

**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
Document Number: <b>400782884</b>			
Date Received: <b>01/28/2015</b>			

**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 08406 00 OGCC Facility ID Number: 240618  
 Well/Facility Name: PACHECO HEIRS GAS UNIT Well/Facility Number: 1  
 Location QtrQtr: NESW Section: 32 Township: 2N Range: 66W 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 NESW Sec 32

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 \_\_\_\_\_

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 \_\_\_\_\_ Twp \_\_\_\_\_ Range \_\_\_\_\_

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>1955</u>	<u>FSL</u>	<u>2480</u>	<u>FWL</u>
_____	_____	_____	_____
Twp <u>2N</u>	Range <u>66W</u>	Meridian <u>6</u>	
Twp _____	Range _____	Meridian _____	
_____	_____	_____	_____
_____	_____	_____	_____
Twp _____	Range _____		
Twp _____	Range _____		
_____	_____	_____	_____
_____	_____	_____	_____

\*\* attach deviated drilling plan

**CHANGE OR ADD OBJECTIVE FORMATION AND/OR SPACING UNIT**

<u>Objective Formation</u>	<u>Formation Code</u>	<u>Spacing Order Number</u>	<u>Unit Acreage</u>	<u>Unit Configuration</u>

**OTHER CHANGES**

**REMOVE FROM SURFACE BOND**    Signed surface use agreement is a required attachment

**CHANGE OF WELL, FACILITY OR OIL & GAS LOCATION NAME OR NUMBER**

From:    Name    PACHECO HEIRS GAS UNIT                      Number    1                      Effective Date:    \_\_\_\_\_

To:        Name    \_\_\_\_\_                      Number    \_\_\_\_\_

**ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.**

WELL: Abandon Application for Permit-to-Drill (Form2) – Well API Number \_\_\_\_\_ has not been drilled.

PIT: Abandon Earthen Pit Permit (Form 15) – COGCC Pit Facility ID Number \_\_\_\_\_ has not been constructed (Permitted and constructed pit requires closure per Rule 905)

CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number \_\_\_\_\_ has not been constructed (Constructed facility requires closure per Rule 908)

OIL & GAS LOCATION ID Number: \_\_\_\_\_

Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.

Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.

**Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.**

**REQUEST FOR CONFIDENTIAL STATUS**

**DIGITAL WELL LOG UPLOAD**

**DOCUMENTS SUBMITTED**    Purpose of Submission: \_\_\_\_\_

**RECLAMATION**

**INTERIM RECLAMATION**

Interim Reclamation will commence approximately \_\_\_\_\_

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Interim reclamation complete, site ready for inspection. Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.

**Field inspection will be conducted to document Rule 1003.e. compliance**

**FINAL RECLAMATION**

Final Reclamation will commence approximately \_\_\_\_\_

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

**Field inspection will be conducted to document Rule 1004.c. compliance**

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 02/11/2015

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:

1 Squeeze Niobrara, Sussex, Fox Hills. Set packer. Run on production.  
2 Well already has a gyro (in OW, 2/28/14)  
3 Call Automation Removal Group at least 24 hr prior to rig move. Request they catch and remove plunger, isolate production equipment and remove any automation prior to rig MIRU.  
4 MIRU slickline services. Pull bumper spring and tag bottom. RDMO slickline services.  
5 Prepare location for base beam equipped rig. Install perimeter fence as needed.  
6 Check and record Bradenhead pressure. If Bradenhead valve is not accessible, re-plumb so that valve is above GL.  
7 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD.  
8 TOH and stand back 2-3/8" production tubing (259 joints landed at 7942'.)  
9 PU scraper for 4-1/2" 11.6 ppf casing. TIH on 2-3/8" tubing to 7850'. TOH, standing back all tubing. LD scraper.  
10 MIRU hydrotesters.  
11 RIH 4-1/2" RBP on tubing, hydrotesting to 6000 psi. Set RBP at 7800' to isolate J-Sand perms.  
12 Pick up off bridge plug. Circulate out gas. TOH, standing back tubing.  
13 MIRU WL. Run CBL/VDL/CCL from 7800' to surface to determine cement coverage. Forward the results to Evans Engineering (lisa.denke@anadarko.com and dave.gomendi@anadarko.com). There are no prior CBL's on this well, and cement jobs will be adjusted per the CBL.  
14 Pressure test casing and RBP to 1000 psi for 15 minutes. Dump 2 sx sand on RBP (note: dump sand, not cement).  
15 PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 7050' and 6740'. Depths to be adjusted pending bond log results. RDWL.  
16 PU CICR on 2 3/8" tbg. RIH and set CICR at 6780'. Break circulation w/ fresh water with biocide.  
17 RU Cementers. Pump Niobrara Suicide: 110 sx (188.1 cf of slurry) 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. Underdisplace and sting out of CICR to leave 3 bbl cmt on top of retainer. Volume based on 8-7/8" OH hole size w/ 40% excess. Caliper based on this hole, log beginning at 7000'.  
18 Pull and SB tbg to 6500'. Circulate clean with water containing biocide. TOH.  
19 WOC per cement company's recommendation. PU & TIH with 3-7/8" bit and 2-3/8" TBG. Drill to 6800' (past top perms and CICR). Pressure test through drill bit to 1,000 psi for 15 minutes. If PT passes proceed to next step. If test fails contact Evans Engineering for updated procedure.  
20 Drill out remaining cement plug. Pressure test squeeze holes to 1000 psi. POH with bit, stand back tubing.  
21 MIRU WL. Run CBL/VDL/CCL from prior top of cement to 500' above new top of cement to determine if there is sufficient coverage over the Niobrara. Forward the results to Evans Engineering (lisa.denke@anadarko.com and dave.gomendi@anadarko.com).  
22 PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 4980' and 4370'. RDWL.  
23 PU CICR on 2 3/8" tbg. RIH and set CICR at 4430'.  
24 RU Cementers. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl biocide water spacer immediately preceding cement.  
25 Pump Sussex Suicide: 380 sx (437 cuft of slurry) class "G", w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sk to place suicide squeeze between perms. Underdisplace and sting out of CICR to pump the final 3 bbls cement on top of retainer. Cement volume based on 410' in 10-1/2" annulus with 20% excess (Caliper log for this hole covers this zone).  
26 Pull and SB tubing to 4300'. Circulate water containing biocide to clear tubing. POH standing back tbg.  
27 WOC per cement company's recommendation. PU & TIH with 3-7/8" bit and 2-3/8" TBG. Drill to 4700' (past top perms and CICR). Pressure test through drill bit to 1,000 psi for 15 minutes. If PT passes proceed to next step. If test fails contact Evans Engineering for updated procedure.

**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:**

28 Drill out remaining cement plug. Pressure test squeezes to 1000 psi. POH with bit, stand back tubing.  
 29 MIRU WL. Run CBL/VDL/CCL from 6700' to 500' above the new TOC to determine if there is sufficient coverage over the Sussex. Forward the results to Evans Engineering (lisa.denke@anadarko.com and dave.gomendi@anadarko.com).  
 30 RUWL & PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 1500' and 780'. Adjust perf depths as necessary per CBL. RD WL.  
 31 RIH w/CICR on 2 3/8" tbg. Set at 840' ±10' per CCL.  
 32 RU cementers. Pump 10 bbl SAPP (Sodium Acid Pyrophosphate) followed by 20 bbl (min) fresh water spacer immediately preceding cement.  
 33 Pump Fox Hills Suicide job: 430 sx (571.9 cuft.) Type III cement w/ 0.25 pps cello flake and CaCl2 as deemed necessary mixed at 14.8 ppg and 1.33 cf/sk (based on 720' in 10-1/2" annulus with 40% excess). Sting out of CICR early and spot the final 3 bbls of cmt on top of retainer.  
 34 Pull and SB tubing to 500'. Circulate water containing biocide to clear tubing. POH standing back tubing.  
 35 WOC per cement company's recommendation. PU & TIH with 3-7/8" bit and 2-3/8" TBG. Drill to 900' (past top perms and CICR). Pressure test through drill bit to 1,000 psi for 15 minutes. If PT passes proceed to next step. If test fails contact Evans Engineering for updated procedure.  
 36 Drill out remaining cement plug. Pressure test squeezes to 1000 psi.  
 37 Cleanout to RBP at 7800'. TOH and SB tubing.  
 38 MIRU WL. Run CBL/VDL/CCL from 2000' to surface to determine if there is sufficient coverage over the Fox Hills. Forward the results to Evans Engineering (lisa.denke@anadarko.com and dave.gomendi@anadarko.com). RDMO WL.  
 39 PU retrieving head for RBP. TIH w/ retrieving head on 2-3/8" tbg. Circulate out sand. Latch onto RBP, release RBP and TOH, standing back 2-3/8" tbg, LD RBP.  
 40 RIH open ended with 2-3/8" tubing. Clean out to PBMD at 8017'. RU rig lubricator. Broach tubing to check for cement on inside. RD rig lubricator. TOH.  
 41 Run packer: RIH with 2-3/8" NC, 2-3/8" XN profile nipple, ±3200' (103 jnts) of 2-3/8 tbg Arrowset AS-1X packer rated to 10,000 psi (4-1/2", 11.6#), 2-3/8" tbg to surface. Set packer at ±4700 (adjust per CCL and CBL to set packer in cemented interval above Niobrara squeeze). Land EOT approximately 1 joint above J-Sand formation top perf at 7931'.  
 42 Fill 2-3/8" by 4-1/2" annulus w/ biocide treated water. Pressure test annulus to 1000 psi for 15 min.  
 43 ND BOP and NU WH.  
 44 Install 2-3/8" pup joint above master valve. Using hydrotester, pressure test from below TBG head through master valve to 5,000 psi.  
 45 RDMO WO Rig

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: 1/28/2015

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: 2/6/2015

**CONDITIONS OF APPROVAL, IF ANY:**

<u>COA Type</u>	<u>Description</u>
	1) The additional cement referenced shall be placed as indicated and comply with Rule 317.j. The placed cement shall be verified with a CBL and documented with a Form 5 Drilling Completion Report. 2) Please submit gyro survey data with Form 5 Drilling Completion Report.

**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>
400782884	FORM 4 SUBMITTED
400782885	OTHER

Total Attach: 2 Files