	0.01	%			09/20/22 08:25	1
Percent Solids	89.4		0.01	0.01	%			09/20/22 08:25	1

**Client Sample ID: SVE-Soil-Sept19-32Pre2**  
Date Collected: 09/19/22 15:07  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-2**  
Matrix: Solid  
Percent Solids: 89.4

**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	☼	09/20/22 08:11	09/20/22 10:44	1

**Client Sample ID: SVE-Soil-Sept19-32Pre3**  
Date Collected: 09/19/22 15:09  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-3**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.0		0.01	0.01	%			09/20/22 08:25	1
Percent Solids	88.0		0.01	0.01	%			09/20/22 08:25	1

**Client Sample ID: SVE-Soil-Sept19-32Pre3**  
Date Collected: 09/19/22 15:09  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-3**  
Matrix: Solid  
Percent Solids: 88.0

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.057	0.040	ug/Kg	☼	09/20/22 08:11	09/20/22 11:00	1

**Client Sample ID: SVE-Soil-Sept19-32Pre4**  
Date Collected: 09/19/22 15:11  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-4**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.2		0.01	0.01	%			09/20/22 08:25	1

Eurofins Spokane

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

**Client Sample ID: SVE-Soil-Sept19-32Pre4**  
Date Collected: 09/19/22 15:11  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-4**  
Matrix: Solid

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.8		0.01	0.01	%			09/20/22 08:25	1

**Client Sample ID: SVE-Soil-Sept19-32Pre4**  
Date Collected: 09/19/22 15:11  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-4**  
Matrix: Solid  
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/Kg	☆	09/20/22 08:11	09/20/22 11:17	1

**Client Sample ID: Trip Blank**  
Date Collected: 09/19/22 00:00  
Date Received: 09/19/22 16:59

**Lab Sample ID: 590-18652-5**  
Matrix: Solid

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.048	0.034	ug/Kg		09/20/22 08:11	09/20/22 11:33	1



# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38140/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38143**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38140**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/20/22 08:11	09/20/22 09:23	1

**Lab Sample ID: LCS 590-38140/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38143**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38140**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.820		ug/Kg		82	60 - 140

**Lab Sample ID: 590-18652-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38143**

**Client Sample ID: SVE-Soil-Sept19-32Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38140**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND	F1 F2	1.20	0.782		ug/Kg	⊛	65	60 - 140

**Lab Sample ID: 590-18652-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38143**

**Client Sample ID: SVE-Soil-Sept19-32Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38140**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND	F1 F2	1.20	0.581	F1 F2	ug/Kg	⊛	48	60 - 140	29	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18652-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 38142**

**Client Sample ID: SVE-Soil-Sept19-32Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	17.0		13.1	F3	%		26	20
Percent Solids	83.0		86.9		%		5	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

**Client Sample ID: SVE-Soil-Sept19-32Pre1**

**Lab Sample ID: 590-18652-1**

Date Collected: 09/19/22 15:05

Matrix: Solid

Date Received: 09/19/22 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38142	09/20/22 08:25	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre1**

**Lab Sample ID: 590-18652-1**

Date Collected: 09/19/22 15:05

Matrix: Solid

Date Received: 09/19/22 16:59

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.13 g	2 mL	38140	09/20/22 08:11	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38143	09/20/22 09:56	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre2**

**Lab Sample ID: 590-18652-2**

Date Collected: 09/19/22 15:07

Matrix: Solid

Date Received: 09/19/22 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38142	09/20/22 08:25	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre2**

**Lab Sample ID: 590-18652-2**

Date Collected: 09/19/22 15:07

Matrix: Solid

Date Received: 09/19/22 16:59

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.17 g	2 mL	38140	09/20/22 08:11	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38143	09/20/22 10:44	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre3**

**Lab Sample ID: 590-18652-3**

Date Collected: 09/19/22 15:09

Matrix: Solid

Date Received: 09/19/22 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38142	09/20/22 08:25	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre3**

**Lab Sample ID: 590-18652-3**

Date Collected: 09/19/22 15:09

Matrix: Solid

Date Received: 09/19/22 16:59

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.02 g	2 mL	38140	09/20/22 08:11	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38143	09/20/22 11:00	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept19-32Pre4**

**Lab Sample ID: 590-18652-4**

Date Collected: 09/19/22 15:11

Matrix: Solid

Date Received: 09/19/22 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38142	09/20/22 08:25	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

**Client Sample ID: SVE-Soil-Sept19-32Pre4**

**Lab Sample ID: 590-18652-4**

**Date Collected: 09/19/22 15:11**

**Matrix: Solid**

**Date Received: 09/19/22 16:59**

**Percent Solids: 89.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.09 g	2 mL	38140	09/20/22 08:11	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38143	09/20/22 11:17	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18652-5**

**Date Collected: 09/19/22 00:00**

**Matrix: Solid**

**Date Received: 09/19/22 16:59**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.34 g	2 mL	38140	09/20/22 08:11	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38143	09/20/22 11:33	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  
Project/Site: Simplot Warden

Job ID: 590-18652-1

## Laboratory: Eurofins Spokane

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

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Washington	State	C569	01-06-23

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

<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18652-1

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





# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18652-1

**Login Number: 18652**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	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	

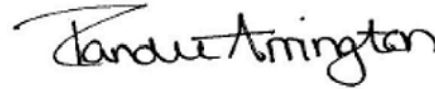
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18671-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/22/2022 4:27:51 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

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**Job ID: 590-18671-1**

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**Laboratory: Eurofins Spokane**

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**Narrative**

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**Receipt**

The samples were received on 9/21/2022 2:25 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**

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  
Project/Site: Simplot Warden

Job ID: 590-18671-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18671-1	SVE-Soil-Sept21-33Pre1	Solid	09/21/22 12:02	09/21/22 14:25
590-18671-2	SVE-Soil-Sept21-33Pre2	Solid	09/21/22 12:05	09/21/22 14:25
590-18671-3	SVE-Soil-Sept21-33Pre3	Solid	09/21/22 12:06	09/21/22 14:25
590-18671-4	SVE-Soil-Sept21-33Pre4	Solid	09/21/22 12:09	09/21/22 14:25
590-18671-5	SVE-Soil-Sept21-33DUP	Solid	09/21/22 12:00	09/21/22 14:25
590-18671-6	Trip Blank	Solid	09/21/22 00:00	09/21/22 14:25

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

## Glossary

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

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

**Client Sample ID: SVE-Soil-Sept21-33Pre1**

**Lab Sample ID: 590-18671-1**

Date Collected: 09/21/22 12:02

Matrix: Solid

Date Received: 09/21/22 14:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.5		0.01	0.01	%			09/21/22 15:01	1
Percent Solids	90.5		0.01	0.01	%			09/21/22 15:01	1

**Client Sample ID: SVE-Soil-Sept21-33Pre1**

**Lab Sample ID: 590-18671-1**

Date Collected: 09/21/22 12:02

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 90.5

**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	☼	09/22/22 09:14	09/22/22 11:40	1

**Client Sample ID: SVE-Soil-Sept21-33Pre2**

**Lab Sample ID: 590-18671-2**

Date Collected: 09/21/22 12:05

Matrix: Solid

Date Received: 09/21/22 14:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.1		0.01	0.01	%			09/21/22 15:01	1
Percent Solids	87.9		0.01	0.01	%			09/21/22 15:01	1

**Client Sample ID: SVE-Soil-Sept21-33Pre2**

**Lab Sample ID: 590-18671-2**

Date Collected: 09/21/22 12:05

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 87.9

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/22/22 09:14	09/22/22 12:28	1

**Client Sample ID: SVE-Soil-Sept21-33Pre3**

**Lab Sample ID: 590-18671-3**

Date Collected: 09/21/22 12:06

Matrix: Solid

Date Received: 09/21/22 14:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		0.01	0.01	%			09/21/22 15:01	1
Percent Solids	89.5		0.01	0.01	%			09/21/22 15:01	1

**Client Sample ID: SVE-Soil-Sept21-33Pre3**

**Lab Sample ID: 590-18671-3**

Date Collected: 09/21/22 12:06

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 89.5

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.056	0.039	ug/Kg	☼	09/22/22 09:14	09/22/22 12:44	1

**Client Sample ID: SVE-Soil-Sept21-33Pre4**

**Lab Sample ID: 590-18671-4**

Date Collected: 09/21/22 12:09

Matrix: Solid

Date Received: 09/21/22 14:25

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.5		0.01	0.01	%			09/21/22 15:01	1

Eurofins Spokane

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

**Client Sample ID: SVE-Soil-Sept21-33Pre4**  
Date Collected: 09/21/22 12:09  
Date Received: 09/21/22 14:25

**Lab Sample ID: 590-18671-4**  
Matrix: Solid

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.5		0.01	0.01	%			09/21/22 15:01	1

**Client Sample ID: SVE-Soil-Sept21-33Pre4**  
Date Collected: 09/21/22 12:09  
Date Received: 09/21/22 14:25

**Lab Sample ID: 590-18671-4**  
Matrix: Solid  
Percent Solids: 88.5

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☼	09/22/22 09:14	09/22/22 13:00	1

**Client Sample ID: SVE-Soil-Sept21-33DUP**  
Date Collected: 09/21/22 12:00  
Date Received: 09/21/22 14:25

**Lab Sample ID: 590-18671-5**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.2		0.01	0.01	%			09/21/22 15:01	1
Percent Solids	89.8		0.01	0.01	%			09/21/22 15:01	1

**Client Sample ID: SVE-Soil-Sept21-33DUP**  
Date Collected: 09/21/22 12:00  
Date Received: 09/21/22 14:25

**Lab Sample ID: 590-18671-5**  
Matrix: Solid  
Percent Solids: 89.8

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ug/Kg	☼	09/22/22 09:14	09/22/22 13:16	1

**Client Sample ID: Trip Blank**  
Date Collected: 09/21/22 00:00  
Date Received: 09/21/22 14:25

**Lab Sample ID: 590-18671-6**  
Matrix: Solid

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.048	0.034	ug/Kg		09/22/22 09:14	09/22/22 13:32	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38178/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38179**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38178**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/22/22 09:14	09/22/22 11:08	1

**Lab Sample ID: LCS 590-38178/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38179**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38178**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.08		ug/Kg		108	60 - 140

**Lab Sample ID: 590-18671-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38179**

**Client Sample ID: SVE-Soil-Sept21-33Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38178**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.09	0.722		ug/Kg	⊛	66	60 - 140

**Lab Sample ID: 590-18671-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38179**

**Client Sample ID: SVE-Soil-Sept21-33Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38178**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.10	0.708		ug/Kg	⊛	65	60 - 140	2	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18671-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 38170**

**Client Sample ID: SVE-Soil-Sept21-33Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.5		8.4		%		12	20
Percent Solids	90.5		91.6		%		1	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

**Client Sample ID: SVE-Soil-Sept21-33Pre1**

**Lab Sample ID: 590-18671-1**

Date Collected: 09/21/22 12:02

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38170	09/21/22 15:01	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre1**

**Lab Sample ID: 590-18671-1**

Date Collected: 09/21/22 12:02

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.03 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 11:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre2**

**Lab Sample ID: 590-18671-2**

Date Collected: 09/21/22 12:05

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38170	09/21/22 15:01	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre2**

**Lab Sample ID: 590-18671-2**

Date Collected: 09/21/22 12:05

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.13 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 12:28	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre3**

**Lab Sample ID: 590-18671-3**

Date Collected: 09/21/22 12:06

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38170	09/21/22 15:01	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre3**

**Lab Sample ID: 590-18671-3**

Date Collected: 09/21/22 12:06

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.05 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 12:44	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33Pre4**

**Lab Sample ID: 590-18671-4**

Date Collected: 09/21/22 12:09

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38170	09/21/22 15:01	NMI	EET SPK

Eurofins Spokane



# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

**Client Sample ID: SVE-Soil-Sept21-33Pre4**

**Lab Sample ID: 590-18671-4**

Date Collected: 09/21/22 12:09

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.72 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 13:00	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33DUP**

**Lab Sample ID: 590-18671-5**

Date Collected: 09/21/22 12:00

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38170	09/21/22 15:01	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept21-33DUP**

**Lab Sample ID: 590-18671-5**

Date Collected: 09/21/22 12:00

Matrix: Solid

Date Received: 09/21/22 14:25

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.33 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 13:16	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18671-6**

Date Collected: 09/21/22 00:00

Matrix: Solid

Date Received: 09/21/22 14:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.34 g	2 mL	38178	09/22/22 09:14	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38179	09/22/22 13:32	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  
Project/Site: Simplot Warden

Job ID: 590-18671-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18671-1

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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# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18671-1

**Login Number: 18671**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	



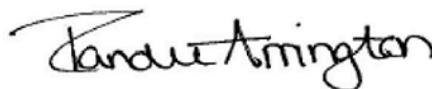
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18719-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:  
9/26/2022 2:33:41 PM*

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

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**Job ID: 590-18719-1**

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**Laboratory: Eurofins Spokane**

---

**Narrative**

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**Receipt**

The samples were received on 9/23/2022 2:05 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**

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  
Project/Site: Simplot Warden

Job ID: 590-18719-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18719-1	SVE-Soil-Sept23-34Pre1	Solid	09/23/22 12:18	09/23/22 14:05
590-18719-2	SVE-Soil-Sept23-34Pre2	Solid	09/23/22 12:20	09/23/22 14:05
590-18719-3	SVE-Soil-Sept23-34Pre3	Solid	09/23/22 12:22	09/23/22 14:05
590-18719-4	SVE-Soil-Sept23-34Pre4	Solid	09/23/22 12:24	09/23/22 14:05
590-18719-5	Trip Blank	Solid	09/23/22 00:00	09/23/22 14:05

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

**Client Sample ID: SVE-Soil-Sept23-34Pre1**

**Lab Sample ID: 590-18719-1**

Date Collected: 09/23/22 12:18

Matrix: Solid

Date Received: 09/23/22 14:05

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.0		0.01	0.01	%			09/24/22 11:40	1
Percent Solids	91.0		0.01	0.01	%			09/24/22 11:40	1

**Client Sample ID: SVE-Soil-Sept23-34Pre1**

**Lab Sample ID: 590-18719-1**

Date Collected: 09/23/22 12:18

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 91.0

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☼	09/24/22 10:40	09/24/22 12:59	1

**Client Sample ID: SVE-Soil-Sept23-34Pre2**

**Lab Sample ID: 590-18719-2**

Date Collected: 09/23/22 12:20

Matrix: Solid

Date Received: 09/23/22 14:05

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.5		0.01	0.01	%			09/24/22 11:40	1
Percent Solids	90.5		0.01	0.01	%			09/24/22 11:40	1

**Client Sample ID: SVE-Soil-Sept23-34Pre2**

**Lab Sample ID: 590-18719-2**

Date Collected: 09/23/22 12:20

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 90.5

**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	☼	09/24/22 10:40	09/24/22 13:48	1

**Client Sample ID: SVE-Soil-Sept23-34Pre3**

**Lab Sample ID: 590-18719-3**

Date Collected: 09/23/22 12:22

Matrix: Solid

Date Received: 09/23/22 14:05

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		0.01	0.01	%			09/24/22 11:40	1
Percent Solids	89.7		0.01	0.01	%			09/24/22 11:40	1

**Client Sample ID: SVE-Soil-Sept23-34Pre3**

**Lab Sample ID: 590-18719-3**

Date Collected: 09/23/22 12:22

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 89.7

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg	☼	09/24/22 10:40	09/24/22 14:05	1

**Client Sample ID: SVE-Soil-Sept23-34Pre4**

**Lab Sample ID: 590-18719-4**

Date Collected: 09/23/22 12:24

Matrix: Solid

Date Received: 09/23/22 14:05

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.8		0.01	0.01	%			09/24/22 11:40	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

**Client Sample ID: SVE-Soil-Sept23-34Pre4**

**Lab Sample ID: 590-18719-4**

Date Collected: 09/23/22 12:24

Matrix: Solid

Date Received: 09/23/22 14:05

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.2		0.01	0.01	%			09/24/22 11:40	1

**Client Sample ID: SVE-Soil-Sept23-34Pre4**

**Lab Sample ID: 590-18719-4**

Date Collected: 09/23/22 12:24

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 89.2

**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	☼	09/24/22 10:40	09/24/22 14:21	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18719-5**

Date Collected: 09/23/22 00:00

Matrix: Solid

Date Received: 09/23/22 14:05

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.045	0.032	ug/Kg		09/24/22 10:40	09/24/22 14:38	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

## Method: 8011 - EDB

Lab Sample ID: MB 590-38222/2-A  
Matrix: Solid  
Analysis Batch: 38225

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 38222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/24/22 10:40	09/24/22 12:26	1

Lab Sample ID: LCS 590-38222/3-A  
Matrix: Solid  
Analysis Batch: 38225

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 38222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	0.991		ug/Kg		99	60 - 140

Lab Sample ID: 590-18719-1 MS  
Matrix: Solid  
Analysis Batch: 38225

Client Sample ID: SVE-Soil-Sept23-34Pre1  
Prep Type: Total/NA  
Prep Batch: 38222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.07	0.671		ug/Kg	⊛	63	60 - 140

Lab Sample ID: 590-18719-1 MSD  
Matrix: Solid  
Analysis Batch: 38225

Client Sample ID: SVE-Soil-Sept23-34Pre1  
Prep Type: Total/NA  
Prep Batch: 38222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.05	0.674		ug/Kg	⊛	64	60 - 140	1	20

## Method: Moisture - Percent Moisture

Lab Sample ID: 590-18719-1 DU  
Matrix: Solid  
Analysis Batch: 38226

Client Sample ID: SVE-Soil-Sept23-34Pre1  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.0		8.5		%		6	20
Percent Solids	91.0		91.5		%		0.5	20

Lab Sample ID: 590-18719-2 DU  
Matrix: Solid  
Analysis Batch: 38226

Client Sample ID: SVE-Soil-Sept23-34Pre2  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.5		10.4		%		9	20
Percent Solids	90.5		89.6		%		1	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

**Client Sample ID: SVE-Soil-Sept23-34Pre1**

**Lab Sample ID: 590-18719-1**

Date Collected: 09/23/22 12:18

Matrix: Solid

Date Received: 09/23/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38226	09/24/22 11:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre1**

**Lab Sample ID: 590-18719-1**

Date Collected: 09/23/22 12:18

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 91.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.44 g	2 mL	38222	09/24/22 10:40	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38225	09/24/22 12:59	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre2**

**Lab Sample ID: 590-18719-2**

Date Collected: 09/23/22 12:20

Matrix: Solid

Date Received: 09/23/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38226	09/24/22 11:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre2**

**Lab Sample ID: 590-18719-2**

Date Collected: 09/23/22 12:20

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.08 g	2 mL	38222	09/24/22 10:40	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38225	09/24/22 13:48	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre3**

**Lab Sample ID: 590-18719-3**

Date Collected: 09/23/22 12:22

Matrix: Solid

Date Received: 09/23/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38226	09/24/22 11:40	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre3**

**Lab Sample ID: 590-18719-3**

Date Collected: 09/23/22 12:22

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			11.16 g	2 mL	38222	09/24/22 10:40	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38225	09/24/22 14:05	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept23-34Pre4**

**Lab Sample ID: 590-18719-4**

Date Collected: 09/23/22 12:24

Matrix: Solid

Date Received: 09/23/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38226	09/24/22 11:40	NMI	EET SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

**Client Sample ID: SVE-Soil-Sept23-34Pre4**

**Lab Sample ID: 590-18719-4**

Date Collected: 09/23/22 12:24

Matrix: Solid

Date Received: 09/23/22 14:05

Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.85 g	2 mL	38222	09/24/22 10:40	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38225	09/24/22 14:21	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18719-5**

Date Collected: 09/23/22 00:00

Matrix: Solid

Date Received: 09/23/22 14:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			11.00 g	2 mL	38222	09/24/22 10:40	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38225	09/24/22 14:38	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  
Project/Site: Simplot Warden

Job ID: 590-18719-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids





# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18719-1

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





## Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18719-1

**Login Number: 18719**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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?	False	
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	

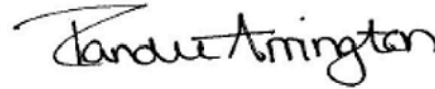
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18744-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:*  
9/28/2022 4:33:46 PM

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

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**Job ID: 590-18744-1**

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**Laboratory: Eurofins Spokane**

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## Narrative

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### Receipt

The samples were received on 9/27/2022 3:12 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 3.3° 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  
Project/Site: Simplot Warden

Job ID: 590-18744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18744-1	SVE-Soil-Sept27-35Pre1	Solid	09/27/22 13:29	09/27/22 15:12
590-18744-2	SVE-Soil-Sept27-35Pre2	Solid	09/27/22 13:31	09/27/22 15:12
590-18744-3	SVE-Soil-Sept27-35Pre3	Solid	09/27/22 13:33	09/27/22 15:12
590-18744-4	SVE-Soil-Sept27-35Pre4	Solid	09/27/22 13:35	09/27/22 15:12
590-18744-5	Trip Blank	Solid	09/27/22 00:00	09/27/22 15:12

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

## Glossary

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



# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
Date Collected: 09/27/22 13:29  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-1**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.01	0.01	%			09/28/22 08:57	1
Percent Solids	89.4		0.01	0.01	%			09/28/22 08:57	1

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
Date Collected: 09/27/22 13:29  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-1**  
Matrix: Solid  
Percent Solids: 89.4

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND	F2	0.054	0.038	ug/Kg	☼	09/28/22 08:26	09/28/22 11:00	1

**Client Sample ID: SVE-Soil-Sept27-35Pre2**  
Date Collected: 09/27/22 13:31  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-2**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.01	0.01	%			09/28/22 08:57	1
Percent Solids	89.4		0.01	0.01	%			09/28/22 08:57	1

**Client Sample ID: SVE-Soil-Sept27-35Pre2**  
Date Collected: 09/27/22 13:31  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-2**  
Matrix: Solid  
Percent Solids: 89.4

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☼	09/28/22 08:26	09/28/22 11:49	1

**Client Sample ID: SVE-Soil-Sept27-35Pre3**  
Date Collected: 09/27/22 13:33  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-3**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.9		0.01	0.01	%			09/28/22 08:57	1
Percent Solids	89.1		0.01	0.01	%			09/28/22 08:57	1

**Client Sample ID: SVE-Soil-Sept27-35Pre3**  
Date Collected: 09/27/22 13:33  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-3**  
Matrix: Solid  
Percent Solids: 89.1

**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	☼	09/28/22 08:26	09/28/22 12:06	1

**Client Sample ID: SVE-Soil-Sept27-35Pre4**  
Date Collected: 09/27/22 13:35  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-4**  
Matrix: Solid

**General Chemistry**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.4		0.01	0.01	%			09/28/22 08:57	1

Eurofins Spokane

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

**Client Sample ID: SVE-Soil-Sept27-35Pre4**

**Lab Sample ID: 590-18744-4**

Date Collected: 09/27/22 13:35

Matrix: Solid

Date Received: 09/27/22 15:12

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.6		0.01	0.01	%			09/28/22 08:57	1

**Client Sample ID: SVE-Soil-Sept27-35Pre4**

**Lab Sample ID: 590-18744-4**

Date Collected: 09/27/22 13:35

Matrix: Solid

Date Received: 09/27/22 15:12

Percent Solids: 91.6

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.052	0.037	ug/Kg	☆	09/28/22 08:26	09/28/22 12:22	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18744-5**

Date Collected: 09/27/22 00:00

Matrix: Solid

Date Received: 09/27/22 15:12

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/28/22 08:26	09/28/22 12:39	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38278/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38281**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38278**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/28/22 08:26	09/28/22 10:27	1

**Lab Sample ID: LCS 590-38278/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38281**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38278**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.12		ug/Kg		112	60 - 140

**Lab Sample ID: 590-18744-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38281**

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38278**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND	F2	1.10	0.797		ug/Kg	☼	72	60 - 140

**Lab Sample ID: 590-18744-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38281**

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38278**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND	F2	1.10	1.05	F2	ug/Kg	☼	96	60 - 140	27	20

## Method: Moisture - Percent Moisture

**Lab Sample ID: 590-18744-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 38280**

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.6		9.9		%		6	20
Percent Solids	89.4		90.1		%		0.7	20

**Lab Sample ID: 590-18744-4 DU**  
**Matrix: Solid**  
**Analysis Batch: 38280**

**Client Sample ID: SVE-Soil-Sept27-35Pre4**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	8.4		9.4		%		11	20
Percent Solids	91.6		90.6		%		1	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
Date Collected: 09/27/22 13:29  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-1**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38280	09/28/22 08:57	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre1**  
Date Collected: 09/27/22 13:29  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-1**  
Matrix: Solid  
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.31 g	2 mL	38278	09/28/22 08:26	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38281	09/28/22 11:00	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre2**  
Date Collected: 09/27/22 13:31  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-2**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38280	09/28/22 08:57	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre2**  
Date Collected: 09/27/22 13:31  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-2**  
Matrix: Solid  
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.55 g	2 mL	38278	09/28/22 08:26	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38281	09/28/22 11:49	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre3**  
Date Collected: 09/27/22 13:33  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-3**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38280	09/28/22 08:57	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre3**  
Date Collected: 09/27/22 13:33  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-3**  
Matrix: Solid  
Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.25 g	2 mL	38278	09/28/22 08:26	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38281	09/28/22 12:06	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept27-35Pre4**  
Date Collected: 09/27/22 13:35  
Date Received: 09/27/22 15:12

**Lab Sample ID: 590-18744-4**  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38280	09/28/22 08:57	NMI	EET SPK

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# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

**Client Sample ID: SVE-Soil-Sept27-35Pre4**

**Lab Sample ID: 590-18744-4**

**Date Collected: 09/27/22 13:35**

**Matrix: Solid**

**Date Received: 09/27/22 15:12**

**Percent Solids: 91.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.41 g	2 mL	38278	09/28/22 08:26	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38281	09/28/22 12:22	NMI	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18744-5**

**Date Collected: 09/27/22 00:00**

**Matrix: Solid**

**Date Received: 09/27/22 15:12**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.05 g	2 mL	38278	09/28/22 08:26	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38281	09/28/22 12:39	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  
Project/Site: Simplot Warden

Job ID: 590-18744-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18744-1

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







# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18744-1

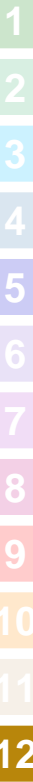
**Login Number: 18744**

**List Number: 1**

**Creator: Fettig, Riley**

**List Source: Eurofins Spokane**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



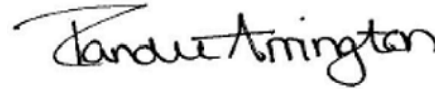
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-18784-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



*Authorized for release by:*  
9/30/2022 5:00:58 PM

Randee Arrington, Lab Director  
(509)924-9200  
[Randee.Arrington@et.eurofinsus.com](mailto:Randee.Arrington@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://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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# Case Narrative

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

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**Job ID: 590-18784-1**

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**Laboratory: Eurofins Spokane**

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**Narrative**

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**Receipt**

The samples were received on 9/29/2022 3:01 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 3.6° 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  
Project/Site: Simplot Warden

Job ID: 590-18784-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18784-1	SVE-Soil-Sept29-36Pre1	Solid	09/29/22 13:10	09/29/22 15:01
590-18784-2	SVE-Soil-Sept29-36Pre2	Solid	09/29/22 13:12	09/29/22 15:01
590-18784-3	SVE-Soil-Sept29-36Pre3	Solid	09/29/22 13:14	09/29/22 15:01
590-18784-4	SVE-Soil-Sept29-36Pre4	Solid	09/29/22 13:16	09/29/22 15:01
590-18784-5	Trip Blank	Solid	09/29/22 00:00	09/29/22 15:01

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# Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

## Glossary

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

# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

**Client Sample ID: SVE-Soil-Sept29-36Pre1**  
Date Collected: 09/29/22 13:10  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-1**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		0.01	0.01	%			09/30/22 07:47	1
Percent Solids	89.5		0.01	0.01	%			09/30/22 07:47	1

**Client Sample ID: SVE-Soil-Sept29-36Pre1**  
Date Collected: 09/29/22 13:10  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-1**  
Matrix: Solid  
Percent Solids: 89.5

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.054	0.038	ug/Kg	☼	09/30/22 08:16	09/30/22 11:09	1

**Client Sample ID: SVE-Soil-Sept29-36Pre2**  
Date Collected: 09/29/22 13:12  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-2**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.5		0.01	0.01	%			09/30/22 07:47	1
Percent Solids	90.5		0.01	0.01	%			09/30/22 07:47	1

**Client Sample ID: SVE-Soil-Sept29-36Pre2**  
Date Collected: 09/29/22 13:12  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-2**  
Matrix: Solid  
Percent Solids: 90.5

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.051	0.035	ug/Kg	☼	09/30/22 08:16	09/30/22 11:57	1

**Client Sample ID: SVE-Soil-Sept29-36Pre3**  
Date Collected: 09/29/22 13:14  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-3**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.6		0.01	0.01	%			09/30/22 07:47	1
Percent Solids	91.4		0.01	0.01	%			09/30/22 07:47	1

**Client Sample ID: SVE-Soil-Sept29-36Pre3**  
Date Collected: 09/29/22 13:14  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-3**  
Matrix: Solid  
Percent Solids: 91.4

## Method: 8011 - EDB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg	☼	09/30/22 08:16	09/30/22 12:13	1

**Client Sample ID: SVE-Soil-Sept29-36Pre4**  
Date Collected: 09/29/22 13:16  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-4**  
Matrix: Solid

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.1		0.01	0.01	%			09/30/22 07:47	1

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# Client Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

**Client Sample ID: SVE-Soil-Sept29-36Pre4**  
Date Collected: 09/29/22 13:16  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-4**  
Matrix: Solid

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89.9		0.01	0.01	%			09/30/22 07:47	1

**Client Sample ID: SVE-Soil-Sept29-36Pre4**  
Date Collected: 09/29/22 13:16  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-4**  
Matrix: Solid  
Percent Solids: 89.9

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.053	0.037	ug/Kg	☆	09/30/22 08:17	09/30/22 13:32	1

**Client Sample ID: Trip Blank**  
Date Collected: 09/29/22 00:00  
Date Received: 09/29/22 15:01

**Lab Sample ID: 590-18784-5**  
Matrix: Solid

**Method: 8011 - EDB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.048	0.034	ug/Kg		09/30/22 08:17	09/30/22 13:48	1



# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

## Method: 8011 - EDB

**Lab Sample ID: MB 590-38335/2-A**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		09/30/22 08:16	09/30/22 09:50	1

**Lab Sample ID: LCS 590-38335/3-A**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.18		ug/Kg		118	60 - 140

**Lab Sample ID: LCS 590-38335/4-A**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.21		ug/Kg		121	60 - 140

**Lab Sample ID: LCS 590-38335/5-A**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.10		ug/Kg		110	60 - 140

**Lab Sample ID: LCS 590-38335/6-A**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.11		ug/Kg		111	60 - 140

**Lab Sample ID: 590-18784-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: SVE-Soil-Sept29-36Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.08	0.795		ug/Kg	✱	74	60 - 140

**Lab Sample ID: 590-18784-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 38338**

**Client Sample ID: SVE-Soil-Sept29-36Pre1**  
**Prep Type: Total/NA**  
**Prep Batch: 38335**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.05	0.868		ug/Kg	✱	82	60 - 140	9	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

**Client Sample ID: SVE-Soil-Sept29-36Pre1**

**Lab Sample ID: 590-18784-1**

Date Collected: 09/29/22 13:10

Matrix: Solid

Date Received: 09/29/22 15:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38334	09/30/22 07:47	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre1**

**Lab Sample ID: 590-18784-1**

Date Collected: 09/29/22 13:10

Matrix: Solid

Date Received: 09/29/22 15:01

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.31 g	2 mL	38335	09/30/22 08:16	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38338	09/30/22 11:09	M1V	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre2**

**Lab Sample ID: 590-18784-2**

Date Collected: 09/29/22 13:12

Matrix: Solid

Date Received: 09/29/22 15:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38334	09/30/22 07:47	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre2**

**Lab Sample ID: 590-18784-2**

Date Collected: 09/29/22 13:12

Matrix: Solid

Date Received: 09/29/22 15:01

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.92 g	2 mL	38335	09/30/22 08:16	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38338	09/30/22 11:57	M1V	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre3**

**Lab Sample ID: 590-18784-3**

Date Collected: 09/29/22 13:14

Matrix: Solid

Date Received: 09/29/22 15:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38334	09/30/22 07:47	NMI	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre3**

**Lab Sample ID: 590-18784-3**

Date Collected: 09/29/22 13:14

Matrix: Solid

Date Received: 09/29/22 15:01

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.84 g	2 mL	38335	09/30/22 08:16	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38338	09/30/22 12:13	M1V	EET SPK

**Client Sample ID: SVE-Soil-Sept29-36Pre4**

**Lab Sample ID: 590-18784-4**

Date Collected: 09/29/22 13:16

Matrix: Solid

Date Received: 09/29/22 15:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			38334	09/30/22 07:47	NMI	EET SPK

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# Lab Chronicle

Client: HDR Inc  
 Project/Site: Simplot Warden

Job ID: 590-18784-1

**Client Sample ID: SVE-Soil-Sept29-36Pre4**

**Lab Sample ID: 590-18784-4**

**Date Collected: 09/29/22 13:16**

**Matrix: Solid**

**Date Received: 09/29/22 15:01**

**Percent Solids: 89.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.56 g	2 mL	38335	09/30/22 08:17	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38338	09/30/22 13:32	M1V	EET SPK

**Client Sample ID: Trip Blank**

**Lab Sample ID: 590-18784-5**

**Date Collected: 09/29/22 00:00**

**Matrix: Solid**

**Date Received: 09/29/22 15:01**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.40 g	2 mL	38335	09/30/22 08:17	M1V	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	38338	09/30/22 13:48	M1V	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  
Project/Site: Simplot Warden

Job ID: 590-18784-1

## Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Method Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-18784-1

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





# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-18784-1

**Login Number: 18784**

**List Source: Eurofins Spokane**

**List Number: 1**

**Creator: Fettig, Riley**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	

