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**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: Kelsi Welch  
 Name of Operator: PDC ENERGY INC Phone: (303) 831-3974  
 Address: 1775 SHERMAN STREET - STE 3000 Fax: \_\_\_\_\_  
 City: DENVER State: CO Zip: 80203 Email: kelsi.welch@pdce.com

**For "Intent" 24 hour notice required,** Name: Gomez, Jason Tel: (970) 573-1277  
**COGCC contact:** Email: jason.gomez@state.co.us

API Number 05-123-12581-00 Well Number: 1-21  
 Well Name: HAZEL  
 Location: QtrQtr: SESE Section: 21 Township: 5N Range: 65W Meridian: 6  
 County: WELD Federal, Indian or State Lease Number: 68149  
 Field Name: WATTENBERG Field Number: 90750

Notice of Intent to Abandon  Subsequent Report of Abandonment

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

Latitude: 40.379167 Longitude: -104.661389  
 GPS Data:  
 Date of Measurement: 05/03/2010 PDOP Reading: 3.0 GPS Instrument Operator's Name: Chuck Kraft  
 Reason for Abandonment:  Dry  Production Sub-economic  Mechanical Problems  
 Other \_\_\_\_\_  
 Casing to be pulled:  Yes  No Estimated Depth: 550  
 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
NIOBRARA	6700	6919			
CODELL	7014	7019	09/20/2006	B PLUG CEMENT TOP	6975

Total: 2 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	342	250	342	0	
1ST	7+7/8	4+1/2	11.6	7,108	200	7,108	6,370	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6650 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 230 sks cmt from 600 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 4650 ft. with 300 sacks. Leave at least 100 ft. in casing 4100 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 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:

Hazel 1-21 (05-123-12581)/Plugging Procedure (Intent)  
Producing Formation: Niobrara 6700'-6919'  
Plugged Back Formation: Codell 7012'-7019'  
Existing CIBP set at: 6975' w/ 2 sxs  
TD: 7125' PBD: 7090'  
Surface Casing: 8 5/8" 24# @ 342' w/ 250 sxs.  
Production Casing: 4 1/2" 11.6# @ 7108' w/ 200 sks cmt. (TOC at 6370' - CBL)

Tubing: 2 3/8" tubing set at 6673'. (1/24/2011)

Proposed Procedure:

1. MIRU RU pulling unit. Pull tubing.
2. RU wireline company.
3. TIH with CIBP. Set BP at 6650'. Top with 2 sxs 15.8#/gal CI G cement.
4. TIH with perforating gun. Perforate 4 squeeze holes at 4650'.
5. TIH with cement retainer. Set retainer at 4100'.
6. TIH with tubing. Sting into retainer at 4100'. Establish rate. Mix and pump 300 sxs 15.8#/gal CI G cement down tubing. Displace cement to top of retainer. TOOH with tubing.
7. TIH with casing cutter. Cut 4 1/2" casing at 550'. Pull cut casing.
8. TIH with tubing to 600'. Mix and pump 230 sxs 15.8#/gal CI G cement down tubing. Cement should circulate to surface.
9. Cut surface casing 6' below ground level and weld on cap.

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

Signed: \_\_\_\_\_ Print Name: Kelsi Welch

Title: Production Tech Date: \_\_\_\_\_ Email: kelsi.welch@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: \_\_\_\_\_

Date: \_\_\_\_\_

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

Expiration Date: \_\_\_\_\_

<u>COA Type</u>	<u>Description</u>

### **Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
401257117	WELLBORE DIAGRAM
401257118	WELLBORE DIAGRAM

Total Attach: 2 Files

### **General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)