

**WELL ABANDONMENT REPORT**

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.

Document Number:  
 402834163  
 Date Received:  
 10/12/2021

OGCC Operator Number: 96155 Contact Name: Andrew Fish  
 Name of Operator: WHITING OIL & GAS CORPORATION Phone: (303) 357-4021  
 Address: 1700 LINCOLN STREET SUITE 4700 Fax: \_\_\_\_\_  
 City: DENVER State: CO Zip: 80290 Email: andrew.fish@whiting.com

**For "Intent" 24 hour notice required,** Name: Longworth, Mike Tel: (970) 812-7644  
**COGCC contact:** Email: michael.longworth@state.co.us

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

API Number 05-103-06014-00  
 Well Name: EMERALD Well Number: 129  
 Location: QtrQtr: NWSE Section: 6 Township: 1N Range: 102W Meridian: 6  
 County: RIO BLANCO Federal, Indian or State Lease Number: \_\_\_\_\_  
 Field Name: RANGELY Field Number: 72370

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

Latitude: 40.084246 Longitude: -108.885821  
 GPS Data: GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP Date of Measurement: 01/18/2021  
 Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other Re-plug by other operator. AL had casing set.  
 Casing to be pulled:  Yes  No Estimated Depth: 3500  
 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

Total: 0 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	11	10+3/4	NA	32.75	0	32	59	32	0	VISU
1ST	7+7/8	7	NA		200	2888				

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 246 with 35 sacks cmt on top. CIBP #2: Depth \_\_\_\_\_ with \_\_\_\_\_ sacks cmt on top.  
CIBP #3: Depth \_\_\_\_\_ with \_\_\_\_\_ 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 105 sks cmt from 4 ft. to 196 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ 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 \_\_\_\_\_ ft. with \_\_\_\_\_ sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth  
Perforate and squeeze at \_\_\_\_\_ ft. with \_\_\_\_\_ sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth  
Perforate and squeeze at \_\_\_\_\_ ft. with \_\_\_\_\_ 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 Number of Days from Setting Surface Plug to Capping or Sealing the Well: \_\_\_\_\_  
Surface Plug Setting Date: \_\_\_\_\_ Cut and Cap Date: \_\_\_\_\_  
\*Wireline Contractor: \_\_\_\_\_ \*Cementing Contractor: \_\_\_\_\_  
Type of Cement and Additives Used: \_\_\_\_\_  
Flowline/Pipeline has been abandoned per Rule 1105  Yes  No

#### Technical Detail/Comments:

Wellbore bridged off at 246 feet.  
7" Squeegee plug at 246 feet.

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

Signed: \_\_\_\_\_ Print Name: Bryce Maifeld  
Title: Regulatory Specialist Date: 10/12/2021 Email: bryce.maifeld@whiting.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: Katz, Aaron Date: 12/20/2021

#### CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 6/19/2022

## Condition of Approval

### COA Type

### Description

- 1) Provide 48 hour notice of plugging MIRU via electronic Form 42.
  - 2) The approved Form 6, Notice of Intent will be at the location during all phases of plugging operations.
  - 3) Operator shall implement measures to control venting and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard.
  - 4) Properly abandon flowlines as per Rule 1105. Pursuant to Rule 911.a. Closure of Oil and Gas Facilities, Operator will submit Site Investigation and Remediation Workplans via Form 27 for COGCC prior approval before cutting and capping the plugged well, conducting flowline abandonment, and removing production equipment. Pursuant to Rule 1105.f. Abandonment Verification, within 90 days of an operator completing abandonment requirements for a flowline or crude oil transfer line, an operator must submit a Field Operations Notice, Form 42-Abandonment of Flowlines for on-location flowlines, and a Flowline Report, Form 44, for off-location flowlines or crude oil transfer lines.
  - 5) Check bradenhead annulus pressure prior to MIRU. Perform a bradenhead test if bradenhead pressure is greater than 25 psi, submit results electronically on a Form 17, and contact COGCC area engineer.
- If a well has a bradenhead pressure greater than 25 PSI measured at the time of the test then a sample of both the production and bradenhead gas (if sufficient volume to analyze) shall be collected and submitted for laboratory analysis of the gas composition and stable isotopes. The compositional analysis should include hydrogen, argon, oxygen, carbon dioxide, nitrogen, methane (C1), ethane (C2), ethene, propane (nC3), isobutane (iC4), butane (nC4), isopentane (iC5), pentane (nC5), hexanes +, specific gravity and British Thermal Units (BTU). The stable isotope analysis should include delta DC1, delta 13C1, delta 13C2, delta 13C3, delta 13iC4, delta 13nC4, delta 13iC5 (if possible), delta 13nC5 (if possible), and delta 13C of CO2 (if possible). The analytical results shall be submitted to the COGCC via Form 43 (Analytical Sample Submittal Form).
- Gas sample containers should be filled in accordance with container manufacturer or laboratory recommendations; purging multiple container volumes may not be feasible due to limited gas volumes.
- If water is encountered in the bradenhead during testing then samples (if sufficient quantity to analyze) should be collected and submitted for the laboratory analysis of major anions (chloride, carbonate, bicarbonate, and sulfate), cations (sodium, potassium, calcium, and magnesium) total dissolved solids (TDS), BTEX, DRO, GRO, and dissolved gasses (RSK 175). If there is a limited amount of water available then anions, cations and BTEX should be given first priority. Data from bradenhead water samples shall be submitted to the COGCC via Form 43.
- Please refer to Appendix A of the COGCC Operator Instructions for Bradenhead Testing and Reporting for more information regarding testing and sampling protocol.
- If the Bradenhead pressure is greater than 25 psi, the operator shall provide notice to Environmental Supervisor Alex Fischer at alex.fischer@state.co.us or 303-894-2100 X 5138 and COGCC Engineer Craig Burger at craig.burger@state.co.us or 970-319-4194, a minimum of 72 hours prior to conducting field operations. Bradenhead testing and sample collection shall be completed if the Bradenhead pressure is greater than 25 psi. 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.

1 COA

## Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402834163	FORM 6 INTENT SUBMITTED
402834496	SURFACE OWNER CONSENT
402837477	WELLBORE DIAGRAM
402837482	WELLBORE DIAGRAM
402837483	OPERATIONS SUMMARY

Total Attach: 5 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	<p>Replug for an original plugging in 1961 and the well was reentered in 1972, but not deemed commercial so it was abandoned a 2nd time. Original abandonment DOC# 566265 &amp; 566258 (see documents for plugging details)</p> <p>During the 1972 plugging operation 200 ft of 7" casing was pulled and a 5 sx stub plug was pumped</p> <p>Legacy well with little historical information available.</p> <p>Updated casing information based on historical documents. TD on WBD differs from historical documents due to discrepancy in documentation</p> <p>Well is bridged off at 246 ft.</p> <p>No zones to report, well was never produced</p> <p>There are no water wells within 1 mile</p>	12/20/2021

Total: 1 comment(s)