Form 3160-5 (August 2007) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OCD Hobbs 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 proposals.					FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010		
					5. Lease Serial No. NMNM116166		
					6. If Indian, Allottee	or Tribe Name	
SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agreement, Name and/or No.		
1. Type of Well Gas Well Other					<ol> <li>Well Name and No. EK 29 BS2 FEDERAL COM 3H</li> </ol>		
2. Name of Operator MCELVAIN ENERGY INC Contact: TONY G COOPER E-Mail: TONY.COOPER@MCELVAIN.COM					9. API Well No. 30-025-42699		
3a. Address         3b. Phone No. (include area code)           1050 17TH STREET SUITE 2500         Ph: 303-893-0933 Ext: 331           DENVER, CO 80265         Fx: 303-893-0914					10. Field and Pool, or Exploratory EK- BONE SPRINGS		
4. Location of Well (Footage, Sec., T.	4. Location of Well (Footage, Sec., T., R., M., or Survey Description)					11. County or Parish, and State	
Sec 29 T18S R34E Mer 6PM 305FSL 2155FEL					LEA COUNTY, NM		
12. CHECK APPF	ROPRIATE BOX(ES) TO	) INDICATE N	ATURE OF	NOTICE, RE	EPORT, OR OTHE	ER DATA	
TYPE OF SUBMISSION	TYPE OF SUBMISSION TYPE OF ACTION						
Notice of Intent		🗖 Deepe		-	ion (Start/Resume)	□ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	Fractu		🗖 Reclama		U Well Integrity	
	Casing Repair	_	Construction	C Recomp		🛛 Other	
Final Abandonment Notice	Change Plans	D Plug a	nd Abandon	U Tempor	arily Abandon		
13. Describe Proposed or Completed Op If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi ?McElvain Energy, Inc. (MEI) casing at 1,788 ft on the EK 29 The plan is to MIRU a spudde place. The spudder rig would fi lb/ft J-55 STC casing to TD. T 3rd party vendor (possibly Hal surface casing in place. The s surface casing cement job me the surface casing with a pres personnel can inspect the surf surface casing. A drilling rig w	r rig and drill the conduct then drill the 17 ?? surfac he spudder rig would still liburton Energy Services pudder rig would wait the ets all COA?s per the AP sure gauge to ensure no face casing at any time to ould then be MIRU appro	or hole, run cor e hole to 1,788 be on location or some simila appropriate an PD. At that point debris enters the ensure no pre eximately a mor	ductor pipe a ft and run 13 and over the company) ca ount of time , MEI would v le surface cas ssure is prese th or less afte	nd cement in -3/8? 54.5 wellbore as a emented the to ensure the veld a plate o sing and/or Bl ent within the er the surface	ver LM	CD FOR POWER	
14. I hereby certify that the foregoing is	true and correct. Electronic Submission #		by the BLM W	ell Information			
Name(Printed/Typed) TONY G	COOPER		litle SR EH	IS SPECIALI	ST .	· .	
Signature (Electronic S	Submission)		Date 08/24/	2015	/	Ke	
THIS SPACE FOR FEDERAL OR STATE OFFICE USE ON THIS							
				ALLI	TUVED		
Approved By 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			Title		OLEUM ENGIN	<b>FR</b> Date	
which would entitle the applicant to conduct operations thereon. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and windly of make to any department or agency of the United						or agency of the United	
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. BUREAU OF LAND MANAGEMENT ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED *COREBAJOR:SUBMITTED **							
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## Additional data for EC transaction #313647 that would not fit on the form

#### 32. Additional remarks, continued

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casing has been ran and cemented to drill the remaining intervals per the APD. Of course; MELreserves the right to delay the drilling rig if commodity price is unquitable for continueddrilling and/or some other unforescence vent.?-



# **CONDITIONS OF APPROVAL**

	OPERATOR'S NAME:	MCELVAIN ENERGY, INC.
	LEASE NO.:	NM245247
	WELL NAME & NO.:	EK 29 BS2 Federal Com 3H
SURFA	ACE HOLE FOOTAGE:	305' FSL & 2155' FWL
BOTT	TOM HOLE FOOTAGE	510' FNL & 1980' FWL
	LOCATION:	Section 29, T.18S., R34E., NMPM
	COUNTY:	Lea County, New Mexico

## DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

#### 🛛 Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated <u>500 feet prior</u> to drilling into the Queen formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. Option Setting surface casing with Spudder Rig
  - a. Notify the BLM when removing the Spudder Rig.
  - b. Notify the BLM when moving in the Drilling Rig. Rig to be moved in within 60 days of notification that Spudder Rig has left the location. Failure to notify or have rig on location within 60 days will result in an Incident of Non-Compliance.
  - c. Once the Drilling Rig is on location, it shall not be removed from over the hole without prior approval unless the production casing has been run and cemented or the well has been properly plugged. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.

- d. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as Drilling Rig is rigged up on well. CIT for the surface casing shall be performed and results recorded on subsequent sundry – pressure to be 1200 psi.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

## **B.** CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

#### Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string..

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible water flows in the Salado, Artesia Group.

Possible lost circulation in the Rustler, San Andres, Grayburg, Red Beds, Delaware, and Artesia Group.

- 1. The 13-3/8 inch 54.5# J-55 ST-C surface casing shall be set at approximately 1788 feet (in a competent bed, which is a <u>Member of the Rustler</u>, and if salt is encountered, set casing at least 25 feet above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing shall be set at approximately <u>4900 feet</u> and is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Cement volumes shall be adjusted accordingly to reach surface as stated by operator.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

#### **Option 1 (Primary Program):**

Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification. Cement volumes shall be adjusted accordingly as stated by operator.

#### **Option 2 (Well Conditions Warranted):**

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve approved top of cement.

Operator has proposed DV tool at depth of 7500 feet, but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50 feet below previous shoe and a minimum of 200 feet above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

- b. Second stage above DV tool:
- Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification. Cement volumes shall be adjusted accordingly as stated by operator.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000** (**2M**) psi. **Operator installing a 3M but testing as a 2M**
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock with a corresponding chart (i.e. two hour clock-two hour chart, one hour clock-one hour chart).
  - d. The results of the test shall be reported to the appropriate BLM office.
  - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

#### D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

#### E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

#### KGR 09022015