

Surface Use & Operating Plan

Deerstalker Federal Com #4H

- Surface Owner: Rupert Madera, 524 Antelope Ridge, Jal, NM 88252
- New Road: 5413'
- Flow Line: On well pad
- Facilities: Will be constructed on well pad – see Exhibit 3
- **Well Site Information**
 - V Door: East
 - Topsoil: South
 - Interim Reclamation: South and West

Notes

Onsite: On-site was done by Don Peterson (BLM); Todd Suter (COG); Rand French (COG) on February 19, 2015

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

- A. The well site survey and elevation plat for the proposed well is attached with this application. It was staked by Harcrow Surveying, Artesia, NM.
- B. All roads to the location are shown on the Location Verification Map Exhibit 2. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling the well will be done where necessary. The road route to the well site is depicted in Exhibit #2. The road shown in Exhibit #2 will be used to access the well.
- C. Directions to location: See 600 x 600 plat
- D. Based on current road maintenance performed on other roads serving existing wells, we anticipate maintaining the lease roads leading to the proposed well pad at least once a year on dry conditions and twice a year in wetter conditions.

2. Proposed Access Road:

The Location Verification Map shows that 5413' new access road was required for this location. If any road is required it will be constructed as follows:

The maximum width of the running surface will be 14'. The road will be crowned, ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

- A. The average grade will be less than 1%.
 - B. No turnouts are planned.
 - C. No cattleguard, culvert, gates, low water crossings or fence cuts are necessary.
- 1) Surfacing material consist of native caliche. Caliche will be obtained from the actual well site if available. If not available onsite, candidate source will be caliche pit from Rupert Madera, 524 Antelope Ridge, Jal, NM 88252. 575-395-2912.

3. Location of Existing Well:

The One-Mile Radius Map Exhibit 4 shows existing wells within a one-mile radius of the proposed wellbore.

Location of Existing and/or Proposed Facilities:

- A. COG Operating LLC does not operate an oil production facility on this lease
- B. If the well is productive, contemplated facilities will be as follows:
 - 1) A tank battery and facilities will be constructed as shown on Exhibit 3.
 - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
 - 3) Any additional caliche will be obtained from the actual well site. If caliche does not exist or is not plentiful from the well site, If not available onsite, candidate source will be caliche pit from Rupert Madera, 524 Antelope Ridge, Jal, NM 88252. 575-395-2912.
 - 4) Any additional construction materials were purchased from contractors.
 - 5) It will be necessary to run electric power if this well is productive. Power will be provided by Xcel Energy and they will submit a separate plan and ROW for service to the well location.
 - 6) If the well is productive, rehabilitation plans will include the following:
 - The original topsoil from the well site will be returned to the location, and the site will be re-contoured as close as possible to the original site.

4. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from a private source Glenn's Water Well Service., P O Box 692, Tatum NM, 575-398-2424. No water well will be drilled on the location. No water well will be drilled on the location.

5. Source of Construction Materials and Location "Turn-Over" Procedure:

Obtaining caliche: One primary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well site. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- A. Equipment that was needed to construct the proposed location was as follows: Two dozers to flip the site for caliche and to move topsoil, one blade to level the surface, one morograder to roll and compact this site, one backhoe to dig the cellar, one water truck to water location and dust abatement and two dump trucks to haul surface material. If caliche is not available onsite and have to haul caliche from a private pit, in addition to equipment mentioned above we will have 10 belly dumps and one front end loader.
- B. The time line to complete construction was approximately 10 days.
- C. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
- D. An approximate 160' X 160' area is used within the proposed well site to remove caliche.
- E. Subsoil is removed and stockpiled within the surveyed well pad.
- F. When caliche is found, material will be stock piled within the pad site to build the location and road.
- G. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- H. Once well is drilled, the stock piled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced.
- I. Neither caliche, nor subsoil will be stock piled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat.

Caliche will be obtained from the actual well site if available. If not available onsite, candidate source will be caliche pit from Rupert Madera, 524 Antelope Ridge, Jal, NM 88252. 575-395-2912.

6. Methods of Handling Water Disposal:

- A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.

- B. Drilling fluids will be contained in steel mud pits and taken to R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.
- C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOC approved commercial disposal facility. R360's disposal site located at 4507 West Carlsbad Highway, Hobbs, NM 88240.
- D. It is anticipated that the disposal of produced water will be trucked to and possibly piped to a commercial SWD facility, likely the Madera SWD #1 facility located in Section 14. T24S. R34E.
- E. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill-Lea Landfill LLC. Located at Mile Marker 64, Highway 62-180 East, P O Box 3247, Carlsbad, NM 88221. No toxic waste or hazardous chemicals will be produced by this operation.
- F. Human waste and grey water will need to be properly contained and disposed of. Proper disposal and elimination of waste and grey water may include but are not limited to portable septic systems and/or portable waste gathering systems (i.e. portable toilets).
- G. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

7. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

8. Well Site Layout:

- A. The drill pad layout, with elevations staked by Harcrow Surveying, is shown in the Elevation Plat. Dimensions of the pad and pits are shown on the Rig Layout. V door direction is East. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. The Rig Layout Closed-Loop exhibit shows the proposed orientation of closed loop system and access road. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

- A. Interim Reclamation will take place within six months after the well has been completed. The pad will be downsized by reclaiming the areas not needed for production operations. The portions of the pad that are not needed for production operations will be re-contoured to its original state as much as possible. The caliche that is removed will be reused to either build another pad site or for road repairs within the lease. The stockpiled topsoil will then be spread out reclaimed area and reseeded with a BLM approved seed mixture. In the event that the well must be worked over or maintained, it may be necessary to drive, park, and/or operate machinery on reclaimed land. This area will be repaired or reclaimed after work is complete.
- B. Final Reclamation: Upon plugging and abandoning the well all caliche for well pad and lease road will be removed and surface will be recountoured to reflect its surroundings as much as possible within six months. Caliche will be recycled for road repair or reused for another well pad within the lease. If any topsoil remains, it will be spread out and the area will be re-seeded with a BLM approved mixture and re-vegetated as per BLM orders. When required by BLM, the well pad site will be restored to match pre-construction grades.

10. Sedimentation and Erosion Control

Approximately 200' of straw waddles will be placed on the North side and 200' on the South side to reduce sediment impacts to fragile/sensitive soils.

11. Surface Ownership:

- A. The surface is multiple uses with the primary uses of the region for grazing of livestock and the production of oil and gas.
- B. The surface owner is Rupert Madera, 524 Antelope Ridge, Jal NM 88252. COG has a surface use agreement with the land owner.
- C. The proposed road routes and surface location will be restored as directed by the BLM.

12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is moderately sparse with native prairie grasses, some mesquite and shinnery oak. No wildlife was observed but it is likely that mule deer, rabbits, coyotes and rodents traverse the area.
- B. There is no permanent or live water in the immediate area.

Surface Use Plan
COG Operating LLC
Deerstalker Federal Com #4H
SHL: 25' FNL & 430' FWL UL D
Section 8, T25S, R35E
BHL: 330' FNL & 380' FWL Lot 4
Section 5, T25S, R35E
Lea County, New Mexico

- B. There is no permanent or live water in the immediate area.
- C. There are no dwellings within 2 miles of this location.
- D. If needed, a Cultural Resources Examination is being prepared by Boone Arch Services of NM, LLC., 2030 North Canal, Carlsbad, New Mexico, 88220, phone # 575-885-1352 and the results will be forwarded to your office in the near future. Otherwise, **COG will be participating in the Permian Basin MOA Program.**

13. Bond Coverage:

Bond Coverage is Statewide Bonds # NMB000740 and NMB000215

14. Lessee's and Operator's Representative:

The COG Operating LLC representative responsible for assuring compliance with the surface use plan is as follows:

Sheryl Baker
Drilling Superintendent
COG Operating LLC
2208 West Main Street
Artesia, NM 88210
Phone (575) 748-6940 (office)
 (432) 934-1873 (cell)

Ray Peterson
Drilling Manager
COG Operating LLC
One Concho Center
600 W Illinois Ave
Midland, TX 79701
Phone (432) 685-4304 (office)
 (432) 818-2254 (business)

Surface Use Plan
COG Operating LLC
Deerstalker Federal Com #4H
SHL: 25' FNL & 430' FWL UL D
Section 8, T25S, R35E
BHL: 330' FNL & 380' FWL Lot 4
Section 5, T25S, R35E
Lea County, New Mexico

OPERATOR CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or COG Operating LLC, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 11th day of April, 2016.

Signed: Melanie J. Wilson

Printed Name: Melanie J. Wilson

Position: Regulatory Coordinator

Address: 2208 W. Main Street, Artesia, NM 88210

Telephone: (575) 748-6940

Field Representative (if not above signatory): Rand French

E-mail: mwilson@concho.com

Run Time: 07:35 AM

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTRun Date: 12/10/2015
Page 1 of 1

LLD ACREAGE REPORT

Admin State: NM

Geo State: NM

MTR: 23 0250S 0350E

Section: 005

Sur Type	Sur No	Lld Suff	NE	NW	SW	SE	Sur Note	Dup Flg	Sub Surf	Acreage
			NNSS	NNSS	NNSS	NNSS				
A			--XX	--XX	XXXX	XXXX				480.000
L	1		X---	----	----	----				40.820
L	2		-X--	----	----	----				40.700
L	3		----	X---	----	----				40.580
L	4		----	-X--	----	----				40.460

Section 005 Total: 642.560

MTR Total Excluding Survey Notes C/D/R
and Sub Surf = Y 642.560Grand Total Excluding Survey Notes C/D/R
and Sub Surf = Y: 642.560

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page**

Run Time: 02:07 PM

Page 1 of 1

Run Date: 12/08/2015

01 12-22-1987;101STAT1330;30USC181 ET SE

Case Type 312021: O&G LSE COMP PD -1987

Commodity 459: OIL & GAS

Case Disposition: AUTHORIZED

Total Acres
361.400

Serial Number
NMNM-- - 132948

Serial Number: NMNM-- - 132948

Name & Address			Int Rel	% Interest
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND TX 797014882	LESSEE	100.000000000

Serial Number: NMNM-- - 132948

Mer Twp	Rng	Sec	STyp	SNr Suff	Subdivision	District/Field Office	County	Mgmt Agency
23	0250S	0350E	005	ALIQ	SENE,SENW,S2S2,NESE;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT
23	0250S	0350E	005	LOTS	1,3;	CARLSBAD FIELD OFFICE	LEA	BUREAU OF LAND MGMT

Serial Number: NMNM-- - 132948

Act Date	Code	Action	Action Remark	Pending Office
04/16/2014	387	CASE ESTABLISHED	201407025;	
07/16/2014	143	BONUS BID PAYMENT RECD	\$724.00;	
07/16/2014	191	SALE HELD		
07/16/2014	267	BID RECEIVED	\$3620000.00;	
07/25/2014	143	BONUS BID PAYMENT RECD	\$3619276.00;	
09/16/2014	237	LEASE ISSUED		
09/16/2014	974	AUTOMATED RECORD VERIF	JA	
10/01/2014	496	FUND CODE	05;145003	
10/01/2014	530	RLTY RATE - 12 1/2%		
10/01/2014	868	EFFECTIVE DATE		
09/30/2024	763	EXPIRES		

Serial Number: NMNM-- - 132948

Line Nr	Remarks
0002	STIPULATIONS ATTACHED TO LEASE:
0003	NM-11-LN SPECIAL CULTURAL RESOURCES
0004	SENM-S-22 PRAIRIE CHICKENS
0005	SENM-S-34 ZONE 3 - POD
0006	SENM-S-47 RECLAMATION



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

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

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

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

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02296	CUB	LE		1	3	2	18	25S	35E	650398	3556305*	300	230	70
C 02297	CUB	LE		2	2	1	21	25S	35E	653436	3555140*	300	230	70
C 02298	CUB	LE		2	2	1	21	25S	35E	653436	3555140*	250	205	45
C 02388		LE					3 05	25S	35E	651467	3558832*	180	165	15
CP 00178		LE		2	1	1	24	25S	35E	657867	3555206*	240		
CP 00183		LE		4	2	3	13	25S	35E	658256	3555818*	240		

Average Depth to Water: **207 feet**

Minimum Depth: **165 feet**

Maximum Depth: **230 feet**

Record Count: 6

PLSS Search:

Township: 25S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



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

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

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

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

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<u>C 02388</u>			LE	3	05	25S	35E			651467	3558832*	180	165	15

Average Depth to Water: **165 feet**

Minimum Depth: **165 feet**

Maximum Depth: **165 feet**

Record Count: 1

PLSS Search:

Section(s): 5

Township: 25S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 8

Township: 25S

Range: 35E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/9/15 8:37 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER