Forin 3160-5 (August 2007)	DE	UNITED STATES	OCD	CD Hobbs FORM APPROVED OMB NO. 1004-0135					
	BUREAU OF LAND MANAGEMENT					Expires: July 31, 2010 5. Lease Serial No.			
	NOTICES AND REPO is form for proposals to	ELLS e-enter an 🛛 📕		NMLC029405B					
abandoned well. Use form 3160-3 (APD) for such proposals.								me	
	7. If Unit or CA/Agree	ement, Nar	ne and/or No.						
1. Type of Well X Oil Well	ner	8. Well Name and No. RUBY FEDERAL 33							
 Name of Oper CONOCOF 	AUNDER cophillips.com	ophillips.com							
3a. Address 3300 N "A" MIDLAND,	ST BLDG 6 TX 79705		3b. Phone No Ph: 281-20 Fx: 281-20). (include area code)6-5281 6-5745	:)	10. Field and Pool, or Exploratory MALJAMAR			
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)				. 11. County or			arish, and State		
Sec 18 T17 32.501393	7S R32E SWNE 17 N Lat, 103.480977						ГҮ, NM		
	12. CHECK APPI	ROPRIATE BOX(ES) TO) INDICATI	ENATURE OF	NOTICE, R	EPORT, OR OTHE	R DATA		
TYPE OF S	TYPE OF SUBMISSION TYPE OF					FACTION			
Notice of Intent		Acidize	Dec	epen	Production (Start/Resume)		🗖 Wat] Water Shut-Off	
Subsequent Report		Alter Casing	🗖 Fra	Fracture Treat		□ Reclamation		 Well Integrity Other Change to Original A 	
Einal Abandonmant Notica		Casing Repair		v Construction		complete			
	indonnen Notice	Convert to Injection	Convert to Injection		g Back 🛛 Water 1		PD		
ConocoPhi proposes to additional v telephone a Our intent i minimum o strength, w performing -Well sumn -Complete	npieton of the involved en completed. Final Al at the site is ready for f llips Company resp o perform a remedi vork has been com and email. s to perform a brace f four (4) hours afte hichever is greater this additional cerr nary Procedure	operations. If the operation re bandonment Notices shall be fil inal inspection.) pectfully requests a chang al cement operation to ac municated to BLM staff n denhead cement squeeze er bringing it to surface or . We are including the foll tent operation.	down the an until it reach owing docun	nal APD for this t to surface. The nifer Mason and nulus. COPC wi es 500 pounds c nentation as the	well. COPC e need for Ed Fernand Il wait on cer basis for	ez via ment a	VED Wew 6 201	e filed once stator has	
14 Lhereby cert	ify that the foregoing is	true and correct		<u> </u>		- 10 MAR		NAULOE	
Name(Printed	d by the BLM We MPANY, sent to RT SIMMONS on Title SENIO	ell Information the Hobbs 03/06/2014 (1 R REGULA	n System 4KMS2973SEI AU OF FORY SPECIALIST	LAND MA SAD FIELD	ÖFFILE				
Cionatura (Electronic Sub-minica)				Date 03/04/2014					
			DR FEDER	AL OR STATE		SE			
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Approved_By_EDWARD_FERNANDEZ				TitlePETROLEUM ENGINEER Date 03/06/20				ate 03/06/2014	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.				Office Hobbs					
Title 18 U.S.C. Sec States any false,	ction 1001 and Title 43 fictitious or fraudulent	U.S.C. Section 1212, make it a statements or representations as	crime for any p to any matter w	erson knowingly and ithin its jurisdiction	d willfully to m 	ake to any department or	agency of	the United	
	** BLM REV	ISED ** BLM REVISEI) ** BLM R	EVISED ** BLI	M REVISE	D ** BLM REVISE	D **		
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APR 1 4 2014

Additional data for EC transaction #237731 that would not fit on the form

32. Additional remarks, continued

-Results of running Cement Bond Logs and pressure testing

Our intent is to proceed with stimulation/completion operations after well integrity has been established. Maximum anticipated frac pressure for this job is 6000 psi, expected during initial formation breakdown. Estimated pad treating pressure during the stimulation varies by stage, from 3000 ? 4000 psi. COPC will install a pressure gauge on the 8-5/8? by 5-1/2? casing annulus to monitor pressure during stimulation operations.

We request verbal approval of our plans, so that we can perform the cement job on March 6 or 7, 2014 followed by completion operations. Thank you for your time in considering this request.

Ruby Federal #33

API 30-025-41505-00

Summary:

During drilling operations for this well, cement did not circulate to surface behind the production casing as specified in our approved APD for two string casing and cementing designs. ConocoPhillips Company (COPC) representatives communicated with BLM staff regarding this occurrence. After scheduling conflicts prevented the completion of a temperature survey, we again contacted BLM staff and received acceptance of our intent to move the rig off location. At that time BLM requested COPC perform a Cement Bond Log (CBL) and a pressure test as means of evaluating the top of cement and well integrity.

On Wednesday, February 19, 2014 we ran a cement bond log with Schlumberger on Ruby Federal 33. We ran two full passes, the first at 0 psi and the second at 1,000 psi. The CBL indicates that top of cement is at approximately 1,090' MD, as indicated by significant reduction in amplitude at this depth. Additionally, there is quality cement above the top producing horizon for this well (Grayburg at 3467' MD). Estimated TOC is 981' above the Yates formation, which is the nearest hydrocarbon bearing zone. The 8-5/8" 24# J-55 STC surface casing is set at 772' MD and cemented to surface. The open hole zone is from 772-1090' MD, and the corresponding formations are the Rustler Anhydrite and Salado Salt.

Engineering decided to utilize the Formation Integrity Test results as a basis for satisfying the BLM request to conduct a pressure test, because of the open hole zone. On Thursday, February 20, 2014 we pressure tested the 8-5/8" by 5-1/2" casing annulus with PetroPlex. Prior to pressure test, the annular pressure gauge read 0 psi. We pressured up to 200 psi on the surface by production casing annulus and at 2:38 pm NM time, we began the test and monitored annulus pressure for 30 minutes. The test was concluded and the 8-5/8" by 5-1/2" casing annulus pressure was recorded at 179 psi.

On Monday, February 25, 2014 COPC proposed proceeding with completion operations. BLM staff required remedial cement operations be performed prior to stimulation/completion operations.

Well is currently secured.

Proposal:

Our intent is to perform a bradenhead cement squeeze down the annulus. The complete procedure is attached. COPC will wait on cement a minimum of four (4) hours after bringing it to surface or until it reaches 500 pounds compressive strength, whichever is greater. Our intent is to proceed with stimulation/completion operations after well integrity has been established and BLM approval is received. COPC will install an annulus pressure gauge to monitor pressure during stimulation/completion operations.

PROCEDURE: BRADENHEAD SQUEEZE DOWN ANNULUS, RUBY FEDERAL 33

1. Conduct safety meeting (JSA)

- 2. Excavate cellar and ensure surface casing valve is closed.
- 3. Remove piping to surface.
- 4. MIRU Baker Hughes cementing crew and tie surface line into 8-5/8" x 5-1/2" casing annulus valve.
- 5. Test surface line to 2,500 psi.
- 6. Pressure up on 8-5/8" x 5-1/2" casing annulus and establish injection by pumping fresh water at 2 – 5 BPM. Surface pressure must not exceed 2,000 psi. Do not mix cement until ability to inject is confirmed.
- 7. After verifying injection, batch mix **50 bbls** of the following cement to surface. Pump at maximum rate achieved in Step 6 and do not exceed 2,000 psi. After pumping 26 bbls, decrease rate to half the original pump rate. If pressure begins to increase while pumping at a constant rate, proceed to Step 8.
 - a) Total Mix Water Required: 1,466 gallons
 - b) Squeeze Slurry: 160 sacks of 13.5 ppg Class C + additives, 1.75 cf/sack yield
- 8. Displace cement in surface lines and ensure that wellhead is clear of cement below the tree.
- 9. Clean out batch mixer, preparing for a possible +/-25 bbls excess cement during clean up. Sugar will be added to excess cement as retardant to assist clean-up operations.
- 10. RDMO Baker Hughes cementing crew.
 - a) If well IS NOT on vacuum after pumping cement, skip to Step 21.
 - b) If well IS on vacuum after pumping cement, proceed as follows.
- 11. Close 8-5/8" x 5-1/2" casing annulus valve.
- 12. Spot wireline unit, crane, and equipment truck/trailer.
- 13. Verify there is no pressure on the 5-1/2" production casing prior to rigging up Wireline Service Company.
- 14. MIRU Wireline Service Company and place barriers along route of wireline cable between the wellhead and wireline unit (cones, caution tape, etc.).
- 15. NU pack-off to 7-1/16 10K flanged tubing head.

Remedial Cement Procedure (Ruby Federal 33) Page 1 of 2

- 16. RIH with temperature survey and locate top and bottom of cement. (Bottom of cement should be no deeper than 1,090 ft MD, which was original TOC identified in the CBL prior to remediation).
- 17. POOH with tool string.
- 18. ND pack-off and RDMO wireline unit, crane, and equipment truck/trailer.
- 19. Allow cement to set overnight and prepare for 8-5/8"x 5-1/2" casing annulus pressure test.

PRESSURE TEST 8-5/8" x 5-1/2" CASING ANNULUS

Notify BLM field inspector of intent to pressure test, giving BLM the option to witness pressure test. Contact: (575) 393-3612

- 20. Ensure cement has set for a minimum of 16 hrs.
- 21. Move lines to 8-5/8" x 5-1/2" casing annulus.
- 22. Pressure test to 600 psi and chart pressure for 30 minutes, as required by the BLM. Use a circular pressure chart with 0 1500 psi scale. Use red ink for recording pressure.

***A successful pressure test must not vary by greater than 10% over 30 minutes.

- 23. After completing pressure test, ensure that the pressure test chart includes the following information, as required by the BLM:
 - a) Well name and number
 - b) API number
 - c) Start time and pressure
 - d) End time and pressure
 - e) Calibration date
 - f) Signature of person performing the test
 - g) Signature of COPC representative witnessing the test
 - h) Signature of any government witness on location

NOTE: Chart line must be clearly visible, do not write over the pressure record line.

24. RDMO lines and test unit.

Remedial Cement Procedure (Ruby Federal 33) Page 2 of 2



JEREY THIRMAN COP REP

START TIME/PSI 2:38 200PSI END TIME/PSI 3:08 179 PSI

CALIBRATION DATE 2-14-2014