/ `Form 3160-5 (August 2007)	UNITED STATES	NM OIL CON	ISERVATION	FORM /	APPROVED	
DI	EPARTMENT OF THE INTERIC UREAU OF LAND MANAGEMEN	OR ARTESIA	DISTRICT	OMB NC Expires:	D. 1004-0135 July 31, 2010	
SUNDRY			5. Lease Serial No. NMNM025533			
abandoned we	nis form for proposals to drill or a ell. Use form 3160-3 (APD) for su	uch proposals.		f Indian, Allottee of	Tribe Name	
SUBMIT IN TR	IPLICATE - Other instructions or		7. II	f Unit or CA/Agree 91000303X	ment, Name and/or No.	
1. Type of Well	her		8. W P	ell Name and No. OKER LAKE UN	IT CVX JV BS 036H	
2. Name of Operator BOPCO LP	Contact: WHITNE E-Mail: wbmckee@basspet.	EY MCKEE		PI Well No. 0-015-42428-0	D-X1	
3a. Address P O BOX 2760 MIDLAND, TX 79702		ne No. (include area code) 32-683-2277		Field and Pool, or I INDESIGNATE	and Pool, or Exploratory ESIGNATED	
4. Location of Well (Footage, Sec., 7	T., R., M., or Survey Description)		11. (	County or Parish, a	nd State	
Sec 19 T24S R31E NENW 0 32.123431 N Lat, 103.490357			E	DDY COUNTY	, NM	
12. CHECK APP	ROPRIATE BOX(ES) TO INDIC	ATE NATURE OF N	OTICE, REPOR	T, OR OTHER	DATA	
TYPE OF SUBMISSION		TYPE OF	ACTION			
Notice of Intent		Deepen	Production (S	tart/Resume)	U Water Shut-Off	
Subsequent Report	[ _ · · ·	Fracture Treat	Reclamation		Well Integrity	
Final Abandonment Notice		New Construction	<ul> <li>Recomplete</li> <li>Temporarily A</li> </ul>	ily Abandon Change to Origi		
		Plug Back	Water Dispos		PD	
If the proposal is to deepen direction: Attach the Bond under which the wo following completion of the involved testing has been completed. Final At determined that the site is ready for fi	•	rface locations and measur No. on file with BLM/BIA. nultiple completion or recor er all requirements, includi	ed and true vertical d Required subsequer mpletion in a new int ng reclamation, have	lepths of all pertine nt reports shall be fi erval, a Form 3160 been completed, ar	nt markers and zones. iled within 30 days -4 shall be filed once	
BOPCO L. P. requests to ame L.P. will alter the intermediate 12-1/4? hole rather than an 11	end the approved 8pt drilling progra casing size from 8-5/8? to 9-5/8? inch hole.	am for the PLU CVX a and drilling an interme	IV BS #036H. BC ediate	DPCO		
placed at 5,800? rather than a	preased from 7-7/8? to 8-3/4 inche- pproved APD depth of 5,000 feet. to surface on the first stage of cerr detailed in the table attached.	The DV tool depth is	being deepened size and SEE ATT	ACHED F	-	
	Accepted	for record	CONDITI	ONS OF A	APPROVAL	
	-POD NMC	YD				
14. I hereby certify that the foregoing is	true and correct.	1/14/2015			<u> </u>	
	Electronic Submission #263064 ve For BOPCO LF	P, sent to the Carlsbad			•	
Comi Name(Printed/Typed) DON WOC	mitted to AFMSS for processing by . חר		01/05/2015 (15JAN G ENGINEER	10152SE)		
Signature (Electronic S	ubmission)	Date 09/12/20	14 <u>APP</u>	ROVED		
	THIS SPACE FOR FEDE	ERAL OR STATE C				
Approved By		Title	JAN	7/2015	Date	
Conditions of approval, if any, are attached certify that the applicant holds legal or equ which would entitle the applicant to condu	itable title to those rights in the subject lea ct operations thereon.	Office		IELD OFFICE	<u>//.</u>	
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a crime for an tatements or representations as to any matter	ny person knowingly and viter within its jurisdiction.	villfully to make to an	ny department or a	ency of the United	

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\*\* BLM REVISED \*\*

TO:Whitney McKeeFROM:Donald H. WoodDATE:September 12, 2014SUBJECT:Sundry Notice for the PLU CVX JV BS #036H

BOPCO L. P. requests to amend the approved 8pt drilling program for the PLU CVX JV BS #036H. BOPCO L.P. will alter the intermediate casing size from 8-5/8" to 9-5/8" and drilling an intermediate 12-1/4" hole rather than an 11 inch hole.

The production hole will be increased from 7-7/8" to 8-3/4 inches and the 5-1/2" DV tool will be placed at 5,800' rather than approved APD depth of 5,000 feet. The DV tool depth is being deepened to improve circulating cement to surface on the first stage of cement. The APD casing size and cement volumes changes are detailed in the table below.

#### **Approved 8-Point Casing Program:**

Casing Description	Interval (MD)	Hole Size	Purpose	Material Status	
8-5/8", 32#, J-55 LT&C	0-4,290'	11″	Intermediate	New	
5-1/2", 17.0 #, HCP-110 BTC	0-17,894'	7-7/8″	Production	New	

#### Amended 8-Point Casing Program:

Casing Description	Interval (MD)	Hole Size	Purpose	Material Status	
9-5/8", 40.0#, J-55 LTC	0-4,290'	12-1/4"	Intermediate	New	
5-1/2", 17.0#, HCP-110 BTC	0-17,877	8-3/4″	Production	New	

The adjusted cement types and volumes are as follows:

#### **Approved 8-Point Cement Program:**

Interval (MD)	Amount (sx)	Fill Ht. (ft)	Туре	Water (gal/sx)	Density (ppg)	Vol. (cu. ft.)
INTERMEDIATE						
Lead: 0-3,790'	780	3,790	EconoCEM HLC +5% CaCl + 5 pps Gilsonite	9.32	12.90	1.85
Tail: 3,790-4,290'	150	500	HalCem C	6.34 ·	14.8	1.33
PRODUCTION						
Stage 1:						
Lead: 5,000-10,167'	510	5,167	Tuned Light + 0.125 pps Poly- E-Flake	14.87	11.0	2.64
Tail: 10,167-17,894'	1000	7,727	Class "H" +	11.41	12.00	2.03

			0.5% Halad-344 + 0.25% CFR-3 + 0.5% Econolite			
DV Tool @ 5,000'						
Stage 2:						
Lead: 3,790-5,000'	130	1,210	Tuned Light + 0.125 pps Poly- E-Flake	11.70	11.0	2.35

Amended 8-Point Cement Program:

Interval (MD)	Amount (sx)	Fill Ht. (ft)	Туре	Water (gal/sx)	Density (ppg)	Vol. (cu. ft.)
INTERMEDIATE					<u></u>	
Lead: 0-3,790'	1,135	3,790	35/65 Poz Class + 5% Salt + 6% Bentonite + 0.2% retarder +	9.895	12.90	1.91
	-	· .	0.125 pps Celloflake + 0.4 pps Defoamer			
			+ 3 pps KolSeal		· ·	· ·
Tail: 3,790-4,290'	265	500	Class C + 0.2% retarder	6.307	14.8	1.33
PRODUCTION				· · ·	·····	
Stage 1:		······································			1	
Lead: 5,800- 10,080	810	4,280′	VERSACEM SYSTEM+8% bentonite, 0.5# D-AIR 5000,	13.08	11.9	2.28
			0.8% HR-601, 1.0% Cal-Seal 60			
Tail: 10,080- 17,877'	2,166	7,797	VERSACEM SYSTEM+0.5% LAP-1, 0.3% CFR-3, 0.10% FWCA, 0.125# Poly-E-Flake,	5.49	14.5	1.23
			0.5# D-AIR 5000, 0,1% HR- 601			
DV Tool @ 5,800'						
Stage 2: Lead: 3,790-	315	1,710	VERSACEM	13.05	11.9	2.26
5,500'			SYSTEM+8% bentonite, 0.125# Poly-E- Flake, 0.5# D- AIR 5000			
Tail: 5,500-5,800	100	300	HALCEM SYSTEM + 0.1% BWOC HR-800	6.34	14.8	1.33

# NM OIL CONSERVATION

ARTESIA DISTRICT

JAN 1 3 2015

## PECOS DISTRICT CONDITIONS OF APPROVAL

## RECEIVED

OPERATOR'S NAME:	BOPCO, L.P.
LEASE NO.:	NMNM-0506A
WELL NAME & NO.:	Poker Lake Unit CVX JV BS 36H
SURFACE HOLE FOOTAGE:	0150' FNL & 2332' FWL
<b>BOTTOM HOLE FOOTAGE</b>	2310' FNL & 1980' FWL Sec. 30, T. 24 S., R 31 E.
LOCATION:	Section 19, T. 24 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico
API:	30-015-42428

## The original COAs still stand with the following drilling modifications:

## I. 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)

### **Eddy County**

- Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. Operator has stated that Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. Operator has also stated that if H2S is encountered in quantities greater than 10 PPM the well shall be shut in and H2S equipment shall be installed and flare line must be extended pursuant to Onshore Oil and Gas Order #6. Report measured values and formation to the BLM. After detection, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items.
- Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.

- 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) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

Possibility of water flows in the Salado and Castile. Possibility of lost circulation in the Rustler, Red Beds, and Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 900 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
  - 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 is:

Cement to surface. If cement does not circulate see B.1.a, c-d above.

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:

Operator has proposed DV tool at depth of 5800', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

- 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 on the next stage.
- b. Second stage above DV tool:
- Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

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. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- 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. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - 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.

## JAM 010715