

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:
 402505749
 Date Received:
 12/10/2020

OGCC Operator Number: 96155 Contact Name: Madalyn McGuire
 Name of Operator: WHITING OIL & GAS CORPORATION Phone: (303) 357-4083
 Address: 1700 LINCOLN STREET SUITE 4700 Fax: _____
 City: DENVER State: CO Zip: 80290 Email: madalyn.mcguire@whiting.com

For "Intent" 24 hour notice required, Name: Moran, Rick Tel: (720) 827-6689
COGCC contact: Email: rick.moran@state.co.us

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

API Number 05-103-05436-00
 Well Name: EMERALD C Well Number: 136
 Location: QtrQtr: SENW 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: 40.086242 Longitude: -108.888999
 GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP Date of Measurement: 11/12/2020
 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: 3878
 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	H-40	32.75	0	26	35	26	0	CALC
TAPER	7+7/8	0+0/1	NA	NA	696	3878				
OPEN HOLE	8+3/4				26	696				

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth _____ with _____ sacks cmt on top. CIPB #2: Depth _____ with _____ sacks cmt on top.
CIBP #3: Depth _____ with _____ sacks cmt on top. CIPB #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 95 sks cmt from 650 ft. to 800 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 90 sacks half in. half out surface casing from 0 ft. to 155 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:

Rock & Shale Mix; 9 7/8 in; 800.0-1,076.0 ftKB
Rock & Shale Mix; 9 7/8 in; 155.0-650.0ftKB

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

Signed: _____ Print Name: Pauleen Tobin
Title: Regulatory Compliance Spe Date: 12/10/2020 Email: pollyt@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: 2/3/2021

CONDITIONS OF APPROVAL, IF ANY:

Expiration Date: 8/2/2021

COA Type	Description
	<p>1)Provide 48 hour notice of plugging MIRU via electronic Form 42.</p> <p>2)The approved Form 6, Notice of Intent will be at the location during all phases of plugging operations.</p> <p>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.</p> <p>4)Properly abandon flowlines as per Rule 1105. File electronic Form 42 once on location abandonment complete. Within 30 days of an operator completing abandonment requirements for an off-location flowline or crude oil transfer line the operator shall submit a Flowline Report, Form 44.</p> <p>5)In accordance with the Notice to Operators (NTO): Timing for COGCC Forms adopted on 05/01/2020, this Form 6 Notice of Intent to Abandon is valid for 12 months from the date of approval expiring on 2/3/2022. This NTO does not alter the deadlines for submission of, or compliance with any other Commission rule or Form.</p> <p>6)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.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>Please refer to Appendix A of the COGCC Operator Instructions for Bradenhead Testing and Reporting for more information regarding testing and sampling protocol. 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 (if applicable). 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>Submit "as drilled" GPS data on Subsequent Report of Abandonment. GPS data must meet the requirements of Rule 215.</p>

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402505749	FORM 6 INTENT SUBMITTED
402505773	WELLBORE DIAGRAM
402505774	PROPOSED PLUGGING PROCEDURE
402551500	LOCATION PHOTO
402551501	LOCATION PHOTO
402551502	LOCATION PHOTO
402551503	LOCATION PHOTO

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	updated casing details and open hole based on historical documents. surface cement estimate based on 1.15 yield Updated lat/long per values from inspection 700404174 No production data-historical data indicates "no significant shows of oil or water No Zones to report-dry and abandoned well Historical documents 39438 & 39439 indicate inadequate plugging in 1961.	01/06/2021
Permit	Waiting for SUA or surface owner consent	12/29/2020
Permit	Requirements for replug by other operator:-Signed Surface Use Agreement or Surface Owner Consent-Operations Summary of proposed re-entry procedure if not in Technical Detail/Comments-Proposed Plugging Procedure if not in Technical Detail/Comments-Current site photos - minimum of four (4) color photographs, one (1) from each cardinal direction; each photograph shall be identified by: date taken, well name, and direction of view.	10/30/2020

Total: 3 comment(s)