JUL 2 6 2011

COG OPERATING LLC MULTI-POINT SURFACE USE AND OPERATIONS PLAN

RECEIVED

Lusk Deep Unit A #25H
SHL: 1800' FNL & 330' FWL
BHL: 1800' FNL & 330' FEL
Section 20 T19S R32E
Lea County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by John West Surveying Company.
- b. Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2. Right of way using this proposed route is being requested if necessary.
- c. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

DIRECTIONS:

From the intersection of CO. Rd. #136 (Maljamar Road) and the CO. Rd. #126 (Lusk Plant Rd.) The location stake is approx. 400 feet southeast.

PLANNED ACCESS ROAD:

COG will be using existing two track road to get to the well site.

2. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. In the event the well is found productive, the Lusk Deep Unit A #25H tank battery would be utilized and the necessary production equipment will be installed at the well site. See Exhibit #4.
- B. All flowlines will adhere to API standards
- C. If electricity is needed, power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.
- D. If the well is productive, rehabilitation plans are as follows:

i. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

3. LOCATION AND TYPES OF WATER SUPPLY:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in Exhibit #2. On occasion, water will be obtained form a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, the existing and proposed road shown in Exhibit "2" will be utilized.

5. CONSTRUCTION MATERIALS:

All Caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

6. METHODS OF HANDLING WASTE MATERIAL:

- a. All trash, junk and other waste material will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
- b. The supplier, including broken sacks, will pick up slats remaining after completion of well.
- c. A porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- d. Disposal of fluids to be transported by an approved disposal company.

6. ANCILLARY FACILITIES:

No campsite or other facilities will be constructed as a result of this well.

7. WELLSITE LAYOUT:

- a. Exhibit 1 shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicates proposed location of reserve and sump pits if utilized and living facilities.
- c. Mud pits in the active circulating system will be steel pits and a closed loop system will be utilized.

8. PLANS FOR SURFACE RECLAMATION:

a. After finishing drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the

original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original state.

- b. The location and road will be rehabilitated as recommended by the BLM.
- c. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

9. SURFACE OWNERSHIP:

The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas. The proposed road routes and the surface location will be restored as directed by the BLM.

10.OTHER INFORMATION:

- a. The area surrounding the well site is grassland. The vegetation is moderately sparse with native prairie grass and mesquite bushes. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography. Reserve pit will not be used on this location therefore no reclamation is needed.
- d. Topsoil will be stockpiled on the <u>NORTH SIDE</u> of the location until it is needed for interim reclamation described in paragraph above.

12. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

B. Through Drilling Operations

Rand French, Regulatory Supervisor COG Operating LLC Artesia, NM 88210 Phone (575)748-6940 Cell (432) 254-5556 Sheryl Baker, Drilling Supervisor COG Operating LLC Artesia, NM 88210 Phone (575)748-6940 Cell (432)934-7873 original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original state.

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- d. Topsoil will be stockpiled on the <u>SOUTH SIDE</u> of the location until it is needed for interim reclamation described in paragraph above.

12.OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

B. Through Drilling Operations

Rand French, Regulatory Supervisor COG Operating LLC Artesia, NM 88210 Phone (575)748-6940 Cell (432) 254-5556

Sheryl Baker, Drilling Supervisor COG Operating LLC Artesia, NM 88210 Phone (575)748-6940 Cell (432)934-7873

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date:

May 6, 20111

HOBBS OCD

Lease #:

NMLC0065710A Lusk Deep Unit A #25H

JUL 26 2011

Legal Description:

Sec. 20 - T19S - R32E

Eddy County, New Mexico

RECEIVED

Formation(s): Bone Springs

Bond Coverage: Statewide

BLM Bond File #: NMB00215

COG OPERATING LLC

Mayte Reyes

Regulatory Analyst

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by COG Operating LLC and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

COG OPERATING, LLC

Date

Rand French

Regulatory Supervisor

HOBBS OCD

JUL 26 20:1

RECEIVED



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

Sub

Depth Depth Water

POD Number

basin Use County 6416 4 Sec Tws Rng

Y Well WaterColumn

CP 00639 EXPL

EXP LE

3 1 20 19S 32E

613029 3612880* 350

345 Average Depth to Water: 345 feet

Minimum Depth:

Maximum Depth:

345 feet 345 feet

Record Count: 1

PLSS Search:

Section(s): 20

Township: 19S

Range: 32E

*UTM location was derived from PLSS - see Help

Land Status Energy Sites Roads Mining Range Land

Oil	and Gas	Sec 3	68 Ener	gy Corri	dors	Energy Po	otential Area	s ∫St	ipulations	OG Density	Coal	Geoi	thermal	Fast 1	rack
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Lan	d Status	Plats													

Identify Source: Selected Sketch

⊕ o	I and	Gas	Agreements		4	results	
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Map	Reports	More Info	Unit Name	Area Name	Serial No. (Full)	Geometry	Case ID	
XXO	LR2000 CR Report	More Info	LUSK WEST (DELAWARE)	*	NMNM 094514X		22102	
XXX	LR2000 CR Report	More Info	LUSK DEEP	INT DELAWARE	NMNM 070982D		2164319	(
XXO	LR2000 CR Report	More Info	LUSK DEEP	*	NMNM 070982X		2266094	
XXO	LR2000 CR Report	More Info	LUSK DEEP	INITIAL MORROW	NMNM 070982B		2071697	(

🚭 Oil and Gas Leases Producing: 1 result 🗌

<u>Map</u>	,			Stored Acreage	Serial No. (Full)	Geometry	<u>Case 7</u>
XXX	R2000 CR Report	More Info	LUSK FIELD	640.000	NMLC 0065710A	(O&G LSE NONCOMP

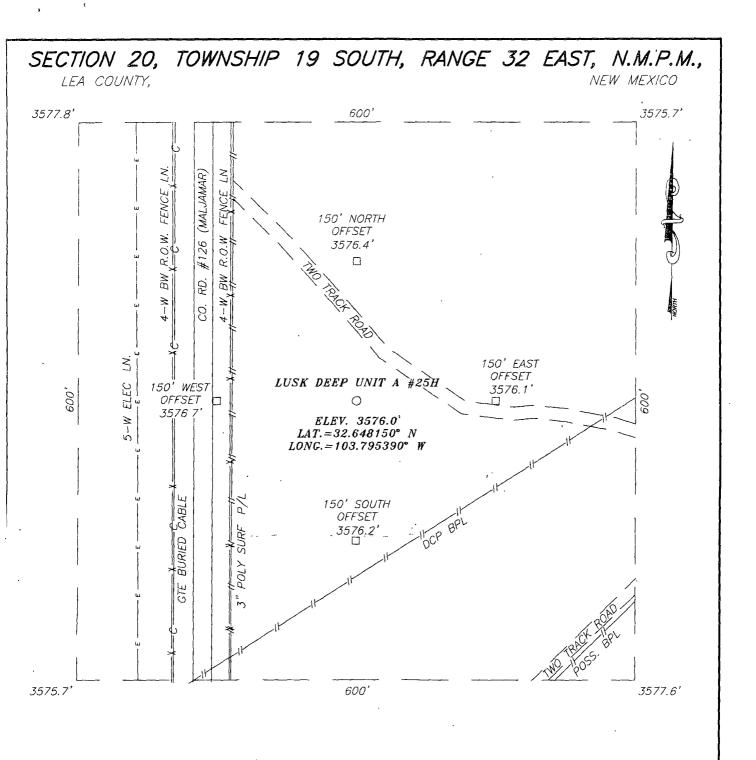
The following tables returned no data and were not displayed:
0&G Lease Sale Parcels
Oil and Gas Agreements (Closed)
Oil and Gas Leases Non Producing
Oil and Gas Hydrocarbon Leases
Oil and Gas Leases (Closed)
Oil Shale Le



Oil Shale Leases (Closed)



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DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. #126 (MALJAMAR ROAD) AND CO. RD #126 (LUSK PLANT RD). THE LOCATION STAKE IS APPROX. 400 FEET SOUTHEAST.



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

100 0 100 200 Feet

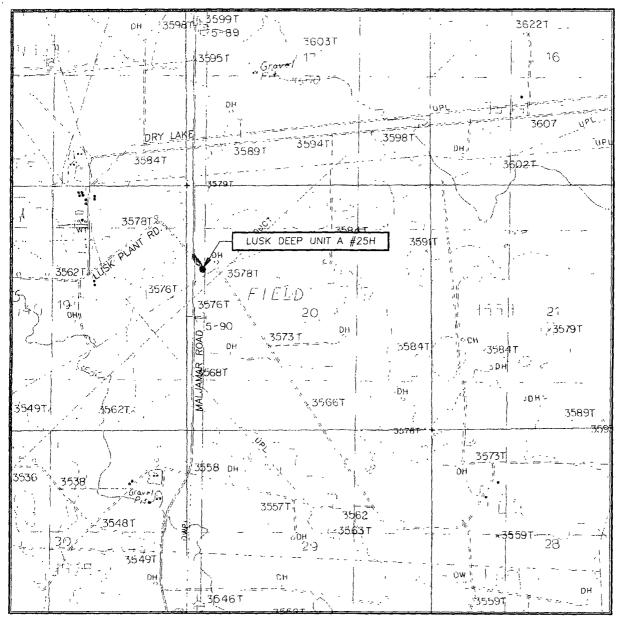
Scale:1"=100'

COG OPERATING, LLC

LUSK DEEP UNIT A #25H WELL ·
LOCATED 1800 FEET FROM THE NORTH LINE
AND 330 FEET FROM THE WEST LINE OF SECTION 20,
TOWNSHIP 19 SOUTH, RANGE 32 EAST, N M P.M.,
LEA COUNTY, NEW MEXICO

Survey Date: 12/3/10	5	heet	1	of	1 Sheets
W.O. Number 10.11 1689	Dr E	3y · LA		Re	ev 1 4/8/11
Date. 12/7/10 Disk	ALLES CATALO	101	11689		Scale:1"=100'

LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'

CONTOUR INTERVAL: GREENWOOD LAKE, N.M. - 10'

SEC. 20 TWP. 19—S RGE 32—E

SURVEY N.M.P.M

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1800' FNL & 330' FWL

ELEVATION 3576'

OPERATOR COG OPERATING, LLC

LEASE LUSK DEEP UNIT A

U.S.G.S. TOPOGRAPHIC MAP
GREENWOOD LAKE, N M



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N OAL PASO
HOBBS, N M 88240
(575) 393-3117



VICINITY MAP

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SCALE: 1'' = 2 MILES

SEC. <u>20</u>	TWP. 19-S RGE. 32-E
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COUNTY	LEA STATE NEW MEXICO
DESCRIPTIO	N 1800' FNL & 330' FWL
ELEVATION_	3576'
OPERATOR_	COG OPERATING, LLC
LEASE	LUSK DEED LINIT A



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N M. 88240
(575) 393-3117



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