



June 9, 2022

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

**Subject: Progress Report for May 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 May 2022

- Simplot conducted weekly inspections of the stockpile cover per the Ex-Situ Soil Stockpile Protection Plan (HDR December 2021) through May 18. Repairs to the stockpile cover were completed by GrayMar. Documented weekly checks will discontinue now that the project is active again; the stockpile cover will be addressed as necessary by the SVE provider/operator (GrayMar).
- Simplot/HDR coordinated mobilization and ex-situ soil vapor extraction (SVE) system start-up logistics with the SVE provider/operator, GrayMar.
- GrayMar mobilized equipment and supplies to the site on May 23, 2022. Site preparation and treatment cell construction was completed between May 23 and May 31, 2022.
- Soil samples were collected on May 31, 2022 prior to SVE system operation to determine pre-treatment ethylene dibromide (EDB), percent moisture, and total organic carbon (TOC), per the SVE Performance Test Plan (PTP; HDR May 2022). Four discrete core soil samples and the associated quality control (QC) samples were analyzed for EDB by Eurofins in Spokane, Washington on a rush 24-hour turnaround basis. All samples were reported as non-detect for EDB by the analytical laboratory. EDB analytical results are attached to this memo. TOC analytical results are pending.
- Simplot initiated SVE operations per the *Cleanup Action Implementation Compliance Monitoring Plan* (CAICMP; HDR revised May 2022) and *SVE Performance Test Plan* (PTP; HDR May 2022).
- SVE pilot test operations commenced on June 1, 2022. Simplot/HDR collected field data and vapor samples on each day between June 1 and June 5, 2022, per the PTP. Vapor sample and field data analysis are in progress.
- Simplot/HDR collected four discrete core soil samples and associated QC samples after 5 days of operation on June 5, 2022. These samples were analyzed for EDB by Eurofins in Spokane, Washington on a rush 24-hour turnaround basis. All samples were reported as non-detect for EDB by the analytical laboratory. Post-treatment EDB analytical results are attached to this memo.
- Simplot/HDR coordinated with GrayMar to remove pilot study soil within the treatment pile for use as on-site backfill based on non-detect soil sample analytical results, in accordance with the CAIMP and PTP.
- Simplot/HDR are working on a draft cleanup action report to summarize the remedial action (impacted soils excavation) to date.

### Anticipated Activities for June 2022

- Simplot/HDR to schedule meeting with Ecology to discuss results of May 2022/June 2022 SVE pilot test.
- Simplot/HDR currently compiling pilot study field and laboratory analytical data for optimization of SVE system operation and will communicate results and any associated recommendations regarding system operation to Ecology.

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

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:      Soil Sample Analytical Report (pre-treatment), Eurofins 6/2/2022  
                             Soil Sample Analytical Report (post-treatment), Eurofins 6/7/2022

CC:                     Molly Dimick, J.R. Simplot Company  
                             Stacey Lamer, HDR

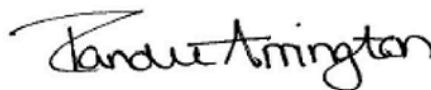
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-17643-1  
Client Project/Site: Simplot Warden  
Revision: 1

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

Attn: Jered Newcomb



Authorized for release by:  
6/2/2022 4:54:05 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



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[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: 590-17643-1

**Job ID: 590-17643-1**

**Laboratory: Eurofins Spokane**

## Narrative

### Revision

The report being provided is a revision of the original report sent on 6/2/2022. The report (revision 1) is being revised due to: The method header in the final report was revised per the client's request.

### Receipt

The samples were received on 6/1/2022 8:20 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 2.4° C.

### GC Semi VOA

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

### General Chemistry

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

### Organic Prep

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

# Sample Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-17643-1	SVE-Soil-May31-1Pre1	Solid	05/31/22 15:50	06/01/22 08:20
590-17643-2	SVE-Soil-May31-1Pre2	Solid	05/31/22 16:10	06/01/22 08:20
590-17643-3	SVE-Soil-May31-1Pre3	Solid	05/31/22 16:05	06/01/22 08:20
590-17643-4	SVE-Soil-May31-1DUP	Solid	05/31/22 15:30	06/01/22 08:20
590-17643-5	SVE-Soil-May31-1Pre4	Solid	05/31/22 16:20	06/01/22 08:20
590-17643-6	Trip Blanks	Solid	05/31/22 00:00	06/01/22 08:20

## Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

### 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: 590-17643-1

## Client Sample ID: SVE-Soil-May31-1Pre1

Date Collected: 05/31/22 15:50

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-1

Matrix: Solid

Percent Solids: 88.8

### 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	☆	06/01/22 15:31	06/01/22 17:02	1

## Client Sample ID: SVE-Soil-May31-1Pre2

Date Collected: 05/31/22 16:10

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-2

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		0.052	0.036	ug/Kg	☆	06/01/22 15:31	06/01/22 17:51	1

## Client Sample ID: SVE-Soil-May31-1Pre3

Date Collected: 05/31/22 16:05

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-3

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		0.053	0.037	ug/Kg	☆	06/01/22 15:31	06/01/22 18:07	1

## Client Sample ID: SVE-Soil-May31-1DUP

Date Collected: 05/31/22 15:30

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-4

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	☆	06/01/22 15:31	06/01/22 18:24	1

## Client Sample ID: SVE-Soil-May31-1Pre4

Date Collected: 05/31/22 16:20

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-5

Matrix: Solid

Percent Solids: 89.3

### 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	☆	06/01/22 15:31	06/01/22 18:40	1

## Client Sample ID: Trip Blanks

Date Collected: 05/31/22 00:00

Date Received: 06/01/22 08:20

## Lab Sample ID: 590-17643-6

Matrix: Solid

### 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		06/01/22 15:31	06/01/22 19:13	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

## Method: 8011 - EDB

Lab Sample ID: MB 590-36348/2-A  
Matrix: Solid  
Analysis Batch: 36349

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 36348

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		06/01/22 15:31	06/01/22 16:13	1

Lab Sample ID: LCS 590-36348/3-A  
Matrix: Solid  
Analysis Batch: 36349

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 36348

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.14		ug/Kg		114	60 - 140

Lab Sample ID: 590-17643-1 MS  
Matrix: Solid  
Analysis Batch: 36349

Client Sample ID: SVE-Soil-May31-1Pre1  
Prep Type: Total/NA  
Prep Batch: 36348

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.08	0.793		ug/Kg	⚠	74	60 - 140

Lab Sample ID: 590-17643-1 MSD  
Matrix: Solid  
Analysis Batch: 36349

Client Sample ID: SVE-Soil-May31-1Pre1  
Prep Type: Total/NA  
Prep Batch: 36348

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		1.07	0.840		ug/Kg	⚠	79	60 - 140	6	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

**Client Sample ID: SVE-Soil-May31-1Pre1**

**Lab Sample ID: 590-17643-1**

**Date Collected: 05/31/22 15:50**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

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			36336	06/01/22 10:58	M1V	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre1**

**Lab Sample ID: 590-17643-1**

**Date Collected: 05/31/22 15:50**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

**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			10.50 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 17:02	NMI	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre2**

**Lab Sample ID: 590-17643-2**

**Date Collected: 05/31/22 16:10**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

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			36336	06/01/22 10:58	M1V	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre2**

**Lab Sample ID: 590-17643-2**

**Date Collected: 05/31/22 16:10**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

**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			10.82 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 17:51	NMI	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre3**

**Lab Sample ID: 590-17643-3**

**Date Collected: 05/31/22 16:05**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

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			36336	06/01/22 10:58	M1V	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre3**

**Lab Sample ID: 590-17643-3**

**Date Collected: 05/31/22 16:05**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

**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			10.58 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 18:07	NMI	TAL SPK

**Client Sample ID: SVE-Soil-May31-1DUP**

**Lab Sample ID: 590-17643-4**

**Date Collected: 05/31/22 15:30**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

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			36336	06/01/22 10:58	M1V	TAL SPK

Eurofins Spokane

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

**Client Sample ID: SVE-Soil-May31-1DUP**

**Lab Sample ID: 590-17643-4**

**Date Collected: 05/31/22 15:30**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

**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			10.25 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 18:24	NMI	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre4**

**Lab Sample ID: 590-17643-5**

**Date Collected: 05/31/22 16:20**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

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			36336	06/01/22 10:58	M1V	TAL SPK

**Client Sample ID: SVE-Soil-May31-1Pre4**

**Lab Sample ID: 590-17643-5**

**Date Collected: 05/31/22 16:20**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

**Percent Solids: 89.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.42 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 18:40	NMI	TAL SPK

**Client Sample ID: Trip Blanks**

**Lab Sample ID: 590-17643-6**

**Date Collected: 05/31/22 00:00**

**Matrix: Solid**

**Date Received: 06/01/22 08:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.06 g	2 mL	36348	06/01/22 15:31	NMI	TAL SPK
Total/NA	Analysis	8011		1			36349	06/01/22 19:13	NMI	TAL SPK

## Laboratory References:

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

# Accreditation/Certification Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17643-1

## 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: 590-17643-1

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

### Protocol References:

EPA = US Environmental Protection Agency

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

### Laboratory References:

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

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

## Chain of Custody Record

[illegible]

## Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-17643-1

**Login Number: 17643**

**List Number: 1**

**Creator: Vaughan, Madison 1**

**List Source: Eurofins Spokane**

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



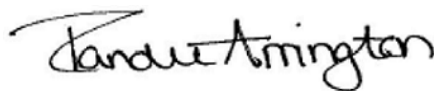
## ANALYTICAL REPORT

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

Laboratory Job ID: 590-17700-1  
Client Project/Site: Simplot Warden

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

Attn: Jered Newcomb



Authorized for release by:  
6/7/2022 2:14:27 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



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[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: 590-17700-1

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**Job ID: 590-17700-1**

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**Laboratory: Eurofins Spokane**

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### Narrative

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#### Receipt

The samples were received on 6/6/2022 10:40 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 3.7° C.

#### Receipt Exceptions

The following sample was listed on the Chain of Custody (COC); however, no sample was received: Trip Blank (590-17700-6).

#### GC Semi VOA

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

#### General Chemistry

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

#### Organic Prep

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

# Sample Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-17700-1	SVE-Soil-June5-1Post1	Solid	06/05/22 12:59	06/06/22 10:40
590-17700-2	SVE-Soil-June5-1Post2	Solid	06/05/22 13:23	06/06/22 10:40
590-17700-3	SVE-Soil-June5-1Post3	Solid	06/05/22 13:47	06/06/22 10:40
590-17700-4	SVE-Soil-June5-1Post4	Solid	06/05/22 14:15	06/06/22 10:40
590-17700-5	SVE-Soil-June5-Dup2	Solid	06/05/22 13:34	06/06/22 10:40

## Definitions/Glossary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

### 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: 590-17700-1

## Client Sample ID: SVE-Soil-June5-1Post1

Date Collected: 06/05/22 12:59

Date Received: 06/06/22 10:40

## Lab Sample ID: 590-17700-1

Matrix: Solid

Percent Solids: 90.4

### 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	☆	06/07/22 09:12	06/07/22 10:23	1

## Client Sample ID: SVE-Soil-June5-1Post2

Date Collected: 06/05/22 13:23

Date Received: 06/06/22 10:40

## Lab Sample ID: 590-17700-2

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		0.054	0.038	ug/Kg	☆	06/07/22 09:12	06/07/22 11:11	1

## Client Sample ID: SVE-Soil-June5-1Post3

Date Collected: 06/05/22 13:47

Date Received: 06/06/22 10:40

## Lab Sample ID: 590-17700-3

Matrix: Solid

Percent Solids: 90.8

### 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	☆	06/07/22 09:12	06/07/22 11:28	1

## Client Sample ID: SVE-Soil-June5-1Post4

Date Collected: 06/05/22 14:15

Date Received: 06/06/22 10:40

## Lab Sample ID: 590-17700-4

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		0.052	0.037	ug/Kg	☆	06/07/22 09:12	06/07/22 11:44	1

## Client Sample ID: SVE-Soil-June5-Dup2

Date Collected: 06/05/22 13:34

Date Received: 06/06/22 10:40

## Lab Sample ID: 590-17700-5

Matrix: Solid

Percent Solids: 90.8

### 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	☆	06/07/22 09:12	06/07/22 12:00	1

# QC Sample Results

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

## Method: 8011 - EDB

Lab Sample ID: MB 590-36411/2-A  
Matrix: Solid  
Analysis Batch: 36412

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 36411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.050	0.035	ug/Kg		06/07/22 09:12	06/07/22 09:50	1

Lab Sample ID: LCS 590-36411/3-A  
Matrix: Solid  
Analysis Batch: 36412

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 36411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	1.00	1.34		ug/Kg		134	60 - 140

Lab Sample ID: 590-17700-1 MS  
Matrix: Solid  
Analysis Batch: 36412

Client Sample ID: SVE-Soil-June5-1Post1  
Prep Type: Total/NA  
Prep Batch: 36411

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	ND		1.06	0.933		ug/Kg	⚠	88	60 - 140

Lab Sample ID: 590-17700-1 MSD  
Matrix: Solid  
Analysis Batch: 36412

Client Sample ID: SVE-Soil-June5-1Post1  
Prep Type: Total/NA  
Prep Batch: 36411

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	0.760		ug/Kg	⚠	70	60 - 140	20	20

# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

**Client Sample ID: SVE-Soil-June5-1Post1**

**Lab Sample ID: 590-17700-1**

**Date Collected: 06/05/22 12:59**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

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			36397	06/06/22 11:22	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post1**

**Lab Sample ID: 590-17700-1**

**Date Collected: 06/05/22 12:59**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

**Percent Solids: 90.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.28 g	2 mL	36411	06/07/22 09:12	NMI	TAL SPK
Total/NA	Analysis	8011		1			36412	06/07/22 10:23	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post2**

**Lab Sample ID: 590-17700-2**

**Date Collected: 06/05/22 13:23**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

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			36397	06/06/22 11:22	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post2**

**Lab Sample ID: 590-17700-2**

**Date Collected: 06/05/22 13:23**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

**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			10.19 g	2 mL	36411	06/07/22 09:12	NMI	TAL SPK
Total/NA	Analysis	8011		1			36412	06/07/22 11:11	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post3**

**Lab Sample ID: 590-17700-3**

**Date Collected: 06/05/22 13:47**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

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			36397	06/06/22 11:22	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post3**

**Lab Sample ID: 590-17700-3**

**Date Collected: 06/05/22 13:47**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

**Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.32 g	2 mL	36411	06/07/22 09:12	NMI	TAL SPK
Total/NA	Analysis	8011		1			36412	06/07/22 11:28	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-1Post4**

**Lab Sample ID: 590-17700-4**

**Date Collected: 06/05/22 14:15**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

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			36397	06/06/22 11:22	NMI	TAL SPK

Eurofins Spokane



# Lab Chronicle

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

**Client Sample ID: SVE-Soil-June5-1Post4**

**Lab Sample ID: 590-17700-4**

**Date Collected: 06/05/22 14:15**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

**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			10.65 g	2 mL	36411	06/07/22 09:12	NMI	TAL SPK
Total/NA	Analysis	8011		1			36412	06/07/22 11:44	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-Dup2**

**Lab Sample ID: 590-17700-5**

**Date Collected: 06/05/22 13:34**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

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			36397	06/06/22 11:22	NMI	TAL SPK

**Client Sample ID: SVE-Soil-June5-Dup2**

**Lab Sample ID: 590-17700-5**

**Date Collected: 06/05/22 13:34**

**Matrix: Solid**

**Date Received: 06/06/22 10:40**

**Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			10.13 g	2 mL	36411	06/07/22 09:12	NMI	TAL SPK
Total/NA	Analysis	8011		1			36412	06/07/22 12:00	NMI	TAL SPK

## Laboratory References:

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

# Accreditation/Certification Summary

Client: HDR Inc  
Project/Site: Simplot Warden

Job ID: 590-17700-1

## 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: 590-17700-1

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

### Protocol References:

EPA = US Environmental Protection Agency

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

### Laboratory References:

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

[illegible]

# Login Sample Receipt Checklist

Client: HDR Inc

Job Number: 590-17700-1

**Login Number: 17700**

**List Number: 1**

**Creator: Vaughan, Madison 1**

**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.	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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	