

<b>FORM</b> 6 Rev 11/20	<b>State of Colorado</b> <b>Energy &amp; Carbon Management Commission</b> 1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109				DE	ET	OE	ES
	<b>WELL ABANDONMENT REPORT</b>				Document Number:  403493690  Date Received:  08/10/2023			

This form is to be submitted as an Intent to Abandon whenever an abandonment is planned on a borehole. After the abandonment is complete, this form shall again be submitted as a Subsequent Report of the actual work completed. The approved intent shall be valid for six months after the approval date, after that period, a new intent will be required. Attachments required with the Intent to Abandon are wellbore diagrams of the current configuration and the proposed configuration with plugs set. A Subsequent Report of Abandonment shall indicate the actual work completed. Attachments required with a Subsequent Report are a wellbore diagram showing plugs that were set and casing remaining in the hole, the job summaries from all plugging contractors used, including wireline and cementing (third party verification) and any logs that may have been run during abandonment.

OGCC Operator Number: 95620	Contact Name: Steve James
Name of Operator: WESTERN OPERATING COMPANY	Phone: (303) 726-8650
Address: 1165 DELAWARE STREET #200	Fax:
City: DENVER State: CO Zip: 80204	Email: steve@westernoperating.com
For "Intent" 24 hour notice required, Name: Schure, Kym Tel: (970) 520-3832 COGCC contact: Email: kym.schure@state.co.us	

Type of Well Abandonment Report: 
 ☒ Notice of Intent to Abandon 
 ☐ Subsequent Report of Abandonment

API Number 05-075-08097-00	
Well Name: EMERALD	Well Number: 6-34
Location: QtrQtr: NWNE Section: 34 Township: 9N Range: 54W Meridian: 6	
County: LOGAN	Federal, Indian or State Lease Number:
Field Name: EMERALD	Field Number: 20750

*Only Complete the Following Background Information for Intent to Abandon*

Latitude: 40.715480 Longitude: -103.390850

GPS Data: GPS Quality Value: 6.0 Type of GPS Quality Value: Date of Measurement: 03/21/2006

Reason for Abandonment: 
 ☐ Dry 
 ☐ Production Sub-economic 
 ☐ Mechanical Problems  
☒ Other Reducing well count

Casing to be pulled: ☐ Yes ☒ No Estimated Depth:

Fish in Hole: ☐ Yes ☒ No If yes, explain details below

Wellbore has Uncemented Casing leaks: ☐ Yes ☒ No If yes, explain details below

Details:

**Current and Previously Abandoned Zones**

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
J SAND	5242	5247			

Total: 1 zone(s)

**Casing History**

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top	Status
SURF	12+1/4	8+5/8	NA	24	0	98	70	98	0	VISU
1ST	7+7/8	5+1/2	NA	14	0	5329	185	5329	4100	CALC



## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 5192 with 3 sacks cmt on top. CIBP #2: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.  
CIBP #3: Depth 5067 with 3 sacks cmt on top. CIBP #4: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.  
CIBP #5: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.

NOTE: Two(2) sacks cement required on all CIBPs.

Set 12 sks cmt from 2100 ft. to 2000 ft. Plug Type: CASING Plug Tagged: ☒  
Set 12 sks cmt from 800 ft. to 700 ft. Plug Type: CASING Plug Tagged: ☒  
Set 35 sks cmt from 300 ft. to 0 ft. Plug Type: CASING Plug Tagged: ☒  
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged: ☐  
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged: ☐

Perforate and squeeze at 2100 ft. with 30 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

Perforate and squeeze at 800 ft. with 30 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

Perforate and squeeze at 300 ft. with 45 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

(Cast Iron Cement Retainer Depth)

Set \_\_\_\_\_ sacks half in. half out surface casing from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Tagged: ☐

Set \_\_\_\_\_ sacks at surface

Cut four feet below ground level, weld on plate Above Ground Dry-Hole Marker: ☐ Yes ☐ No

Set \_\_\_\_\_ sacks in rat hole Set \_\_\_\_\_ sacks in mouse hole

### Additional Plugging Information for Subsequent Report Only

Casing Recovered: \_\_\_\_\_ ft. of \_\_\_\_\_ inch casing

Surface Plug Setting Date: \_\_\_\_\_ Cut and Cap Date: \_\_\_\_\_ Number of Days from Setting Surface Plug to Capping or Sealing the Well: \_\_\_\_\_

\*Wireline Contractor: \_\_\_\_\_

\*Cementing Contractor: \_\_\_\_\_

Type of Cement and Additives Used: \_\_\_\_\_

Flowline/Pipeline has been abandoned per Rule 1105 ☐ Yes ☐ No

Technical Detail/Comments:

The wellhead does not exist within any CPW buffers

Initial Form 27 work plan and related flowline Form 42/44 documentation will be completed by Entrada Consulting Group prior to commencing P&A and facility closure environmental sampling.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Ben Baugh

Title: Senior Geologist Date: 8/10/2023 Email: bbaugh@entradainc.com

Based on the information provided herein, this Well Abandonment Report (Form 6) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Wolfe, Stephen Date: 8/15/2023

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

Expiration Date: 2/14/2024



COA Type	Description
	<p>Bradenhead Testing</p> <p>Prior to starting plugging operations a bradenhead test shall be performed if there has not been a reported bradenhead test within the 60 days immediately preceding the start of plugging operations.</p> <p>1) If, before opening the bradenhead valve, the beginning pressure is greater than 25 psi, sampling is required.</p> <p>2) If pressure remains at the conclusion of the test, or if any liquids were present during the test, sampling is required.</p> <p>The Form 17 shall be submitted within 10 days of the test. Sampling shall comply with Operator Guidance - Bradenhead Testing and Reporting Instructions. If samples are collected, copies of all final laboratory analytical results shall be provided to the COGCC within three (3) months of collecting the samples.</p> <p>If there is a need for sampling, contact COGCC engineering for verification of plugging procedure.</p>
	<p>Consistent with Rule 911.a, a Form 27 must be approved prior to cut and cap, conducting flowline abandonment, or removing production equipment. Allow 30 days for Director review of the Form 27; include the Form 27 document number on the Form 44 for offsite flowline abandonment (if applicable) and on the Form 6 Subsequent.</p>
	<p>Properly abandon flowlines per Rule 1105. If flowlines will be abandoned in place, include with the Form 27: pressure test results conducted in the prior 12 months as well as identification of any document numbers for a COGCC Spill/Release Report, Form 19, associated with the abandoned line.</p>
	<p>Plugging</p> <p>1) Provide electronic Form 42 Notice of MIRU 2 business days ahead of operations and electronic Form 42 Notice of Plugging Operations 48 hours prior to mobilizing for plugging operations.</p> <p>2) Plugs and squeezes will be placed as stated in the Plugging Procedure section of the approved NOIA unless revised by COA or prior approval from COGCC is obtained.</p> <p>3) The wellbore must be static prior to placing cement plugs which are to be a minimum of 100' in length for all but surface plugs. Mechanical isolation requires a 25' cement plug, minimum. For plugs not specified to be tagged, a tag is required if circulation is not maintained while pumping plug and displacing to depth. Tag at tops specified or shallower. Notify COGCC Area Engineer before adding cement to previous plug.</p> <p>4) Place a 50' plug (minimum) at the surface, both inside the inner most casing and in all annular spaces. Surface plugs shall be circulated to surface. Confirm cement to surface in all strings during cut and cap.</p> <p>5) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed.</p> <p>6) Operator must wait a sufficient time on all plugs to achieve the intended design. If at any time during the plugging there is evidence of previously unreported pressure or fluid migration, contact COGCC Area Engineer before continuing operations.</p> <p>7) Plugging procedure has been modified as follows,</p> <p>Plug #1 - 5192', CIBP with 3 sx of cement (see Plug #2 for note on cement).</p> <p>Plug #2 - 5067', CIBP with 3 sx of cement. NOTE: Plug #2 can be replaced with 30 sx of cement on top of Plug #1.</p> <p>Plug #3 - 2100', perf and squeeze 30 sx into the perfs, spot 12 sx in the casing (100'). WOC and tag if CICR is not used.</p> <p>Plug #4 - 800', perf and squeeze 30 sx into the perfs, spot 12 sx in the casing (100'). WOC and tag if CICR is not used. Plugs #4 and #5 can be combined if circulation can be established and cement is circulated to the surface.</p> <p>Plug #5 - 300', perf and circulate 80 sx of cement to surface. If perfs will take fluid but do not circulate or circulation is lost, pump a minimum of 50 sx and WOC and tag at 48' or shallower. Notify COGCC Area Engineer of insufficient cement prior to pumping additional plugs.</p> <p>Plug #6 - 50' of cement at the surface in both the casing and the annulus per COA #4.</p>
4 COAs	



### Attachment List

<u>Att Doc Num</u>	<u>Name</u>
403493690	WELL ABANDONMENT REPORT (INTENT)
403493696	WELLBORE DIAGRAM
403497996	FORM 6 INTENT SUBMITTED

Total Attach: 3 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Groundwater=Alluvium, Upper Pierre Deepest water well=709'(2mi, 12 records) Logs=075-06085 2/25/52 GR 4318 Pierre shale at the shoe, UP 196-1041'	08/15/2023
OGLA	OGLA Review completed.	08/15/2023
Permit	Confirmed as-drilled well location. No other forms in process. Production reporting up-to-date for this operator. Confirmed productive intervals docnum: 271009. Reviewed WBD. Pass.	08/14/2023

Total: 3 comment(s)