

**State of Colorado**  
**Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
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DE	ET	OE	ES
Document Number: <b>400803986</b>			
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**SUNDRY NOTICE**

Submit a signed original. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full in Comments or provide as an attachment. Identify Well by API Number; identify Oil and Gas Location by Location ID Number; identify other Facility by Facility ID Number.

OGCC Operator Number: 47120 Contact Name Cheryl Light  
 Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP Phone: (720) 929-6461  
 Address: P O BOX 173779 Fax: (720) 929-7461  
 City: DENVER State: CO Zip: 80217-3779 Email: cheryl.light@anadarko.com

Complete the Attachment  
Checklist

OP OGCC

API Number : 05- 123 39499 00 OGCC Facility ID Number: 437344  
 Well/Facility Name: DOUTHIT Well/Facility Number: 8N-27HZ  
 Location QtrQtr: SENE Section: 26 Township: 3N Range: 68W Meridian: 6  
 County: WELD Field Name: WATTENBERG  
 Federal, Indian or State Lease Number: \_\_\_\_\_

Survey Plat		
Directional Survey		
Srvc Eqpmt Diagram		
Technical Info Page		
Other		

**CHANGE OF LOCATION OR AS BUILT GPS REPORT**

- Change of Location \*     As-Built GPS Location Report     As-Built GPS Location Report with Survey

\* Well location change requires new plat. A substantive surface location change may require new Form 2A.

**SURFACE LOCATION GPS DATA** Data must be provided for Change of Surface Location and As Built Reports.

Latitude \_\_\_\_\_ PDOP Reading \_\_\_\_\_ Date of Measurement \_\_\_\_\_  
 Longitude \_\_\_\_\_ GPS Instrument Operator's Name \_\_\_\_\_

**LOCATION CHANGE (all measurements in Feet)**

Well will be: \_\_\_\_\_ (Vertical, Directional, Horizontal)

Change of **Surface Footage From** Exterior Section Lines:

Change of **Surface Footage To** Exterior Section Lines:

Current **Surface Location From** QtrQtr SENE Sec 26

New **Surface Location To** QtrQtr \_\_\_\_\_ Sec \_\_\_\_\_

Change of **Top of Productive Zone Footage From** Exterior Section Lines:

Change of **Top of Productive Zone Footage To** Exterior Section Lines:

Current **Top of Productive Zone Location From** Sec 26

New **Top of Productive Zone Location To** Sec \_\_\_\_\_

Change of **Bottomhole Footage From** Exterior Section Lines:

Change of **Bottomhole Footage To** Exterior Section Lines:

Current **Bottomhole Location** Sec 27 Twp 3N Range 68W

New **Bottomhole Location** Sec \_\_\_\_\_ Twp \_\_\_\_\_ Range \_\_\_\_\_

Is location in High Density Area? \_\_\_\_\_

Distance, in feet, to nearest building \_\_\_\_\_, public road: \_\_\_\_\_, above ground utility: \_\_\_\_\_, railroad: \_\_\_\_\_,  
 \_\_\_\_\_ property line: \_\_\_\_\_, lease line: \_\_\_\_\_, well in same formation: \_\_\_\_\_

Ground Elevation \_\_\_\_\_ feet Surface owner consultation date \_\_\_\_\_

FNL/FSL		FEL/FWL	
<u>1500</u>	<u>FNL</u>	<u>309</u>	<u>FEL</u>
_____	_____	_____	_____
Twp <u>3N</u>	Range <u>68W</u>	Meridian <u>6</u>	
Twp _____	Range _____	Meridian _____	
<u>1800</u>	<u>FNL</u>	<u>50</u>	<u>FEL</u>
_____	_____	_____	_____ **
Twp <u>3N</u>	Range <u>68W</u>		
Twp _____	Range _____		
<u>1850</u>	<u>FNL</u>	<u>300</u>	<u>FEL</u>
_____	_____	_____	_____ **

\*\* attach deviated drilling plan



Comments:

## ENGINEERING AND ENVIRONMENTAL WORK

### NOTICE OF CONTINUED TEMPORARILY ABANDONED STATUS

Indicate why the well is temporarily abandoned and describe future plans for utilization in the COMMENTS box below or provide as an attachment, as required by Rule 319.b.(3).

Date well temporarily abandoned \_\_\_\_\_ Has Production Equipment been removed from site? \_\_\_\_\_

Mechanical Integrity Test (MIT) required if shut in longer than 2 years. Date of last MIT \_\_\_\_\_

SPUD DATE: \_\_\_\_\_

## TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

NOTICE OF INTENT Approximate Start Date 03/09/2015

REPORT OF WORK DONE Date Work Completed \_\_\_\_\_

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Intent to Recomplete (Form 2 also required) | <input type="checkbox"/> Request to Vent or Flare   | <input type="checkbox"/> E&P Waste Mangement Plan      |
| <input type="checkbox"/> Change Drilling Plan                        | <input checked="" type="checkbox"/> Repair Well   | <input type="checkbox"/> Beneficial Reuse of E&P Waste |
| <input type="checkbox"/> Gross Interval Change                       | <input type="checkbox"/> Rule 502 variance requested. Must provide detailed info regarding request. |  |
| <input type="checkbox"/> Other _____                                 | <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases          |  |

## COMMENTS:

### Douthit 8N-27HZ Remediation Procedure

#### Well History:

The Douthit 8N-27HZ was planned as a horizontal sliding sleeve completion of the Niobrara utilizing the Suretech sliding sleeve system. Its well configuration consists of 7" intermediate casing through the curve to 7640 ft, and the 4.5" Suretech system from a liner hanger at 6597 ft to a TD at 12,919 ft. The 7" intermediate casing cement top was located at 210' via CBL.

Prior to completion, a leak was found at the liner hanger by testing against a retrievable bridge plug set in the 4.5" casing below the liner hanger. The remedy was to install a second liner hanger (Packers Plus) above the existing Suretech liner hanger. The two were connected via a latch assembly and 1 joint of 4.5" 11.6ppf HCP-110 casing. After this work, the liner still had a similar leak. A retrievable bridge plug was then set in the single joint of casing between liner hangers, isolating the Suretech liner hanger from the Packers Plus liner hanger. Upon pressure testing, the Packers Plus liner hanger held pressure, showing that the leak was below. The well was readied for completion.

During the frac, no ball seats were seen while attempting to frac the first two stages. Due to previous issues with the Douthit 41C (four stages attempted), the frac was stopped pending further investigation. A retrievable bridge plug was set below the Suretech liner hanger to attempt to determine injection. Injection was established: 5bpm at 3440psi. Assumption is that frac exited 4.5" casing below the liner hanger and entered the Niobrara at the 7" shoe.

#### Current Status:

The Douthit 8N-27HZ is currently shut in awaiting further operations.

#### Remediation Procedure – Bullhead Squeeze Cement into 4.5" x 7" Annulus

- RIH with RBP and set 2-3 joints below Suretech liner hanger. Test injection. If no injection, discuss tubing punch in 4.5" casing for injection point. Dump sand on RBP.
- RIH with composite cement retainer and set in joint of pipe between liner hangers. RIH with 2-3/8" tubing and sting into cement retainer. Establish injection through leak, down 4.5" x 7" annulus, and into formation. Sting out.
- MIRU cements. Cement to consist of:
  - o Lead – 95sks (4.5" x 7" annulus volume) of 15.8ppg Class G plus additives with pump time of 1-1.5 hours.
  - o Tail – 50sks of 15.8ppg Class G plus additives including retarder with pump time of 3 hours.
- Spot lead cement to end of tubing. Sting into cement retainer and inject cement. Pump lead out of tubing. Once tail is out of tubing, begin slowing down and hesitating while tail enters 4.5" x 7" annulus in order to build pressure.
- Once all of tail is in 4.5" x 7" annulus or no further injection is possible, sting out of cement retainer, reverse circulate out any remaining cement, trip out of hole with tubing, and wait on cement.
- RIH with mill on tubing. Mill cement retainer and any cement below. Tag sand on RBP. Trip out of hole with tubing.
- Test squeeze to 4000psi. If squeeze tests, slowly bring pressure up to frac test pressure of 7500psi. If squeeze tests to 7500psi, MIRU frac crew and finish well with max frac pressure of 7500psi.
- If squeeze does not test:
  - o If injection >2bpm is possible, repeat squeeze attempt.
  - o If no injection is possible, shut well in and plan to remediate via drill out and flush joint pipe. Timetable on drill out is fall 2015, after crops are harvested.

**CASING AND CEMENTING CHANGES**

Casing Type	Size	Of	/	Hole	Size	Of	/	Casing	Wt/Ft	Csg/LinTop	Setting Depth	Sacks of Cement	Cement Bottom	Cement Top

**H2S REPORTING**

Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.

Gas Analysis Report must be attached.

H2S Concentration: \_\_\_\_\_ in ppm (parts per million)

Date of Measurement or Sample Collection \_\_\_\_\_

Description of Sample Point:

Absolute Open Flow Potential \_\_\_\_\_ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: \_\_\_\_\_

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: \_\_\_\_\_

COMMENTS:

<b><u>Best Management Practices</u></b>	
<b><u>No BMP/COA Type</u></b>	<b><u>Description</u></b>

Operator Comments:

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 Email: DJRegulatory@anadarko.com Date: 3/4/2015

Based on the information provided herein, this Sundry Notice (Form 4) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: SCHLAGENHAUF, MARK Date: 3/5/2015

**CONDITIONS OF APPROVAL, IF ANY:**

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

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)

**Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
400803986	FORM 4 SUBMITTED
400803989	OTHER

Total Attach: 2 Files