

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:
-----------	-----------	-------	---------

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: _____ OGRID Number: _____
 Well Name: _____ API: _____
 Pool: _____ Pool Code: _____

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]

[I] Commingling – Storage – Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application Content Complete

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

 Print or Type Name

Shaw-Marie Ford
 Signature

 Date

 Phone Number

 e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ ☒ Disposal _____ Storage
Application qualifies for administrative approval? _____ ☒ Yes _____ No
- II. OPERATOR: Enduring Resources, LLC OGRID: 372286
ADDRESS: 200 Energy Court, Farmington, New Mexico 87401
CONTACT PARTY: Shaw-Marie Ford PHONE: (505) 716-3297
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes ☒ No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Shaw-Marie Ford TITLE: Regulatory Specialist
SIGNATURE: Shaw-Marie Ford DATE: 3/12/2025
E-MAIL ADDRESS: sford@enduringresources.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: File Electronically Via OCD Permitting

Side 2

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Side 1

OPERATOR: Enduring Resources, LLC

WELL NAME & NUMBER: S Escavada Unit SWD 001

WELL LOCATION: 2077 FSL x 377 FEL

M2

27

22N

FOOTAGE LOCATION

UNIT LETTER

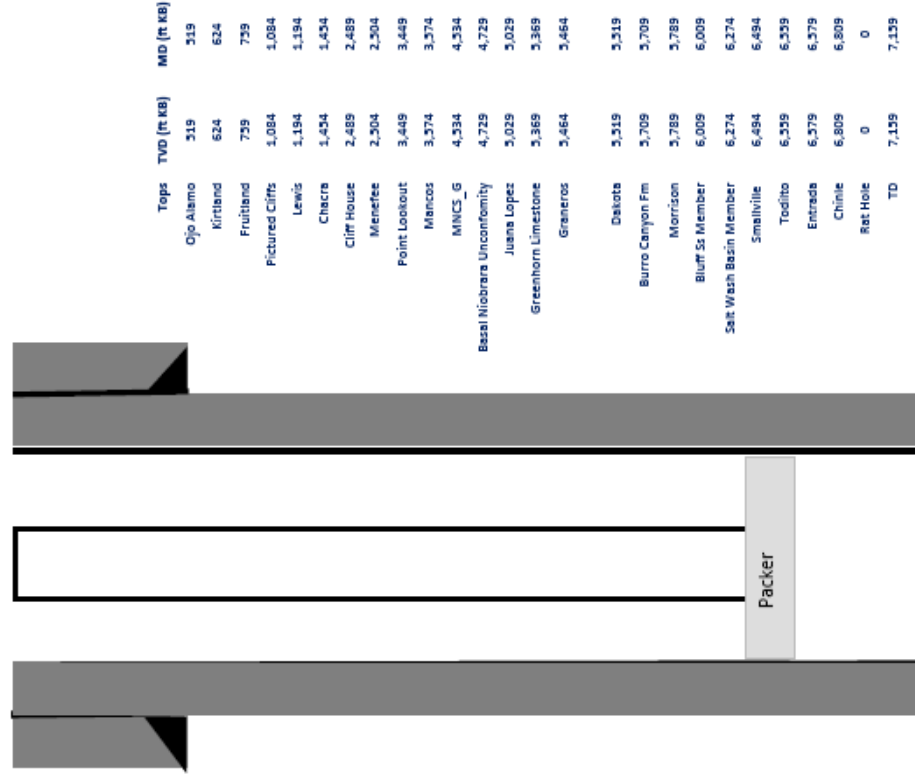
SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA
Surface Casing



Hole Size: 12.250

Casing Size: 9.625

Cemented with:	158	or	254.4	ft ³
----------------	-----	----	-------	-----------------

or 254.4 ft³

Top of Cement: _____ Surface _____

Method Determined: Circulate to surface

Intermediate Casing

Hole Size:

Casing Size:

Cemented with:

or Ω^3

Top of Cement:

Method Determined:

Production Casing

Hole Size: 8.75

Casing Size: 7.0

Cemented with: 840

or 1624.6 ft³

Top of Cement: Surface

Method Determined: Circulate to surface

Total Depth: 7159'

Injection Interval

580' Perforated feet to 6579' - 7159'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEETTubing Size: 3.5" 9.3# L80 8RD EUE Lining Material: plasticType of Packer: 7" x 4.5" ASI-X 10k nickel coatedPacker Setting Depth: 50' above the upper most perforation

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Entrada Sandstone

3. Name of Field or Pool (if applicable): Pool Code: 96436 Pool Name: SWD; Entrada

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. n/a

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: See attached

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code 96436	Pool Name SWD: ENTRADA
Property Code 322151	Property Name S ESCAVADA UNIT SWD	Well Number 1
OGRID No. 372286	Operator Name ENDURING RESOURCES, LLC	Ground Level Elevation 6754'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input checked="" type="checkbox"/> Tribal <input type="checkbox"/> Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
I	27	22N	7W		2077' SOUTH	377' EAST	36.108398° N	107.555480° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
I	27	22N	7W		2077' SOUTH	377' EAST	36.108398 N	107.555480 W	SANDOVAL

Dedicated Acres SE/4 SECTION 27 = 160 ACRES	PENETRATED SPACING UNIT;	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code UNIT
Order Numbers: R-14347			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation
---	---	------------------------

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Shaw-Marie Ford
Signature

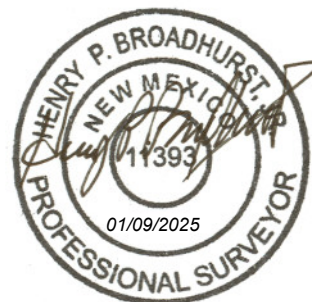
1/16/2025
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.



Signature and Seal of Professional Surveyor:

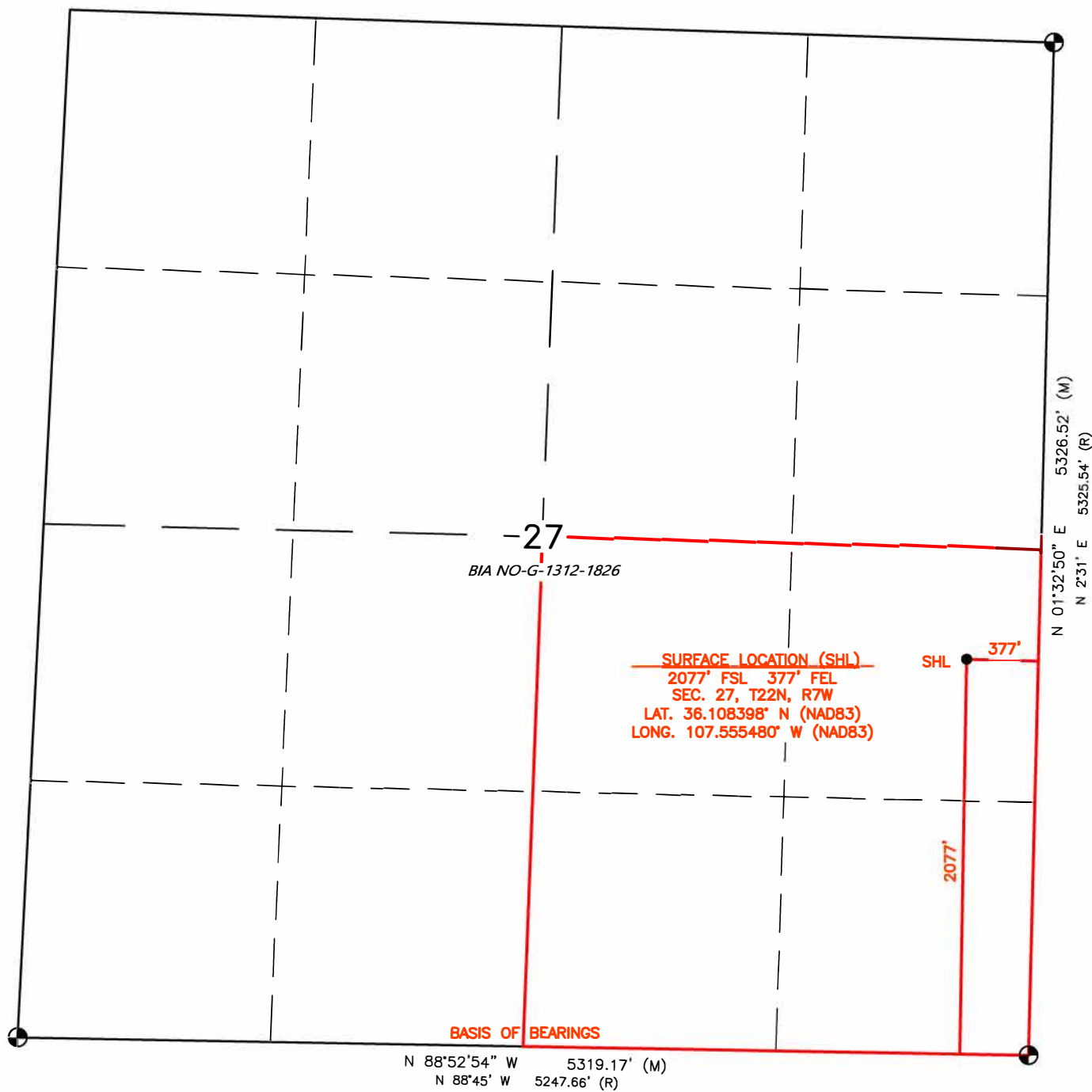
Certificate Number

11393

Date of Survey

AUGUST 30, 2022

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.





Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

I. Purpose

Enduring Resources, LLC is hereby making an application for Administrative Approval to dispose of produced water by underground injection. The proposed underground injection site is known as the **S. Escavada Unit SWD #001**

II. Operator Contact

Enduring Resources, LLC (OGRID: 372286)
Shaw-Marie Ford, Regulatory Specialist
200 Energy Court, Farmington, New Mexico 87401
E: sford@enduringresources.com M: (505) 716-3297

III. Well Data

Surface Ownership:

This project is located on public lands managed by the BLM-FFO and Navajo Indian Allotted lands.

Surface location:

2077' FSL & 377' FEL
SE/4 UL I, Sec. 27, T22N, R7W
Latitude: 36.108398° N Longitude: -107.555480° W
Lease No. N0G13121826 Unit No. NMNM130812A
Sandoval County, New Mexico.

The proposed injection well is a new drill for the purpose of produced water disposal from wells operated by Enduring Resources, LLC.

Name of formation: Entrada Sandstone

Subsurface depth interval zone: 6579' - 7159'

Thickness of proposed zone: 580'

Proposed average injection pressure will be 800 psi.

Proposed maximum injection pressure of 1,385 psi.

Proposed average injection rate will be 8,000 Bbls/day.

Proposed maximum injection rate of 20,000 Bbls/day.

Surface Casing

Hole size: 12.125". Steel casing size: 9.625" 36 lb J55 STC. Set depth: F/surface – T/500'. Cement: Type I-II, 254 bbls (158sx) 14.5 ppg, 1.61 yield, 7.41 gps. TOC: Surface BOC: 500'. Methodology for determining top of cement: Circulates to Surface.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

Production Casing

Hole size: 8.75". Steel casing size: 7.0" 26 lb L80 LTC. Set depth: F/surface – T/7159'. Two Stage Cement. LEAD: Type III, 888 bbls (413sx) 12.5 ppg, 2.15 yield, 12.05 gps. TOC: Surface BOC: 3474'. TAIL: Type III, 730 bbls (427sx) 13.5 ppg, 1.71 yield, 8.88 gps. TOC: 3474' BOC: 7159'. Methodology for determining top of cement: Circulates to Surface.

Injection Tubing

4.5" 11.6 lb L80 EUE Internally plastic coated tubing set 50' above the upper most perforation.

Packer

7" x 4.5" ASI-X, 10k nickel coated set 50' above the upper most perforation.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

IV. Existing Project

The proposed S. Escavada Unit SWD #001 injection well is not an expansion of an existing project. A Division Order Number authorizing this SWD has not yet been assigned.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

V. Wells and leases within two miles and one-half mile area of review

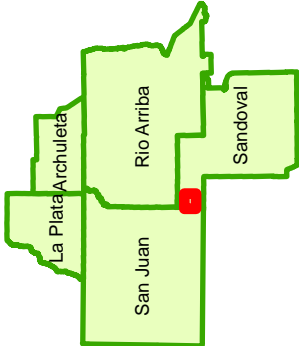
There are no wells within the ½ mile area of review which penetrate the proposed injection zone.
There is one (1) Pre-Ongard plugged well within the ½ mile radius area of review.
There are three (3) producing wells operated by Enduring within the ½ mile area of review.

There are no wells within the 2-mile radius which penetrate the proposed injection zone.
There are eleven (11) producing wells within the 2-mile radius.
There are nineteen (19) cancelled permits within the 2-mile radius.
There are nine (9) future wells permitted within the 2-mile radius.
There are twenty-one (21) Plugged (site released) wells within the 2-mile radius.



ENDURING
RESOURCES, LLC

Area of Review
SEU SWD #001



Sourced from data posted to:
NMOCD
IHS

(SEU SWD #001

Well Status

- Active
- ⦿ New
- 9 Plugged (site released)
- Cancelled
- Temporary Abandonment

- 2 Mile Buffer
- 1/2 Mile Buffer



API	WELL NAME	TYPE	STATUS	OGRID	OPERATOR NAME	ULSTR	LAT	LONG	direction	year_spudd	MD	TVD	POOL	plug_date	lease_type	last_produ
30-043-20266	PRE-ONGARD WELL #006	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	A-27-22N-07W	36.115238	-107.558037		9999	0	0		5/16/1985	Navajo	12/31/9999
30-043-20517	PRE-ONGARD WELL #3	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	O-27-22N-07W	36.105027	-107.560076		9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-21349	ESCAVADA UNIT #347H	Oil	Active	372286	ENDURING RESOURCES, LLC	I-27-22N-07W	36.108414	-107.555545	H	2021	13215	4543	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024
30-043-21321	ESCAVADA UNIT #348H	Oil	New	372286	ENDURING RESOURCES, LLC	O-27-22N-07W	36.103316	-107.560659	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Navajo	12/31/9999
30-043-21322	ESCAVADA UNIT #349H	Oil	New	372286	ENDURING RESOURCES, LLC	O-27-22N-07W	36.103313	-107.560524	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Navajo	12/31/9999
30-043-21318	ESCAVADA UNIT #350H	Gas	Active	372286	ENDURING RESOURCES, LLC	I-27-22N-07W	36.108441	-107.555677	H	2021	12972	4533	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024
30-043-21317	ESCAVADA UNIT #351H	Oil	Active	372286	ENDURING RESOURCES, LLC	I-27-22N-07W	36.108428	-107.555611	H	2021	11697	4652	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024

OCD Permitting

Home Searches Wells Well Details

30-043-20266 PRE-ONGARD WELL #006 [30041]

General Well Information

Operator:

[214263] PRE-ONGARD WELL OPERATOR

Status:

Plugged, Site Released

Well Type:

Gas

Work Type:

New

Direction:

Multi-Lateral:

No

Mineral Owner:

Navajo

Surface Owner:

Indian

Surface Location:

A-27-22N-07W 790 FNL 1190 FEL

Lat/Long:

36.1152382,-107.5580368 NAD83

GL Elevation:

6731

KB Elevation:

DF Elevation:

Sing/Mult Compl:

Single

Potash Waiver:

False

Pre-ONGARD Information

Original Well Name:

RUSTY NAVAJO

Original Operator Name:

CHACE OIL CO INC

Proposed Formation and/or Notes

CHACE OIL CO INC /RUSTY NAVAJO

Depths

Proposed:

0

Measured Vertical Depth:

0

True Vertical Depth:

0

Plugback Measured:

0

Formation Tops

Formation	Top	Producing	Method Obtained
Pictured Cliffs Formation	836		
Chacra Mesa Member	1440		

Event Dates

Initial APD Approval:

03/18/1977

Most Recent APD Approval:

03/18/1977

APD Cancellation:

APD Extension Approval:

Spud:

Approved Temporary Abandonment:

Shut In:

Plug and Abandoned Intent Received:

Well Plugged:

05/16/1985

Site Release:

Last Inspection:

Current APD Expiration:

03/18/1979

Gas Capture Plan Received:

TA Expiration:

PNR Expiration:

Last MIT/BHT:

- Quick Links
- General Well Information
 - History
 - Comments
 - Operator ↗
 - Pits
 - Casing
 - Well Completions
 - Financial Assurance
 - Compliance
 - Orders
 - Production
 - Transporters
 - Points of Disposition
 - Action Status ↗
- Associated Images
- Well Files (8)
 - Well Logs (1)
 - Well Admin Orders
- New Searches
- New Facility Search ↗
 - New Incident Search ↗
 - New Operator Search ↗
 - New Pit Search ↗
 - New Spill Search ↗
 - New Tank Search ↗
 - New Well Search ↗

History								
Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status	Apd Cancelled	Plug Date
03/18/1977	[30041] PRE-ONGARD WELL	#006	[214263] PRE-ONGARD WELL OPERATOR	New	Gas	Plugged, Site Released		05/16/1985

Pits

No Pits Found

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and Plug Description		
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	Sacks	Pressure Test (Y/N)
Surface Casing	1		8.625	0	63		0	0.0	63	0	Circ	Unknown	100	No
Production Casing	1		4.500	0	1893		0	0.0	1893	0	Circ	Unknown	170	No
Tubing 1	1		1.315	0	1580		0	0.0	0	0			0	No

No wellbore schematic illustrating plugging detail on file with the NMOCD.

Well Completions

No Completions Found

Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
01/01/1900	Blanket	1	1	SEABOARD SURETY CO	Surety	

Requests to release bonds must be submitted in writing. You may send an e-mail to OCD.AdminComp@emnrd.nm.gov.

Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

Orders

No Orders Found

Production / Injection

The production & injection volumes are sourced from monthly production reports (C-115) submissions.

Earliest Production in OCD Records:

Last

Show All Production [Export to Excel](#)

Production					Injection				
Time Frame	Oil (BBLS)	Gas (MCF)	Water (BBLS)	Days P/I	Water (BBLS)	Co2 (MCF)	Gas (MCF)	Other	Pressure
Grand Total:	0	0	0	0	0	0	0	0	N/A

Transporters

Transporter	Product	Most Recent for Property
-------------	---------	--------------------------

OCD Permitting

Home Searches Wells Well Details

30-043-21349 S ESCAVADA UNIT #347H [322151]

General Well Information

Operator:
Status:
Well Type:
Work Type:

[372286] ENDURING RESOURCES, LLC
Active
Oil
New

Direction:
Multi-Lateral:
Mineral Owner:
Surface Owner:

Horizontal
No
Federal
Indian

Sing/Mult Compl:
Potash Waiver:

Multiple
False

Surface Location:
Lat/Long:
GL Elevation:
KB Elevation:
DF Elevation:

I-27-22N-07W 2082 FSL 397 FEL
36.108414,-107.555545 NAD83
6749

Proposed Formation and/or Notes

Depths

Proposed:
Measured Vertical Depth:

4634
13215

True Vertical Depth:
Plugback Measured:

4543
13121

Formation Tops

Formation	Top	Producing	Method Obtained
Ojo Alamo Formation	527		Outside Source
Kirtland Formation	637		Outside Source
Fruitland Coal	762		Outside Source
Pictured Cliffs Formation	1095		Outside Source
Cliff House Formation	2497		Outside Source
Menefee Formation	2507		Outside Source
Point Lookout Formation	3436		Outside Source
Mancos Formation	3562		Outside Source
Gallup Formation	4517		Outside Source

Event Dates

Initial APD Approval:
Most Recent APD Approval:
APD Cancellation:
APD Extension Approval:
Spud:
Approved Temporary Abandonment:
Shut In:
Plug and Abandoned Intent Received:
Well Plugged:
Site Release:
Last Inspection:

08/13/2021
08/13/2021

10/26/2021

10/08/2024

Current APD Expiration:

Gas Capture Plan Received:
TA Expiration:

PNR Expiration:
Last MIT/BHT:

08/13/2023

08/13/2021

10/08/2024

Quick Links

- General Well Information
- History
- Comments
- Operator ↗
- Pits
- Casing
- Well Completions
- Financial Assurance
- Compliance
- Natural Gas Venting & Flaring
- Orders
- Production
- Transporters
- Points of Disposition
- Action Status ↗

Associated Images

- Well Files (9)
- Well Logs (0)
- Well Admin Orders

New Searches

- New Facility Search ↗
- New Incident Search ↗
- New Operator Search ↗
- New Pit Search ↗
- New Spill Search ↗
- New Tank Search ↗
- New Well Search ↗

Released to Imaging: 5/7/2025 4:40:03 PM

08/13/2021	[322151] S ESCAVADA UNIT	#347H	[372286] ENDURING RESOURCES, LLC	New	Oil	Active		
------------	-----------------------------	-------	-------------------------------------	-----	-----	--------	--	--

Comments

Pits

No Pits Found

Casing

Boreholes, Strings and Equipment Specifications						Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and Plug Description		
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	Sacks	Pressure Test (Y/N)
Hole 1	1	10/26/2021	17.500	0	384		0	0.0	0	0			0	No
Surface Casing	1		13.375	0	384	J-55	384	54.5	384	0	Circ	Unknown	350	Yes
Hole 2	1	12/21/2021	12.250	384	2822		0	0.0	0	0			0	No
Intermediate 1 Casing	1		9.625	0	2822	J-55	2822	36.0	2822	0	Circ	Unknown	684	Yes
Hole 3	1	01/06/2022	8.500	2822	13215		0	0.0	0	0			0	No
Production Casing	1		5.500	0	13215	P-110	13215	17.0	13215	3910	Theory	Class G Cement	1464	Yes
Tubing 1	1		2.875	0	5175	L-80	5175	6.5	0	0			0	No

Well Completions

[52860] RUSTY GALLUP

Status:Active

Bottomhole Location:O-28-22N-07W 416 FSL 2615 FEL

Lat/Long:36.104078,-107.581186 NAD83

Acreage:240 27-22N-07W Units: M N O P 28-22N-07W Units: O P

DHC:No

Last Produced:12/01/2024

Consolidation Code:Unitization

Production Method:Flowing

Well Test Data

Production Test:03/26/2022

Flowing Tubing Pressure:289 psi

Choke Size:1.000 inches

Gas Volume:233.0 MCF

Gas-Oil Ratio:896 Kcf / bbl

Disposition of Gas:Sold

Test Length:24 hours

Flowing Casing Pressure:1125 psi

Testing Method:Flowing

Oil Volume:260.0 bbls

Oil Gravity:0.0 Corr. API

Water Volume:1686.0 bbls

Perforations

Date	Top Measured Depth (Where Completion Enters Formation)	Bottom Measured Depth (End of Lateral)	Top Vertical Depth	Bottom Vertical Depth
01/19/2022	5480	13116	0	0

Notes

Searches Operator Data Submissions Administration

TD Reached:	01/13/2022	DHC:	
Deviation Report Received:	No	Rig Released:	01/14/2022
Directional Survey Run:	Yes	Logs Received:	No
Directional Survey Received:	Yes	Closure Pit Plat Received:	
First Oil Production:	03/26/2022	First Gas Production:	03/24/2022
First Injection:		Completion Report Received:	
Ready to Produce:	03/20/2022	New Well C-104 Approval:	03/20/2024
C-104 Approval:	03/18/2022	Revoked Until:	
Plug Back:			
Authorization Revoked Start:			

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
03/20/2022	[322151] S ESCAVADA UNIT	#347H	[372286] ENDURING RESOURCES, LLC	Active	
02/20/2022	[322151] S ESCAVADA UNIT	#347H	[372286] ENDURING RESOURCES, LLC	Active	
08/13/2021	[322151] S ESCAVADA UNIT	#347H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	

Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
06/30/2017	Blanket	250000	250000	RLI INSURANCE COMPANY	Surety	

Requests to release bonds must be submitted in writing. You may send an e-mail to OCD.AdminComp@emnrd.nm.gov.

Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

cTV2428260442

Violation Source:

Date of Violation:

Compliance Required:

Field Inspection

10/08/2024

01/06/2025

Resolved:

11/06/2024

Notes

Fluid around the wellhead that needs to be removed. 11/6/2024 Received photos of corrective action, fluids have been removed from around the wellhead.

Actions/Events

Event Date	Category	Type
10/08/2024	Notifications	Pre Enforcement Notification

Upstream Natural Gas Venting & Flaring

The upstream natural gas venting & flaring volumes are sourced from upstream natural gas waste reports (C-115B) submissions.

Earliest Natural Gas Waste Report in OCD Records:

10/2021

Last:

01/2025

Show All Upstream Venting & Flaring

Venting & Flaring Volumes			Beneficial Use	
	Vented (MCF)	Flared (MCF)	Total (MCF)	Used (MCF)
2021	3	0	3	0

2023	11	0	11		0
2024	0	0	0		152
2025	0	0	0		0
Grand Total:	25	0	25		152

Orders

C106-899-0

Applicant:

Contact:

Reviewer:

[\[372286\]](#) ENDURING RESOURCES, LLC

Heather Huntington

Dean McClure

Approved By:

Issuing Office:

Santa Fe

Processing Dates

Received:	02/12/2021	Ordered:	03/23/2021
Approved:	11/18/2021	Denied:	
Expiration:		Cancelled:	

Order Pools

Pool	Gas Percent	Oil Percent
[52860] RUSTY GALLUP	0	0

Production / Injection

The production & injection volumes are sourced from monthly production reports (C-115) submissions.

Earliest Production in OCD						Show All Production Export to Excel			
Records:		3/2022	Last	12/2024					
Production					Injection				
Time Frame	Oil (BBLs)	Gas (MCF)	Water (BBLs)	Days P/I	Water (BBLs)	Co2 (MCF)	Gas (MCF)	Other	Pressure
2022	42,416	251,529	112,347	306	0	0	0	0	N/A
2023	19,431	93,550	60,443	365	0	0	0	0	N/A
2024	11,317	53,313	31,266	366	0	0	0	0	N/A
Grand Total:	73,164	398,392	204,056	1,037	0	0	0	0	N/A

Transporters

Transporter	Product	Most Recent for Property
[25244] WILLAMS FOUR CORNERS, LLC	Gas	12/2024
[248440] WESTERN REFINING COMPANY, L.P.	Gas	12/2024
[248440] WESTERN REFINING COMPANY, L.P.	Oil	12/2024

Points of Disposition

ID	Type	Description	Pool(s)
4038045	Gas	S ESCAVADA UNIT #347H	[52860] RUSTY GALLUP
4038044	Oil	S ESCAVADA UNIT #347H	[52860] RUSTY GALLUP

WELL NAME: S ESCAVADA UNIT 347H
OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-H formation

API Number: 30-043-21349

AFE Number: DV03062

ER Well Number: NM08262.01

State: New Mexico

County: Sandoval

Surface Elev.: 6,749 ft ASL (GL) 6,777 ft ASL (KB)

Surface Location: 27-22N-07W Sec-Twn- Rng 2,082 ft FSL 397 ft FEL

BH Location: 28-22N-07W Sec-Twn- Rng 408 ft FSL 2524 ft FEL

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 48.9 miles to MM 103; Right (South) on Atkins Road for 3.2 miles to fork; Left (South) continuing on Atkins Road for 1.1 miles to 4-way intersection; Straight (south) for 1.6 miles to 4-way intersection; Straight (South) for 1.9 miles to fork; Left (South) for 0.4 miles to fork; Right (South) for 0.3 miles to S Escavada Unit 350H access road; Left (South) along 350H access road for 0.7 miles to S Escavada Unit 350H Pad (Wells: 347H, 350H & 351H).

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	2,813 ft
KOP (MD)	4,307 ft
KOP (TVD)	3,918 ft
Target (TVD)	4,604 ft
Curve BUR	10 °/100 ft
POE (MD)	5,422 ft
TD (MD)	13,154 ft
Lat Len (ft)	7,732 ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	2,813	9.625	36.0	J-55	LTC	0	2,813
Production	8.500	13,154	5.500	17.0	P-110	LTC	0	13,154

CEMENT PROPERTIES SUMMARY:

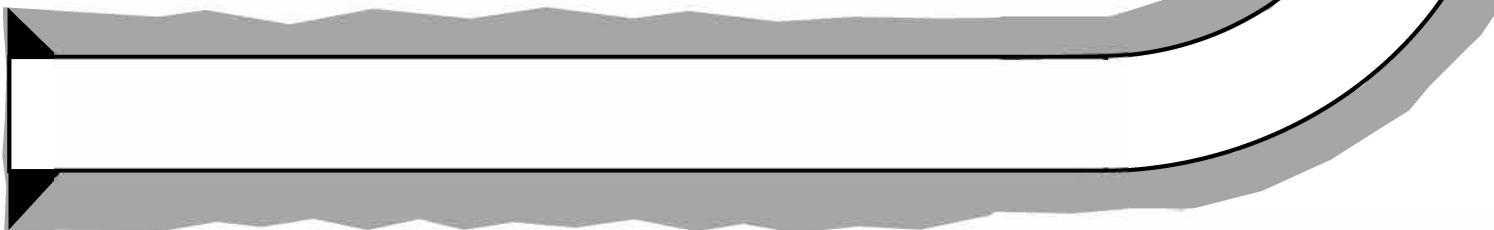
	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	Type III	14.6	1.39	6.686	0.6946	100%	0	350
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	0.3627	70%	0	548
Inter. (Tail)	Type III	14.6	1.38	6.64	0.3132	20%	2,313	136
Prod. (Lead)	Type III	12.4	2.360	13.4	0.2691	65%	0	496
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.2291	10%	3,910	1,493

COMPLETION / PRODUCTION SUMMARY:

Frac: 35 plug-and-perf stages with 270,000 bbls slickwater fluid and 12,500,000 lbs of proppant (estimated)

Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assistance)

Production: Produce through production tubing via gas-lift into permanent production and storage facilities



Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	527	527
Kirtland	637	637
Fruitland	762	763
Pictured Cliffs	1,095	1,105
Lewis	1,192	1,208
Chacra	1,459	1,504
Cliff House	2,497	2,687
Menefee	2,507	2,699
Point Lookout	3,457	3,781
Mancos	3,570	3,910
Gallup (MNCS_A)	3,887	4,271
MNCS_B	3,997	4,395
MNCS_C	4,087	4,494
MNCS_Cms	4,127	4,538
MNCS_D	4,267	4,699
MNCS_E	4,407	4,885
MNCS_F	4,455	4,962
MNCS_G	4,520	5,087
MNCS_H	4,582	5,250
LANDING PT (FTP) TARGET	4,604	5,422
PROJECTED LTP	4,547	13,154

OCD Permitting

Home Searches Wells Well Details

30-043-21318 S ESCAVADA UNIT #350H [322151]

General Well Information

Operator:

[372286] ENDURING RESOURCES, LLC

Status:

Active

Well Type:

Gas

Work Type:

New

Direction:

Horizontal

Multi-Lateral:

No

Mineral Owner:

Federal

Surface Owner:

Navajo

Surface Location:

I-27-22N-07W 2091 FSL 436 FEL

Lat/Long:

36.108441,-107.555677 NAD83

GL Elevation:

6749

KB Elevation:

DF Elevation:

Sing/Mult Compl:

Single

Potash Waiver:

False

Proposed Formation and/or Notes

RUSTY GALLUP/HD 104 DS/PLAT

Depths

Proposed:

12903

Measured Vertical Depth:

12972

True Vertical Depth:

4533

Plugback Measured:

12862

Formation Tops

Formation	Top	Producing	Method Obtained
Ojo Alamo Formation	527		Outside Source
Kirtland Formation	637		Outside Source
Fruitland Formation	762		Outside Source
Pictured Cliffs Formation	1095		Outside Source
Cliff House Formation	2497		Outside Source
Menefee Formation	2507		Outside Source
Point Lookout Formation	3462		Outside Source
Mancos Formation	3578		Outside Source
Gallup Formation	4540		Outside Source

Event Dates

Initial APD Approval:

07/20/2018

Most Recent APD Approval:

07/20/2018

APD Cancellation:

APD Extension Approval:

Spud:

11/14/2021

Approved Temporary Abandonment:

Shut In:

Plug and Abandoned Intent Received:

Well Plugged:

Site Release:

Last Inspection:

10/08/2024

Current APD Expiration:

05/09/2022

Gas Capture Plan Received:

05/16/2018

TA Expiration:

PNR Expiration:

Last MIT/BHT:

10/08/2024

- Quick Links
- General Well Information
 - History
 - Comments
 - Operator ↗
 - Pits
 - Casing
 - Well Completions
 - Financial Assurance
 - Compliance
 - Natural Gas Venting & Flaring
 - Orders
 - Production
 - Transporters
 - Points of Disposition
 - Action Status ↗
- Associated Images
- Well Files (14)
 - Well Logs (0)
 - Well Admin Orders
- New Searches
- New Facility Search ↗
 - New Incident Search ↗
 - New Operator Search ↗
 - New Pit Search ↗
 - New Spill Search ↗
 - New Tank Search ↗
 - New Well Search ↗

07/20/2018	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	New	Gas	Active		
------------	-----------------------------	-------	-------------------------------------	-----	-----	--------	--	--

Comments

2-24-20 Change of Plans-BHL,POE,directional,drilling,casing change
Added on 03/11/2020 by Amy Vermersch

3-11-20 Change of Plans; BHL,POE,directional,drilling,casing change
Added on 04/01/2020 by Amy Vermersch

Pits

No Pits Found

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and Plug Description		
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	Sacks	Pressure Test (Y/N)
Hole 1	1	11/14/2021	17.500	0	360		0	0.0	0	0			0	No
Surface Casing	1		13.375	0	360	J-55	360	54.5	360	0	Circ	Unknown	350	Yes
Hole 2	1	12/19/2021	12.250	360	2736		0	0.0	0	0			0	No
Intermediate 1 Casing	1		9.625	0	2736	J-55	2736	36.0	2736	0	Circ	Unknown	670	Yes
Hole 3	1	12/24/2021	8.500	2736	12978		0	0.0	0	0			0	No
Production Casing	1		5.500	0	12972	P-110	12972	17.0	12972	0	Circ	Unknown	1949	Yes
Tubing 1	1	03/21/2022	2.875	0	4919	L-80	4919	0.0	0	0			0	No

Well Completions

[52860] RUSTY GALLUP

Status:Active

Bottomhole Location:K-28-22N-07W 1850 FSL 2622 FEL

Lat/Long:36.108019,-107.580993 NAD83

Acreage:240 28-22N-07W Units: I J
27-22N-07W Units: I J K L

DHC:No

Last Produced:12/01/2024

Consolidation Code:Unitization

Production Method:Flowing

Well Test Data

Production Test:03/26/2022

Flowing Tubing Pressure:310 psi

Choke Size:1.000 inches

Gas Volume:880.0 MCF

Gas-Oil Ratio:4190 Kcf / bbl

Disposition of Gas:Sold

Test Length:24 hours

Flowing Casing Pressure:1120 psi

Testing Method:Flowing

Oil Volume:210.0 bbls

Oil Gravity:0.0 Corr. API

Water Volume:1203.0 bbls

Perforations

Notes

Event Dates

Initial Effective/Approval:	07/20/2018	TA Expiration:	
Most Recent Approval:	03/20/2022	Confidential Until:	
Confidential Requested On:		Test Allowable End:	
Test Allowable Approval:	03/18/2022	DHC:	
TD Reached:	12/29/2021	Rig Released:	12/30/2021
Deviation Report Received:	No	Logs Received:	No
Directional Survey Run:	Yes	Closure Pit Plat Received:	
Directional Survey Received:	Yes	First Gas Production:	03/25/2022
First Oil Production:	03/26/2022	Completion Report Received:	
First Injection:		New Well C-104 Approval:	03/21/2024
Ready to Produce:	03/20/2022	Revoked Until:	
C-104 Approval:	03/18/2022		
Plug Back:			
Authorization Revoked Start:			

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
03/20/2022	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	Active	
02/20/2022	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	Active	
03/11/2020	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	
02/24/2020	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	
07/20/2018	[322151] S ESCAVADA UNIT	#350H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	

Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
06/30/2017	Blanket	250000	250000	RLI INSURANCE COMPANY	Surety	

Requests to release bonds must be submitted in writing. You may send an e-mail to OCD.AdminComp@emnrd.nm.gov.

Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

cTV2428260374

Violation Source:	Field Inspection	Resolved:	11/06/2024
Date of Violation:	10/08/2024		
Compliance Required:	01/06/2025		

Notes

Fluid around wellhead needs to be removed. 11/6/2024 Received photos of corrective action, fluids have been removed from around the wellhead.

Actions/Events

Event Date	Category	Type
10/08/2024	Notifications	Pre Enforcement Notification

cTV2428260375

Actions/Events

Event Date	Category	Type
10/08/2024	Notifications	Pre Enforcement Notification

Upstream Natural Gas Venting & Flaring

The upstream natural gas venting & flaring volumes are sourced from upstream natural gas waste reports (C-115B) submissions.

Earliest Natural Gas Waste Report in OCD

Show All Upstream Venting & Flaring

Records: 10/2021 Last: 01/2025

	Venting & Flaring Volumes			Beneficial Use	
	Vented (MCF)	Flared (MCF)	Total (MCF)	Used (MCF)	
2021	3	0	3	0	
2022	186	0	186	0	
2023	11	0	11	0	
2024	3	0	3	122	
2025	0	0	0	0	
Grand Total:	203	0	203	122	

Orders

C106-899-0

Applicant: [372286] ENDURING RESOURCES, LLC

Contact: Heather Huntington

Reviewer: Dean McClure

Approved By: [Redacted]

Issuing Office: Santa Fe

Processing Dates

Received: 02/12/2021

Ordered: 03/23/2021

Approved: 11/18/2021

Denied:

Expiration:

Cancelled:

Order Pools

Pool	Gas Percent	Oil Percent
[52860] RUSTY GALLUP	0	0

Production / Injection

The production & injection volumes are sourced from monthly production reports (C-115) submissions.

Earliest Production in OCD

Show All Production Export to Excel

Records: 3/2022 Last: 12/2024

Time Frame	Production				Injection				
	Oil (BBLS)	Gas (MCF)	Water (BBLS)	Days P/I	Water (BBLS)	Co2 (MCF)	Gas (MCF)	Other	Pressure
2022	37,458	219,759	114,173	306	0	0	0	0	N/A
2023	16,194	77,330	51,016	365	0	0	0	0	N/A
2024	14,502	33,624	34,017	366	0	0	0	0	N/A
Grand Total:	68,154	330,713	199,206	1,037	0	0	0	0	N/A

[248440] WESTERN REFINING COMPANY, L.P.	Gas	12/2024
[248440] WESTERN REFINING COMPANY, L.P.	Oil	12/2024

Points of Disposition

ID	Type	Description	Pool(s)
4038049	Gas	S ESCAVADA UNIT #350H	[52860] RUSTY GALLUP
4038048	Oil	S ESCAVADA UNIT #350H	[52860] RUSTY GALLUP

WELL NAME: S ESCAVADA UNIT 350H
OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-H formation

API Number: 30-043-21318

AFE Number: DV03063

ER Well Number: NM08099.01

State: New Mexico

County: Sandoval

Surface Elev.: 6,749 ft ASL (GL) 6,777 ft ASL (KB)
Surface Location: 27-22N-07W Sec-Twn- Rng 2,091 ft FSL 436 ft FEL
BH Location: 28-22N-07W Sec-Twn- Rng 1857 ft FSL 2530 ft FEL
Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 48.9 miles to MM 103; Right (South) on Atkins Road for 3.2 miles to fork; Left (South) continuing on Atkins Road for 1.1 miles to 4-way intersection; Straight (south) for 1.6 miles to 4-way intersection; Straight (South) for 1.9 miles to fork; Left (South) for 0.4 miles to fork; Right (South) for 0.3 miles to S Escavada Unit 350H access road; Left (South) along 350H access road for 0.7 miles to S Escavada Unit 350H Pad (Wells: 347H, 350H & 351H).

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	2,713	9.625	36.0	J-55	LTC	0	2,713
Production	8.500	12,873	5.500	17.0	P-110	LTC	0	12,873

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	Type III	14.6	1.39	6.686	0.6946	100%	0	350
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	0.3627	70%	0	523
Inter. (Tail)	Type III	14.6	1.38	6.64	0.3132	20%	2,213	136
Prod. (Lead)	Type III	12.4	2.360	13.4	0.2691	65%	0	480
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.2291	10%	3,776	1,470

COMPLETION / PRODUCTION SUMMARY:

Frac: 35 plug-and-perf stages with 270,000 bbls slickwater fluid and 12,500,000 lbs of proppant (estimated)
Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assistance)
Production: Produce through production tubing via gas-lift into permanent production and storage facilities

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	2,713 ft
KOP (MD)	4,208 ft
KOP (TVD)	4,019 ft
Target (TVD)	4,622 ft
Curve BUR	10 °/100 ft
POE (MD)	5,172 ft
TD (MD)	12,873 ft
Lat Len (ft)	7,701 ft

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	527	527
Kirtland	637	637
Fruitland	762	762
Pictured Cliffs	1,095	1,095
Lewis	1,192	1,192
Chacra	1,459	1,464
Cliff House	2,497	2,592
Menefee	2,507	2,603
Point Lookout	3,457	3,639
Mancos	3,590	3,776
Gallup (MNCS_A)	3,904	4,093
MNCS_B	4,015	4,204
MNCS_C	4,105	4,294
MNCS_Cms	4,149	4,339
MNCS_D	4,287	4,487
MNCS_E	4,425	4,659
MNCS_F	4,472	4,730
MNCS_G	4,537	4,851
MNCS_H	4,600	5,008
LANDING PT (FTP) TARGET	4,622	5,172
PROJECTED LTP	4,567	12,873

OCD Permitting

Home Searches Wells Well Details

30-043-21317 S ESCAVADA UNIT #351H [322151]

General Well Information

Operator:
Status:
Well Type:
Work Type:

[372286] ENDURING RESOURCES, LLC
Active
Oil
New

Direction:
Multi-Lateral:
Mineral Owner:
Surface Owner:

Horizontal
No
Federal
Navajo

Surface Location:
Lat/Long:
GL Elevation:
KB Elevation:
DF Elevation:

I-27-22N-07W 2087 FSL 417 FEL
36.108428,-107.555611 NAD83
6749

Sing/Mult Compl:
Potash Waiver:

Single
False

Proposed Formation and/or Notes

RUSTY GALLUP/HD 104 FOR DS/PLAT

Depths

Proposed:
Measured Vertical Depth:

11638
11697

True Vertical Depth:
Plugback Measured:

4652
11586

Formation Tops

Formation	Top	Producing	Method Obtained
Ojo Alamo Formation	451		Outside Source
Kirtland Formation	663		Outside Source
Pictured Cliffs Formation	1126		Outside Source
Lewis Formation	1164		Outside Source
Chacra Mesa Member	1442		Outside Source
Cliff House Formation	2554		Outside Source
Menefee Formation	2577		Outside Source
Point Lookout Formation	3384		Outside Source
Mancos Formation	3615		Outside Source
Gallup Formation	3933		Outside Source

Event Dates

Initial APD Approval:
Most Recent APD Approval:
APD Cancellation:
APD Extension Approval:
Spud:
Approved Temporary Abandonment:
Shut In:
Plug and Abandoned Intent Received:
Well Plugged:
Site Release:
Last Inspection:

07/20/2018
07/20/2018

11/11/2021

10/08/2024

Current APD Expiration:

Gas Capture Plan Received:
TA Expiration:

PNR Expiration:
Last MIT/BHT:

05/09/2022

05/22/2018

10/08/2024

Quick Links

- General Well Information
- History
- Comments
- Operator ↗
- Pits
- Casing
- Well Completions
- Financial Assurance
- Compliance
- Natural Gas Venting & Flaring
- Orders
- Production
- Transporters
- Points of Disposition
- Action Status ↗

Associated Images

- Well Files (15)
- Well Logs (0)
- Well Admin Orders

New Searches

- New Facility Search ↗
- New Incident Search ↗
- New Operator Search ↗
- New Pit Search ↗
- New Spill Search ↗
- New Tank Search ↗
- New Well Search ↗

Released to Imaging: 5/7/2025 4:40:03 PM

07/20/2018	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	New	Oil	Active		
------------	-----------------------------	-------	-------------------------------------	-----	-----	--------	--	--

Comments

2-24-20 Change of plans-BHL,POE, directional,drilling, casing change
Added on 03/11/2020 by Amy Vermersch

3-11-20 Change of Plans; BHL, POE, Drilling, Casing, Directional
Added on 04/01/2020 by Amy Vermersch

Pits

No Pits Found

Casing

			Boreholes, Strings and Equipment Specifications			Specifications for Strings and Tubing			Strings Cemented and Intervals			Cement and Plug Description		
String/Hole Type	Taper	Date Set	Diameter	Top	Bottom (Depth)	Grade	Length	Weight	Bot of Cem	Top of Cem	Meth	Class of Cement	Sacks	Pressure Test (Y/N)
Hole 1	1	11/11/2021	17.500	0	366		0	0.0	0	0			0	No
Surface Casing	1		13.375	0	366	J-55	366	54.5	366	0	Circ	Unknown	350	Yes
Hole 2	1	12/20/2021	12.250	366	2660		0	0.0	0	0			0	No
Intermediate 1 Casing	1		9.625	0	2660	J-55	2660	36.0	2660	0	Circ	Unknown	670	Yes
Hole 3	1	12/30/2021	8.500	2660	11697		0	0.0	0	0			0	No
Production Casing	1		5.500	0	11697	P-110	11697	17.0	11697	3660	Theory	Class G Cement	1464	Yes
Tubing 1	1		2.875	0	4818	L-80	4818	6.5	4818	0			0	No

Well Completions

[52860] RUSTY GALLUP

Status:Active

Bottomhole Location:L-22-22N-07W 1625 FSL 176 FWL

Lat/Long:36.122282,-107.57077 NAD83

Acreage:320 27-22N-07W Units: B C G H I
22-22N-07W Units: L M N

DHC:No

Last Produced:12/01/2024

Consolidation Code:Unitization

Production Method:

Well Test Data

Production Test:03/26/2022

Flowing Tubing Pressure:289 psi

Choke Size:1.000 inches

Gas Volume:447.0 MCF

Gas-Oil Ratio:1927 Kcf / bbl

Disposition of Gas:Sold

Test Length:24 hours

Flowing Casing Pressure:564 psi

Testing Method:Flowing

Oil Volume:232.0 bbls

Oil Gravity:0.0 Corr. API

Water Volume:447.0 bbls

Perforations

Notes

Event Dates

Initial Effective/Approval:	07/20/2018	TA Expiration:	
Most Recent Approval:	03/20/2022	Confidential Until:	
Confidential Requested On:		Test Allowable End:	
Test Allowable Approval:	03/18/2022	DHC:	
TD Reached:	01/06/2022	Rig Released:	01/06/2022
Deviation Report Received:	No	Logs Received:	No
Directional Survey Run:	Yes	Closure Pit Plat Received:	
Directional Survey Received:	Yes	First Gas Production:	03/25/2022
First Oil Production:	03/26/2022	Completion Report Received:	03/30/2023
First Injection:		New Well C-104 Approval:	03/24/2023
Ready to Produce:	03/20/2022	Revoked Until:	
C-104 Approval:	03/18/2022		
Plug Back:			
Authorization Revoked Start:			

Well Completion History

Effective Date	Property	Well Number	Operator	Completion Status	TA Expiration Date
03/20/2022	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	Active	
02/20/2022	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	Active	
03/11/2020	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	
02/24/2020	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	
07/20/2018	[322151] S ESCAVADA UNIT	#351H	[372286] ENDURING RESOURCES, LLC	New, Not Drilled	

Financial Assurance

Effective	Bond Type	Base	Balance	Issuer	Cash/Surety	Cancellation Date
06/30/2017	Blanket	250000	250000	RLI INSURANCE COMPANY	Surety	

Requests to release bonds must be submitted in writing. You may send an e-mail to OCD.AdminComp@emnrd.nm.gov.

Compliance

Note that Financial Assurance and Inactive Well Compliance are documented in separate reports ([Inactive Well Report](#), [Financial Assurance Report](#)).

Also note that some compliance issues are addressed at the operator level so not listed under each well.

cTV2428260421

Violation Source:	Field Inspection	Resolved:	
Date of Violation:	10/08/2024		
Compliance Required:	01/06/2025		

Notes


Fluid around wellhead needs to be removed.

Actions/Events

Event Date	Category	Type
10/08/2024	Notifications	Pre Enforcement Notification

	Vented (MCF)	Flared (MCF)	Total (MCF)		Used (MCF)
2021	7	0	7		0
2022	2,105	0	2,105		0
2023	1,644	8	1,652		0
2024	5	0	5		147
2025	0	0	0		0
Grand Total:	3,761	8	3,769		147

Orders

C106-899-0				
Applicant:	[372286] ENDURING RESOURCES, LLC			
Contact:	Heather Huntington		Approved By:	
Reviewer:	Dean McClure		Issuing Office:	Santa Fe

Processing Dates

Received:	02/12/2021	Ordered:	03/23/2021
Approved:	11/18/2021	Denied:	
Expiration:		Cancelled:	

Order Pools

Pool	Gas Percent	Oil Percent
[52860] RUSTY GALLUP	0	0

Production / Injection

The production & injection volumes are sourced from monthly production reports (C-115) submissions.

Earliest Production in OCD Records:						Show All Production Export to Excel			
3/2022 Last					12/2024				
Production					Injection				
Time Frame	Oil (BBLS)	Gas (MCF)	Water (BBLS)	Days P/I	Water (BBLS)	Co2 (MCF)	Gas (MCF)	Other	Pressure
2022	46,952	143,967	77,357	306	0	0	0	0	N/A
2023	30,839	90,079	47,030	365	0	0	0	0	N/A
2024	18,159	47,167	31,709	366	0	0	0	0	N/A
Grand Total:	95,950	281,213	156,096	1,037	0	0	0	0	N/A

Transporters

Transporter	Product	Most Recent for Property
[25244] WILLAMS FOUR CORNERS, LLC	Gas	12/2024
[248440] WESTERN REFINING COMPANY, L.P.	Gas	12/2024
[248440] WESTERN REFINING COMPANY, L.P.	Oil	12/2024

4038052	Oil	S ESCAVADA UNIT #351H	[52860] RUSTY GALLUP
---------	-----	-----------------------	----------------------

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

WELL NAME: S ESCAVADA UNIT 351H
OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-H formation

API Number: 30-043-21317

AFE Number: DV03064

ER Well Number: NM08100.01

State: New Mexico

County: Sandoval

Surface Elev.: 6,749 ft ASL (GL) 6,777 ft ASL (KB)

Surface Location: 27-22N-07W Sec-Twn- Rng 2,087 ft FSL 417 ft FEL

BH Location: 22-22N-07W Sec-Twn- Rng 1520 ft FSL 250 ft FWL

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 48.9 miles to MM 103; Right (South) on Atkins Road for 3.2 miles to fork; Left (South) continuing on Atkins Road for 1.1 miles to 4-way intersection; Straight (south) for 1.6 miles to 4-way intersection; Straight (South) for 1.9 miles to fork; Left (South) for 0.4 miles to fork; Right (South) for 0.3 miles to S Escavada Unit 350H access road; Left (South) along 350H access road for 0.7 miles to S Escavada Unit 350H Pad (Wells: 350H & 351H).

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	2,648	9.625	36.0	J-55	LTC	0	2,648
Production	8.500	11,623	5.500	17.0	P-110	LTC	0	11,623

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	Type III	14.6	1.39	6.686	0.6946	100%	0	350
Inter. (Lead)	III:POZ Blend	12.5	2.14	12.05	0.3627	70%	0	507
Inter. (Tail)	Type III	14.6	1.38	6.64	0.3132	20%	2,148	136
Prod. (Lead)	Type III	12.4	2.360	13.4	0.2691	65%	0	464
Prod. (Tail)	G:POZ blend	13.3	1.560	7.7	0.2291	10%	3,659	1,287

COMPLETION / PRODUCTION SUMMARY:

Frac: 40 plug-and-perf stages with 240,000 bbls slickwater fluid and 11,000,000 lbs of proppant (estimated)

Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assistance)

Production: Produce through production tubing via gas-lift into permanent production and storage facilities

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	2,648 ft
KOP (MD)	4,092 ft
KOP (TVD)	4,022 ft
Target (TVD)	4,625 ft
Curve BUR	10 °/100 ft
POE (MD)	5,049 ft
TD (MD)	11,623 ft
Lat Len (ft)	6,574 ft

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	527	527
Kirtland	637	637
Fruitland	762	762
Pictured Cliffs	1,095	1,097
Lewis	1,192	1,196
Chacra	1,459	1,470
Cliff House	2,497	2,535
Menefee	2,507	2,546
Point Lookout	3,457	3,520
Mancos	3,592	3,659
Gallup (MNCS_A)	3,910	3,980
MNCS_B	4,020	4,090
MNCS_C	4,110	4,180
MNCS_Cms	4,154	4,225
MNCS_D	4,292	4,373
MNCS_E	4,430	4,546
MNCS_F	4,472	4,610
MNCS_G	4,540	4,736
MNCS_H	4,605	4,900
LANDING PT (FTP) TARGET	4,625	5,049
PROJECTED LTP	4,657	11,623



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

VI. Tabulation of Data on Wells

API	WELL NAME	TYPE	STATUS	OGRID	OPERATOR NAME	ULSTR	LAT	LONG	directio n	year_sp ludd	MD	TVD	POOL	plug_date	lease_type	last_produ
30-043-20309	CHACRA #002	Gas	Active	6515	DUGAN PRODUCTION CORP	O-21-22N-07W	36.120903	-107.576866	V	1977	2004	2004	[84360] RUSTY CHACRA (GAS)	12/31/9999	Federal	8/1/2024
30-043-20281	DOME TESERO 15-22-7 #001	Gas	Active	6515	DUGAN PRODUCTION CORP	P-15-22N-07W	36.134457	-107.567861	V	1979	1950	1950	[84360] RUSTY CHACRA (GAS)	12/31/9999	Federal	8/1/2024
30-043-20542	DOME TESERO 22 #004	Oil	Active	6515	DUGAN PRODUCTION CORP	C-22-22N-07W	36.129852	-107.565804	V	1981	5000	5000	[82860] RUSTY GALLUP	12/31/9999	Navajo	8/1/2024
30-043-20506	DOME TESERO 23 #001	Oil	Active	6515	DUGAN PRODUCTION CORP	L-23-22N-07W	36.121857	-107.551552	V	1980	4800	4800	[52860] RUSTY GALLUP	12/31/9999	Navajo	8/1/2024
30-043-20515	DOME TESERO 27 #003	Oil	Plugged (site released)	6515	DUGAN PRODUCTION CORP	D-27-22N-07W	36.115463	-107.568901	V	1980	5000	5000	[84360] RUSTY GALLUP	5/18/2023	Navajo	5/1/2023
30-043-20398	FEDERAL 25-22-7 #001	Gas	Plugged (site released)	6515	DUGAN PRODUCTION CORP	B-25-22N-07W	36.114285	-107.523966	V	1978	1770	1770	[84360] RUSTY CHACRA (GAS)	8/16/2024	Federal	5/1/2023
30-043-20363	FEDERAL 26-22-7 #001	Gas	Active	6515	DUGAN PRODUCTION CORP	A-26-22N-07W	36.115048	-107.539124	V	1978	1820	1820	[84360] RUSTY CHACRA (GAS)	12/31/9999	Federal	8/1/2024
30-043-20282	NAVAJO 21-22-7 #001	Gas	Plugged (site released)	6515	DUGAN PRODUCTION CORP	A-21-22N-07W	36.129421	-107.575777	V	1978	1882	1882	[84360] RUSTY CHACRA (GAS)	12/17/2001	Navajo	6/1/1998
30-043-21512	S ESCAVADA UNIT #337H	Oil	New	372286	ENDURING RESOURCES, LLC	B-22-22N-07W	36.131251	-107.561330	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Indian	12/31/9999
30-043-21515	S ESCAVADA UNIT #343H	Oil	New	372286	ENDURING RESOURCES, LLC	N-14-22N-07W	36.133763	-107.545837	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Indian	12/31/9999
30-043-21516	S ESCAVADA UNIT #344H	Oil	New	372286	ENDURING RESOURCES, LLC	N-14-22N-07W	36.133708	-107.545838	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Indian	12/31/9999
30-043-21513	S ESCAVADA UNIT #345H	Oil	New	372286	ENDURING RESOURCES, LLC	B-22-22N-07W	36.131324	-107.561229	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Indian	12/31/9999
30-043-21514	S ESCAVADA UNIT #346H	Oil	New	372286	ENDURING RESOURCES, LLC	B-22-22N-07W	36.131287	-107.561279	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Indian	12/31/9999
30-043-21349	S ESCAVADA UNIT #347H	Oil	Active	372286	ENDURING RESOURCES, LLC	L-27-22N-07W	36.108414	-107.555545	H	2021	13215	4543	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024
30-043-21321	S ESCAVADA UNIT #348H	Oil	New	372286	ENDURING RESOURCES, LLC	O-27-22N-07W	36.103316	-107.560659	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Navajo	12/31/9999
30-043-21322	S ESCAVADA UNIT #349H	Oil	New	372286	ENDURING RESOURCES, LLC	O-27-22N-07W	36.103313	-107.560524	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Navajo	12/31/9999
30-043-21318	S ESCAVADA UNIT #350H	Gas	Active	372286	ENDURING RESOURCES, LLC	L-27-22N-07W	36.108441	-107.555677	H	2021	12972	4533	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024
30-043-21317	S ESCAVADA UNIT #351H	Oil	Active	372286	ENDURING RESOURCES, LLC	L-27-22N-07W	36.108428	-107.555611	H	2021	11697	4652	[52860] RUSTY GALLUP	12/31/9999	Federal	8/1/2024
30-043-21323	S ESCAVADA UNIT #352H	Oil	Active	372286	ENDURING RESOURCES, LLC	F-26-22N-07W	36.112549	-107.546094	H	2018	11962	4741	[52860] RUSTY GALLUP	12/31/9999	Navajo	8/1/2024
30-043-21320	S ESCAVADA UNIT #353H	Oil	Active	372286	ENDURING RESOURCES, LLC	F-26-22N-07W	36.112535	-107.546159	H	2018	11051	4735	[52860] RUSTY GALLUP	12/31/9999	Navajo	8/1/2024
30-043-21319	S ESCAVADA UNIT #354H	Oil	New	372286	ENDURING RESOURCES, LLC	F-26-22N-07W	36.112563	-107.546028	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Navajo	12/31/9999
30-043-21324	S ESCAVADA UNIT #355H	Oil	New	372286	ENDURING RESOURCES, LLC	A-26-22N-07W	36.115891	-107.540586	H	9999	0	0	[52860] RUSTY GALLUP	12/31/9999	Federal	12/31/9999
30-043-21308	STATE 2207 36D #193H	Oil	Active	372286	ENDURING RESOURCES, LLC	D-26-22N-07W	36.100619	-107.535935	H	2017	6435	4864	[98231] WC 22N7W36; GALLUP (O)	12/31/9999	State	8/1/2024
30-043-20171	RUSTY FEDERAL #003	Gas	Plugged (site released)	13673	M & M PRODUCTION & OPERATOR	P-14-22N-07W	36.134022	-107.538841	V	1975	3697	3697	[84360] RUSTY CHACRA (GAS)	1/19/2024	Federal	9/1/2017
30-043-20359	PRE-ONGARD WELL #001	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	P-33-22N-07W	36.090332	-107.576370	V	1978	0	115	[96928] WC D3, PICTURED CLIFFS	9/15/1979	Federal	12/31/9999
30-043-20285	PRE-ONGARD WELL #001	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	H-28-22N-07W	36.113380	-107.574387	V	1978	0	1800	[84360] RUSTY CHACRA (GAS)	6/16/1978	Federal	12/31/9999
30-043-20491	PRE-ONGARD WELL #001	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	B-34-22N-07W	36.099693	-107.559990	V	1980	0	1879	[84360] RUSTY CHACRA (GAS)	7/24/1985	Federal	12/31/9999
30-043-20492	PRE-ONGARD WELL #001	Oil	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	P-22-22N-07W	36.119164	-107.556130	V	1980	0	4930	[52860] RUSTY GALLUP	9/13/1988	Navajo	12/31/9999
30-043-20201	PRE-ONGARD WELL #001	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	A-23-22N-07W	36.129631	-107.538918	V	9999	0	0		5/5/1976	Navajo	12/31/9999
30-043-05150	PRE-ONGARD WELL #001	Oil	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	L-23-22N-07W	36.122650	-107.538536	V	1957	0	5975	[96894] WC D3, GALLUP	3/10/1964	Federal	12/31/9999
30-043-20315	PRE-ONGARD WELL #002	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	C-28-22N-07W	36.115429	-107.583199	V	9999	0	0		12/5/2001	Federal	12/31/9999
30-043-20485	PRE-ONGARD WELL #002	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	L-28-22N-07W	36.107239	-107.575218	V	1980	0	1835	[84360] RUSTY CHACRA (GAS)	7/26/1985	Navajo	12/31/9999
30-043-20203	PRE-ONGARD WELL #002	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	C-23-22N-07W	36.129665	-107.548332	V	1976	0	2004	[84360] RUSTY CHACRA (GAS)	5/16/1985	Navajo	12/31/9999
30-043-05146	PRE-ONGARD WELL #002	Oil	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	B-35-22N-07W	36.100815	-107.543709	V	1957	0	5905	[96894] WC D3, GALLUP	2/26/1970	Federal	12/31/9999
30-043-20219	PRE-ONGARD WELL #003	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	K-23-22N-07W	36.121784	-107.547798	V	1976	0	1808	[84360] RUSTY CHACRA (GAS)	4/16/1985	Navajo	12/31/9999
30-043-20241	PRE-ONGARD WELL #004	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	F-26-22N-07W	36.112728	-107.547882	V	1976	0	1808	[84360] RUSTY CHACRA (GAS)	4/16/1985	Navajo	12/31/9999
30-043-20252	PRE-ONGARD WELL #005	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	A-22-22N-07W	36.129780	-107.556557	V	9999	0	0		4/16/1985	Navajo	12/31/9999
30-043-20266	PRE-ONGARD WELL #006	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	A-27-22N-07W	36.115238	-107.558037	V	9999	0	0		5/16/1985	Navajo	12/31/9999
30-043-20264	PRE-ONGARD WELL #007	Gas	Plugged (site released)	214263	PRE-ONGARD WELL OPERATOR	M-22-22N-07W	36.119873	-107.567551	V	1977	0	2015	[84360] RUSTY CHACRA (GAS)	4/16/1985	Navajo	12/31/9999
30-043-20399	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	K-28-22N-07W	36.107896	-107.584398	V	9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20411	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	L-28-22N-07W	36.107115	-107.575249	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20381	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	D-03-21N-07W	36.085804	-107.570008	V	9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20516	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	L-27-22N-07W	36.108019	-107.569393	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20546	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	A-27-22N-07W	36.116080	-107.557129	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20278	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	D-24-22N-07W	36.129653	-107.533525	V	9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20401	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	C-25-22N-07W	36.113935	-107.531562	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20410	PRE-ONGARD WELL #1	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	B-36-22N-07W	36.100262	-107.524370	V	9999	0	0		12/31/9999	State	12/31/9999
30-043-20514	PRE-ONGARD WELL #2	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	C-22-22N-07W	36.130031	-107.566340	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20544	PRE-ONGARD WELL #2	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	K-22-22N-07W	36.122214	-107.566772	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20534	PRE-ONGARD WELL #2	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	C-27-22N-07W	36.115335	-107.565519	V	9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20284	PRE-ONGARD WELL #2	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	P-26-22N-07W	36.104785	-107.540008	V	9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20517	PRE-ONGARD WELL #3	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	O-27-22N-07W	36.105027	-107.560076	V	9999	0	0		12/31/9999	Navajo	12/31/9999

API	WELL NAME	TYPE	STATUS	OGRID	OPERATOR NAME	ULSTR	LAT	LONG	direction	year_sp ludd	MD	TVD	POOL	plug_date	lease_type	last_produ
30-043-20543	PRE-ONGARD WELL #3	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	H-22-22N-07W	36.126884	-107.557150		9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20310	PRE-ONGARD WELL #3	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	M-24-22N-07W	36.120447	-107.533503		9999	0	0		12/31/9999	Federal	12/31/9999
30-043-20265	PRE-ONGARD WELL #8	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	P-22-22N-07W	36.119581	-107.557941		9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-20545	PRE-ONGARD WELL #A	Gas	Cancelled	214263	PRE-ONGARD WELL OPERATOR	D-26-22N-07W	36.116365	-107.550677		9999	0	0		12/31/9999	Navajo	12/31/9999
30-043-21154	CHACO SLOPE 22 7 35 #001H	Oil	Plugged (site released)	20572	SG INTERESTS I LTD	A-35-22N-07W	36.100403	-107.537865	H	2015	0	0	[52860] RUSTY GALLUP	5/1/2023	Federal	12/31/9999
30-043-21050	FEDERAL 22 7 34 #003	Gas	Cancelled	20572	SG INTERESTS I LTD	N-34-22N-07W	36.090523	-107.566895		9999	0	0	[71629] BASIN FRUITLAND COAL (GAS)	12/31/9999	Federal	12/31/9999



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

VII. Operations Plan

- Average Injection Rate: 8,000 Bbls/day. Maximum Injection Rate: 20,000 Bbls/day.
- Average Injection Pressure: 800 psi. Maximum Injection Pressure 1,385 psi.
- The source of injected water will be from area production. The water to be injected is compatible with the water in the proposed disposal zone.
- The Entrada Sandstone formation has not been proven productive within the area of review.
- The system will be closed.



ENDURING RESOURCES IV, LLC
6300 S SYRACUSE WAY, SUITE 525
CENTENNIAL, COLORADO 80211

DRILLING PLAN: *Drill, complete, and equip single vertical SWD in the Entrada formation*

WELL INFORMATION:

Name: S Escavada Unit SWD 001

API Number: Not yet assigned

State: New Mexico

County: Sandoval

Surface Elevation: 6,754 ft ASL (GL) 6,769 ft ASL (KB)

Surface Location: 27-22-7 Sec-Twn-Rng 2,077 ft FSL 377 ft FEL

36.108398 ° N latitude 107.55548 ° W longitude (NAD 83)

BH Location: 27-22-7 Sec-Twn-Rng 2,077 ft FSL 377 ft FEL

36.108398 ° N latitude 107.55548 ° W longitude (NAD 83)

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 50.0 miles to Adkins Road; Right (South) on Cty Road Atkins Road for 5.5 miles to fork; Left (South) staying on Atkins Road 7825 for 3.0 miles to 4 way; Straight (South) on lease road for 0.7 miles to S Escavada Unit 350H pad. There are 3 existing wells on this pad, from West (furthest from location entrance) to East: S Escavada Unit 350H, 351H, 347H and one new staked well, S Escavad Unit SWD 001.

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:	Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O / G / W	Pressure
	Ojo Alamo	6,250	519	519	W	normal
	Kirtland	6,145	624	624	W	normal
	Fruitland	6,010	759	759	G, W	sub
	Pictured Cliffs	5,685	1,084	1,084	G, W	sub
	Lewis	5,575	1,194	1,194	G, W	normal
	Chacra	5,315	1,454	1,454	G, W	normal
	Cliff House	4,280	2,489	2,489	G, W	sub
	Menefee	4,265	2,504	2,504	G, W	normal
	Point Lookout	3,320	3,449	3,449	G, W	normal
	Mancos	3,195	3,574	3,574	O,G	sub (~0.38)
	MNCS_G	2,235	4,534	4,534	O,G	sub (~0.38)
	Basal Niobrara Unconfomity	2,040	4,729	4,729	O,G	sub (~0.38)
	Juana Lopez	1,740	5,029	5,029	O,G	sub (~0.38)
	Greenhorn Limestone	1,400	5,369	5,369	O,G	sub (~0.38)
	Graneros	1,305	5,464	5,464	O,G	sub (~0.38)
	Dakota	1,250	5,519	5,519	O,G	sub (~0.38)
	Burro Canyon Fm	1,060	5,709	5,709	O,G	sub (~0.38)
	Morrison	980	5,789	5,789	O,G	sub (~0.38)
	Bluff Ss Member	760	6,009	6,009	O,G	sub (~0.38)
	Salt Wash Basin Member	495	6,274	6,274	O,G	sub (~0.38)
	Smallville	275	6,494	6,494	O,G	sub (~0.38)
	Todilto	210	6,559	6,559	O,G	sub (~0.38)
	Entrada	190	6,579	6,579	O,G	sub (~0.38)

Chinle	-40	6,809	6,809	O,G	sub (~0.38)
Rat Hole	350	0	0	O,G	sub (~0.38)
TD	-390	7,159	7,159	O,G	sub (~0.38)

Surface: Nacimiento

Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the Entrada

Pressure: Normal (0.43 psi/ft) or sub-normal pressure gradients anticipated in all formations

Max. pressure gradient: 0.43 psi/ft Evacuated hole gradient: 0.22 psi/ft

Maximum anticipated BH pressure, assuming maximum pressure gradient: 3,080 psi

Maximum anticipated surface pressure, assuming partially evacuated hole: 1,510 psi

Temperature: Maximum anticipated BHT is 180° F or less

H₂S INFORMATION:

H₂S Zones: Encountering hydrogen-sulfide bearing zones is **NOT** anticipated.

Safety: Sensors and alarms will be placed in the substructure, on the rig floor, above the pits, and at the shakers.

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; gas detection from drillout of 9-5/8" casing to TD.

MWD / LWD: Gamma Ray from drillout of 9-5/8" casing to TD

Open Hole Logs: None planned

Testing: None planned

Coring: None planned

Cased Hole Logs: CBL on 7" casing from deepest free-fall depth to surface

DRILLING RIG INFORMATION:

Contractor: Aztec

Rig No.: Aztec Drilling 777

Draw Works: Loadcraft 224DDR

Mast: Loadcraft (116ft, 410,000 lbs, 10 lines)

Top Drive: Tesco 250 ton

Prime Movers: 2 - CAT C-15

Pumps: 2 - HRSF-1000 (3,000 psi)

BOPE 1: Double Gate Ram (11" 3,000 psi)

BOPE 2: Annular Preventer (11" 3,000 psi)

Choke 3" x 5,000 psi

KB-GL (ft): 14.5

Note: Actual drilling rig may vary depending on availability at time the well is scheduled to be drilled.

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

- 1) Rig will be equipped with upper and lower kelly cocks with handles available.
- 2) Inside BOP and TIW valves will be available to use on all sizes and threads of drill pipe used while drilling the well.
- 3) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.

4)

BOP testing shall be conducted (a) when initially installed, (b) whenever any seal is broken or repaired, (c) if the time since the previous test exceeds 30 days. Tests will be conducted using a test plug. BOP ram preventers will be tested to 3,000 psig for 10 minutes, and the annular preventer will be tested to 1,500 psi for 10 minutes. Ram and annular preventers will be tested to 250 psi for 5 minutes. Additionally, BOP and casing strings will be tested to .22 psi/ft or 1,500 psi, whichever is greater but not exceeding 70% of yield strength of the casing, for 30 minutes, prior to drilling out casing. Rams and hydraulically operated remote choke line valve will be function tested daily at a minimum.

- 5) Remote valve for BOP rams, HCR, and choke shall be placed in a location that is readily available to the driller. The remote BOP valve shall be capable of closing and opening the rams.
- 6) Manual locking devices (hand wheels) shall be intalled on rams. A valve will be installed on the annular preventer's closing line as close as possible to the preventer to act as a locking device. The valve will be maintained in the open position and shall only be closed when there is no power to the accumulator.

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement:

Pumps shall be equipped with stroke counters with displays in the dog-house. Slow pump speed shall be recorded daily and after mudding up, at a minimum, on the drilling report. A Pit Volume Totalizer will be installed and the readout will be displayed in the dog-house. Gas-detecting equipment will be installed at the shakers, and readouts will be available in the dog-house and the in the geologist's work-station (if geologist or mud-logger is on-site).

Closed-Loop System: A fully, closed-loop system will be utilized. The system will consist of above-ground piping and above-ground storage tanks and bins. The system will not entail any earthen pits, below-grade storage, or drying pads. All equipment will be disassembled and removed from the site when drilling operations cease. The system will be capable of storing all fluids and generated cuttings and of preventing uncontrolled releases of the same. The system will be operated in an efficient manner to allow the recycling and reuse of as much fluid as possible and to minimize the amount of fluids and solids that require disposal.

Fluid Disposal: Fluids that cannot be reused, recycled, or returned to the supplier will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Solids Disposal: Drilling solids will be stored (until haul-off) on-site in separate containers with no other waste, debris, or garbage products. Waste solids will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Fluid Program: See "Detailed Drilling Plan" section and attached Newpark mud program for additional details.

DETAILED DRILLING PLAN:

SURFACE: Drill vertically to casing setting depth (plus necessary rathole), run casing, cement casing to surface.

0 ft (MD)	to	500 ft (MD)	Hole Section Length:	500 ft
0 ft (TVD)	to	500 ft (TVD)	Casing Required:	500 ft

Note: Surface hole may be drilled, cased, and cemented with a smaller rig in advance of the drilling rig.

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	Fresh Water	8.4	N/C	2 - 8	2 - 12	9.0	Spud mud

Hole Size: 12-1/4"

Bit / Motor: Mill Tooth or PDC, no motor

MWD / Survey: No MWD, deviation survey

Logging: None

Casing Specs:							Tens. Body	Tens. Conn
		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	(lbs)	(lbs)
Specs	9.625	36.0	K-55	STC	2,020	3,520	564,000	423,000

Loading		218	1,532	115,697	115,697
Min. S.F.		9.25	2.30	4.87	3.66

Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient

Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling intermediate hole and 8.4 ppg equivalent external pressure gradient

Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs): Minimum: 3,400 Optimum: 4,530 Maximum: 5,660

Casing Summary: Float shoe, 1 jt casing, float collar, casing to surface

Centralizers: 2 centralizers per jt stop-banded 10' from each collar on bottom 3 jts, 1 centralizer per 2 jts to surface

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	Hole Cap. (cuft/ft)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Redi-Mix	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	158	254

Calculated cement volumes assume gauge hole and the excess noted in table

Csg ID 8.921

Mesa Ready Mix or first available

Shoe Track L 44

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out.

PRODUCTION: Drill as per directional plan to casing setting depth, run casing, cement casing to surface.

500 ft (MD)	to	7,159 ft (MD)	Hole Section Length:	6,659 ft
500 ft (TVD)	to	7,159 ft (TVD)	Casing Required:	7,159 ft

Estimated BHST = 180° F

Fluid:	Type	MW (ppg)	FL (mL/30 min)	PV (cp)	YP (lb/100 sqft)	pH	Comments
	LSND (KCI)	8.8 - 9.2	15	8 - 14	6 - 12	10.8 - 11.2	No OBM

Hole Size (inches): 8.75

Bit / Motor: 8-3/4" PDC bit w/mud motor

MWD / Survey: MWD Survey with inclination and azimuth survey (every 100' at a minimum), GR optional

Logging: None

Pressure Test: NU BOPE and test (as noted above); pressure test 13-3/8" casing to 1,575 psi for 30 minutes.

Casing Specs:		Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	Tens. Body (lbs)	Tens. Conn (lbs)
Specs	7	26.0	L80	LTC	5,410	7,240	604,000	519,000
Loading					3,127	1,919	262,307	262,307
Min. S.F.					1.73	3.77	2.30	1.98

Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient

Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling production hole and 8.4 ppg equivalent external pressure gradient

Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs): Minimum: 4,600 Optimum: 5,110 Maximum: 5,660

Centralizers: 1 per joint in non-vertical hole; 1 per 2-joints in vertical hole

Cement:	Type	Weight (ppg)	Yield (cuft/sk)	Water (gal/sk)	% Excess	Planned TOC (ft MD)	Total Cmt (sx)	Total Cmt (cu ft)
Lead	III:POZ Blend	12.5	2.150	12.05	80%	0	413	888
Tail	Type III	13.5	1.710	8.88	30%	3,474	427	730
Annular Capacity	0.16681	cuft/ft	7" casing x 9-5/8" casing annulus			Shoe Track L 44		
	0.1503	cuft/ft	7" casing x 8-3/4" hole annulus			Casing ID 6.276		
	0.2148	cuft/ft	7" casing casing volume					

Calculated cement volumes assume gauge hole and the excess noted in table

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out.

Released to Imaging: 5/7/2025 4:40:03 PM

Proposed Wellbore Diagram

WELL NAME: S Escavada Unit SWD 001

OBJECTIVE: Drill, complete, and equip single vertical SWD in the Entrada formation

API Number: Not yet assigned

AFE Number: Not yet assigned

ER Well Number: Not yet assigned

State: New Mexico

County: Sandoval

Surface Elev.: 6,754 ft ASL (GL) 6,769 ft ASL (KB)

Surface Location: 27-22-7 Sec-Twn- Rng 2,077 ft FSL 377 ft FEL

BH Location: 27-22-7 Sec-Twn- Rng 2,077 ft FSL 377 ft FEL

Driving Directions:

FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 50.0 miles to Adkins Road; Right (South) on Cty Road Atkins Road for 5.5 miles to fork; Left (South) staying on Atkins Road 7825 for 3.0 miles to 4 way; Straight (South) on lease road for 0.7 miles to S Escavada Unit 350H pad. There are 3 existing wells on this pad, from West (furthest from location entrance) to East: S Escavada Unit 350H, 351H, 347H and one new staked well, S Escavad Unit SWD 001.

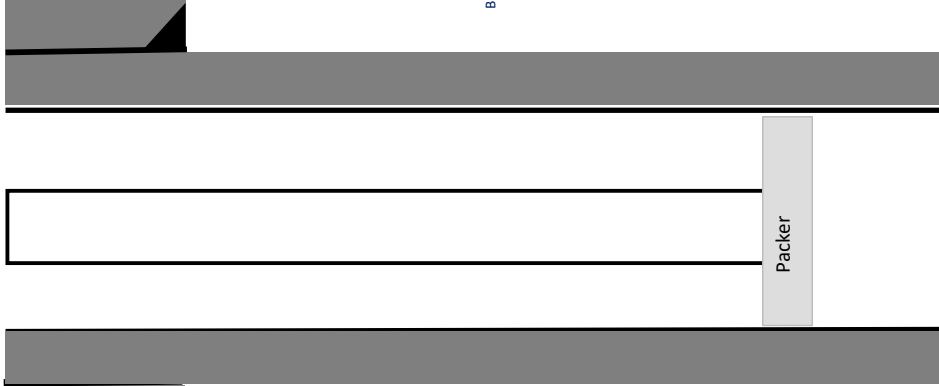
QUICK REFERENCE	
Sur TD (MD)	500 ft
TD (MD)	7,159 ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	12.250	500	9.625	36	K-55	STC	0	500
Production	8.750	7,159	7	26.0	L80	LTC	0	7,159

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	TYPE I-II	14.5	1.61	7.41	0.3132	50%	0	158
Prod. (Lead)	III: POZ Blend	12.5	2.15	12.05	0.1668	80%	0	413
Prod. (Tail)	Type III	13.5	1.71	8.88	0.1503	30%	3,474	427



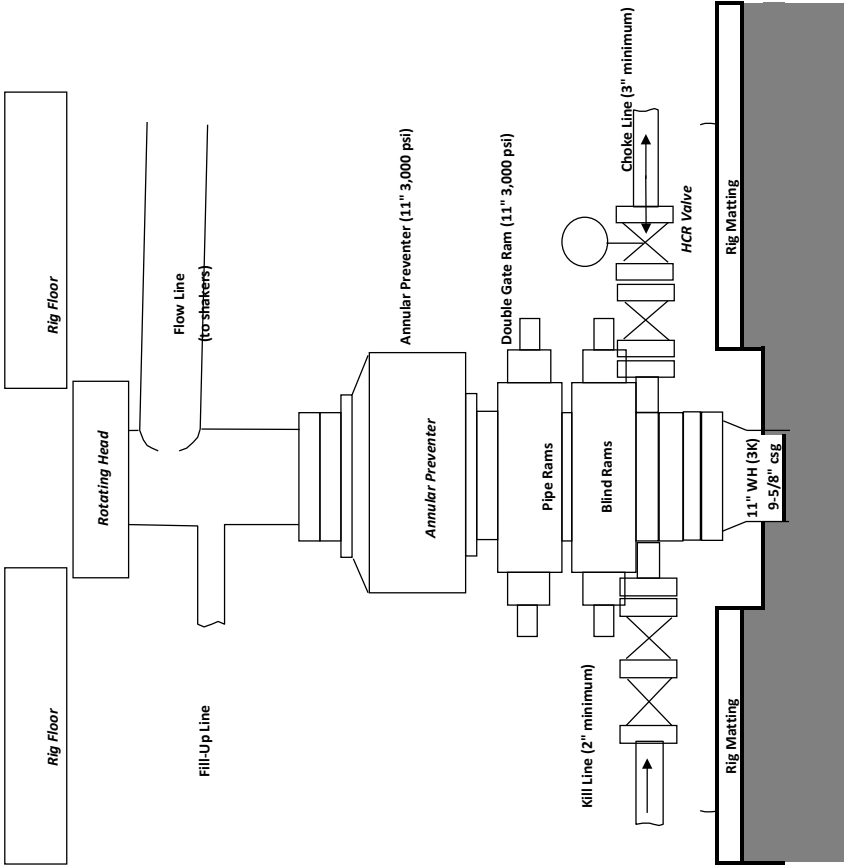
Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	519	519
Kirtland	624	624
Fruitland	759	759
Pictured Cliffs	1,084	1,084
Lewis	1,194	1,194
Chacra	1,454	1,454
Cliff House	2,489	2,489
Menefee	2,504	2,504
Point Lookout	3,449	3,449
Mancos	3,574	3,574
MNCS_G	4,534	4,534
Basal Niobrara Unconformity	4,729	4,729
Juana Lopez	5,029	5,029
Greenhorn Limestone	5,369	5,369
Graneros	5,464	5,464
Dakota	5,519	5,519
Burro Canyon Fm	5,709	5,709
Morrison	5,789	5,789
Bluff ss Member	6,009	6,009
Salt Wash Basin Member	6,274	6,274
Smalville	6,494	6,494
Todilto	6,559	6,559
Entrada	6,579	6,579
Chinle	6,809	6,809
Rat Hole	0	0
TD	7,159	7,159

Packer

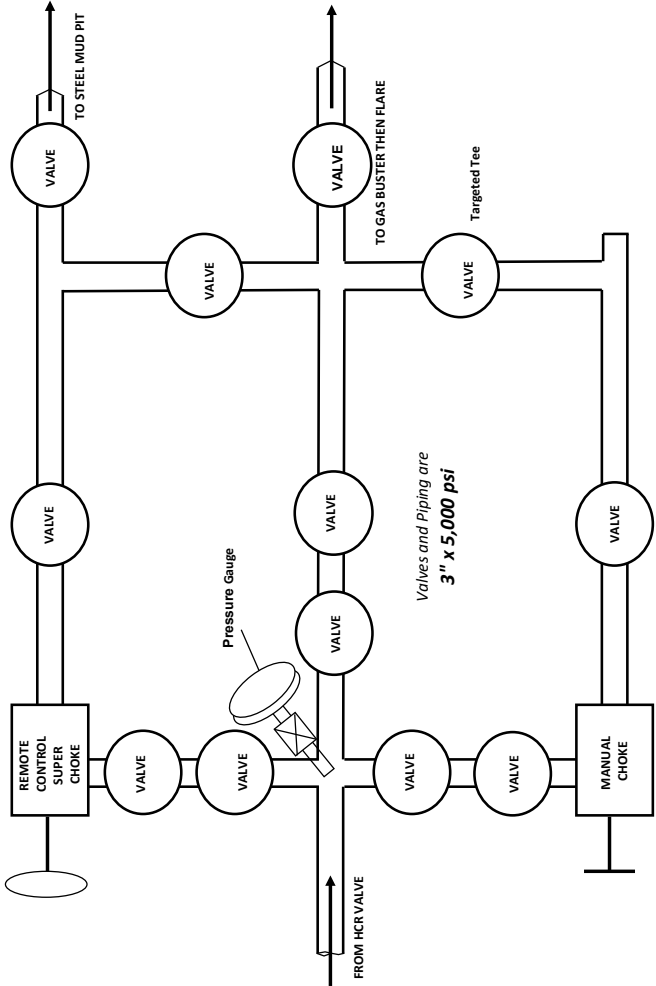
BOPE & CHOKE MANIFOLD DIAGRAMS

NOTE: EXACT BOPE AND CHOKE CONFIGURATION AND COMPONENTS MAY DIFFER FROM WHAT IS DEPICTED IN THE DIGRAMS BELOW DEPENDING ON THE RIG AND ITS ASSOCIATED EQUIPMENT. RAM PREVENTERS, ANNULAR PREVENTERS, AND CHOKE MANIFOLD AND COMPONENTS WILL BE RATED TO 3,000 PSI MINIMUM.

BOPE



CHOKE MANIFOLD





Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

VIII. Geologic Data

The proposed injection interval is the Entrada Sandstone; Entrada (96436) pool. The Entrada formation underlies the Todilto formation. The Entrada is described as a fine to very fine-grained sandstone with fair to good porosity and permeability. The Entrada Sandstone is a very porous and permeable aeolian sandstone and is widely used as an injection zone in this region of the San Juan Basin. The top of the Entrada is at 6,579' TVD. The bottom of the closest overlying oil producing formation (Dakota) is at 5,709' TVD. There will be 580' between the highest perforation and the bottom of the Dakota formation.

The following table identifies the geologic markers and projected formation tops (depth in feet from surface) based on open hole logs from offset wells in the area.

Formation Tops	TVD	Production
Ojo Alamo	519	G
Kirtland	624	G
Fruitland	759	G
Pictured Cliffs	1084	G
Lewis	1194	G
Chacra	1454	G
Cliff House	2489	G
Menefee	2504	G
Point Lookout	3449	G
Mancos	3574	O,G
Basal Niobrara	4729	O,G
Juana Lopez	5029	O,G
Greenhorn Limestone	5369	O,G
Graneros	5464	O,G
Dakota	5519	O,G
Burro Canyon Fm	5709	O,G
Morrison	5789	O,G
Bluff Ss Member	6009	O,G
Salt Wash Basin Member	6274	O,G
Smallville	6494	O,G
Todilto	6559	O,G
Entrada	6579	O,G
Chinle	6809	O,G



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

Seals

The proposed injection interval is the Middle Jurassic Entrada formation and is stratigraphically located 6,579 feet below the Tertiary Ojo Alamo, Nacimiento and San Jose freshwater aquifers. The Middle Jurassic Entrada is primarily eolian dune sandstones varying in thickness. The Entrada is most often water-bearing but does not economically produce oil. The Upper Triassic Chinle formation unconformably underlies the Entrada formation throughout the San Juan Basin and consists of primarily shales with minor interbeds of sandstone and siltstone. The Chinle is basically impervious to fluids. The Entrada formation is overlain by the Todilto sealing limestone, anhydrite and shale. Above the Todilto is the Summerville shale. Both the Summerville and Todilto are thin on top of the Entrada dune build-ups and thicken in areas where the Entrada dunes thin. The Bluff formation is not well developed in this location, so it is a better seal due to the lack of well-developed sandstone. For the most part the Morrison formation is a seal. The thin, interbedded sandstones are tight and yield very little, if any, water or hydrocarbons. The Lower Cretaceous Burro Canyon formation consists of primarily clayey sandstones, which are mostly water-bearing in the immediate area. The Upper Cretaceous Dakota formation and Graneros formation are comprised of interbedded sandstones and shales with minor coals. The Dakota and Graneros are continuous and hydrocarbon productive. Lack of production is usually due to lack of porosity and permeability, not due to water occurrences. Above the Graneros is the Greenhorn Limestone, which consists of thinly interbedded organic shales and shaley limestone. The Greenhorn is more a hydrocarbon source rock and seal than it is a viable reservoir. The overlying Lower Mancos Shale is a definite seal rock. The Juana Lopez is a regional stratigraphic marker like the Greenhorn. It is a sequence of slightly sandy, shaley and calcareous siltstone that is not a commercial reservoir. The Gallup formation is a sequence of very thinly interbedded organic shales, sandy shales and shaley sandstones. When the Tertiary sandstone, which has matrix porosity, is absent as it is in the area around the proposed well, the Gallup is only hydrocarbon productive when fractured. The fractures die out upward near the top of the Gallup into the overlying Upper Mancos Shale. The Upper Mancos Shale is a definite seal rock because it rarely yields hydrocarbon shows and is non-productive. The Mesaverde formation in this area and is either tight or yields salt water and minor gas. To the northwest, the Mesaverde formation is one of the major hydrocarbon producing zones in the San Juan Basin. Above the Mesaverde is the Chacra member of the Lewis shale. The Chacra is predominantly shale with only tens of feet of interbedded tight sandstone and is definitely a seal in this part of the basin. The Lewis Shale overlies the Chacra and is a possible hydrocarbon source rock and a seal. Above the Lewis Shale is the Pictured Cliffs formation. The Pictured Cliffs is usually gas-productive or tight and is rarely water-bearing. In this southeast portion of the San Juan Basin, the Fruitland formation consists interbedded coals, shales and minor sandstones. The Fruitland produces neither gas nor water in the area, so is in effect a good seal. The non-marine Kirtland Shales has minor interbeds of fluvial sandstones that are basically tight and sealing. The Tertiary Ojo Alamo and Nacimiento formations are mostly freshwater bearing but do produce some gas. The Nacimiento and San Jose formations are comprised of interbedded lenticular sandstones and non-marine shales.

Regional Flow

The San Juan Basin is an asymmetric northwest trending structural depression located on the eastern edge of the Colorado Plateau in northern New Mexico. The San Juan Basin contains a thick sequence of sedimentary rocks ranging in age from Cambrian through Tertiary. The Entrada Sandstone is a late Jurassic formation. The proposed S. Escavada Unit SWD #001 is located in the central west portion of



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

the basin and intercepts the Entrada Formation approximately 6,579 feet beneath ground surface. The hydrologic properties, regional flow patterns, and water quality do not vary significantly from unit to unit within the San Juan Basin. Regional flow within the basin as occurring from elevated recharge areas on the basin margin toward discharge areas along the San Juan River in the northwest and along the Rio Puerco in the southeast. They also state that vertical flow occurs across unit boundaries and along geologic structures within the basin.

Literature Cited

Hydrology and Water Resources of San Juan Basin, Stone et.al. 1983.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

IX. Stimulation Program

Upon approval of this application, an injection test will be conducted. If adequate rates are not found, it may be necessary to stimulate the Entrada Sandstone or perforate additional zones in the well.

Any changes to the plans contained herein will be approved by the New Mexico Oil Conservation Division prior to implementation.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

X. Logging and Test Data

All logs and test data for the S. Escavada SWD #001 will be submitted to the NMOCD.



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

XI. Chemical Analysis of Freshwater

Point of Diversion data obtained from the NMOSE indicates there are no freshwater wells completed within a 1-mile radius of the area of interest. The Entrada interval at this location and depth is not reasonably expected to supply any type of freshwater systems. The more shallower options that exist are currently in limited use at depths of 624' or less in the San Jose Sandstone interval.

Enduring was advised of an unpermitted existing water hole near an arroyo 1480-ft from the proposed injection well. Anecdotal information obtained from family members currently living in the vicinity indicated it was hand-dug in the 1920's to an estimated depth of 12-ft. Further information obtained from the family indicated the hole has not been used for over 40 years. A surface marker was located, but it has long since been abandoned and is covered by sand and silt due to natural occurring weather conditions. A freshwater distribution system was installed by the Navajo Tribal Utilities Association which provides water to residents in the area.

Water analysis from the proposed exempted aquifer:

pH	7.0
Specific Gravity @ 70°F	1.0260
Resistivity @ 70°F (Ω.m)	2.0



Wright Water Engineers, Inc.

1666 N. Main Avenue, Suite C
Durango, Colorado 81301
(970) 259-7411 TEL
(970) 259-8758 FAX

www.wrightwater.com
e-mail: pfoster@wrightwater.com

DRAFT

June 20, 2024

Via email: doug.rappuhn@state.nm.us

Douglas Rappuhn, P.G.
Hydrology Bureau / New Mexico Office of the State Engineer
5550 San Antonio Drive NE
Albuquerque, NM 87109-4127

Re: Water Quality Results from the North Alamito No. 7 Water Supply Well – May 13, 2024

Dear Doug:

Wright Water Engineers, Inc. (WWE) is pleased to provide the results from a water quality sample collected from DJR's North Alamito No. 7 water supply well (POD No. SJ-4348) producing water from the Entrada Sandstone aquifer. Pumping prior to sample collection began at noon on Thursday May 9, 2024 at a rate of 350 gpm. The pumping rate was constant until sample collection on May 13 at 1:30pm, purging approximately 6.2 acre feet. This large purge volume is adequate to produce a representative groundwater sample for laboratory analysis.

Field Parameters

Prior to sample collection, water quality field parameters of temperature, pH, and TDS (total dissolved solids) were collected. The temperature was 156°F, the pH was 7.4, and the TDS was 10,560 mg/L at 1:25 pm May 13, 2024 just before sample collection. These field parameter values are consistent with previous testing of the North Alamito No. 7 WSW.

Water Quality Results

The laboratory results from the May 13, 2024 sample collected from the North Alamito No. 7 WSW area attached. The recorded laboratory analysis result for TDS of 12,100 mg/L meets the minimum criteria of at least 1,000 mg/L per the New Mexico Deep Non-potable Water Statutes.

We appreciate the opportunity to review these water quality results from the North Alamito No. 7 WSW, and welcome any questions or comments.


DENVER
(303) 480-1700 TEL (303) 480-1020 FAX

GLENWOOD SPRINGS
(970) 945-7755 TEL (970) 945-9210 FAX

June 20, 2024

Page 2

Sincerely,
WRIGHT WATER ENGINEERS, INC.

By 
Peter R. Foster, P.E.
Vice President

By 
Trevor Downing, P.G.
Geologist

Attachments:

Attachment A – Water Quality Laboratory Results

P:\191-014 DJR Energy\000\Engineering\Aquifer Testing\North Alamito No. 7\Water Quality Lab Results\2024.5.13 Sample\2024.6.20 North Alamito No. 7 Water Quality Sample text.docx



75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
jeremy.allen@greenanalytical.com

29 May 2024

Trevor Downing
Wright Water Engineering
1666 N Main Ave Suite C
Durango, CO 81301
RE: Enduring N. Alamito No. 7

Enclosed are the results of analyses for samples received by the laboratory on 05/13/24 15:28. The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells
Project Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C24-00019

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

Table of Contents

Samples in Report	3
Sample Results	4
2405176-01: NA7	4
Quality Assurance Results	6
Notes and Definitions	11
Qualifier Summary	12
Chain of Custody & Attachments	13



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
NA7	2405176-01	Water	05/13/24 13:30	05/13/24 15:28	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

NA7

2405176-01 (Ground Water)

Sampled Date: 05/13/24 13:30

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Alkalinity, Total as CaCO ₃ *	194	10.0	8.00	mg/L	1	05/21/24 15:00	2320 B		AES
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	05/21/24 15:00	2320 B		AES
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	05/21/24 15:00	2320 B		AES
Alkalinity, Bicarbonate as CaCO ₃ *	194	10.0	8.00	mg/L	1	05/21/24 15:00	2320 B		AES
Chloride*	1170	15.0	0.833	mg/L	15	05/17/24 00:38	EPA300.0		AWG
Conductivity*	14600	1.00		umho/cm@25 C	1	05/15/24 09:30	2510 B		JDA
Fluoride*	7.16	1.50	0.146	mg/L	15	05/17/24 00:38	EPA300.0		AWG
pH*	7.40			pH Units	1	05/15/24 09:30	EPA150.1		JDA
pH Temperature, degrees C	17.7			pH Units	1	05/15/24 09:30	EPA150.1		JDA
Phosphorus, Total	<0.0500	0.0500	0.0215	mg P/L	1	05/16/24 12:27	EPA365.1		CAI
SAR	70.4			No Unit	1	05/29/24 10:18	Calculation		AWG
Specific Gravity	1.013	0.8000		No Unit	1	05/21/24 11:00	ASTM D1429-03		JDA
Sulfate*	7200	100	12.4	mg/L	100	05/17/24 00:58	EPA300.0		AWG
Total Dissolved Solids*	12100	40.0		mg/L	4	05/14/24 17:47	EPA160.1		AES

Total Recoverable Metals by ICP (E200.7)

Calcium*	186	2.00	1.15	mg/L	10	05/29/24 10:18	EPA200.7		AWG
Hardness as CaCO ₃	504	9.11	4.45	mg/L	10	05/29/24 10:18	2340 B		AWG
Iron*	1.07	0.050	0.026	mg/L	1	05/16/24 18:55	EPA200.7		AWG
Magnesium*	9.43	1.00	0.383	mg/L	10	05/29/24 10:18	EPA200.7		AWG
Sodium*	3630	10.0	2.54	mg/L	10	05/29/24 10:18	EPA200.7		AWG

Dissolved Metals by ICP

Aluminum*	<0.750	0.750	0.332	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Boron	<4.50	4.50	0.923	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Calcium*	179	1.00	0.180	mg/L	10	05/29/24 10:14	EPA200.7		AWG
Iron*	<0.750	0.750	0.298	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Magnesium*	9.36	1.50	0.455	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Potassium*	25.0	15.0	1.12	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Silica (SiO ₂)	42.8	16.0	1.50	mg/L	15	05/16/24 17:47	Calculation		AWG
Silicon	20.0	7.50	0.699	mg/L	15	05/16/24 17:47	EPA200.7		AWG
Sodium*	3550	10.0	2.30	mg/L	10	05/29/24 10:14	EPA200.7		AWG
Strontium*	7.92	1.50	0.172	mg/L	15	05/16/24 17:47	EPA200.7		AWG

Green Analytical Laboratories

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

NA7

2405176-01 (Ground Water)

Sampled Date: 05/13/24 13:30

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

Dissolved Metals by ICPMS

Arsenic*	<0.0150	0.0150	0.0093	mg/L	15	05/22/24 15:06	EPA200.8		AES
Barium*	0.0344	0.0075	0.0063	mg/L	15	05/22/24 15:06	EPA200.8		AES
Cadmium*	<0.0075	0.0075	0.0009	mg/L	15	05/22/24 15:06	EPA200.8		AES
Chromium*	<0.0300	0.0300	0.0161	mg/L	15	05/22/24 15:06	EPA200.8		AES
Copper*	0.123	0.0150	0.0012	mg/L	15	05/22/24 15:06	EPA200.8		AES
Lead*	<0.0075	0.0075	0.0018	mg/L	15	05/22/24 15:06	EPA200.8		AES
Manganese*	0.0632	0.0075	0.0027	mg/L	15	05/22/24 15:06	EPA200.8		AES
Molybdenum*	<0.0075	0.0075	0.0008	mg/L	15	05/22/24 15:06	EPA200.8		AES
Nickel*	0.0075	0.0075	0.0007	mg/L	15	05/22/24 15:06	EPA200.8		AES
Selenium*	<0.0150	0.0150	0.0041	mg/L	15	05/22/24 15:06	EPA200.8		AES
Zinc*	<0.0300	0.0300	0.0090	mg/L	15	05/22/24 15:06	EPA200.8		AES

Other

Iron-Related Bacteria	Low			CFU/mL	1	05/13/24 16:30	Lab Procedure		MRN
	Aggressivity -								
	0								
Slime-Forming Bacteria	Low			CFU/mL	1	05/13/24 16:30	Lab Procedure		MRN
	Aggressivity -								
	100								
Sulfate-Reducing Bacteria	Low			CFU/mL	1	05/13/24 16:30	Lab Procedure		MRN
	Aggressivity -								
	0								

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B241214 - General Prep - Wet Chem										
Blank (B241214-BLK1)				Prepared & Analyzed: 05/14/24						
Total Dissolved Solids	20.0	10.0	mg/L							B1
Reference (B241214-SRM1)				Prepared & Analyzed: 05/14/24						
Total Dissolved Solids	405	10.0	mg/L	400		101	85-115			
Batch B241217 - General Prep - Wet Chem										
Reference (B241217-SRM1)				Prepared & Analyzed: 05/15/24						
pH	7.02		pH Units	7.00		100	98.57-101.42			
Batch B241222 - Lachat										
Blank (B241222-BLK1)				Prepared: 05/15/24 Analyzed: 05/16/24						
Phosphorus, Total	ND	0.0500	mg P/L							
LCS (B241222-BS1)				Prepared: 05/15/24 Analyzed: 05/16/24						
Phosphorus, Total	2.55	0.0500	mg P/L	2.50		102	90-110			
LCS Dup (B241222-BSD1)				Prepared: 05/15/24 Analyzed: 05/16/24						
Phosphorus, Total	2.58	0.0500	mg P/L	2.50		103	90-110	1.09	20	
Batch B241236 - Total Recoverable by ICP										
Blank (B241236-BLK1)				Prepared: 05/15/24 Analyzed: 05/17/24						
SAR	0.00		No Unit							
Batch B241239 - IC- Ion Chromatograph										
Blank (B241239-BLK1)				Prepared & Analyzed: 05/16/24						
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B241239-BS1)				Prepared & Analyzed: 05/16/24						
Chloride	25.1	1.00	mg/L	25.0		100	90-110			
Fluoride	2.60	0.100	mg/L	2.50		104	90-110			
Sulfate	24.7	1.00	mg/L	25.0		98.9	90-110			
LCS Dup (B241239-BSD1)				Prepared & Analyzed: 05/16/24						
Chloride	25.2	1.00	mg/L	25.0		101	90-110	0.446	20	
Fluoride	2.61	0.100	mg/L	2.50		105	90-110	0.499	20	

Green Analytical Laboratories

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

General Chemistry - Quality Control (Continued)

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

Batch B241239 - IC- Ion Chromatograph (Continued)

LCS Dup (B241239-BSD1) (Continued)

Prepared & Analyzed: 05/16/24

Sulfate	24.8	1.00	mg/L	25.0		99.4	90-110	0.468	20	
---------	------	------	------	------	--	------	--------	-------	----	--

Batch B241247 - General Prep - Wet Chem

Reference (B241247-SRM1)

Prepared & Analyzed: 05/15/24

Conductivity	996	1.00	umho/cm@25C	1000		99.6	90-110			
--------------	-----	------	-------------	------	--	------	--------	--	--	--

Batch B241291 - General Prep - Wet Chem

Blank (B241291-BLK1)

Prepared & Analyzed: 05/21/24

Alkalinity, Bicarbonate as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Total as CaCO ₃	ND	10.0	mg/L							

LCS (B241291-BS1)

Prepared & Analyzed: 05/21/24

Alkalinity, Total as CaCO ₃	103	10.0	mg/L	100		103	85-115			
--	-----	------	------	-----	--	-----	--------	--	--	--

LCS Dup (B241291-BSD1)

Prepared & Analyzed: 05/21/24

Alkalinity, Total as CaCO ₃	102	10.0	mg/L	100		102	85-115	0.976	20	
--	-----	------	------	-----	--	-----	--------	-------	----	--

Reference (B241291-SRM1)

Prepared & Analyzed: 05/21/24

Alkalinity, Total as CaCO ₃	99.0	10.0	mg/L	100		99.0	85-115			
--	------	------	------	-----	--	------	--------	--	--	--

Green Analytical Laboratories

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

Total Recoverable Metals by ICP (E200.7) - Quality Control

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

Batch B241236 - Total Recoverable by ICP

Blank (B241236-BLK1)

Prepared: 05/15/24 Analyzed: 05/16/24

Calcium	ND	0.200	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							

LCS (B241236-BS1)

Prepared: 05/15/24 Analyzed: 05/16/24

Calcium	2.00	0.200	mg/L	2.00		100	85-115			
Iron	1.95	0.050	mg/L	2.00		97.5	85-115			
Magnesium	10.4	0.100	mg/L	10.0		104	85-115			
Sodium	1.68	1.00	mg/L	1.62		104	85-115			

LCS Dup (B241236-BSD1)

Prepared: 05/15/24 Analyzed: 05/16/24

Calcium	1.96	0.200	mg/L	2.00		98.1	85-115	1.93	20	
Iron	1.90	0.050	mg/L	2.00		95.0	85-115	2.59	20	
Magnesium	10.3	0.100	mg/L	10.0		103	85-115	1.11	20	
Sodium	1.64	1.00	mg/L	1.62		101	85-115	2.75	20	

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

Dissolved Metals by ICP - Quality Control

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

Batch B241215 - Dissolved ICP

Blank (B241215-BLK1)

Prepared: 05/14/24 Analyzed: 05/16/24

Aluminum	ND	0.050	mg/L							
Boron	ND	0.300	mg/L							
Calcium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Silicon	ND	0.500	mg/L							
Sodium	ND	1.00	mg/L							
Strontium	ND	0.100	mg/L							

LCS (B241215-BS1)

Prepared: 05/14/24 Analyzed: 05/16/24

Aluminum	4.11	0.050	mg/L	4.00	103	85-115				
Boron	4.27	0.300	mg/L	4.00	107	85-115				
Calcium	4.18	0.100	mg/L	4.00	104	85-115				
Iron	4.13	0.050	mg/L	4.00	103	85-115				
Magnesium	21.2	0.100	mg/L	20.0	106	85-115				
Potassium	8.26	1.00	mg/L	8.00	103	85-115				
Silicon	4.05	0.500	mg/L	4.00	101	85-115				
Sodium	3.46	1.00	mg/L	3.24	107	85-115				
Strontium	4.13	0.100	mg/L	4.00	103	85-115				

LCS Dup (B241215-BSD1)

Prepared: 05/14/24 Analyzed: 05/16/24

Aluminum	4.09	0.050	mg/L	4.00	102	85-115	0.569	20		
Boron	4.24	0.300	mg/L	4.00	106	85-115	0.705	20		
Calcium	4.12	0.100	mg/L	4.00	103	85-115	1.34	20		
Iron	4.08	0.050	mg/L	4.00	102	85-115	1.39	20		
Magnesium	21.0	0.100	mg/L	20.0	105	85-115	1.10	20		
Potassium	8.17	1.00	mg/L	8.00	102	85-115	1.15	20		
Silicon	4.00	0.500	mg/L	4.00	99.9	85-115	1.33	20		
Sodium	3.38	1.00	mg/L	3.24	104	85-115	2.46	20		
Strontium	4.06	0.100	mg/L	4.00	102	85-115	1.50	20		

Green Analytical Laboratories

Veronica J. Wells

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

Dissolved Metals by ICPMS - Quality Control

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

Batch B241284 - Dissolved ICPMS

Blank (B241284-BLK1)

Prepared: 05/21/24 Analyzed: 05/22/24

Arsenic	ND	0.0010	mg/L
Barium	ND	0.0005	mg/L
Cadmium	ND	0.0005	mg/L
Chromium	ND	0.0020	mg/L
Copper	ND	0.0010	mg/L
Lead	ND	0.0005	mg/L
Manganese	ND	0.0005	mg/L
Molybdenum	ND	0.0005	mg/L
Nickel	ND	0.0005	mg/L
Selenium	ND	0.0010	mg/L
Zinc	ND	0.0020	mg/L

LCS (B241284-BS1)

Prepared: 05/21/24 Analyzed: 05/22/24

Arsenic	0.0495	0.0010	mg/L	0.0500	99.0	85-115
Barium	0.0485	0.0005	mg/L	0.0500	97.0	85-115
Cadmium	0.0491	0.0005	mg/L	0.0500	98.2	85-115
Chromium	0.0481	0.0020	mg/L	0.0500	96.3	85-115
Copper	0.0480	0.0010	mg/L	0.0500	96.0	85-115
Lead	0.0487	0.0005	mg/L	0.0500	97.4	85-115
Manganese	0.0492	0.0005	mg/L	0.0500	98.4	85-115
Molybdenum	0.0487	0.0005	mg/L	0.0500	97.4	85-115
Nickel	0.0488	0.0005	mg/L	0.0500	97.6	85-115
Selenium	0.244	0.0010	mg/L	0.250	97.4	85-115
Zinc	0.0490	0.0020	mg/L	0.0500	98.1	85-115

LCS Dup (B241284-BSD1)

Prepared: 05/21/24 Analyzed: 05/22/24

Arsenic	0.0495	0.0010	mg/L	0.0500	99.0	85-115	0.0433	20
Barium	0.0485	0.0005	mg/L	0.0500	96.9	85-115	0.0975	20
Cadmium	0.0491	0.0005	mg/L	0.0500	98.2	85-115	0.0347	20
Chromium	0.0484	0.0020	mg/L	0.0500	96.8	85-115	0.506	20
Copper	0.0481	0.0010	mg/L	0.0500	96.2	85-115	0.206	20
Lead	0.0491	0.0005	mg/L	0.0500	98.3	85-115	0.854	20
Manganese	0.0493	0.0005	mg/L	0.0500	98.5	85-115	0.183	20
Molybdenum	0.0495	0.0005	mg/L	0.0500	99.0	85-115	1.70	20
Nickel	0.0490	0.0005	mg/L	0.0500	98.1	85-115	0.518	20
Selenium	0.246	0.0010	mg/L	0.250	98.2	85-115	0.825	20
Zinc	0.0492	0.0020	mg/L	0.0500	98.4	85-115	0.292	20

Green Analytical Laboratories

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

Notes and Definitions

B1	Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: DJR - 2022
Project Name / Number: Enduring N. Alamito No. 7
Project Manager: Trevor Downing

Reported:
05/29/24 16:36

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
B241214-BLK1	Total Dissolved Solids [TDS]	Total Dissolved Solids	B1	Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Veronica J. Wells'.

Veronica Wells, 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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



75 Suttle Street
Durango, CO 81303
(970) 247-4220

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FORM-006, R 8.0

Table of Contents

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

Company or Client: Wright Water Engineers, Inc

Address: 1666 N. Main Ave

City: Durango

State: CO Zip: 81301

Phone #: 970-903-2677

Contact Person: Trevor Downing

Email Report to: tdowning@wrightwater.com

Project Name(optional): Eadorn N. Alvarado No. 7

Sampler Name (Print): Trevor Downing

Bill to (if different):

ANALYSIS REQUEST

P.O. #:

Rush? ..

TAT Needed?

Collected

Matrix (check one)

of containers

Lab I.D.
Lab Use Only

Sample Name or Location

2465-176

01

NAT

Date

Time

GROUNDWATER
SURFACE WATER
WASTEWATER
PRODUCED WATER
DRINKING WATER
SOIL
OTHER:
No preservation
Nitric Acid
Hydrochloric Acid
Sulfuric Acid
Sodium Hydroxide
OTHER:

See Attached

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion of the applicable service. In no event shall GAL be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Relinquished By:

Relinquished By:

Date: 5-13-24

Time: 2:28pm

Date:

Time:

Received By:

Received By:

Date:

Time:

Date: 5/14/24

Time: 1521

Date:

Time:

Temperature at receipt:

Checked by:

On Ice?

Therm. used:

Rush TDS - 3 day

Y

N

10901

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

Project Information

Wright Water Engineering

1666 N Main Ave Suite C
Durango, CO 81301
Laboratory PM: Veronica Wells

Wright Water Engineering

Phone: (970) 259-7411
Fax: -

Project Name: DJR - 2022
Project Number: DJR -2022
Client PM: Trevor Downing
Comments:

Analysis	Comment
200.2 Metals Digest	
Alkalinity, Total	
Aluminum Dissolved by ICP	
Arsenic Dissolved by ICPMS	
Barium Dissolved by ICPMS	
BART - Iron Related Bacteria	
BART - Slyme Forming Bacteria	
BART - Sulfate Reducing Bacteria	
Boron Dissolved by ICP	
Cadmium Dissolved by ICPMS	
Calcium Dissolved by ICP	
Chloride [IC]	
Chromium Dissolved by ICPMS	
Conductivity	
Copper Dissolved by ICPMS	
Fluoride [IC]	
Hardness	
Iron 200.2 by ICP	
Iron Dissolved by ICP	
Lead Dissolved by ICPMS	
Magnesium Dissolved by ICP	
Manganese Dissolved by ICPMS	
Molybdenum Dissolved by ICPMS	
Nickel Dissolved by ICPMS	
pH	
Phosphate as P, Total [LACHAT]	
Potassium Dissolved by ICP	
SAR Package [WATER]	
Selenium Dissolved by ICPMS	
Silica Dissolved by ICP	
Sodium 200.2 by ICP	
Sodium Dissolved by ICP	
Specific Gravity	
Strontium Dissolved by ICP	
Sulfate [IC]	
Total Dissolved Solids [TDS]	
Zinc Dissolved by ICPMS	

Hardness subanalyses:

Calcium 200.2 by ICP
Magnesium 200.2 by ICP

Project Information

(Continued)

Wright Water Engineering

1666 N Main Ave Suite C
Durango, CO 81301
Laboratory PM: Veronica Wells

Wright Engineering

Phone: (970) 259-7411
Fax: -

Project Name: DJR - 2022
Project Number: DJR -2022
Client PM: Trevor Downing
Comments:

Analysis	Comment
----------	---------

SAR Package [WATER] subanalyses:

SAR-Calc

Silica Dissolved by ICP subanalyses:

Silicon Dissolved by ICP



SAMPLE CONDITION RECEIPT FORM

Client Name: Wright Water Engineers, Inc.Work Order # 2405-176Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ OtherCustody Seals on Box/Cooler Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ NoThermometer Used: A2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 13.4 °C Correction Factor: 0 °C Final Temp: 13.4 °C

*Temp should be above freezing to 6°C

Date/Initials of person
examining contents: 5-13-24
CDRLabeled by initials: _____
(if different than above)

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. <u>PH, Barts</u>
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. <u>3 day TDS</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Dissolved Testing Needed:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. <u>Diss</u>
Field Filtered: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes Date/Time/ID		
Matrix:	<u>W</u> <input checked="" type="checkbox"/> SL <input type="checkbox"/> OT	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____

Laboratory Sample ID: 2405-176-01

Start Date: 05/13/2024

Sample Name: NA7

BART Type:

DATE:

05/14/2024	05/15/2024	05/16/2024	05/17/2024	05/18/2024	05/19/2024	05/20/2024	05/21/2024	05/22/2024	05/23/2024
------------	------------	------------	------------	------------	------------	------------	------------	------------	------------

Time Lag (days)	1	2	3	4	5	6	7	8	9	10
Approx. Population	475,000	82,000	140,000	4500	450	75	10	< 2	n/a	n/a
Reaction Code										

(Acid Producing Bacteria)

Time Lag (days)	1	2	3	4	5	6	7	8	9	10
Approx. Population	570,000	140,000	35,000	9000	2200	500	150	25	8	< 1
Reaction Code	A	A	A	A	A	A	A	A	A	A

(Iron Related Bacteria)

Time Lag (days)	1	2	3	4	5	6	7	8	9	10
Approx. Population	1,750,000	440,000	67,000	13,000	2500	500	100	< 20	n/a	n/a
Reaction Code	A	A	A	A	A	A	CL	CL	CL	CL

(Slime Forming Bacteria)

Time Lag (days)	1	2	3	4	5	6	7	8	9	10
Approx. Population	2,200,000	500,000	115,000	27,000	6,000	1400	325	75	20	< 5
Reaction Code	A	A	A	A	A	A	A	A	A	A

(Sulfate Reducing Bacteria)

Aggressivity:	High	Medium	Low
---------------	------	--------	-----

Reaction Code Summary: APB

Purple

ABSENT = A

IRB
FO - Foam
BR - Brown Ring
BG - Brown Gel
BC - Brown Clouds
GC - Green Cloudy
RC - Red Cloudy
CL - Cloudy
BL - Black

SLYM
DS - Dense Slime
SR - Slime Ring
CL - Cloudy
CP - Cloudy Layered Plates
PB - Pale Blue Glowing
BL - Blackened Liquid
TH - Thread Like Strands

SRB
BB - Black Base
BT - Black Ball/Top
BT/BB - Black Top & Base
Cloudy
*n/a - Not Aggressive

+

www.DBI.ca

January 2015

Copyright ©2015, DBI



Complete Water Analysis

Analysis Values

Company:Enduring Resources
Well Name:N ESCAVADA POND 16B
Field:LYBROOK
State:NM
Sample Point:Pond

Sample ID:OD_202408897
Sample Date:12/5/2024
Analysis Date:12/12/2024
Analyst:Sindi Flores
Report Date:12/13/2024

Field Data		Inorganics		Metals	
pH:	7.0	Chlorides (Cl):	<u>mg/L</u> 22516	Sodium (Na):	<u>mg/L</u> 14222
Bicarbonate (HCO ₃):	<u>mg/L</u> 683.2	Sulfates (SO ₄):	420	Magnesium (Mg):	80
Aqueous CO ₂ :	150	Boron (B):	6.6	Potassium (K):	64
Aqueous H ₂ S:	1	Phosphorus (P):	0.1	Calcium (Ca):	273
		Scale Inhibitor Residuals:	<u>ppm</u>	Strontium (Sr):	53
		Phosphorus	0.14	Barium (Ba):	2.41
Measured Specific Gravity:	<u>g/mL</u> 1.03			Iron (Fe):	0.6
Calculated Specific Gravity:	1.0260			Zinc (Zn):	0.01
Total Dissolved Solids:	38352	Cation/Anion%:	2.0%	Manganese (Mn):	2.17
				Lead (Pb):	0.0
				Copper (Cu):	0.1
				Silicon (Si):	No Data

Modeling Data: Scaling Indices

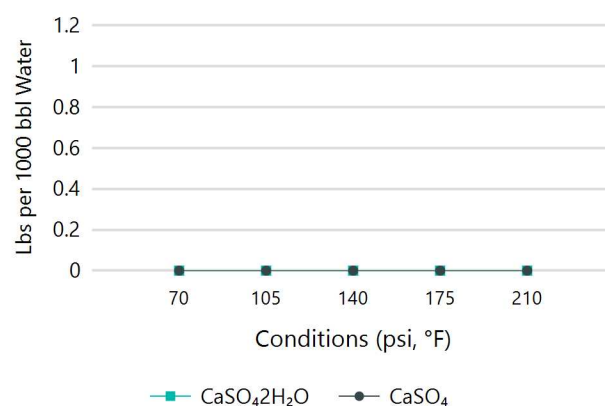
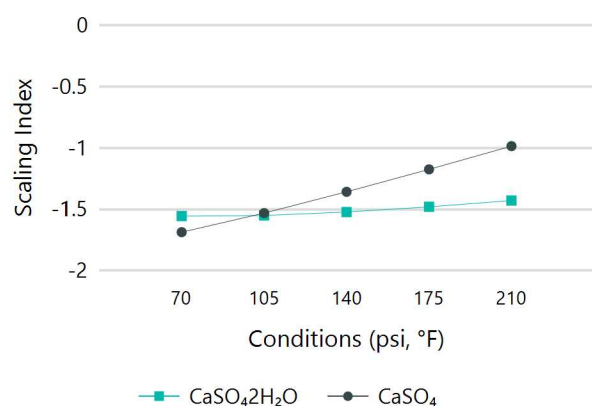
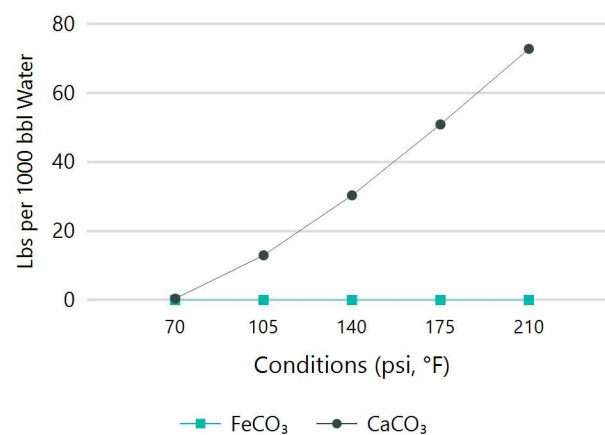
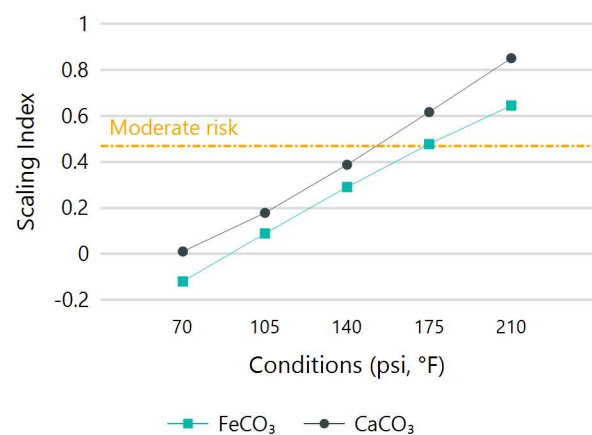
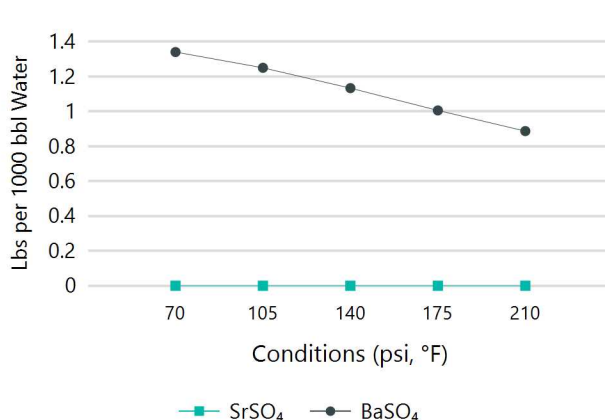
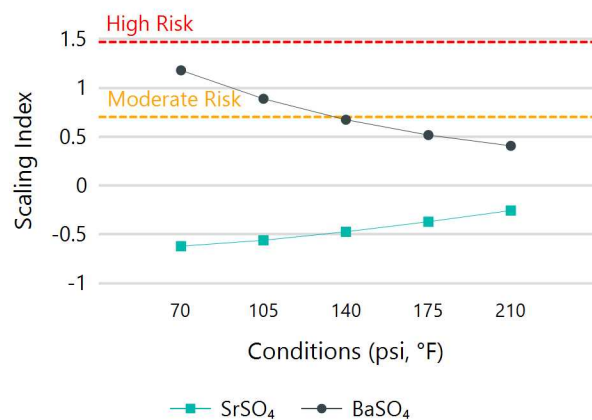
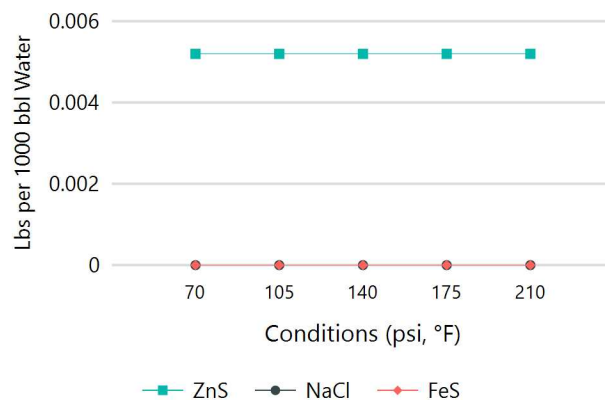
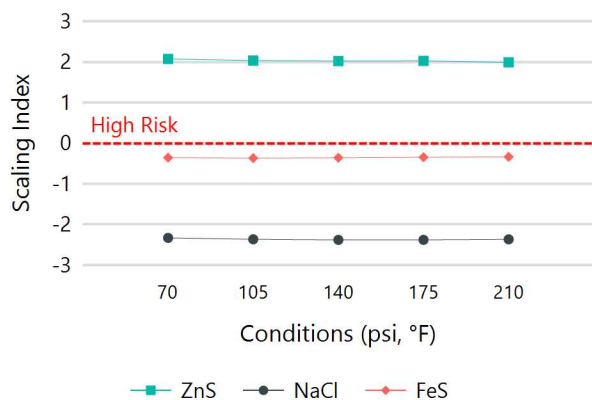
Conditions (psi, °F)	ZnS	SrSO ₄	NaCl	FeS	FeCO ₃	CaSO ₄ 2H ₂ O	CaSO ₄	CaCO ₃	BaSO ₄
515 210	1.99	-0.26	-2.37	-0.33	0.64	-1.43	-0.98	0.85	0.41
390 175	2.03	-0.37	-2.38	-0.34	0.48	-1.48	-1.17	0.62	0.52
265 140	2.02	-0.47	-2.38	-0.36	0.29	-1.52	-1.36	0.39	0.67
140 105	2.04	-0.56	-2.36	-0.36	0.09	-1.55	-1.53	0.18	0.89
15 70	2.08	-0.62	-2.33	-0.35	-0.12	-1.56	-1.69	0.01	1.18

Scaling Index Risk Assessment

Low Risk	<0.00	<0.7	<0.00	<0.00	<0.47	<0.04	<0.04	<0.47	<0.7
Moderate Risk		0.7-1.47			0.47-1.30	>0.08	>0.08	0.47-1.30	0.7-1.47
High Risk	>0.00	>1.47	>0.00	>0.00	>1.30			>1.30	>1.47

Modeling Data: Excess Solute, lbs per 1000 bbls Water Produced

Conditions (psi, °F)	ZnS	SrSO ₄	NaCl	FeS	FeCO ₃	CaSO ₄ 2H ₂ O	CaSO ₄	CaCO ₃	BaSO ₄
515 210	0.0052	0.0000	0.0000		0.0000	0.0000	0.0000	72.7524	0.8872
390 175	0.0052	0.0000	0.0000		0.0000	0.0000	0.0000	50.8592	1.0057
265 140	0.0052	0.0000	0.0000		0.0000	0.0000	0.0000	30.3230	1.1335
140 105	0.0052	0.0000	0.0000		0.0000	0.0000	0.0000	12.9603	1.2502
15 70	0.0052	0.0000	0.0000		0.0000	0.0000	0.0000	0.4103	1.3404





75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax

jeremy.allen@greenanalytical.com

11 March 2025

Trevor Downing
Wright Water Engineering
1666 N Main Ave Suite C
Durango, CO 81301
RE: [none]

Enclosed are the results of analyses for samples received by the laboratory on 10/25/24 14:19. This data replaces the previous report (See case narrative). The data to follow was performed, in whole or in part, by Green Analytical Laboratories. Any data that was performed by a subcontract laboratory is included within the GAL report, or with an additional report attached.

If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen
Laboratory Director

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at

*****greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water. TNI Certificate Number: TX-C25-00012

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8. TNI Certificate Number: TX-C24-00112

Table of Contents

Samples in Report 3

Case Narratives 4

Sample Results 5

2410251-01: VCU WSW 5

2410251-02: NAG WSW 6

Quality Assurance Results 7

Notes and Definitions 9

Qualifier Summary 10

Chain of Custody & Attachments 11



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
VCU WSW	2410251-01	Water	10/25/24 13:00	10/25/24 14:19	
NAG WSW	2410251-02	Water	10/25/24 14:10	10/25/24 14:19	

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

This report has been reissued in order to add pagination to the pdf document. This replaces the previously issued report dated 2410251 GAL_REG Limits_2 FINAL 11 06 24 0940.

Green Analytical Laboratories

A handwritten signature in blue ink, reading 'Jeremy D. Allen', is written over a horizontal line.

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

VCU WSW

2410251-01 (Ground Water)
Sampled Date: 10/25/24 13:00
Sampled By:

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Alkalinity, Total as CaCO ₃ *	310	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Bicarbonate as CaCO ₃ *	310	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Chloride*	595	100	5.55	mg/L	100	11/04/24 16:32	EPA 300.0		AWG
Conductivity*	13500	1.00		umho/cm@25 C	1	10/25/24 15:35	2510 B		HIC
Fluoride*	<10.0	10.0	0.971	mg/L	100	11/04/24 16:32	EPA 300.0		AWG
pH*	7.49			pH Units	1	10/25/24 15:35	EPA 150.1/9040C		HIC
pH Temperature, degrees C	17.9			pH Units	1	10/25/24 15:35	EPA 150.1/9040C		HIC
Sulfate*	6390	100	12.4	mg/L	100	11/04/24 16:32	EPA 300.0		AWG
Total Dissolved Solids*	11500	20.0		mg/L	2	11/01/24 10:39	EPA 160.1/SM 2540C		HIC

Total Recoverable Metals by ICP (E200.7)

Calcium*	146	5.00	1.15	mg/L	10	10/29/24 20:22	EPA 200.7	B2	AES
Hardness as CaCO ₃	410	16.6	4.45	mg/L	10	10/29/24 20:22	2340 B		AES
Iron*	3.68	0.500	0.262	mg/L	10	10/29/24 20:22	EPA 200.7		AES
Magnesium*	11.2	1.00	0.383	mg/L	10	10/29/24 20:22	EPA 200.7		AES
Potassium*	24.6	10.0	1.06	mg/L	10	10/29/24 20:22	EPA 200.7		AES
Sodium*	3490	10.0	2.54	mg/L	10	10/29/24 20:22	EPA 200.7		AES

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

NAG WSW

2410251-02 (Ground Water)

Sampled Date: 10/25/24 14:10

Sampled By:

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
---------	--------	----	-----	-------	----------	----------	--------	-------	---------

General Chemistry

Alkalinity, Total as CaCO ₃ *	197	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Hydroxide as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Carbonate as CaCO ₃ *	<10.0	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Alkalinity, Bicarbonate as CaCO ₃ *	197	10.0	8.00	mg/L	1	10/29/24 13:30	2320 B		HIC
Chloride*	518	100	5.55	mg/L	100	11/04/24 16:52	EPA 300.0		AWG
Conductivity*	11800	1.00		umho/cm@25 C	1	10/25/24 15:35	2510 B		HIC
Fluoride*	11.3	10.0	0.971	mg/L	100	11/04/24 16:52	EPA 300.0		AWG
pH*	7.74			pH Units	1	10/25/24 15:35	EPA 150.1/9040C		HIC
pH Temperature, degrees C	20.5			pH Units	1	10/25/24 15:35	EPA 150.1/9040C		HIC
Sulfate*	5490	100	12.4	mg/L	100	11/04/24 16:52	EPA 300.0		AWG
Total Dissolved Solids*	9920	20.0		mg/L	2	11/01/24 10:43	EPA 160.1/SM 2540C		HIC

Total Recoverable Metals by ICP (E200.7)

Calcium*	134	5.00	1.15	mg/L	10	10/29/24 20:26	EPA 200.7	B2	AES
Hardness as CaCO ₃	359	16.6	4.45	mg/L	10	10/29/24 20:26	2340 B		AES
Iron*	0.556	0.500	0.262	mg/L	10	10/29/24 20:26	EPA 200.7		AES
Magnesium*	6.08	1.00	0.383	mg/L	10	10/29/24 20:26	EPA 200.7		AES
Potassium*	21.0	10.0	1.06	mg/L	10	10/29/24 20:26	EPA 200.7		AES
Sodium*	2960	10.0	2.54	mg/L	10	10/29/24 20:26	EPA 200.7		AES

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B243200 - General Prep - Wet Chem										
Reference (B243200-SRM1)				Prepared & Analyzed: 10/25/24						
pH	7.02		pH Units	7.00		100	98.57-101.42			
Batch B243201 - General Prep - Wet Chem										
Reference (B243201-SRM1)				Prepared & Analyzed: 10/25/24						
Conductivity	991	1.00	umho/cm@25C	1000		99.1	90-110			
Batch B243209 - General Prep - Wet Chem										
Blank (B243209-BLK1)				Prepared & Analyzed: 10/29/24						
Alkalinity, Bicarbonate as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Carbonate as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Hydroxide as CaCO ₃	ND	10.0	mg/L							
Alkalinity, Total as CaCO ₃	ND	10.0	mg/L							
LCS (B243209-BS1)				Prepared & Analyzed: 10/29/24						
Alkalinity, Total as CaCO ₃	108	10.0	mg/L	100		108	85-115			
LCS Dup (B243209-BSD1)				Prepared & Analyzed: 10/29/24						
Alkalinity, Total as CaCO ₃	107	10.0	mg/L	100		107	85-115	0.930	20	
Reference (B243209-SRM1)				Prepared & Analyzed: 10/29/24						
Alkalinity, Total as CaCO ₃	107	10.0	mg/L	100		107	85-115			
Batch B243232 - General Prep - Wet Chem										
Blank (B243232-BLK1)				Prepared & Analyzed: 11/01/24						
Total Dissolved Solids	ND	10.0	mg/L							
Reference (B243232-SRM1)				Prepared & Analyzed: 11/01/24						
Total Dissolved Solids	410	10.0	mg/L	400		102	85-115			
Batch B243240 - IC- Ion Chromatograph										
Blank (B243240-BLK1)				Prepared & Analyzed: 11/04/24						
Chloride	ND	1.00	mg/L							
Fluoride	ND	0.100	mg/L							
Sulfate	ND	1.00	mg/L							
LCS (B243240-BS1)				Prepared & Analyzed: 11/04/24						

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

General Chemistry - Quality Control (Continued)

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

Batch B243240 - IC- Ion Chromatograph (Continued)

LCS (B243240-BS1) (Continued)

Prepared & Analyzed: 11/04/24

Chloride	23.4	1.00	mg/L	25.0		93.5	90-110			
Fluoride	2.39	0.100	mg/L	2.50		95.7	90-110			
Sulfate	23.5	1.00	mg/L	25.0		93.8	90-110			

LCS Dup (B243240-BSD1)

Prepared & Analyzed: 11/04/24

Chloride	24.2	1.00	mg/L	25.0		96.9	90-110	3.58	20	
Fluoride	2.48	0.100	mg/L	2.50		99.2	90-110	3.61	20	
Sulfate	24.3	1.00	mg/L	25.0		97.3	90-110	3.62	20	

Total Recoverable Metals by ICP (E200.7) - Quality Control

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

Batch B243191 - Total Recoverable by ICP

Blank (B243191-BLK1)

Prepared: 10/28/24 Analyzed: 10/29/24

Calcium	ND	0.200	mg/L							B3
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Potassium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							

LCS (B243191-BS1)

Prepared: 10/28/24 Analyzed: 10/29/24

Calcium	1.94	0.200	mg/L	2.00		96.9	85-115			B3
Iron	1.89	0.050	mg/L	2.00		94.6	85-115			
Magnesium	9.57	0.100	mg/L	10.0		95.7	85-115			
Potassium	3.72	1.00	mg/L	4.00		93.1	85-115			
Sodium	1.46	1.00	mg/L	1.62		90.1	85-115			

LCS Dup (B243191-BSD1)

Prepared: 10/28/24 Analyzed: 10/29/24

Calcium	1.94	0.200	mg/L	2.00		96.8	85-115	0.0771	20	B3
Iron	1.96	0.050	mg/L	2.00		97.9	85-115	3.45	20	
Magnesium	9.85	0.100	mg/L	10.0		98.5	85-115	2.90	20	
Potassium	3.82	1.00	mg/L	4.00		95.6	85-115	2.64	20	
Sodium	1.50	1.00	mg/L	1.62		92.6	85-115	2.68	20	

Green Analytical Laboratories

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

Notes and Definitions

B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.
B2	Target analyte detected in continuing calibration blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the blank or less than the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



Wright Water Engineering
1666 N Main Ave Suite C
Durango CO, 81301

Project: Package 1
Project Name / Number: [none]
Project Manager: Trevor Downing

Reported:
03/11/25 15:46

Qualifier Summary

<u>LabNumber</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>TextBody</u>
2410251-01	Calcium 200.2 by ICP	Calcium	B2	Target analyte detected in continuing calibration blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the blank or less than the reporting limit.
2410251-02	Calcium 200.2 by ICP	Calcium	B2	Target analyte detected in continuing calibration blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the blank or less than the reporting limit.
B243191-BLK1	Calcium 200.2 by ICP	Calcium	B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.
B243191-BS1	Calcium 200.2 by ICP	Calcium	B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.
B243191-BSD1	Calcium 200.2 by ICP	Calcium	B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.

Green Analytical Laboratories

A handwritten signature in blue ink that reads 'Jeremy D. Allen'.

Jeremy D Allen, Laboratory Director

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. In no event shall Green Analytical Laboratories be liable for incidental or consequential damages. GALs liability, and clients exclusive remedy for any claim arising, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received within thirty days after completion of the applicable service.



75 Suttle Street
Durango, CO 81303
(970) 247-4220

Company or Client: Wright Water Engineers, Inc.

Address: 1666 N. Main Ave., Suite C

City: Durango State: CO Zip: 81301

Phone #: 970-259-7411

Contact Person: Trevor Downing

Email Report to: t.downing@wrightwater.com

Project Name(optional):

Note: Write-Out™ or similar products cannot be used on the Chain of Custody

Bill to (if different):

ANALYSIS REQUEST

Sampler Name (Print): Trevor Downing

Sample Name or Location

Lab I.D.
Lab Use Only

2410-251

01 VCU WSW

02 NAG WSW

Collected

Date

Time

10-25-24 1:00pm

10-25-24 2:10

Matrix (check one)

GROUNDWATER

SURFACE WATER

WASTEWATER

PRODUCED WATER

DRINKING WATER

SOIL

OTHER:

of containers

No preservation

Nitric Acid

Hydrochloric Acid

Sulfuric Acid

Sodium Hydroxide

OTHER:

TAT Needed?

Y N

P.O. #:

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion of the applicable service. In no event shall GAL be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: 10-25-24

Received By:

Date: 10-25-24

Time: 1419

Relinquished By:

Date:

Received By:

Date:

Relinquished By:

Date:

Received By:

Date:

Temperature at receipt:

8.9°C

Checked by:

mpd

On Ice?

Y N

Therm. used:

laser 2

* GAL cannot accept verbal changes. Please email changes to receiving@greenanalytical.com

* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.



SAMPLE CONDITION RECEIPT FORM

Client Name: Wright Water EngineersWork Order # 2410-251Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Kangaroo ☐ Third Party ☐ OtherCustody Seals on Box/Cooler Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ NoThermometer Used: #2 Samples on ice, cooling process has begun: ☒ Yes ☐ NoType of Ice: ☒ Wet ☐ Blue ☐ NoneCooler Temp: Observed Temp: 8.9 °C Correction Factor: 0 °C Final Temp: 8.9 °C

*Temp should be above freezing to 6°C

Date/Initials of person
examining contents: WPEW
10-25-24Labeled by initials: _____
(if different than above)

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Samples arrived within hold time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. <u>pH</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Dissolved Testing Needed:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11.
Field Filtered: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Labels match COC: -Includes Date/Time/ID	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
Matrix:	<u>W</u> <u>SL</u> <u>OT</u>	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Client Notification/Resolution:

Person Contacted: _____

Date/Time: _____


Comments/Resolution: _____



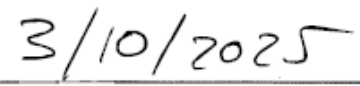
Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

XII. Affirmative Statement of Geologic and Engineering Data

Enduring Resources, LLC is not aware of any geologic or engineering data that may indicate the Entrada Sandstone formation is in hydrological connection with any freshwater sources. No faults have been detected in the area of review or other nearby wellbores. The effectiveness of the main sealing formations stratigraphically isolate hydrocarbon producing and water free formations throughout the Upper Cretaceous geologic section. Entrada water does not reach the shallower Tertiary formations.



Raffaello Sacerdoti



Date



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

XIII. Proof of Notice

All surface owners and offset operators within a two-mile radius were sent notification of the proposed underground injection site. In addition, general public notification was given through advertisement in a local newspaper.



ENDURING RESOURCES, LLC
200 Energy Court, Farmington, New Mexico 87401
Telephone: (505) 636-9720

March 13, 2025

Via Certified Mail (Article 7015 1660 0000 1539 8332)

Dugan Production Corporation
709 East Murray Drive
Farmington, New Mexico 87401

Re: Notice of Application: Authorization to Inject
South Escavada Unit SWD #001
Sandoval County, New Mexico

Ladies and Gentlemen:

The purpose of this communication is to provide notice that Enduring Resources, LLC is making an application for administrative approval to dispose of produced water by means of underground injection. The proposed produced water disposal site is known as the South Escavada Unit SWD #001. Located in the SE/4 of Sec. 27-T22N-R7W at 36.108398°N, -107.555480°W in Sandoval County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada Sandstone formation between the depths of 6579' to 6809' below ground level.

Pursuant to Section 19.15.26 NMAC notice requirement associated with this application, any interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days of the date of this letter.


Enclosed is a copy of the completed C-108 application to be filed with the NMOCD. Please do not hesitate to contact me at (505) 716-3297 or sford@enduringresources.com if you have any questions.

Regards,

Shaw-Marie Ford
Shaw-Marie (Shaw) Ford
Enduring Resources

Encls.

170463

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none">Complete items 1, 2, and 3.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.		<p>A. Signature</p> <p>X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
<p>Dugan Production Corporation Attn: Regulatory Dept. 709 E. Murray Dr. Farmington, NM 87401</p>			
 9590 9401 0117 5225 0458 34			
2. Article Number (Transfer from service label)		3. Service Type	
		<div><input type="checkbox"/> Adult Signature</div> <div><input type="checkbox"/> Adult Signature Restricted Delivery</div> <div><input type="checkbox"/> Certified Mail®</div> <div><input type="checkbox"/> Certified Mail Restricted Delivery</div> <div><input type="checkbox"/> Collect on Delivery</div> <div><input type="checkbox"/> Collect on Delivery Restricted Delivery</div> <div><input type="checkbox"/> Insured Mail</div> <div><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</div> <div><input type="checkbox"/> Priority Mail Express®</div> <div><input type="checkbox"/> Registered Mail™</div> <div><input type="checkbox"/> Registered Mail Restricted Delivery</div> <div><input type="checkbox"/> Return Receipt for Merchandise</div> <div><input type="checkbox"/> Signature Confirmation™</div> <div><input type="checkbox"/> Signature Confirmation Restricted Delivery</div>	

7015 1660 0000 1539 8332

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

CERTIFIED MAIL®



7015 1660 0000 1539 8332

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
OFFICIAL USE	
Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage	\$
Sent To	
Street and Apt	
City, State, Z	
Dugan Production Corporation Attn: Regulatory Dept. 709 E. Murray Dr. Farmington, NM 87401	
PS Form 3800, April 2015 PSN 7530-02-000-9047. See Reverse for Instructions	



ENDURING RESOURCES, LLC
200 Energy Court, Farmington, New Mexico 87401
Telephone: (505) 636-9720

March 13, 2025

Via Certified Mail (Article 7015 1660 0000 1539 8325)

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, New Mexico 87508

Re: Notice of Application: Authorization to Inject
South Escavada Unit SWD #001
Sandoval County, New Mexico

Ladies and Gentlemen:

The purpose of this communication is to provide notice that Enduring Resources, LLC is making an application for administrative approval to dispose of produced water by means of underground injection. The proposed produced water disposal site is known as the South Escavada Unit SWD #001. Located in the SE/4 of Sec. 27-T22N-R7W at 36.108398°N, -107.555480°W in Sandoval County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada Sandstone formation between the depths of 6579' to 6809' below ground level.

Pursuant to Section 19.15.26 NMAC notice requirement associated with this application, any interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days of the date of this letter.

Enclosed is a copy of the completed C-108 application to be filed with the NMOCD. Please do not hesitate to contact me at (505) 716-3297 or sford@enduringresources.com if you have any questions.

Regards,

Shaw-Marie Ford
Shaw-Marie (Shaw) Ford
Enduring Resources

Encls.

1704544

SENDER: COMPLETE THIS SECTION

COMPLETE THIS SECTION ON DELIVERY

■ Complete items 1, 2, and 3.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508

2. Article Number (Transfer from service label)

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

A. Signature
X

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over \$500)

☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

9590 9401 0117 5225 0458 41

7015 1660 0000 1539 8325

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

CERTIFIED MAIL®

7015 1660 0000 1539 8325

7015 1660 0000 1539 8325

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
\$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage
\$

Total Po
\$

Sent To
Street or
City, State

Bureau of Land Management
301 Dinosaur Trail
Santa Fe, NM 87508

Postmark
Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



ENDURING RESOURCES, LLC
200 Energy Court, Farmington, New Mexico 87401
Telephone: (505) 636-9720

March 13, 2025

Via Certified Mail (Article 7015 1660 0000 1539 8318)

Bureau of Land Management & Bureau of Indian Affairs
6251 College Boulevard, Suite A
Farmington, New Mexico 87402

Re: Notice of Application: Authorization to Inject
South Escavada Unit SWD #001
Sandoval County, New Mexico

Ladies and Gentlemen:

The purpose of this communication is to provide notice that Enduring Resources, LLC is making an application for administrative approval to dispose of produced water by means of underground injection. The proposed produced water disposal site is known as the South Escavada Unit SWD #001. Located in the SE/4 of Sec. 27-T22N-R7W at 36.108398°N, -107.555480°W in Sandoval County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada Sandstone formation between the depths of 6579' to 6809' below ground level.

Pursuant to Section 19.15.26 NMAC notice requirement associated with this application, any interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days of the date of this letter.

Enclosed is a copy of the completed C-108 application to be filed with the NMOCD. Please do not hesitate to contact me at (505) 716-3297 or sford@enduringresources.com if you have any questions.

Regards,

Shaw-Marie Ford
Shaw-Marie (Shaw) Ford
Enduring Resources

Encls.

Domestic Return Receipt

7075 1660 0000 1539 8318
7075 1660 0000 1539 8318

See Reverse for Instructions



ENDURING RESOURCES, LLC
200 Energy Court, Farmington, New Mexico 87401
Telephone: (505) 636-9720

March 13, 2025

Via Certified Mail (Article 7015 1660 0000 1539 8301)

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Notice of Application: Authorization to Inject
South Escavada Unit SWD #001
Sandoval County, New Mexico

Ladies and Gentlemen:

The purpose of this communication is to provide notice that Enduring Resources, LLC is making an application for administrative approval to dispose of produced water by means of underground injection. The proposed produced water disposal site is known as the South Escavada Unit SWD #001. Located in the SE/4 of Sec. 27-T22N-R7W at 36.108398°N, -107.555480°W in Sandoval County, New Mexico. Disposal water will be sourced from area production and will be injected into the Entrada Sandstone formation between the depths of 6579' to 6809' below ground level.

Pursuant to Section 19.15.26 NMAC notice requirement associated with this application, any interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days of the date of this letter.

Enclosed is a copy of the completed C-108 application to be filed with the NMOCD. Please do not hesitate to contact me at (505) 716-3297 or sford@enduringresources.com if you have any questions.

Regards,

Shaw-Marie Ford
Shaw-Marie (Shaw) Ford
Enduring Resources

Encls.

170436

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

NM State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501



9590 9401 0117 5225 0458 65

2. Article Number (Transfer from service label)

A. Signature

X

☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☒ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over \$500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

7015 1660 0000 1539 8301

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

CERTIFIED MAIL®



7015 1660 0000 1539 8301

7015 1660 0000 1539 8301

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$
- ☐ Return Receipt (electronic) \$
- ☐ Certified Mail Restricted Delivery \$
- ☐ Adult Signature Required \$
- ☐ Adult Signature Restricted Delivery \$

Postage

\$

Total P

\$

Sent To

Street a

City, St

City, St

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

NM State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501

Postmark
Here

Affidavit of Publication

STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO }

Ad Cost: \$67.32
Ad Number: 185990
Account Number: 1112620
Classification: NON-GOVERNMENT LEGALS

I, Bernadette Gonzales, the undersigned, Legal Representative of the Albuquerque Journal, on oath, state that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, chapter 167, Session Laws of 1937, and payment of fees has been made of assessed and a copy of which is hereto attached, was published in said publication in the daily edition, 1 times(s) on the following date(s):

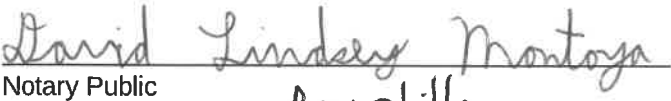
February 20, 2025

That said newspaper was regularly issued and circulated on those dates.

SIGNED:


Legal Representative

Subscribed to and sworn to me this 20th day of February 2025.


Notary Public

County Bernalillo

ID#: 1140229

My commission expires: 04-26-2027

Shaw-Marie Ford, Regulatory Specialist at Enduring Resources, LLC located at 200 Energy Court, Farmington, NM is making an application for administrative approval to dispose of produced water by underground injection. The proposed produced water disposal site is known as the S. Escavada Unit SWD #001. Located in Sandoval County at 36.108398°N -107.555480°W in Sec. 27-T22N-R7W. Disposal water will be sourced from area production and will be injected into the Entrada Sandstone formation between the depths of 6,579' to 6,809' below ground level. Average injection rate will be 8,000 Bbls/day with a maximum of 20,000 Bbls/day. Average injection pressure will be 800 psi with a maximum injection pressure of 1,385 psi. Any interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days of the date of this publication.

Journal: February 20, 2025

STATE OF NEW MEXICO
NOTARY PUBLIC
DAVID LINDSEY MONTOY,
COMMISSION NUMBER 114C
EXPIRATION DATE 04-26-20

Enduring Resources, LLC
200 Energy Court
Farmington, NM 87401



Application For Authorization to Inject
Enduring Resources, LLC
S. Escavada Unit SWD #001

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my and belief.

Shaw-Marie Ford

Shaw-Marie Ford
Regulatory Specialist
Enduring Resources, LLC
M: (505) 716-3297
E: sford@enduringresources.com

3/13/2025
Date

S.Ford 3/13/2025

AE Order Number Banner

Application Number: pEG2512759876

SWD-2652

ENDURING RESOURCES, LLC [372286]

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 443077

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 443077
	Action Type: [C-108] Fluid Injection Well (C-108)

CONDITIONS

Created By	Condition	Condition Date
erica.gordan	None	5/7/2025