Form 3160-5 (March 2012) I	UNITED STATES DEPARTMENT OF THE IN	OCD-HOBBS VTERIOR NOBES	60	ON	ORM APPROVED MB No. 1004-0137 ires: October 31, 2014
В	UREAU OF LAND MANA	GEMENT 12	2012 5. Lease Ser NMLC0682		
Form 3160-5 (March 2012) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such prop			6. If Indian, N/A	6. If Indian, Allottee or Tribe Name N/A	
	BMIT IN TRIPLICATE – Other in	nstructions on page 2.	7. If Unit of N/A	CA/Agreem	nent, Name and/or No.
1. Type of Well     Image: Oil Well   Image: Gase Well     Image: Oil Well   Image: Other			8. Well Nan Buck 17 Fe	ederal # 1 S	SWD,
. Name of Operator			9. API Well 30-025-404	No. 182	
a. Address 20 Box 51810 Aidland, Tx 79710	1	<ul> <li>b. Phone No. (include area code</li> <li>132-688-6943</li> </ul>	e) 10. Field and SWD; Bell		ploratory Area
. Location of Well (Fobtage, Sec. 284 FNL & 1950 FWL IL F of 17-26S-32E	, T.,R.,M., or Survey Description)		11. County o Lea County	,	ate
12. C	HECK THE APPROPRIATE BOX	(ES) TO INDICATE NATURE	OF NOTICE, REPORT	OR OTHEI	RDATA
TYPE OF SUBMISSION		ТҮР	E OF ACTION		
Notice of Intent	Acidize	Deepen Fracture Treat	Production (Start/R	esume)	Water Shut-Off
Subsequent Report	Casing Repair	New Construction	Recomplete		Other Remedial
Final Abandonment Notice	Change Plans	Plug and Abandon Plug Back	Temporarily Aband	lon	Cementing Procedure
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# BUCK 17 FEDERAL #1 SWD REMEDIAL CEMENTING PROCEDURE API#: 30-025-4048200

Location: 2,284' FNL & 1,940' FWL, Sec. 17, T-26S, R-32E, Lea County, New Mexico Original RKB: 3189' (Precision Rig 822, Rig Floor 13' above ground level) Ground Level Elevation: 3176' (above Mean Sea Level)

Our proposal for the remediation of the top of cement on the production casing for Buck Federal 17 # 1 SWD is as follows:

#### Background:

- This well was spudded on 07-April-2012
- 9-5/8" 36# J-55 LTC Surface Casing was set at 1094' MD and was cemented to surface on 08-April-2012
- 7" 26# P-110 BTC Production Casing was set at 6267' MD and was cemented on 18-April-2012, however returns were lost during the cement job and cement did not get back to surface, nor was cement lapped back inside the surface casing.
- A temperature log was run on 18-April-2012 which indicated top of cement on the production casing to be at approximately 4660'.
- A cement bond log was run on 23-April-2012 which indicated top of cement on the production casing to be at approximately 4660', however there was a calibration error on this log and the amplitude data was considered suspect.
- An Isolation Scanner + CBL was run on 04-May-2012 which confirmed top of cement at 4662' MD with a stringer of cement on one side of the casing reaching up to 4652' MD.

# PROPOSED PROCEDURE

- 1. MI-RU well service unit and all necessary ancillary equipment.
- 2. Confirm wellbore is static, with no pressure, and is full of fluid.
- 3. Nipple Down dry hole tree
- 4. Install and test an 11" 5M BOP as follows:
  - Annular BOP, 7-1/16" 5M, hydraulically operated
  - Flow Cross, 7-1/16" 5M
  - Single Ram BOP, 7-1/16" 5M, dressed with blind rams, hydraulically operated
  - o Kill Line
  - o Choke Line
  - Choke Manifold

- 5. RIH with gauge ring and scraper on 2-7/8" workstring to the top of the float collar at ±6221'.
- 6. POOH and stand workstring back in derrick.
- 7. RIH with a Cast Iron Bridge Plug (CIBP) and set it at 4702' WLM as correlated to the Gamma Ray of the *Schlumberger Isolation Scanner Log dated 04-May-2012*.
- 8. Dump 2 sacks of sand down annulus. Allow sand time to settle on top of CIBP.
- 9. MI-RU *perforating* services with packoff or alternatively with a lubricator. RIH with GR/CCL tool along with perforating gun. Correlate to gamma ray on *Schlumberger Isolation Scanner Log dated 04-May-2012*.
- 10. Apply a minimum of 500 psi down casing with a high pressure water truck.
- 11. Perforate 7" production casing using *large diameter, shallow penetration charges* loaded @ 4 SPF on 90° phasing to perforate casing only. Note: <u>Perforation @ depth of 4660' (RKB)</u> or as directed by BLM.
- 12. Record pressure change that occurs when the perforations are made and discuss this with Jerry Reno.
- 13. POOH with wireline and spent perforating gun. Inspect all charges to confirm fired. RD-MO perforating services
- 14. Pump down casing taking returns up the annulus between the production casing and the surface casing out through the choke line to open top tanks. Record pressure and rate. Discuss the pressure and rate with Jerry Reno.

Note: If limited or no injection rate is achieved, call Jerry Reno the ConocoPhillips Production Engineer and discuss. If approved by BLM and NMOCD, we will move up hole 10' and repeat steps 9-14.

#### **Remedial Cement job:**

- 15. PU a 7" cement retainer on the 2 7/8" workstring. RIH w/ cement retainer and set it between 4515' and 4545' MD ORKB (i.e., ±100' 130' above the casing perforations). Remain stung-in to the cement retainer with the workstring.
- 16. MI-RU open top frac tanks (for water supply and returns).
- 17. Pump down workstring with rig pump and establish returns/circulation to surface frac tank. Pump 330 bbls at 3 bbl/min to get bottoms up and continue to circulate until constant rate/volume returns are observed and water cleans up. Contact Jerry Reno (432-202-5957) prior to proceeding to the next step

### Provide Cementers w\ a water sample prior to cementing for analysis & testing

- 18. Establish, hold, and record a minimum of 500 psi of pressure on the workstring x production casing annulus thru-out cement job.
- 19. MI-RU *Halliburton* cementing services and pressure test all lines to 5K psi.
- 20. Cement the well as follows:
  - Lead Slurry: 910 sacks Halliburton Tuned Light + 5 lbm/sk Poly-E-Flake (Lost Circulation Additive).

Fluid Weight:	10.5 lbm/gal
Slurry Yield:	2.76 ft3/sk
Total Mixing Fluid:	13.94 Gal/sack

 Tail Slurry: 180 sacks VerrsaCem - PBSH2, + 0.5 % LAP-1 (Low Fluid Loss Control) + 0.4 % CFR-3 (Dispersant) + 2.5 lbm/sk Kol-Seal (Lost Circulation Additive) + 0.25 lbm/sk D-AIR 5000 (Defoamer)

Fluid Weight	14 lbm/gal
Slurry Yield:	1.38 ft3/sk
Total Mixing Fluid:	6.45 Gal/sk

21. Displace cement with 24 bbls fresh water to leave the cement displaced to 2 bbl short of the retainer. Note and record the volume of cement returns to surface (we should get cement to surface).

Note:

- o Notify Jerry Reno if we lose circulation during the cement job.
- If we do not get cement to surface, we must notify BLM and NMOCD and follow up with them with our further proposal for the remedial work on this well.
- 22. Pull out of the retainer and reverse out workstring until clean water returns are observed. Release cementing services.
- 23. POOH with workstring. Shut well in and WOC a minimum of 12 hours.

# **Drill out Cement**

- 24. MI-RU drilling package (circulating unit, swivel, high pressure pump).
- 25. PU-RIH w/ a bit and drill collars on workstring.
- 26. Tag and record location of the top of cement. Drill out retainer and cement to CIBP.
- 27. Tag up on CIBP. Close pipe rams and pressure down workstring to 500 psi confirm casing is holding.

Note: contact Jerry Reno (432-202-5957) with results. If casing does NOT casing hold, as it may be necessary to repeat cement job.

Procedure prepared by:

Jerry Reno – Staff Production Engineer, ConocoPhillips 432-368-1409 (office) 432-202-5957 (cell) E-mail: j.r.reno@ConocoPhillips.com

#### Buck 17 Fed 1 SWD 30-025-40482 ConocoPhillips Company Conditions of Approval

- 1. Contact BLM 575-393-3612 a minimum of 24 hours prior to cement job.
- 2. Run a CBL from previous cement top to surface and submit the results to the Carlsbad BLM office.\
- 3. Subsequent sundry required.

# Well with a Packer - Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
  - a) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
  - b) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
  - c) At least 24 hours before the test: In Eddy County email Paul R. Swartz <u>paul\_swartz@blm.gov</u>, (phone 575-200-7902). If there is no response phone 575-361-2822. In Lea County email Andy Cortez <u>andy\_cortez@blm.gov</u>, (phone 575-393-3612 or 575-631-5801). Note the contact notification method, time, & date in your subsequent report.
  - d) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.

CRW 060712