

ANALYTICAL REPORT

Eurofins TestAmerica, Denver
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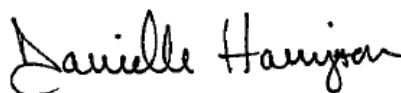
Laboratory Job ID: 280-152420-2

Client Project/Site: 909j Water Sampling - RAD ONLY

For:

Evergreen Natural Resources LLC
27000 Hwy 12
Trinidad, Colorado 81082

Attn: Stacey Wiseman



Authorized for release by:
10/13/2021 11:59:46 AM

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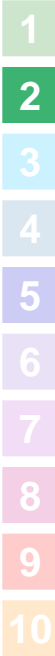
The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Definitions/Glossary

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

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: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Job ID: 280-152420-2

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Evergreen Natural Resources, Inc.

Project: 909j Water Sampling- RAD ONLY

Report Number: 280-152420-2

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.

Receipt

The samples were received on 8/31/2021. 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 time was 1.5°C.

This report only contains the Radiochemistry analyses. The analyses for Radiochemistry were performed at the Eurofins TestAmerica St. Louis laboratory.

Eurofins TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone: 314-298-8566

Radiochemistry

Method 903.0: Radium 226 prep batch 160-526405The Barium carrier recovery is outside the upper control limit (110%) for the following sample: 301115 (280-152420-2). During the barium sulfate precipitation this sample produced a pellet larger than that of the QC sample(s) and when plated and weighed it was above the highest threshold acceptable for this test.

Method 903.0: Radium 226 prep batch 160-526405The barium carrier recovery is outside the upper control limit (110%) for the following sample: 301115 (280-152420-2). A native barium result was applied to the sample which brought the recovery below the 110% limit.

Method 904.0: Radium 228 prep batch 160-526822The Barium carrier recovery is outside the upper control limit (110%) for the following sample: 301115 (280-152420-2). During the barium sulfate precipitation this sample produced a pellet larger than that of the QC sample(s) and when plated and weighed it was above the highest threshold acceptable for this test.

Method 904.0: Radium 228 prep batch 160-526822The barium carrier recovery is outside the upper control limit (110%) for the following sample: 301115 (280-152420-2). A native barium result was applied to the sample which brought the recovery below the 110% limit.

The method 903.0 MS/MSD could not be performed for this batch, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

The method 904.0 MS/MSD could not be performed for this batch, due to insufficient sample volume. Method precision and accuracy have

Case Narrative

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Job ID: 280-152420-2 (Continued)

Laboratory: Eurofins TestAmerica, Denver (Continued)

been verified by the acceptable LCS/LCSD analysis data.

No other anomalies were observed.

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Detection Summary

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Client Sample ID: 265492

Lab Sample ID: 280-152420-1

☐ No Detections.

Client Sample ID: 301115

Lab Sample ID: 280-152420-2

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

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Method Summary

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-152420-1	265492	Water	08/30/21 11:00	08/31/21 10:33
280-152420-2	301115	Water	08/30/21 12:35	08/31/21 10:00

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Client Sample Results

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Client Sample ID: 265492

Lab Sample ID: 280-152420-1

Date Collected: 08/30/21 11:00

Matrix: Water

Date Received: 08/31/21 10:33

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.351		0.220	0.222	1.00	0.295	pCi/L	09/10/21 17:56	10/08/21 17:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					09/10/21 17:56	10/08/21 17:55	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.452		0.234	0.237	1.00	0.343	pCi/L	09/13/21 16:09	10/08/21 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					09/13/21 16:09	10/08/21 12:05	1
Y Carrier	84.5		40 - 110					09/13/21 16:09	10/08/21 12:05	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.803		0.321	0.325	5.00	0.343	pCi/L		10/12/21 18:29	1

Client Sample Results

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Client Sample ID: 301115

Lab Sample ID: 280-152420-2

Date Collected: 08/30/21 12:35

Matrix: Water

Date Received: 08/31/21 10:00

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.36		0.360	0.380	1.00	0.266	pCi/L	09/10/21 17:56	10/08/21 17:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					09/10/21 17:56	10/08/21 17:55	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.39		0.307	0.332	1.00	0.363	pCi/L	09/13/21 16:09	10/08/21 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					09/13/21 16:09	10/08/21 12:05	1
Y Carrier	87.1		40 - 110					09/13/21 16:09	10/08/21 12:05	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.75		0.473	0.505	5.00	0.363	pCi/L		10/12/21 18:29	1

Lab Chronicle

Client: Evergreen Natural Resources LLC
Project/Site: 909j Water Sampling - RAD ONLY

Job ID: 280-152420-2

Client Sample ID: 265492

Date Collected: 08/30/21 11:00

Date Received: 08/31/21 10:33

Lab Sample ID: 280-152420-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1005.24 mL	1.0 g	526405	09/10/21 17:56	MLK	TAL SL
Total/NA	Analysis	903.0		1	1.0 mL	1.0 mL	530570	10/08/21 17:55	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1005.24 mL	1.0 g	526822	09/13/21 16:09	IG	TAL SL
Total/NA	Analysis	904.0		1			530588	10/08/21 12:05	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1			531330	10/12/21 18:29	EMH	TAL SL

Client Sample ID: 301115

Date Collected: 08/30/21 12:35

Date Received: 08/31/21 10:00

Lab Sample ID: 280-152420-2


Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1001.64 mL	1.0 g	526405	09/10/21 17:56	MLK	TAL SL
Total/NA	Analysis	903.0		1			530570	10/08/21 17:55	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1001.64 mL	1.0 g	526822	09/13/21 16:09	IG	TAL SL
Total/NA	Analysis	904.0		1	1.0 mL	1.0 mL	530588	10/08/21 12:05	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1			531330	10/12/21 18:29	EMH	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Chain of Custody Record

Client Information		Sampler: MAAK M		Lab PMT: Harrington, Danielle M		Carrier Tracking No(s):		COC No: 280-109123-31713.3	
Client Contact: Slacey Wiseman		Phone: 719-846-7898		E-Mail: Danielle.Harrington@Eurofins.com		State of Origin:		Page: 1 of 1	
Company: Evergreen Natural Resources LLC		Address: 27000 Hwy 12		City: Trinidad		State: CO		Zip: 81082	
Phone: 719-846-7898		TAT Requested (days): 5		Compliance Project: STD		EC #		WO #	
Email: Slacey.Wiseman@enrllc.com		Project #		SSOW #		Project Name: Evergreen Natural Resources		Site: Colorado	
909 Water Sampling		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Solid, On-site, BT-Tissue, Air)	
Sample Identification		8-30-21		1100		G		Water	
265492								Water	
								Water	
								Water	
								Water	
301118		8-30-21		1235		G		Water	
								Water	
								Water	
									
280-152420 Chain of Custody									
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (Specify)		<input type="checkbox"/> Poison B		<input checked="" type="checkbox"/> Unknown		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Special Instructions/QC Requirements:	
Relinquished by: MAAK M		Date: 8-30-21		Time: 1800		Company: ENR		Received by: ML	
Relinquished by:		Date:		Time:		Company:		Received by:	
Relinquished by:		Date:		Time:		Company:		Received by:	
Custody Seal No: 1631096		Custody Seal No: 1631096		Custody Seal No: 1631096		Custody Seal No: 1631096		Custody Seal No: 1631096	
Custody Seal Intact: Yes		Custody Seal Intact: Yes		Custody Seal Intact: Yes		Custody Seal Intact: Yes		Custody Seal Intact: Yes	
Cooler Temperature(s): 6.5		Cooler Temperature(s): 6.5		Cooler Temperature(s): 6.5		Cooler Temperature(s): 6.5		Cooler Temperature(s): 6.5	
Other Remarks: ETADEN		Other Remarks: ETADEN		Other Remarks: ETADEN		Other Remarks: ETADEN		Other Remarks: ETADEN	



280-152420 Waybill

**UPS Next Day Air Saver**

Shipping Document

SHIPMENT FROM
UPS ACCOUNT NO. **5 2 3 R 1 1**

REFERENCE NUMBER
WATER DEPT.

DICKIE SINTAS
EVERGREEN NATURAL RESOURCES LLC
27000 HWY 12

TELEPHONE
719-846-7898

TRINIDAD
EXTREMELY URGENT DELIVERY TO

CO 81082

DANIELLE HARRIN
TEST AMERICA

TELEPHONE
303-421-6611

4955 YARROW ST
ARVADA

CO 80002

RRD 31 5A 07/2020
0201952542609 6/12 RRD

United Parcel Service, Louisville, KY

WEIGHT	LTR	WEIGHT	DIMENSIONAL WEIGHT	LARGE PACKAGE	SHIPPER RELEASE
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

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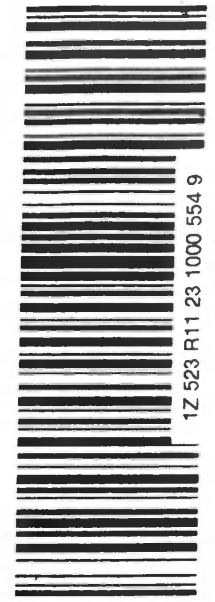
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Saver



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Saver 1P



1Z 523 R11 23 1000 554 9

TRACING NUMBER

SHIPMENT ID NUMBER
523R 1179 Y7W

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Chain of Custody Record



**Environment Testing
America**

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