Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

IAN 1 4 2055 Lease Serial No.

	NOTICES AND REPO		ALIA T. S.	NMNM128366		
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	
SUBMIT IN TR	IPLICATE - Other instruc	ctions on reverse side:		9.77	ement, Name and/or No.	
Type of Well Gas Well	her			8. Well Name and No BLACK PEARL 1		
Name of Operator COG OPERATING LLC	9. API Well No. 30-025-42294-00-X1					
3a. Address ONE CONCHO CENTER 60 MIDLAND, TX 79701-4287	10. Field and Pool, or Exploratory LEA					
4. Location of Well (Footage, Sec., 7	C., R., M., or Survey Description)		11. County or Parish, and State		
Sec 1 T20S R34E Lot 3 190FNL 1260FWL 32.608890 N Lat, 103.517724 W Lon				LEA COUNTY, NM		
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, R	EPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION .	TYPE OF ACTION					
Notice of Intent	☐ Acidize	Deepen	☐ Product	ion (Start/Resume)	■ Water Shut-Off	
_	Alter Casing	☐ Fracture Treat	☐ Fracture Treat ☐ Reclamation		■ Well Integrity	
■ Subsequent Report	□ Casing Repair	■ New Construction	☐ Recomplete		Other	
☐ Final Abandonment Notice	☐ Change Plans	□ Plug and Abandon	☐ Temporarily Abandon		Change to Original A	
	☐ Convert to Injection	Plug Back	■ Water Disposal		r D	
13. Describe Proposed or Completed Op If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final At determined that the site is ready for fo	ally or recomplete horizontally, it will be performed or provide operations. If the operation respondent Notices shall be file	give subsurface locations and meast the Bond No. on file with BLM/BI/ sults in a multiple completion or rec	ured and true ve A. Required sul ompletion in a r	ertical depths of all pertir bsequent reports shall be new interval, a Form 316	ent markers and zones. filed within 30 days 0-4 shall be filed once	

 ${\sf COG}$ Operating LLC, respectfully requests approval to add a Flex Hose Variance Report to the original approved APD.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify	that the foregoing is true and correct. Electronic Submission #285984 verifie For COG OPERATING I Committed to AFMSS for processing by JEN	LLC, se	ent to the	e Hobb	s	•				
Name(Printed/T)	pped) MAYTE X REYES	Title	.REGI	LATO	RYANA	SYST	WED	 -	<u> </u>	
Signature	(Electronic Submission)	Date	12/22	2014	Ar.	rnu	IVLU	7		
	THIS SPACE FOR FEDERA	L OR	STAT	OFF	ICE WE	梅 7	2015	0_		
Approved By		Title		D.		W	NA NI ANA	ENIT	Gu Date	/
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	e		CARLS	BADFIE	LD OFFICE			Ka
	n 1001 and Title 43 U.S.C. Section 1212, make it a crime for any petious or fraudulent statements or representations as to any matter w				ully to mal	e to any	department o	agency	of the Unite	d

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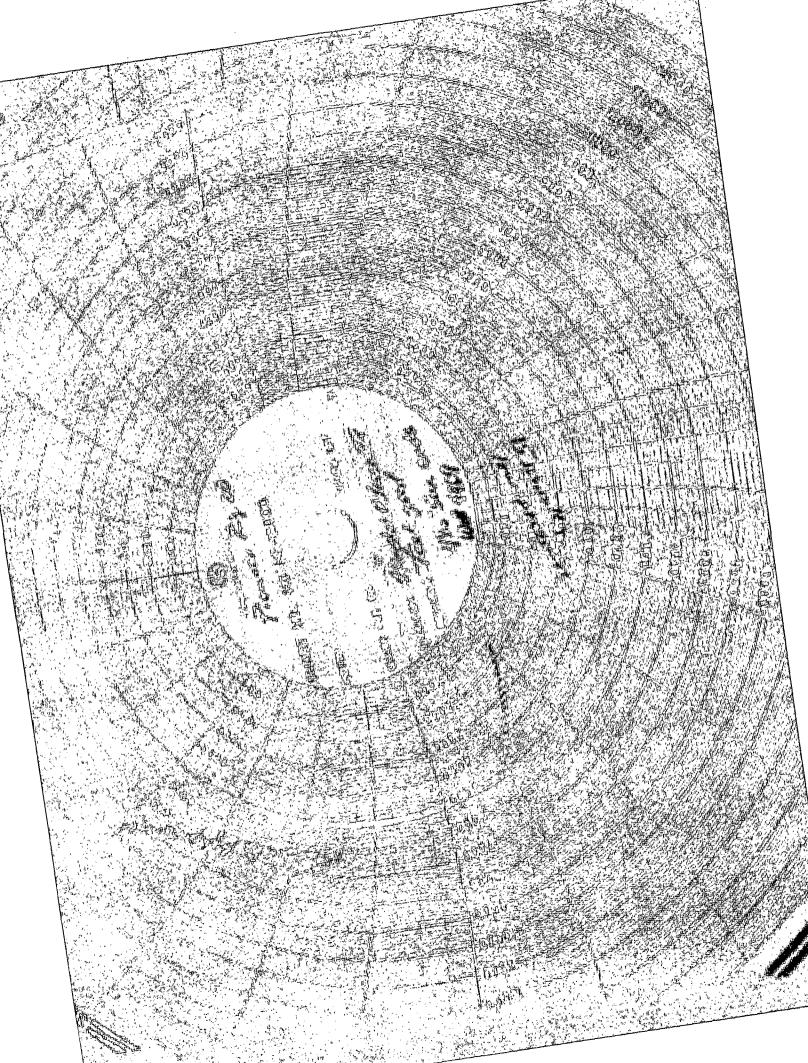
SSI Delivery Ticket #: 7202

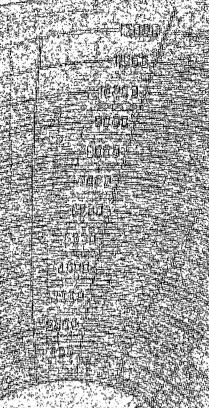
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PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: C

COG Operating LLC.

LEASE NO.:

NMNM-128366

WELL NAME & NO.: SURFACE HOLE FOOTAGE:

| Black Pearl 1 Federal 3H | 0190' FNL & 1260' FWL | 0330' FSL & 1980' FWL

BOTTOM HOLE FOOTAGE LOCATION:

Section 01, T. 20 S., R 34 E., NMPM

COUNTY:

Lea County, New Mexico

API: | 30

30-025-42294

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)

⊠ 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 500 feet prior to drilling into the Seven Rivers 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. 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 Artesia Group, Salado, and Queen.
Possibility of lost circulation in the Rustler, Red beds, Artesia Group, Capitan Reef, and Delaware.

Abnormal pressures may be encountered within the 3rd Bone Spring SandStone and Wolfcamp formation.

- 1. The 13-3/8 inch surface casing shall be set at approximately 1900 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, 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.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the 9-5/8 inch intermedia	ite casing is:
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Cement to surface.	If cement	does not	circulate	see B.1.a	, c-d above
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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:
 - 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. In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).
- 4. 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.
- 5. 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 3000 (3M) psi.
- 6. 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.

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