



ANALYTICAL REPORT

PREPARED FOR

Attn: Monica Smith
Harvest
1755 Arroyo Dr.
Bloomfield, New Mexico 87413

Generated 10/2/2024 10:53:29 AM

JOB DESCRIPTION

Ignacio Plant

JOB NUMBER

885-12024-1

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
10/2/2024 10:53:29 AM

Authorized for release by
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Definitions/Glossary

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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

Case Narrative

Client: Harvest
Project: Ignacio Plant

Job ID: 885-12024-1

Job ID: 885-12024-1

Eurofins Albuquerque

Job Narrative 885-12024-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 9/18/2024 7:25 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 time was 17.5°C.

Metals

Method 6010B: Reporting sample for Ba (MSD failed) as according to the SOP (30% rule), Ba concentration is higher than the spike concentration and thus, recovery is not needed.

Background SB1 @0-6" (885-12024-1), (885-12024-A-1-B MS ^2) and (885-12024-A-1-C MSD ^2)

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

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Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB1 @0-6"

Lab Sample ID: 885-12024-1

Date Collected: 09/17/24 10:00

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	160	F2	0.21	mg/Kg		09/19/24 08:52	10/01/24 15:03	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB1 @4'

Lab Sample ID: 885-12024-2

Date Collected: 09/17/24 10:40

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	160		0.21	mg/Kg		09/19/24 08:52	10/01/24 15:23	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB1 @8'

Lab Sample ID: 885-12024-3

Date Collected: 09/17/24 11:15

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	360		0.20	mg/Kg		09/19/24 08:52	10/01/24 15:27	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB2 @0-6"

Lab Sample ID: 885-12024-4

Date Collected: 09/17/24 11:10

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	670		0.99	mg/Kg		09/19/24 08:52	10/01/24 15:34	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB2 @4'

Lab Sample ID: 885-12024-5

Date Collected: 09/17/24 11:25

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	100		0.21	mg/Kg		09/19/24 08:52	10/01/24 15:36	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB2 @8'

Lab Sample ID: 885-12024-6

Date Collected: 09/17/24 12:50

Matrix: Solid

Date Received: 09/18/24 07:25

Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	97		0.20	mg/Kg		09/19/24 08:52	10/01/24 15:41	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Sample Results

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 885-12535/1-A
Matrix: Solid
Analysis Batch: 13445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12535

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.10	mg/Kg		09/19/24 08:51	10/01/24 14:24	1

Lab Sample ID: LCS 885-12535/5-A
Matrix: Solid
Analysis Batch: 13445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	25.0	23.8		mg/Kg		95	80 - 120

Lab Sample ID: 885-12024-1 MS
Matrix: Solid
Analysis Batch: 13445

Client Sample ID: Background SB1 @0-6"
Prep Type: Total/NA
Prep Batch: 12535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	160	F2	23.9	316	4	mg/Kg		636	75 - 125

Lab Sample ID: 885-12024-1 MSD
Matrix: Solid
Analysis Batch: 13445

Client Sample ID: Background SB1 @0-6"
Prep Type: Total/NA
Prep Batch: 12535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	160	F2	24.6	197	4 F2	mg/Kg		136	75 - 125	46	20

Lab Sample ID: MRL 885-13445/13
Matrix: Solid
Analysis Batch: 13445

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.0500	0.0498		mg/L		100	50 - 150

QC Association Summary

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Metals

Prep Batch: 12535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12024-1	Background SB1 @0-6"	Total/NA	Solid	3050B	
885-12024-2	Background SB1 @4'	Total/NA	Solid	3050B	
885-12024-3	Background SB1 @8'	Total/NA	Solid	3050B	
885-12024-4	Background SB2 @0-6"	Total/NA	Solid	3050B	
885-12024-5	Background SB2 @4'	Total/NA	Solid	3050B	
885-12024-6	Background SB2 @8'	Total/NA	Solid	3050B	
MB 885-12535/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 885-12535/5-A	Lab Control Sample	Total/NA	Solid	3050B	
885-12024-1 MS	Background SB1 @0-6"	Total/NA	Solid	3050B	
885-12024-1 MSD	Background SB1 @0-6"	Total/NA	Solid	3050B	

Analysis Batch: 13445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12024-1	Background SB1 @0-6"	Total/NA	Solid	6010B	12535
885-12024-2	Background SB1 @4'	Total/NA	Solid	6010B	12535
885-12024-3	Background SB1 @8'	Total/NA	Solid	6010B	12535
885-12024-4	Background SB2 @0-6"	Total/NA	Solid	6010B	12535
885-12024-5	Background SB2 @4'	Total/NA	Solid	6010B	12535
885-12024-6	Background SB2 @8'	Total/NA	Solid	6010B	12535
MB 885-12535/1-A	Method Blank	Total/NA	Solid	6010B	12535
LCS 885-12535/5-A	Lab Control Sample	Total/NA	Solid	6010B	12535
MRL 885-13445/13	Lab Control Sample	Total/NA	Solid	6010B	
885-12024-1 MS	Background SB1 @0-6"	Total/NA	Solid	6010B	12535
885-12024-1 MSD	Background SB1 @0-6"	Total/NA	Solid	6010B	12535

Lab Chronicle

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Client Sample ID: Background SB1 @0-6"

Lab Sample ID: 885-12024-1

Date Collected: 09/17/24 10:00

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		2	13445	VP	EET ALB	10/01/24 15:03

Client Sample ID: Background SB1 @4'

Lab Sample ID: 885-12024-2

Date Collected: 09/17/24 10:40

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		2	13445	VP	EET ALB	10/01/24 15:23

Client Sample ID: Background SB1 @8'

Lab Sample ID: 885-12024-3

Date Collected: 09/17/24 11:15

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		2	13445	VP	EET ALB	10/01/24 15:27

Client Sample ID: Background SB2 @0-6"

Lab Sample ID: 885-12024-4

Date Collected: 09/17/24 11:10

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		10	13445	VP	EET ALB	10/01/24 15:34

Client Sample ID: Background SB2 @4'

Lab Sample ID: 885-12024-5

Date Collected: 09/17/24 11:25

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		2	13445	VP	EET ALB	10/01/24 15:36

Client Sample ID: Background SB2 @8'

Lab Sample ID: 885-12024-6

Date Collected: 09/17/24 12:50

Matrix: Solid

Date Received: 09/18/24 07:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			12535	JE	EET ALB	09/19/24 08:52
Total/NA	Analysis	6010B		2	13445	VP	EET ALB	10/01/24 15:41

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Harvest
Project/Site: Ignacio Plant

Job ID: 885-12024-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

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
6010B	3050B	Solid	Barium
Oregon	NELAP	NM100001	02-26-25



Chain-of-Custody Record

Client: Hawwest

Mailing Address: Hawwest

Phone #: 505 320 8621

email or Fax#: Ched.Snell@hwest-nm.com

QA/QC Package: Standard Level 4 (Full Validation)

Accreditation: Az Compliance

NELAC Other

EDD (Type)

Project Manager: Monica Smith

Sampler: Ched Snell

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CP): 7.4 to 17.5 (°C)

Container Type and #

Preservative Type

HEAL No.

Sample Name

Back ground SB1 @ 0.6'

Back ground SB1 @ 4'

Back ground SB1 @ 8'

Back ground SB2 @ 0.6'

Back ground SB2 @ 4'

Back ground SB2 @ 8'

Time

10:00am

10:40am

11:15

11:20

11:25

12:00pm

Date

9-17-24

Matrix

Soil

Relinquished by: [Signature]

Time: 3:00pm

Date: 9/17/24

Relinquished by: [Signature]

Time: 1810

Date: 9/17/24

Turn-Around Time:

Standard Rush

Project Name: Ignacio plant

Project #: [Blank]

Project Manager: Monica Smith

Sampler: Ched Snell

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CP): 7.4 to 17.5 (°C)

Container Type and #

Preservative Type

HEAL No.

Sample Name

Back ground SB1 @ 0.6'

Back ground SB1 @ 4'

Back ground SB1 @ 8'

Back ground SB2 @ 0.6'

Back ground SB2 @ 4'

Back ground SB2 @ 8'

Time

10:00am

10:40am

11:15

11:20

11:25

12:00pm

Date

9-17-24

Matrix

Soil

Relinquished by: [Signature]

Time: 1500

Date: 9/17/24

Relinquished by: [Signature]

Time: 1810

Date: 9/17/24



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109 885-12024 COC

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMBs (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Bacium

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Remarks:

Received by: [Signature] Date Time 9/17/24 1500

Received by: [Signature] Date Time 9/18/24 7:75

Login Sample Receipt Checklist

Client: Harvest

Job Number: 885-12024-1

Login Number: 12024

List Source: Eurofins Albuquerque

List Number: 1

Creator: Proctor, Nancy

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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.	False	Thermal preservation not required.
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	