

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

Evergreen Natural Resources: 915 Full Soil Suite

## JOB NUMBER

280-184115-1

# Eurofins Denver

## Job Notes

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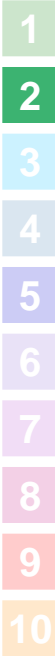
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## Authorization



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## Definitions/Glossary

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

### 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

## Case Narrative

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

**Job ID: 280-184115-1**

**Laboratory: Eurofins Denver**

**Narrative**

### CASE NARRATIVE

**Client: Evergreen Natural Resources LLC**

**Project: Evergreen Natural Resources: 915 Full Soil Suite**

**Report Number: 280-184115-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

This submission may contain field data obtained by the sampler. The methods referenced in this submission for the field data results may not be the methods used to obtain the field data by the sampler.

#### **REVISION 1, DECEMBER 7, 2023**

The data package was revised to include sodium, calcium, and magnesium for method 20B\_SAR per client request.

#### **RECEIPT**

The samples were received on 11/7/2023 8:45 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 0.6° C.

#### **SODIUM ABSORPTION RATIO**

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

#### **PERCENT SOLIDS**

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

## Detection Summary

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

### Client Sample ID: Lickity Split 43-12 553

### Lab Sample ID: 280-184115-1

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	3.6		1.2		No Unit	10		20B	Soluble
Sodium	91		10		mg/Kg	10		20B	Soluble
Calcium	39		2.0		mg/Kg	10		20B	Soluble
Magnesium	5.5		2.0		mg/Kg	10		20B	Soluble

### Client Sample ID: PCW 41-33 553

### Lab Sample ID: 280-184115-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	3.1		1.2		No Unit	10		20B	Soluble
Sodium	76		10		mg/Kg	10		20B	Soluble
Calcium	35		2.0		mg/Kg	10		20B	Soluble
Magnesium	6.9		2.0		mg/Kg	10		20B	Soluble

### Client Sample ID: PCW 23-4 552

### Lab Sample ID: 280-184115-3

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Sodium Adsorption Ratio	4.1		1.2		No Unit	10		20B	Soluble
Sodium	92		10		mg/Kg	10		20B	Soluble
Calcium	30		2.0		mg/Kg	10		20B	Soluble
Magnesium	4.6		2.0		mg/Kg	10		20B	Soluble

This Detection Summary does not include radiochemical test results.

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## Method Summary

Client: Evergreen Natural Resources LLC

Job ID: 280-184115-1

Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Method	Method Description	Protocol	Laboratory
20B	Sodium Adsorption Ratio	USDA	EET DEN
Moisture	Percent Moisture	EPA	EET DEN
20B	Preparation, Sodium Absorption Ratio	USDA	EET DEN

### Protocol References:

EPA = US Environmental Protection Agency

USDA = "USDA Agriculture Handbook 60, section 20B".

### Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

## Sample Summary

Client: Evergreen Natural Resources LLC

Job ID: 280-184115-1

Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-184115-1	Lickity Split 43-12 553	Solid	11/02/23 12:00	11/07/23 08:45
280-184115-2	PCW 41-33 553	Solid	11/02/23 13:05	11/07/23 08:45
280-184115-3	PCW 23-4 552	Solid	11/06/23 09:55	11/07/23 08:45



# Client Sample Results

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

**Client Sample ID: Lickity Split 43-12 553**

**Lab Sample ID: 280-184115-1**

Date Collected: 11/02/23 12:00

Matrix: Solid

Date Received: 11/07/23 08:45

## Method: USDA 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	3.6		1.2		No Unit		11/16/23 15:51	11/20/23 11:49	10
Sodium	91		10		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Calcium	39		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Magnesium	5.5		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	6.5		0.1		%			11/09/23 14:34	1

# Client Sample Results

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

Client Sample ID: PCW 41-33 553

Lab Sample ID: 280-184115-2

Date Collected: 11/02/23 13:05

Matrix: Solid

Date Received: 11/07/23 08:45

## Method: USDA 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	3.1		1.2		No Unit		11/16/23 15:51	11/20/23 11:49	10
Sodium	76		10		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Calcium	35		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Magnesium	6.9		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	6.7		0.1		%			11/09/23 14:34	1

# Client Sample Results

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

Client Sample ID: PCW 23-4 552

Lab Sample ID: 280-184115-3

Date Collected: 11/06/23 09:55

Matrix: Solid

Date Received: 11/07/23 08:45

## Method: USDA 20B - Sodium Adsorption Ratio - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	4.1		1.2		No Unit		11/16/23 15:51	11/20/23 11:49	10
Sodium	92		10		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Calcium	30		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10
Magnesium	4.6		2.0		mg/Kg		11/16/23 15:51	11/20/23 11:49	10

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	2.1		0.1		%			11/09/23 14:34	1

# Lab Chronicle

Client: Evergreen Natural Resources LLC  
Project/Site: Evergreen Natural Resources: 915 Full Soil Suite

Job ID: 280-184115-1

**Client Sample ID: Lickity Split 43-12 553**

**Lab Sample ID: 280-184115-1**

**Date Collected: 11/02/23 12:00**

**Matrix: Solid**

**Date Received: 11/07/23 08:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Prep	20B			96.33 g	1.0 mL	634282	11/16/23 15:51	CAF	EET DEN
Soluble	Analysis	20B		10			634647	11/20/23 11:49	RMS	EET DEN
Total/NA	Analysis	Moisture		1			633252	11/09/23 14:34	LBR	EET DEN

**Client Sample ID: PCW 41-33 553**

**Lab Sample ID: 280-184115-2**

**Date Collected: 11/02/23 13:05**

**Matrix: Solid**

**Date Received: 11/07/23 08:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Prep	20B			99.52 g	1.0 mL	634282	11/16/23 15:51	CAF	EET DEN
Soluble	Analysis	20B		10			634647	11/20/23 11:49	RMS	EET DEN
Total/NA	Analysis	Moisture		1			633252	11/09/23 14:34	LBR	EET DEN

**Client Sample ID: PCW 23-4 552**

**Lab Sample ID: 280-184115-3**

**Date Collected: 11/06/23 09:55**

**Matrix: Solid**

**Date Received: 11/07/23 08:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Prep	20B			94.76 g	1.0 mL	634282	11/16/23 15:51	CAF	EET DEN
Soluble	Analysis	20B		10			634647	11/20/23 11:49	RMS	EET DEN
Total/NA	Analysis	Moisture		1			633252	11/09/23 14:34	LBR	EET DEN

## Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Ver: 2/6/2023