

Surface Use & Operating Plan

Lusk Deep Unit A #33H

- Surface Tenant: Richardson Cattle Co. P O Box 487, Carlsbad, NM 88221
- New Road: 181.2'
- Flow Line: On well pad
- Facilities: Will be constructed on well pad – see Exhibit 3

- **Well Site Information**

V Door: West

Topsoil: West

Interim Reclamation: West

Onsite: On-site was done by Bob Ballard (BLM); Rand French (COG); Gerald Herrera (COG); Javier Rincon (COG) Charlie Tesillo (Harcrow Surveying) on July 28th, 2016.

NOTE: A previous onsite was conducted on 3/19/15 by Don Peterson (BLM); and Eric Conklin (COG). After the original APD had been submitted, and another review by BLM had been performed, BLM requested another SHL change, which resulted in delaying the permitting of this well.

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 181.2' of 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.
- D. 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 Jim Ross, 8502 N. Matt Dr. Hobbs, NM 88242. (575) 441-1254.

Surface Use Plan
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Section 18, T19S, R32E
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3. Location of Existing Well:

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

4. 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) Will utilize tank battery and facilities at the existing Lusk Deep Unit A #25 facility.
 - 2) Production will be sent to the Lusk Deep Unit A #25H facility. A surface flow line of approximately 3790.5' of 3" steel pipe carrying oil, gas and water under a maximum pressure of 125 psi will follow the road to the facility at the Lusk Deep Unit A #25H location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Lusk Deep Unit A #25H to the Lusk Deep Unit A #33H. The surface Gas Lift Gas pipe of approximately 3790.5' under a maximum pressure of 125 psi will be installed no farther than 10 feet from the edge of the road.
 - 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, candidate source will be caliche pit from Jim Ross, 8502 N. Matt Dr. Hobbs, NM 88242. (575) 441-1254.
 - 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.

5. 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 the Lusk Frac Pond and the water will be supplied by private source Gregory Rock House Ranch 1108 W Pierce Street, Carlsbad, NM 88210. 575-885-4195. If necessary commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, fast line may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. 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. If not available onsite, candidate source will be caliche pit from Jim Ross, 8502 N. Matt Dr. Hobbs, NM 88242. (575) 441-1254. 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.
- J. Caliche will be obtained from the actual well site if available. If not available onsite, caliche candidate source will be caliche pit caliche pit from Jim Ross, 8502 N. Matt Dr. Hobbs, NM 88242. (575) 441-1254.

7. 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 NMOCDD 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 sent by a flowline to the Magnum Pronto 32 St SWD 1 (32-19S-32E), or Lusk Deep Unit A-19 SWD (17-19S-32E), or North Lusk 32 St SWD 1 (32-18S-32E), or Pronghorn SWD 1 (24-19S-32E), or Federal 18-4 SWD (18-19S-33E) or Bate Fed 3 SWD (35-19S-33E).
- 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.

8. Ancillary Facilities:

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

9. 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.

10. Plans for Restoration of the Surface:

- 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.

11. Sedimentation and Erosion Control

As noted on the 600' x 600' plat, the well site and surrounding area is very flat, with no surface water flow patterns. There is only one to two inches of elevation change across the proposed location, therefore there is no need for surface water control structures.

12. Surface Ownership:

- A. The surface is owned by U.S. Government and is administered by the Bureau of Land Management. 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 tenant is Richardson Cattle Co. P O Box 487, Carlsbad, NM 88221.
- C. The proposed road routes and surface location will be restored as directed by the BLM.

13. 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.
- 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.**

14. Bond Coverage:

Bond Coverage is Statewide Bonds # NMB000740 and NMB000215

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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)

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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 3rd day of August, 2016.

Signed: Mayte Reyes

Printed Name: Mayte Reyes

Position: Regulatory Analyst

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

Telephone: (575) 748-6940

Field Representative (if not above signatory): Rand French

E-mail: mreyes1@concho.com