FORM 6 Rev 12/05

# State of Colorado
# Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109

| DE | ET | OE | ES |
|---|---|---|---|
| | | | |

Document Number: 401233308

Date Received: 03/17/2017

## 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.

OGCC Operator Number: 10548 Contact Name: Terry Pape

Name of Operator: HRM RESOURCES II LLC Phone: (970) 768-5700

Address: 410 17TH STREET #1600 Fax: (303) 893-6892

City: DENVER State: CO Zip: 80202 Email: tpape@hrmres.com

**For "Intent" 24 hour notice required, COGCC contact:** Name: Schure, Kym Tel: (970) 520-3832 Email: kym.schure@state.co.us

API Number 05-075-05445-00

Well Name: FRASCO Well Number: 1-B

Location: QtrQtr: NENE Section: 9 Township: 7N Range: 55W Meridian: 6

County: LOGAN Federal, Indian or State Lease Number:

Field Name: FRASCO Field Number: 26750

☒ Notice of Intent to Abandon ☐ Subsequent Report of Abandonment

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

Latitude: 40.594489 Longitude: -103.527303

GPS Data:

Date of Measurement: 05/15/2009 PDOP Reading: 4.7 GPS Instrument Operator's Name: Joseph Dugan

Reason for Abandonment: ☐ Dry ☒ Production Sub-economic ☐ Mechanical Problems

☐ Other

Casing to be pulled: ☒ Yes ☐ No Estimated Depth: 188

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 | 5499 | 5508 | | | |

Total: 1 zone(s)

## Casing History

| Casing Type | Size of Hole | Size of Casing | Weight Per Foot | Setting Depth | Sacks Cement | Cement Bot | Cement Top | Status |
|---|---|---|---|---|---|---|---|---|
| SURF | 12+1/4 | 8+5/8 | 24# | 138 | 100 | 138 | 0 | VISU |
| 1ST | 7+7/8 | 5+1/2 | 15.5# | 5,499 | 100 | 5,499 | 5,249 | CALC |

# Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 5449 with 2 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 61 sks cmt from 238 ft. to 0 ft. Plug Type: STUB PLUG 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 4537 ft. with 50 sacks. Leave at least 100 ft. in casing 4487 CICR Depth

Perforate and squeeze at 1400 ft. with 40 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 15 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 Plugging Date: _____

*Wireline Contractor: _____ *Cementing Contractor: _____

Type of Cement and Additives Used: _____

Flowline/Pipeline has been abandoned per Rule 1103 ☐ Yes ☐ No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Plan to plug well as follows. Plugging to commence as soon as approval granted.
1. Check surface annulus for pressure, if present call for orders.
2. MIRU P&A equipment, NDWH, NUBOP. Load and circulate wellbore clean
3. TOH and tally 2-3/8" tbg, stand back 4,487'
4. RU wireline, PU 5-1/2" 15.5# JC/GR, TIH to 5,449', TOH 7. PU 5-1/2" 15.5#, 10K CIBP, TIH and set at 5,449', TOH
8. TIH and CDB 2 sx cement on top, TOH
9. Load and pressure test csg to 500 psi for 5 min.
10. TIH and perforate csg at 4,587' (top of Niobrara), TOH
11. PU 5-1/2", 15.5#, 10K CICR, TIH and set at 4,487', TOH, RD wireline
12. PU stinger, TIH to 4,487', pressure test csg/CICR to 500 psi for 5 minutes
13. Sting into CICR, estab IR into CICR
14. Pump 50 sx cement, 40 sx under and 10 sx on top
15. TOH and LD to 4,300', reverse circulate tbg clean, TOH
16. RU wireline, TIH and cut casing at 188' (50' below surface csg shoe), TOH, RD wireline
17. RU csg equip, NDBOP, NDWH. Unland casing, NUWH, NUBOP
18. TOH and LD csg, RD csg equip
19. TIH to 238' (50' below csg stub,100' below surf csg shoe), establish circulation to surface
20. Pump 61 sx cement to surface
21. TOH and LD tbg, RDMO, dig out and cut off wellhead, verify cement at surface, top off if necessary
22. Weld info plate onto csg, backfill pit, clean location

All cement to be 15.8# class G neat, 1.15 cu ft/sx yield.

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

Signed: _____ Print Name: April Prohaska

Title: Production Tech Date: 3/17/2017 Email: aprohaska@hrmres.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: SUTPHIN, DIRK Date: 3/27/2017

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 9/26/2017

| COA Type | Description |
|---|---|
| | Bradenhead:<br>Prior to initiation of plugging operations, a Bradenhead test shall be performed. Form 17 shall be submitted within 10 days. If there is 25 psi or greater pressure on the Bradenhead, or flowed any liquids from the Bradenhead, collect samples. See COGCC website - Operator Guidance - Bradenhead Testing and Reporting Instructions, Appendix A: Liquid and Gas Sampling. |
| | Note changes to submitted form.<br>1) Provide 48 hour notice of MIRU via electronic Form 42.<br>2) Shoe plug: Tag plug 50’ above surface casing shoe, if not circulated to surface.<br>3) Cement from 50' to surface.<br>4) Properly abandon flowlines per Rule 1103. File Form 42 when done.<br>5) Abandoned well marker shall be inscribed with the well identification per Rule 319.a.(5). |
| | Submit Form 5A to report the well's Shut In status as of January 2015. This Form 5A must be submitted within 30 days for compliance with Rule 308B. |
| | Submit Form 5 to report squeeze from 3182'-3197' identified on wellbore diagram attached to this Notice of Intent. Include wireline tickets and/or cement tickets. This Form 5 must be submitted within 30 days for compliance with Rule 308A. |

## Attachment Check List

| Att Doc Num | Name |
|---|---|
| 401233308 | FORM 6 INTENT SUBMITTED |
| 401236104 | WELLBORE DIAGRAM |
| 401236107 | WELLBORE DIAGRAM |

Total Attach: 3 Files

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| Engineer | Plugs: Operator had perf & squeeze at 5487' on form and wellbore diagram. Based on Technical Details they meant 4587' (Niobrara top). Made this 4537' (50' above Niobrara top). WW's w/in 2 miles: include 2 wells > surface casing.<br>Receipt=9045034, SWSE 32-8N-55W, 660' deep<br>Receipt=9043589, SESE 33-8N-55W, 590' deep<br>Offset well 075-05442 e-log shows this aquifer zone extends to 1220'. Therefore added perf & squeeze 40 sks at 1400'. | 03/27/2017 |
| Permit | Status active - operator resubmitted form with requested corrections, and agrees to submit Form 5 and Form 5A per COAs.<br><br>Permitting review complete. | 03/21/2017 |
| Permit | Returned to draft and emailed Operator for corrections and missing documents:<br>- Zones tab J Sand interval top (5449) should be 5499 as noted on Well Completion Report.<br>- Missing required Proposed Wellbore Diagram.<br>- Attached current wellbore diagram lists TD @ 5580'; verify and/or correct TD.<br>- Current wellbore diagram notes 6/1996 sqzd casing leak @ 3182-3197' w/100 sx cement; this should have been reported. Submit a Form 5 to describe this work.<br>- Well status was reported SI via production reporting as of Jan 2015, but no Form 5A was received; submit Form 5A. | 03/16/2017 |
| Permit | Verified as-built lat/long on COGIS map.<br><br>Verified Well Completion Report (Doc# 209320, 1/14/1963); open hole completion in J Sand from 5499-5508. | 03/16/2017 |
| Public Room | Document verification complete 03/15/17 | 03/15/2017 |

Total: 5 comment(s)