

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-147
Revised April 3, 2017

Recycling Facility and/or Recycling Containment

Type of Facility: ☒ Recycling Facility

☒ Recycling Containment*

Type of action: ☐ Permit
☐ Modification
☐ Closure

☐ Registration
☐ Extension
☒ Other (explain) Completed liner repair/recommencement
of incremental fill testing

* At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: Enduring Resources IV, LLC (For multiple operators attach page with information) OGRID #: 372286

Address: 200 Energy Court, Farmington, New Mexico 87401

Facility or well name (include API# if associated with a well): SEU 2206-20M Water Recycle Facility/Containment

OCD Permit Number: #3RF-30 (For new facilities the permit number will be assigned by the district office)

U/L or Qtr/Qtr SE/4 SE/4 Section 20 Township 22N Range 6W County: Sandoval

Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Recycling Facility:**

Location of recycling facility (if applicable): Latitude 36.11776 Longitude 107.488825 NAD83

Proposed Use: ☒ Drilling* ☒ Completion* ☒ Production* ☒ Plugging *

**The re-use of produced water may NOT be used until fresh water zones are cased and cemented*

☐ Other, *requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.*

☒ Fluid Storage

☒ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type _____

☐ Activity permitted under 19.15.36 NMAC explain type: _____ ☐ Other explain _____

☐ For multiple or additional recycling containments, attach design and location information of each containment

☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: _____

3.

☒ **Recycling Containment:**

☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)

Center of Recycling Containment (if applicable): Latitude 36.11776 Longitude 107.488825 NAD83

☒ For multiple or additional recycling containments, attach design and location information of each containment

☒ Lined ☐ Liner type: **Primary** Thickness 45 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

☒ String-Reinforced

Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: 212,746 bbl Dimensions: L 363' x W 350' x D 25'

☐ Recycling Containment Closure Completion Date: _____

4.

Bonding:

- ☒ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☐ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ _____ (work on these facilities cannot commence until bonding amounts are approved)
- ☐ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

Fencing:

- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify 8 foot chain link fence

6.

Signs:

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

- ☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

If a Variance is requested, it must be approved prior to implementation.

8.

Siting Criteria for Recycling Containment

Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

General siting**Ground water is less than 50 feet below the bottom of the Recycling Containment.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

☐ Yes ☒ No
☐ NA

- Written confirmation or verification from the municipality; written approval obtained from the municipality

Within the area overlying a subsurface mine.

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division

Within an unstable area.

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map

Within a 100-year floodplain. FEMA map

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

☐ Yes ☒ No

- Topographic map; visual inspection (certification) of the proposed site

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

- Visual inspection (certification) of the proposed site; aerial photo; satellite image

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

Within 500 feet of a wetland.

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

9.

Recycling Facility and/or Containment Checklist:**Instructions:** Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☐ Design Plan - based upon the appropriate requirements.
☐ Operating and Maintenance Plan - based upon the appropriate requirements.
☐ Closure Plan - based upon the appropriate requirements.
☐ Site Specific Groundwater Data -
☐ Siting Criteria Compliance Demonstrations -
☐ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

Operator Application Certification:

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Heather Huntington Title: Permitting TechnicianSignature: Heather Huntington Date: 11/18/24e-mail address: hhuntingotn@enduringresources.com Telephone: 505-636-9751

11.

OCD Representative Signature: Victoria Venegas Approval Date: 11/19/2024Title: Environmental Specialist OCD Permit Number: 3RF-30☒ OCD Conditions☒ Additional OCD Conditions on Attachment

Enduring Resources identified the location of the liner leak and repaired the liner on the 3RF-30 - SEU 2206 - 20M FACILITY ID [fVF1828850052] on 11/10/24. A sample analysis and the incremental fill test record from the leak discovery on 11/4/24 are attached.

Enduring Resources would like to request permission to begin the incremental fill test process as the liner has been repaired.

3RF-30 - SEU 2206 - 20M FACILITY ID [fVF1828850052]

SEU POND LEAK TEST

	LEVEL	VOLUME	24 LEAK TEST
START	5'8"	24,000	30 seconds
10%	8'2"	37,300	30 seconds
20%	10'2"	50,600	1hr
30%	12'2"	63,900	
40%	13'11"	77,200	
50%	15'6"	90,500	
60%	17'1"	103,800	
70%	18'6"	117,100	
80%	19'10"	130,400	
90%	21'2"	143,700	
100%	23'	157,000	

Operations halted and prep from drain.



Complete Water Analysis

Analysis Values

Company:Enduring Resources
Well Name:SEU POND
Field:San Juan
State:NM
Sample Point:Pond

Sample ID:OD_202407825
Sample Date:11/4/2024
Analysis Date:11/13/2024
Analyst:Emily Nguyen
Report Date:11/14/2024

Field Data		Inorganics		Metals	
pH:	7.0	Chlorides (Cl):	<u>mg/L</u> 14516	Sodium (Na):	<u>mg/L</u> 10599
Bicarbonate (HCO ₃):	<u>mg/L</u> 646.6	Sulfates (SO ₄):	4400	Magnesium (Mg):	45
Aqueous CO ₂ :	60	Boron (B):	6.6	Potassium (K):	51
Aqueous H ₂ S:	1	Phosphorus (P):	0.5	Calcium (Ca):	111
		Scale Inhibitor Residuals:	<u>ppm</u>	Strontium (Sr):	22
Measured Specific Gravity:	<u>g/mL</u> 1.02	Phosphorus	0.45	Barium (Ba):	0.00
Calculated Specific Gravity:	1.0209			Iron (Fe):	0.0
Total Dissolved Solids:	30427	Cation/Anion%:	8.0%	Zinc (Zn):	0.00
				Manganese (Mn):	0.15
				Lead (Pb):	0.0
				Copper (Cu):	0.0
				Silicon (Si):	No Data

Modeling Data: Scaling Indices

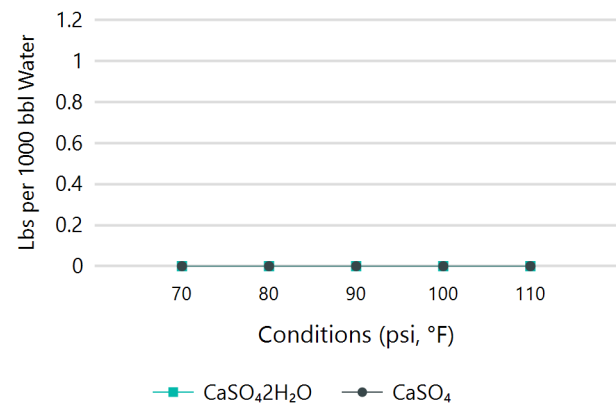
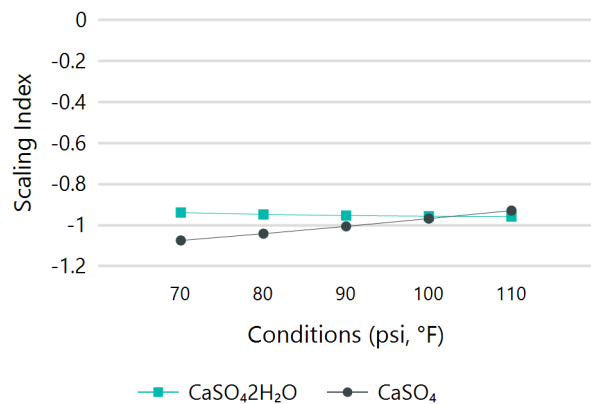
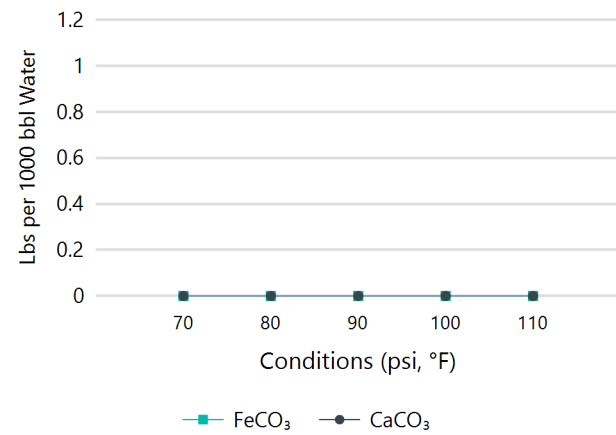
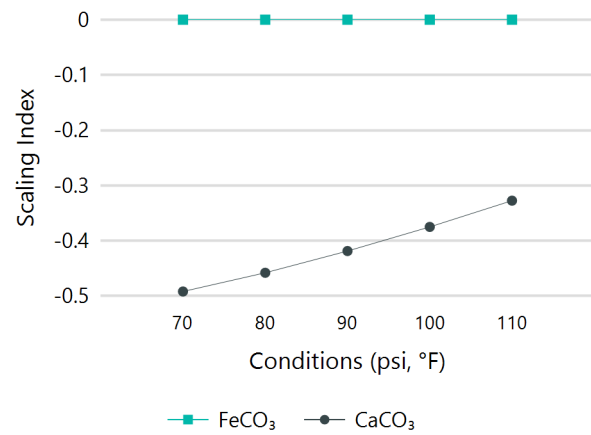
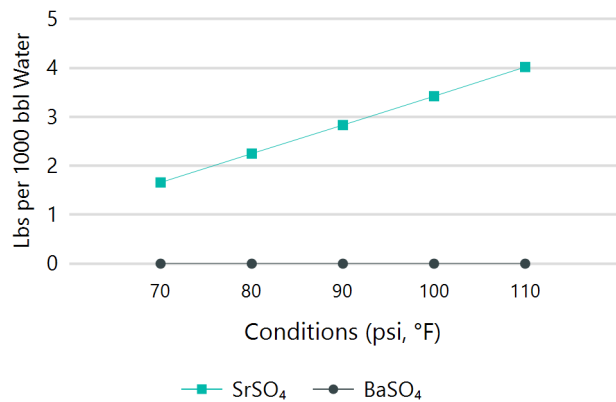
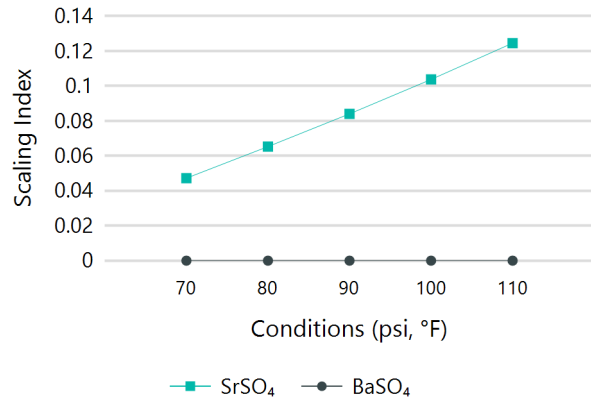
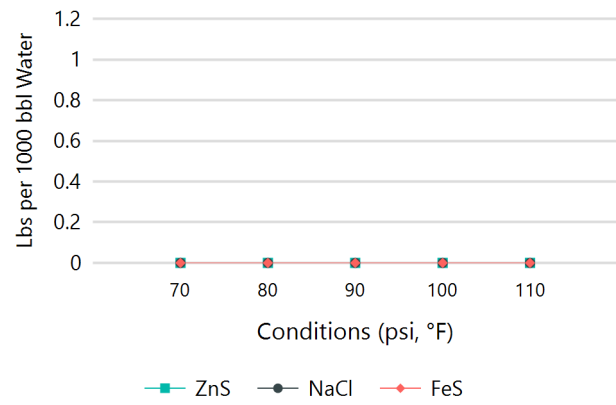
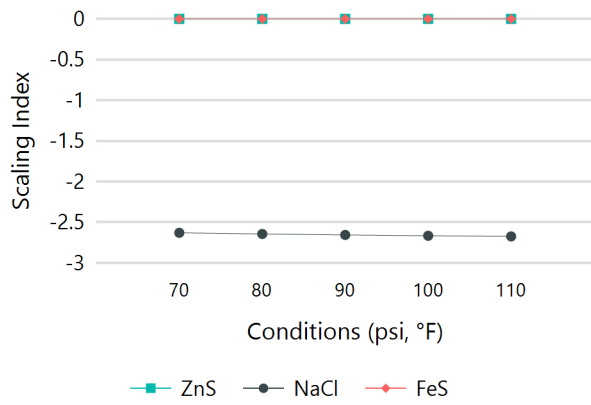
Conditions (psi, °F)	ZnS	SrSO ₄	NaCl	FeS	FeCO ₃	CaSO ₄ 2H ₂ O	CaSO ₄	CaCO ₃	BaSO ₄
515 110	0.00	0.12	-2.67	0.00	0.00	-0.96	-0.93	-0.33	0.00
390 100	0.00	0.10	-2.67	0.00	0.00	-0.96	-0.97	-0.37	0.00
265 90	0.00	0.08	-2.66	0.00	0.00	-0.95	-1.01	-0.42	0.00
140 80	0.00	0.07	-2.64	0.00	0.00	-0.95	-1.04	-0.46	0.00
15 70	0.00	0.05	-2.63	0.00	0.00	-0.94	-1.07	-0.49	0.00

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
515 110	0.0000	4.0190	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
390 100	0.0000	3.4224	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
265 90	0.0000	2.8334	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
140 80	0.0000	2.2496	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
15 70	0.0000	1.6587	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000



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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/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 404415

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 404415
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
venegas	This application and Form C-147 are approved. Thank you for your cooperation.	11/19/2024