

FORM  
6Rev  
12/05State 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:

400577042

Date Received:

03/22/2014

## 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: 47120

Contact Name: CHERYL LIGHT

Name of Operator: KERR-MCGEE OIL &amp; GAS ONSHORE LP

Phone: (720) 929-6461

Address: P O BOX 173779

Fax: (720) 929-7461

City: DENVER State: CO Zip: 80217-

Email: CHERYL.LIGHT@ANADARKO.COM

For "Intent" 24 hour notice required,

Name: JOHNSON, RANDELL

Tel: (303) 815-9641

COGCC contact:

Email: randell.johnson@state.co.us

API Number 05-123-07327-00

Well Name: HART A GAS UNIT

Well Number: 1

Location: QtrQtr: NWNE Section: 27 Township: 2N Range: 67W Meridian: 6

County: WELD

Federal, Indian or State Lease Number:

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: 40.113580

Longitude: -104.873870

GPS Data:

Date of Measurement: 06/18/2008

PDOP Reading: 2.3

GPS Instrument Operator's Name: Cody Mattson

Reason for Abandonment:

☐ Dry☒ Production for Sub-economic☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes☐ No

Estimated Depth: 1410

Fish in Hole: ☐ Yes☒ No

If yes, explain details below

Wellbore has Uncemented Casing leaks:

☐ Yes☒ No

If yes, explain details below

Details:

Casing will be pulled from 200' below Fox Hills Marker (1410') and a cement plug will be set from 100' inside stub to 300' from surface.

## Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
J SAND	8040	8068			

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	635	200	635	0	VISU
1ST	7+7/8	4+1/2	10.5/11.6	8,152	200	8,152	7,300	CALC

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7960 with 2 sacks cmt on top. CIPB #2: Depth 100 with 23 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 670 sks cmt from 1510 ft. to 300 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 6900 ft. with 160 sacks. Leave at least 100 ft. in casing 6930 CICR Depth

Perforate and squeeze at 4330 ft. with 630 sacks. Leave at least 100 ft. in casing 4360 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 23 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:

Perforate and squeeze at 7290 / 6900 ft. with 160 sacks Leave at least 100 ft. in casing 6930 CICR Depth  
 Perforate and squeeze at 5150 / 4330 ft. with 630 sacks Leave at least 100 ft. in casing 4360 CICR Depth  
 HART "A" GAS UNIT #1  
 Note: Production Casing = 4 1/2" OD, 11.6#/ft, K-55; Production Hole Drilled @ 7 7/8";  
 8 MIRU WL. RIH gauge ring for 4 1/2" 11.6#/ft casing to 8040'. RIH CIBP w/ WL. Set at 7960'. PT Casing to 1000 psi. PU dump  
 bailer, dump bail 2 sx class 'G' cement on CIBP.  
 9 Run CBL from CIBP to Surface. Forward results to Evans Engineering.  
 10 PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 7290' and 6900'. Adjust perf heights  
 according to cement location on CBL. Desired bottom perf is 20' above TOC; Desired top perf is 400' above 7305' (Niobrara Top).  
 11 PU CICR. RIH and set at 6930'+/-20' pending actual squeeze hole depth and collar locator on CBL. RD WL.  
 12 RIH w/ 2 3/8" tubing And stinger for CICR while hydrotesting to 3,000 psi.  
 13 RU Cementers. Pump Niobrara Suicide: 160 sx 50/50 Poz "G" w/ 20% silica flour, 3% gel, 0.1% sodium metasilicate and 0.4%  
 FL-52 mixed at 13.5 ppg and 1.71 cf/sk (48.7bbls) (9.5" + 40% no caliper Log in file) to place suicide squeeze between perfs.  
 Underdisplace and sting out of CICR to leave 3 bbls on top of retainer.  
 14 PUH 6 stands. Circulate 95bbls water containing biocide to clear tubing.  
 15 Place 9.0 ppg mud containing biocide from 6742' to 5150' (~26bbls). TOO H & WOC 4 hrs.  
 16 RUWL & PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 5150' and 4330'.  
 17 PU CICR. RIH and set at 4360'+/-20' pending actual Squeeze hole depth and collar locator on CBL. RD WL.  
 18 RIH w/ 2 3/8" tubing and stinger.  
 19 RU Cementers. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding  
 cement.  
 20 Pump SX/SH Suicide: 630 sx class "G", w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx  
 (129.2bbls) (11" +40% No caliper Log in file) to place suicide squeeze between perfs. Underdisplace and sting out of CICR to leave 3  
 bbls on top of retainer.  
 21 PUH 5 stands. Circulate 60bbls water containing biocide to clear tubing.  
 22 Place 9.0 ppg mud containing biocide from 4172' to 1510' (~43bbls). TOO H & WOC 4 hrs.  
 23 RU WL. Crack coupling or shoot off casing at or below 1410'. RDMO WL. Circulate hole using water containing biocide to remove  
 any gas.  
 24 NDBOP, NDTH.  
 25 Install BOP on casing head with 4 1/2" pipe rams.  
 26 TOO H with 4 1/2" casing, LD.  
 27 RIH with 2 3/8" tubing to 1510'.  
 28 RU Cementers. Spot Stub Plug: 670 sx Type III CaCl2 cement mixed at 14.0 ppg and 1.53 cf/sx (182.5bbls) (100' in 4 1/2" prod  
 casing, 775' in 12 1/4" OH + 40% no caliper Log, and 335' in 8 5/8" surface casing).  
 29 TOO H. WOC 4 hrs. Tag Cement. Cement top needs to be above 535'; Proceed assuming TOC is above 535'. Otherwise, call  
 production engineer.  
 30 MIRU WL. RIH 8 5/8" CIBP to 100'. Set, PT to 1000 psi for 15 min. If tests, RDMO WL and WO rig.  
 31 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to  
 rscDJVendors@anadarko.com within 24 hrs of the completion of the job.  
 32 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.  
 33 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.  
 34 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.  
 35 Welder cut 8 5/8" casing minimum 5' below ground level.  
 36 MIRU ready cement mixer. Use 4500 psi compressive strength cement, (NO gravel) fill stubout.  
 37 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API  
 number.  
 38 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.

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

Signed: \_\_\_\_\_ Print Name: CHERYL LIGHT  
 Title: SR. REGULATORY ANALYST Date: 3/22/2014 Email: DJREGULATORY@ANADARKO.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: SCHLAGENHAUF, MARK Date: 3/25/2014

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 9/24/2014

<u>COA Type</u>	<u>Description</u>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) If unable to pull casing, contact COGCC for plugging modifications. 3) For 1510' plug: pump plug and displace. Wait 4 hours then tag plug – must be 550' or shallower. 4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.

### **Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
400577042	FORM 6 INTENT SUBMITTED
400577044	PROPOSED PLUGGING PROCEDURE
400577045	WELLBORE DIAGRAM

Total Attach: 3 Files

### **General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 9/16/1971.	3/25/2014 8:16:10 AM

Total: 1 comment(s)