



**CDH Consulting**  
**David Stainback**  
**9446 Clermont St**  
**Thornton CO 80229**

**April 07, 2025**

**Project Name - Chevron - Feurstein I28-63-1HN      Project Number - [none]**

Attached are your analytical results for Chevron - Feurstein I28-63-1HN received by Origins Laboratory March 12, 2025. This project is associated with Origins project number E5C0472-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory  
303.433.1322  
projectmanager@originslab.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@5	E5C0472-01	Soil	March 12, 2025 12:45	03/12/2025 17:18
BKG02@5	E5C0472-02	Soil	March 12, 2025 12:50	03/12/2025 17:18

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

# ORIGINS LABORATORY

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

**ORIGINS**  
LABORATORY

**ESCORPZ**

Page 1 of 1

Client: CDH Consulting LLC

Project Manager: David Stainback

Key: W=Water

Address: \_\_\_\_\_

Project Name: Feurstein I28-63-1HN

GI=Groundwater

Telephone Number: \_\_\_\_\_

Collected By: SW

SW=Surface Water

Email Address: CDH Consulting LLC

Invoice Billing Info: CDH Consulting LLC

WW=Waste Water

S-Soil | SO-Solid | O-Oil | A-Air | G-Gas | H-Hydrochloric | HNO3-Nitric | H2SO4-Sulfuric | NaOH-Sodium Hydroxide | L-Liquid

Sample ID	Date Sampled	Time Sampled	# of Containers	Matrix Preservative	Analysis						Comments
					DH	EC	SAB	Boron	MS	metals	
BK0005	3/12/25	12:45	2	W1	X	X	X	X	X		
BK0005	3/12/25	12:50	2	W1	X	X	X	X	X		

Temp. Received - 5.1°C Received On Ice?  Yes  No

Turnaround Time  
 48 Hr  72 Hr  
 SAME DAY  24 Hr

Origins Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

# ORIGINS LABORATORY

CDH Consulting  
 9446 Clermont St  
 Thornton CO 80229

David Stainback  
 Project Number: [none]  
 Project: Chevron - Feurstein I28-63-1HN

Origins Laboratory F-012207-01-R1  
Effective Date: 01/09/12

**Sample Receipt Checklist**

Origins Work Order: ESC0172 Client: CDH  
 Checklist Completed by: EM DUAR Client Project ID: Feurstein  
 Date/Time completed: 3/13/25 Shipped Via: HO  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Matrix(s) Received: (Check all that apply):  Soil/Solid Water Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1, S, 1 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C (Describe) \_\_\_\_\_ °C  
 Thermometer ID: 7004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>			
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>			
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analyses or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>			
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) (PH = 2 for samples preserved with HNO3, HCL, H2SO4) / (PH > 10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>			
Additional Comments (if any):				

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to be taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) AJ

3/13/25  
Date/Time Reviewed

Origins Laboratory



Christian Iglesias For Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CDH Consulting  
 9446 Clermont St  
 Thornton CO 80229

David Stainback  
 Project Number: [none]  
 Project: Chevron - Feurstein I28-63-1HN

**BKG01@5**  
**3/12/2025 12:45:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5C0472-01 (Soil)**  
**Origins Laboratory**

**Boron (DTPA Sorbitol)**

Boron	0.387		0.100	mg/L	1	B5C1487	03/14/2025	03/18/2025	
-------	-------	--	-------	------	---	---------	------------	------------	--

**Metals by Saturated Paste by EPA 6010**

Calcium	2.06		0.499	meq/L	10	[CALC]	03/17/2025	03/20/2025	
Magnesium	1.88		0.823	"	"	"	"	"	
Sodium	3.13		0.435	"	"	"	"	"	

**pH in Soil by 9045D**

pH	8.44			pH Units	1	B5C1728	03/17/2025	03/19/2025	
----	------	--	--	----------	---	---------	------------	------------	--

**SAR by 20B Saturated Paste**

SAR	2.23		0.0100	SAR	1	B5C1722	03/17/2025	03/20/2025	
-----	------	--	--------	-----	---	---------	------------	------------	--

**Specific Conductance Mod. 9050A**

Specific Conductance (EC)	0.688		0.00500	mmhos/cm	1	B5C1728	03/17/2025	03/19/2025	
---------------------------	-------	--	---------	----------	---	---------	------------	------------	--

**Table 915 metals by EPA 6020B**

Arsenic	4.96		0.267	mg/kg	10	B5C1734	03/17/2025	03/18/2025	
Barium	94.4		9.20	"	"	"	"	"	
Cadmium	0.146		0.0920	"	"	"	"	"	
Copper	ND		9.20	"	"	"	"	"	U

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

**BKG01@5**  
**3/12/2025 12:45:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5C0472-01 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>Table 915 metals by EPA 6020B</b>									
Lead	7.25		0.920	mg/kg	10	B5C1734	03/17/2025	03/18/2025	
Nickel	10.2		0.920	"	"	"	"	"	
Selenium	0.263		0.239	"	"	"	"	"	
Silver	ND		0.0920	"	"	"	"	"	U
Zinc	35.7		34.0	"	"	"	"	"	
<b>Waypoint Analytical, LLC.</b>									
<b>Total Metals 7196A</b>									
Chromium, Hexavalent	ND	0.5	0.5	mg/Kg	1	A101059	03/12/2025	03/22/2025	

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

CDH Consulting  
 9446 Clermont St  
 Thornton CO 80229

David Stainback  
 Project Number: [none]  
 Project: Chevron - Feurstein I28-63-1HN

**BKG02@5**  
**3/12/2025 12:50:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
<b>E5C0472-02 (Soil)</b>									
<b>Origins Laboratory</b>									
<b>Boron (DTPA Sorbitol)</b>									
Boron	0.424		0.101	mg/L	1	B5C1487	03/14/2025	03/18/2025	
<b>Metals by Saturated Paste by EPA 6010</b>									
Calcium	2.20		0.499	meq/L	10	[CALC]	03/17/2025	03/20/2025	
Magnesium	1.98		0.823	"	"	"	"	"	
Sodium	3.21		0.435	"	"	"	"	"	
<b>pH in Soil by 9045D</b>									
pH	8.42			pH Units	1	B5C1728	03/17/2025	03/19/2025	
<b>SAR by 20B Saturated Paste</b>									
SAR	2.22		0.0100	SAR	1	B5C1722	03/17/2025	03/20/2025	
<b>Specific Conductance Mod. 9050A</b>									
Specific Conductance (EC)	0.731		0.00500	mmhos/cm	1	B5C1728	03/17/2025	03/19/2025	
<b>Table 915 metals by EPA 6020B</b>									
Arsenic	4.49		0.266	mg/kg	10	B5C1734	03/17/2025	03/18/2025	
Barium	96.5		9.19	"	"	"	"	"	
Cadmium	0.139		0.0919	"	"	"	"	"	
Copper	ND		9.19	"	"	"	"	"	U

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

**BKG02@5**  
**3/12/2025 12:50:00PM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-----------------	-------	----------	-------	----------	----------	-------

**E5C0472-02 (Soil)**  
**Origins Laboratory**

**Table 915 metals by EPA 6020B**

Lead	7.15		0.919	mg/kg	10	B5C1734	03/17/2025	03/18/2025	
Nickel	10.9		0.919	"	"	"	"	"	
Selenium	ND		0.239	"	"	"	"	"	U
Silver	ND		0.0919	"	"	"	"	"	U
Zinc	ND		34.0	"	"	"	"	"	U

**Waypoint Analytical, LLC.**

**Total Metals 7196A**

Chromium, Hexavalent	ND	0.5	0.5	mg/Kg	1	A101059	03/12/2025	03/22/2025	
----------------------	----	-----	-----	-------	---	---------	------------	------------	--

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

## Classical Chemistry Parameters - Quality Control Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

### Batch B5C1487 - DTPA Sorbitol Preparation

#### Blank (B5C1487-BLK1)

Prepared: 03/14/2025 Analyzed: 03/18/2025

Boron	ND	0.100	mg/L							U
-------	----	-------	------	--	--	--	--	--	--	---

#### Duplicate (B5C1487-DUP1)

Source: E5C0463-02

Prepared: 03/14/2025 Analyzed: 03/18/2025

Boron	0.400	0.0987	mg/L		0.293			31.0	50	
-------	-------	--------	------	--	-------	--	--	------	----	--

### Batch B5C1722 - Saturated Paste Metals

#### Blank (B5C1722-BLK1)

Prepared: 03/17/2025 Analyzed: 03/20/2025

Calcium PPM	ND	10.0	mg/L							U
SAR	ND	0.0100	SAR							U
Magnesium PPM	ND	10.0	mg/L							U
Sodium PPM	ND	10.0	"							U

#### Duplicate (B5C1722-DUP1)

Source: E5C0456-09

Prepared: 03/17/2025 Analyzed: 03/20/2025

Calcium PPM	5.81	10.0	mg/L		6.75			15.0	50	U
SAR	ND	0.0100	SAR		1.19				200	U
Magnesium PPM	2.13	10.0	mg/L		2.27			6.36	50	U
Sodium PPM	14.2	10.0	"		14.0			1.06	50	

Origins Laboratory



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

## Metals by EPA 6000/7000 Series Methods - Quality Control Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

### Batch B5C1734 - EPA 3050B

#### Blank (B5C1734-BLK1)

Prepared: 03/17/2025 Analyzed: 03/18/2025

Arsenic	ND	0.290	mg/kg							U
Barium	ND	10.0	"							U
Cadmium	ND	0.100	"							U
Copper	ND	10.0	"							U
Lead	ND	1.00	"							U
Nickel	ND	1.00	"							U
Selenium	ND	0.260	"							U
Silver	ND	0.100	"							U
Zinc	ND	37.0	"							U

#### LCS (B5C1734-BS1)

Prepared: 03/17/2025 Analyzed: 03/18/2025

Arsenic	5.19	0.290	mg/kg	5.00		104	80-120			
Barium	542	10.0	"	500		108	80-120			
Cadmium	5.29	0.100	"	5.00		106	80-120			
Copper	55.8	10.0	"	50.0		112	80-120			
Lead	5.41	1.00	"	5.00		108	80-120			
Nickel	5.83	1.00	"	5.00		117	80-120			
Selenium	5.77	0.260	"	5.00		115	80-120			
Silver	5.31	0.100	"	5.00		106	80-120			
Zinc	49.3	37.0	"	50.0		98.5	80-120			

#### Matrix Spike (B5C1734-MS1)

**Source: E5C0433-01**

Prepared: 03/17/2025 Analyzed: 03/18/2025

Arsenic	7.40	0.284	mg/kg	4.90	1.90	112	75-125			
Barium	588	9.80	"	490	51.8	109	75-125			
Cadmium	5.31	0.0980	"	4.90	0.137	105	75-125			
Copper	62.1	9.80	"	49.0	5.79	115	75-125			
Lead	11.6	0.980	"	4.90	4.59	143	75-125			QM-07

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

## Metals by EPA 6000/7000 Series Methods - Quality Control Origins Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5C1734 - EPA 3050B**

**Matrix Spike (B5C1734-MS1)**

**Source: E5C0433-01**

Prepared: 03/17/2025 Analyzed: 03/18/2025

Nickel	12.6	0.980	mg/kg	4.90	5.75	140	75-125			
Selenium	5.38	0.255	"	4.90	0.119	107	75-125			
Silver	5.21	0.0980	"	4.90	0.0820	105	75-125			
Zinc	74.1	36.3	"	49.0	20.7	109	75-125			

**Matrix Spike Dup (B5C1734-MSD1)**

**Source: E5C0433-01**

Prepared: 03/17/2025 Analyzed: 03/18/2025

Arsenic	6.72	0.265	mg/kg	4.58	1.90	105	75-125	9.58	20	
Barium	533	9.15	"	458	51.8	105	75-125	9.82	20	
Cadmium	5.00	0.0915	"	4.58	0.137	106	75-125	6.03	20	
Copper	57.5	9.15	"	45.8	5.79	113	75-125	7.72	20	
Lead	9.68	0.915	"	4.58	4.59	111	75-125	18.1	20	
Nickel	11.9	0.915	"	4.58	5.75	135	75-125	5.57	20	QM-07
Selenium	5.07	0.238	"	4.58	0.119	108	75-125	6.06	20	
Silver	5.00	0.0915	"	4.58	0.0820	107	75-125	4.13	20	
Zinc	67.2	33.9	"	45.8	20.7	102	75-125	9.81	20	

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Christian Iglesias For Jen Pellegrini, Project Manager



CDH Consulting  
 9446 Clermont St  
 Thornton CO 80229

David Stainback  
 Project Number: [none]  
 Project: Chevron - Feurstein I28-63-1HN

**Saturated Paste - Quality Control**  
**Origins Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B5C1728 - Saturated Paste pH/EC**

**Blank (B5C1728-BLK1)**

Prepared: 03/17/2025 Analyzed: 03/19/2025

Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
---------------------------	----	---------	----------	--	--	--	--	--	--	---

**Duplicate (B5C1728-DUP1)**

**Source: E5C0456-09**

Prepared: 03/17/2025 Analyzed: 03/19/2025

pH	8.42		pH Units		8.66			2.81		25
Specific Conductance (EC)	0.121	0.00500	mmhos/cm		0.114			6.06		25

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Christian Iglesias For Jen Pellegrini, Project Manager

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

**Total Metals 7196A - Quality Control  
Waypoint Analytical, LLC.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch A101059 -**

**DUP (L 95974-DUP)**

**Source: 95974**

Prepared: Analyzed: 03/22/2025

Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
----------------------	----	-----	-------	--	--------	---	--	---	----	--

**MS (L 95974-MS)**

**Source: 95974**

Prepared: Analyzed: 03/22/2025

Chromium, Hexavalent	ND	0.5	mg/Kg	7.93	<0.244	0	75-125			*
----------------------	----	-----	-------	------	--------	---	--------	--	--	---

**DUP (L 96097-DUP)**

**Source: 96097**

Prepared: Analyzed: 03/22/2025

Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
----------------------	----	-----	-------	--	--------	---	--	---	----	--

**LCS (LCS)**

Prepared: Analyzed: 03/22/2025

Chromium, Hexavalent	6.12	0.5	mg/Kg	7.75		79	75-125			
----------------------	------	-----	-------	------	--	----	--------	--	--	--

**LRB (LRB)**

Prepared: Analyzed: 03/22/2025

Chromium, Hexavalent	ND	0.5	mg/Kg			-				
----------------------	----	-----	-------	--	--	---	--	--	--	--

Origins Laboratory



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Christian Iglesias For Jen Pellegrini, Project Manager

CDH Consulting  
9446 Clermont St  
Thornton CO 80229

David Stainback  
Project Number: [none]  
Project: Chevron - Feurstein I28-63-1HN

### Notes and Definitions

- U Sample is Non-Detect.
  - QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
  - \* QC Failure
  - ND Analyte NOT DETECTED at or above the reporting limit
  - RPD Relative Percent Difference
- All soil results are reported on a wet weight basis.

Origins Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Christian Iglesias For Jen Pellegrini, Project Manager