

FORM
6
Rev
02/20

State of Colorado Oil and Gas Conservation Commission

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



DE ET OE ES

Replug By Other Operator

Document Number:

402407340

Date Received:

05/27/2020

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: Santistevan, Brittani Tel: (720) 471-1110
COGCC contact: Email: brittani.santistevan@state.co.us

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

API Number 05-123-05178-00
Well Name: HAYES Well Number: 1
Location: QtrQtr: SENE Section: 20 Township: 5N Range: 66W Meridian: 6
County: WELD Federal, Indian or State Lease Number: _____
Field Name: WILDCAT Field Number: 99999

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.386880 Longitude: -104.796500
GPS Data: GPS Quality Value: 1.7 Type of GPS Quality Value: PDOP Date of Measurement: 05/13/2020
GPS Instrument Operator's Name: Scott Sherard
Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other Re-enter to Re-plug for PDC's Stugart development
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

Total: 0 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	10+3/4	40.5	711	575	711	0	VISU
OPEN HOLE	9+5/8			9,502				

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth _____ with _____ 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 275 sks cmt from 7016 ft. to 6516 ft. Plug Type: OPEN HOLE Plug Tagged:
Set 275 sks cmt from 4440 ft. to 3940 ft. Plug Type: OPEN HOLE Plug Tagged:
Set 275 sks cmt from 1730 ft. to 1230 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:

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 446 sacks half in. half out surface casing from 911 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. _____ inch casing Cut and Cap Date: _____
of _____

*Wireline Contractor: _____ *Cementing Contractor: _____

Type of Cement and Additives Used: _____

Flowline/Pipeline has been abandoned per Rule 1105 Yes No

Technical Detail/Comments:

Hayes 1 (05-123-05178)/Re-Enter to Re-Plug Procedure (Intent)
 Original Plug Date: 9/3/1957
 Producing Formation: N/A (DA well)
 Upper Pierre Aquifer: 520'-1480'
 TD: 9502'
 Surface Casing: 10.75" 40.5# @ 711' w/ 575 sxs cmt
 Open Hole: 9.625" @ 9502' (Open Hole Size estimated based on SC drift)
 Existing Plugs: 9502'-9316' (75 sx cmt), 9173'-8987' (75 sx cmt), 817'-606' (100 sx cmt),
 62' to Surface (25 sx cmt)

Proposed Procedure:

1. Dig out to find wellhead and check pressure.
2. Cut cap off, extend surface pipe to achieve ground level.
3. MIRU WO unit, ND wellhead, NU BOP, tally all pipe to be ran in well.
4. Mill cement, cement btm is approximately 817' according to well history data.
5. Wash run down to top of Niobrara @ 7066' or depth that well allows.
6. PU tubing to 7016'. RU cementing company. Mix and pump 275 sxs 15.8#/gal CI G cement down tubing (Nio coverage 7016' – 6516'). PU tubing above plug and SI well. (Top of Niobrara @ 7066')
 - a. Wait 4 hours and tag plug
7. PU tubing to 4440'. RU cementing company. Mix and pump 275 sxs 15.8#/gal CI G cement down tubing (Sussex coverage 4440' – 3940'). PU tubing above plug and SI well. (Top of Sussex @ 4490')
 - a. Wait 4 hours and tag plug
8. PU tubing to 1730'. RU cementing company. Mix and pump 275 sxs 15.8#/gal CI G cement down tubing (Pierre Aquifer coverage 1730' - 1230'). PU tubing above plug and SI well.
 - a. Wait 4 hours and tag plug
9. PU tubing to 911'. RU cementing company. Mix and pump 446 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface. LD tubing.
 - a. Wait 4 hours and tag plug
10. RDMO WO unit. Remove extension of surface pipe. Top off if necessary.
11. Weld on cap with ID plate, inscribed with well location, and identity. Backfill, clean location, Re-Entry complete.

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 Tech Date: 5/27/2020 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: JENKINS, STEVE Date: 6/1/2020

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 11/30/2020

COA Type	Description
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Prior to placing the 911' plug: verify that all fluid migration (liquid or gas) has been eliminated. If evidence of fluid migration or pressure remains, contact COGCC Engineer for an update to plugging orders. 3) After isolation has been verified, pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours then tag plug – must be at 661' or shallower and provide 10 sx plug at the surface. 4) Leave at least 100' of cement in the wellbore for each plug. 5) With the Form 6 SRA operator must provide written documentation which positively affirms each COA has been addressed. 6) After placing the shallowest hydrocarbon isolating plug (1730'), operator must wait a sufficient time to confirm static conditions. If at any time after placing this plug there is evidence of pressure or of fluid migration, contact COGCC engineering before continuing operations.
	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.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402407340	FORM 6 INTENT SUBMITTED
402407344	WELLBORE DIAGRAM
402407345	WELLBORE DIAGRAM
402407346	LOCATION PHOTO
402407347	SURFACE OWNER CONSENT

Total Attach: 5 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	1) Deepest Water Well within 1 mile = 95'. 2) Fox Hills Bottom- N/A, per SB5.	06/01/2020
Permit	As-drilled well location obtained. Pass.	06/01/2020

Total: 2 comment(s)