

FORM
6Rev
11/20

State of Colorado Oil and Gas Conservation Commission

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



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Document Number:

403138594

Date Received:

08/17/2022

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: 69175

Contact Name: Valerie Danson

Name of Operator: PDC ENERGY INC

Phone: (970) 506-9272

Address: 1775 SHERMAN STREET - STE 3000

Fax:

City: DENVER State: CO Zip: 80203

Email: valerie.danson@pdce.com

For "Intent" 24 hour notice required,

Name: Serna, Abe

Tel: (720) 661-7317

COGCC contact:

Email: abe.serna@state.co.us

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

API Number 05-123-13481-00

Well Name: JERKE UP

Well Number: 8-7

Location: QtrQtr: SENE Section: 7 Township: 4N Range: 65W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 68547

Field Name: WATTENBERG

Field Number: 90750

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.328890

Longitude: -104.699444

GPS Data: GPS Quality Value: 2.2 Type of GPS Quality Value: PDOP Date of Measurement: 01/14/2010

Reason for Abandonment: ☐ Dry ☒ Production Sub-economic ☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes ☐ No Estimated Depth: 2500Fish in Hole: ☐ Yes ☒ No If yes, explain details belowWellbore 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 |
|-----------------|-----------|-----------|----------------|---------------------|------------|
| NIOBRARA-CODELL | 6849 | 7175 | | | |

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 | J55 | 24 | 0 | 311 | 215 | 311 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | J55 | 15.1 | 0 | 7314 | 230 | 7314 | 6370 | CBL |

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6799 with 2 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 <u>10</u> sks cmt from <u>3894</u> ft. to <u>3763</u> ft. | Plug Type: <u>CASING</u> | Plug Tagged: <input type="checkbox"/> |
| Set <u>100</u> sks cmt from <u>2550</u> ft. to <u>2300</u> ft. | Plug Type: <u>STUB PLUG</u> | Plug Tagged: <input type="checkbox"/> |
| Set <u>100</u> sks cmt from <u>1470</u> ft. to <u>1270</u> ft. | Plug Type: <u>OPEN HOLE</u> | Plug Tagged: <input checked="" type="checkbox"/> |
| Set _____ sks cmt from _____ ft. to _____ ft. | Plug Type: _____ | Plug Tagged: <input type="checkbox"/> |
| Set _____ sks cmt from _____ ft. to _____ ft. | Plug Type: _____ | Plug Tagged: <input type="checkbox"/> |

Perforate and squeeze at 4080 ft. with 90 sacks. Leave at least 100 ft. in casing 3895 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 192 sacks half in. half out surface casing from 511 ft. to 0 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:

Jerke Up 8-7 (05-123-13481)/Plugging Procedure (Intent)
 Producing Formations: Niobrara/Codell: 6849'-7175'
 Upper Pierre Aquifer: 460'-1370'
 TD: 7314' PBTD: 7263' (2/11/11)
 Surface Casing: 8 5/8" 24# @ 311' w/ 215 sxs cmt
 Production Casing: 4 1/2" 15.1# @ 7314' w/ 230 sxs cmt (TOC @ 6370' - CBL)

Tubing: 2 3/8" tubing set @ 7132' (2/12/11)

Proposed Procedure:

1. MIRU pulling unit. Pull 2 3/8" tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6799'. Top with 2 sxs 15.8#/gal CI G cement. (Top of Nio perms @ 6849')
4. TIH with perf gun. Shoot lower squeeze holes at 4080' and upper squeeze holes at 3880'.
5. TIH with CICR. Set CICR at 3895'. RU cementing company. Sting in and pump 100 sxs 15.8#/gal CI G cement. Sting out and leave 10 sxs (of the 100 sxs) cement on top of CICR. (Top of Sussex @ 4130')
6. TIH with casing cutter. Cut 4 1/2" casing @ 2500'. Pull cut casing.
7. TIH with tubing to 2550'. RU cementing company. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Stub plug from 2550'-2300')
8. Wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or fluid migration, contact engineering before continuing operations.
9. TIH with tubing to 1470'. Mix and pump 100 sxs 15.8#/gal CI G cement down tubing. (Pierre coverage from 1470'-1270')
10. Pick up with tubing to 511'. Mix and pump 192 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
11. Well casing cut and capped per COGCC guidelines at a depth as not to interfere with soil cultivation.

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

Signed: _____ Print Name: Valerie Danson
 Title: Reg Analyst Date: 8/17/2022 Email: valerie.danson@pdce.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: McFarland, Nick Date: 8/24/2022

CONDITIONS OF APPROVAL, IF ANY: Expiration Date: 2/23/2023

Condition of Approval

| COA Type | Description |
|----------|---|
| | <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>Operator shall implement measures to control venting, to protect health and safety, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.</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>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. These are two separate notifications, required by Rules 405.e and 405.l.</p> <p>2) After placing plug at 2550' assure that all fluid migration has been eliminated by monitoring the well for a minimum of 8 hours before proceeding to the next plug. If at any time after placing this plug there is evidence of pressure or of fluid migration, contact COGCC engineering before continuing operations.</p> <p>3) Prior to placing the 511' plug: verify that all fluid (liquid and gas) migration has been eliminated. If evidence of fluid migration or pressure remains, contact COGCC Engineer for an update to plugging orders.</p> <p>4) After isolation has been verified, pump surface casing shoe plug. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 261' or shallower and provide a minimum of 10 sx plug at the surface.</p> <p>5) Leave at least 100' of cement in the wellbore for each plug without mechanical isolation.</p> <p>6) With the Form 6 SRA operator must provide written documentation which positively affirms each COA listed above has been addressed.</p> |

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| | Prior to commencing operations, the operator will post signs in conspicuous locations at intersections that will remain in place throughout the duration of the plug and abandonment activities. The signs will indicate plugging and abandonment operations are being conducted, the well name, well, and the applicable contact information. Signs will be placed so as not to create a potential traffic hazard. |
| | Notification will be given to any adjacent building unit occupants within a 1000 feet of the wellhead of planned P&A start date. |
| | Operator will implement measures to capture, combust, or control emissions to protect health and safety, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public health, welfare and the environment. Due to the proximity of building units (BUs) all blowdown gasses will be controlled. |
| | Due to proximity to a wetland and surface water, operator will use secondary containment for all tanks and other liquid containers. Operator will implement stormwater BMPs and erosion control measures as needed to prevent sediment and stormwater runoff from entering the wetland and surface water. |
| | Reported "as drilled" GPS data is inaccurate. Submit accurate "as drilled" GPS data on Subsequent Report of Abandonment. GPS data must meet the requirements of Rule 216. |
| 9 COAs | |

Attachment List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|-------------------------|
| 403138594 | FORM 6 INTENT SUBMITTED |
| 403138617 | WELLBORE DIAGRAM |
| 403138618 | WELLBORE DIAGRAM |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Engineer | Most recent bradenhead test 3/25/21 - 34 psi. SI since December 2020. SB5 Base of Fox Hills: 226' Deepest Water Well Within One Mile: 360' Number of Wells: 101 Production within one mile: JSND, CODL, NBRR, SUSX | 08/24/2022 |
| OGLA | OGLA Review complete. | 08/24/2022 |
| Permit | As-drilled well location inaccurate. No other forms in process. Confirmed productive interval docnums: 952003, 129387. Production reporting up-to-date. Reviewed WBDs. Pass. | 08/23/2022 |

Total: 3 comment(s)