Form 3160-5 • (August 2007)	UNITED STATE DEPARTMENT OF THE	INTERIOR OCD	Hoht OMB	<b>1 APPROVED</b> NO. 1004-0135 s: July 31, 2010	
··- 5	BUREAU OF LAND MANA SUNDRY NOTICES AND REPO	AGEMENT	5. Lease Serial No. NMNM116166		
Do r aban	Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.			6. If Indian, Allottee or Tribe Name	
SUBI	SUBMIT IN TRIPLICATE - Other instructions on reverse side: $AOBBSOCD$			eement, Name and/or No.	
1. Type of Well	· · · · · · · · · · · · · · · · · · ·		SEP 0 8 2015 8. Well Name and N EK 30 BS2 FEI		
2. Name of Operator			9. API Well No. 30-025-42701	· · · · · · · · · · · · · · · · · · ·	
3a. Address 1050 17TH STREE DENVER, CO 8020		3b. Phone No. (include area code Ph: 303-893-0933 Ext: 33 Fx: 303-893-0914	10. Field and Pool, o	or Exploratory RINGS	
	otage, Sec., T., R., M., or Survey Descriptio		11. County or Parish	, and State	
Sec 30 T18S R34E	Mer 6PM 175FSL 860FEL		LEA COUNTY	, NM	
. 12. CH	ECK APPROPRIATE BOX(ES) T	O INDICATE NATURE OF	NOTICE, REPORT, OR OTH	ER DATA	
TYPE OF SUBMIS	TYPE OF SUBMISSION TYPE OF ACTION				
Notice of Intent		Deepen	Production (Start/Resume)	□ Water Shut-Off	
Subsequent Report	□ Alter Casing □ Casing Repair	Fracture Treat New Construction	Reclamation Recomplete	Well Integrity Other	
Final Abandonmer		Plug and Abandon	☐ Temporarily Abandon		
	Convert to Injection		□ Water Disposal		
3rd party vendor (p surface casing in pl surface casing cem the surface casing v personnel can insp	ompleted Operation (clearly state all pertin- ben directionally or recomplete horizontally which the work will be performed or provid the involved operations. If the operation r ted. Final Abandonment Notices shall be f is ready for final inspection.) Inc. (MEI) requests the approval to n the EK 30 BS2 Federal Com #1H J a spudder rig and drill the conduct rig would then drill the 17 ?? surfa g to TD. The spudder rig would still ossibly Halliburton Energy Services ace. The spudder rig would wait th ent job meets all COA?s per the A with a pressure gauge to ensure no ect the surface casing at any time t rilling rig would then be MIRU appr	s or some similar company) ce e appropriate amount of time t PD. At that point, MEI would w o debris enters the surface cas to ensure no pressure is prese	nd cement in 3/8? 54.5 vellbore as a mented the o ensure the reld a plate over ing and/or BLM nt within the r the surface	ED & OP POWER	
			yr. * * *	× ×	
14. I hereby certify that the	14. I hereby certify that the foregoing is true and correct. Electronic Submission #313650 verified by the BLM Well Information System For MCELVAIN ENERGY INC, sent to the Hobbs				
Name(Printed/Typed)	TONY G COOPER	Title SR EH	S SPECIALIST	ogenegatietetetetetetetetetetetetetetetetetete	
Signature	(Electronic Submission)	Date 08/24/2			
	THIS SPACE F	OR FEDERAL OR STATE			
			PETROLEUM ENGIN		
certify that the applicant hold	y, are attached. Approval of this notice doe Is legal or equitable title to those rights in the	he subject lease	SEP - 2 2015 Kenneth Renni	· Date	
Title 18 U.S.C. Section 1001	cant to conduct operations thereon. and Title 43 U.S.C. Section 1212, make it or fraudulent statements or representations a	a crime for any person knowingly an as to any matter within its jurisdiction	willight water maker to any department		
	OPERATOR-SUBMITTED ** (		CARLSDAD FIELD OFFIC	E	
				AID	

#### Additional data for EC transaction #313650 that would not fit on the form

#### 32. Additional remarks, continued

# **CONDITIONS OF APPROVAL**

•	
OPERATOR'S NAME:	MCELVAIN ENERGY, INC.
LEASE NO.:	NM123938
WELL NAME & NO.:	EK 30 BS2 Federal Com 1H
SURFACE HOLE FOOTAGE:	175' FSL & 860' FEL
 BOTTOM HOLE FOOTAGE	510' FNL & 660' FEL
LOCATION:	Section 30, 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 1738 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.
- 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