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FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

CONDOR-000 ARTESIA

5. Lease Serial No.

MNM007713

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

CONDOR 8 FEDERAL COM

4H 327298

9. API Well No.

30-015-46816

10. Field and Pool, or Exploratory  
RED LAKE/GLORIETA YESO

11. Sec., T. R. M. or Blk. and Survey or Area  
SEC 9/T18S/R27E/NMP

1a. Type of work: ☒ DRILL ☐ REENTER  
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other  
1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
LIME ROCK RESOURCES II A LP

3a. Address  
1111 Bagby Street, Suite 4600, Houston, TX 77002

3b. Phone No. (include area code)  
(713) 292-9500

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface NWNW / 280 FNL / 575 FWL / LAT 32.7687647 / LONG -104.2901037  
At proposed prod. zone NENE / 820 FNL / 1220 FEL / LAT 32.7673549 / LONG -104.3131015

14. Distance in miles and direction from nearest town or post office\*  
8 miles

12. County or Parish  
EDDY

13. State  
NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
280 feet

16. No of acres in lease  
160

17. Spacing Unit dedicated to this well  
200.0

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.  
40 feet

19. Proposed Depth  
3580 feet / 10432 feet

20. BLM/BIA Bond No. in file  
FED: NMB000797

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3525 feet

22. Approximate date work will start\*  
12/01/2019

23. Estimated duration  
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature  
(Electronic Submission)

Name (Printed/Typed)  
Brian Wood / Ph: (713) 292-9500

Date  
09/30/2019

Title  
President

Approved by (Signature)  
(Electronic Submission)

Name (Printed/Typed)  
Cody Layton / Ph: (575) 234-5959

Date  
02/27/2020

Title  
Assistant Field Manager Lands & Minerals

Office  
Carlsbad Field Office

Application approval 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.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVED WITH CONDITIONS  
Approval Date: 02/27/2020

RUP 3-10-20

## INSTRUCTIONS

**GENERAL:** This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

**ITEM 1:** If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

**ITEM 4:** Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

**ITEM 14:** Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

**ITEMS 15 AND 18:** If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

**ITEM 22:** Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

**ITEM 24:** If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

**PRINCIPAL PURPOSES:** The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

**ROUTINE USE:** Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## Additional Operator Remarks

### Location of Well

O. SHL: NWNW / 280 FNL / 575 FWL / TWSP: 18S / RANGE: 27E / SECTION: 9 / LAT: 32.7687647 / LONG: -104.2901037 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNW / 500 FNL / 1320 FWL / TWSP: 18S / RANGE: 27E / SECTION: 7 / LAT: 32.767317 / LONG: -104.304893 ( TVD: 3580 feet, MD: 7908 feet )

PPP: NENE / 676 FNL / 135 FEL / TWSP: 18S / RANGE: 27E / SECTION: 8 / LAT: 32.7676804 / LONG: -104.2924119 ( TVD: 3580 feet, MD: 4052 feet )

BHL: NENE / 820 FNL / 1220 FEL / TWSP: 18S / RANGE: 27E / SECTION: 7 / LAT: 32.7673549 / LONG: -104.3131015 ( TVD: 3580 feet, MD: 10432 feet )

### BLM Point of Contact

Name: Gavin Mickwee

Title: Land Law Examiner

Phone: (575) 234-5972

Email: gmickwee@blm.gov

**Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL

**Lime Rock Resources II-A, L.P.**

**Lease Number NMNM007713**

**County: Eddy**

**Condor 8 Federal Com 3H**

Surface Hole Location: 240' FNL & 575' FWL, Section 9, T. 18 S., R. 27 E.

Bottom Hole Location: 500' FNL & 1220' FEL, Section 7, T. 18 S., R 27 E.

**Condor 8 Federal Com 4H**

Surface Hole Location: 280' FNL & 575' FWL, Section 9, T. 18 S., R. 27 E.

Bottom Hole Location: 820' FNL & 1220' FEL, Section 7, T. 18 S., R 27 E.

**TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Watershed
  - Cave/Karst
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

#### **SPECIAL REQUIREMENT(S)**

##### **Watershed:**

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

##### **Cave/Karst:**

#### **Construction Mitigation**

In order to mitigate the impacts from construction activities on cave and karst resources, the following Conditions of Approval will apply to this APD or project:

##### **General Construction:**

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

**Pad Construction:**

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

**Road Construction:**

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

**Buried Pipeline/Cable Construction:**

- Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

**Powerline Construction:**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

**Surface Flowlines Installation:**

- Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

**Drilling Mitigation**

Federal regulations and standard Conditions of Approval applied to all APDs require that adequate measures are taken to prevent contamination to the environment. Due to the extreme sensitivity of the cave and karst resources in this project area, the following additional Conditions of Approval will be added to this APD.

To prevent cave and karst resource contamination the following will be required:



- Closed loop system using steel tanks - all fluids and cuttings will be hauled off-site and disposed of properly at an authorized site
- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional drilling is only allowed at depths greater than 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost circulation zones will be logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See drilling COAs.

#### **Production Mitigation**

In order to mitigate the impacts from production activities and due to the nature of karst terrane, the following Conditions of Approval will apply to this APD:

- Tank battery locations and facilities will be bermed and lined with a 20 mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.
- Development and implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### **Residual and Cumulative Mitigation**

The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be taken to correct the problem to the BLM's approval.

#### **Plugging and Abandonment Mitigation**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

### **V. CONSTRUCTION**

#### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

#### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

#### **C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### **D. FEDERAL MINERAL MATERIALS PIT**

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

#### **F. EXCLOSURE FENCING (CELLARS & PITS)**

##### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### **G. ON LEASE ACCESS ROADS**

##### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

##### **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

##### **Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### Ditching

Ditching shall be required on both sides of the road.

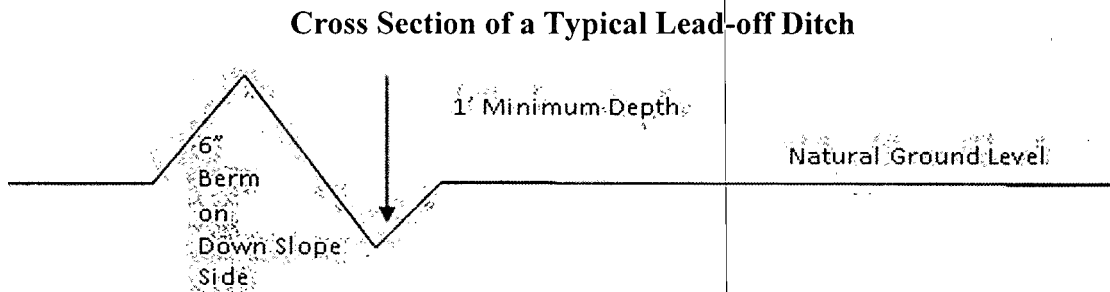
### Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out sloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

### Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

## Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

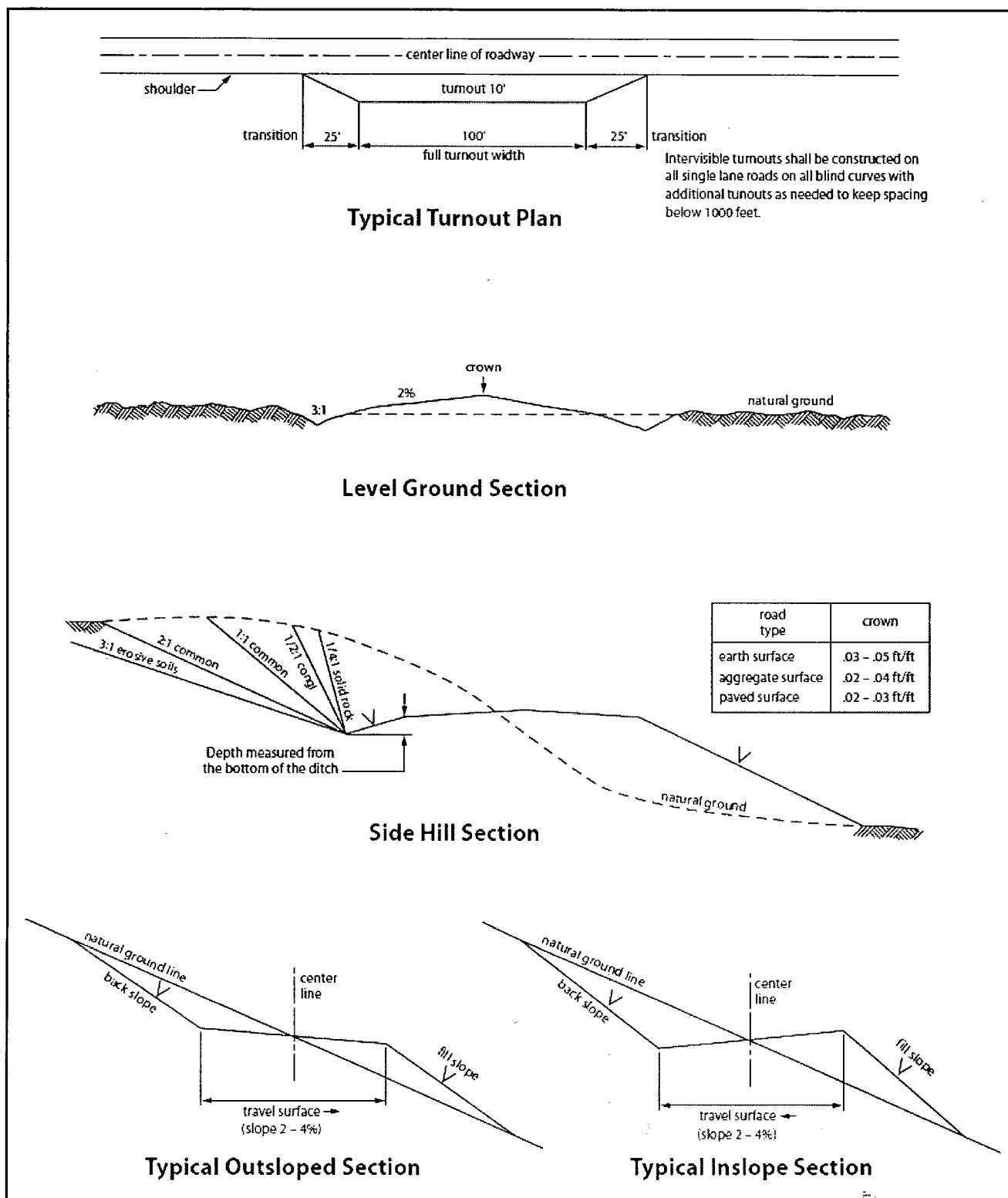


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or F5 local and higher-class roads.

## **VI. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### **Chemical and Fuel Secondary Containment and Exclosure Screening**

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

## B. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

**A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.**

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.
4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to

the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing
  - (2) Earth-disturbing and earth-moving work
  - (3) Blasting
  - (4) Vandalism and sabotage;
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of 30 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No



permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
16. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."
17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
18. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

19. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

## **VII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## **VIII. FINAL ABANDONMENT & RECLAMATION**

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

#### Mixture 4, for Gypsum Sites

The holder shall seed all the disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Alkali Sacaton ( <i>Sporobolus airoides</i> )	1.5
DWS~ Four-wing saltbush ( <i>Atriplex canescens</i> )	8.0

~DWS: DeWinged Seed

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Operator Certification Data Report

02/28/2020

### Operator Certification

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently 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 the company I represent, 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.*

**NAME:** Brian Wood

**Title:** President

**Street Address:** 37 Verano Loop

**City:** Santa Fe

**State:** NM

**Phone:** (505)466-8120

**Email address:** afmss@permitswest.com

**Signed on:** 09/30/2019

**Zip:** 87508

### Field Representative

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Phone:** (505)466-8120

**Email address:** afmss@permitswest.com

**Zip:**



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Application Data Report

02/28/2020

APD ID: 10400048225

Submission Date: 09/30/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - General

APD ID: 10400048225

Tie to previous NOS? N

Submission Date: 09/30/2019

BLM Office: CARLSBAD

User: Brian Wood

Title: President

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM007713

Lease Acres: 160

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? N

Permitting Agent? YES

APD Operator: LIME ROCK RESOURCES II A LP

Operator letter of designation:

### Operator Info

Operator Organization Name: LIME ROCK RESOURCES II A LP

Operator Address: 1111 Bagby Street, Suite 4600

Operator PO Box:

Zip: 77002

Operator City: Houston

State: TX

Operator Phone: (713)292-9500

Operator Internet Address:

### Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED LAKE

Pool Name: GLORIETA YESO

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N

Use Existing Well Pad? N

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:

Number: 3H

Well Class: HORIZONTAL

Condor 8 Federal Com

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 8 Miles

Distance to nearest well: 40 FT

Distance to lease line: 280 FT

Reservoir well spacing assigned acres Measurement: 200 Acres

Well plat: Condor\_4H\_Plat\_GasGap\_Plan\_20190930082414.pdf

Well work start Date: 12/01/2019

Duration: 30 DAYS

### Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 12797

Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	280	FNL	575	FW L	18S	27E	9	Aliquot NWN W	32.76876 47	- 104.2901 037	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 007721	352 5	0	0	N
KOP Leg #1	280	FNL	575	FW L	18S	27E	9	Aliquot NWN W	32.76876 47	- 104.2901 037	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 007721	651	287 4	287 4	N
PPP Leg #1-1	676	FNL	135	FEL	18S	27E	8	Aliquot NENE	32.76768 04	- 104.2924 119	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 007713	-55	405 2	358 0	Y

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-2	500	FNL	1320	FWL	18S	27E	7	Aliquot NWNW	32.767317	-104.304893	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 007716	-55	7908	3580	Y
EXIT Leg #1	820	FNL	1220	FEL	18S	27E	7	Aliquot NENE	32.7673549	-104.3131015	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 007719	-55	10432	3580	Y
BHL Leg #1	820	FNL	1220	FEL	18S	27E	7	Aliquot NENE	32.7673549	-104.3131015	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 007719	-55	10432	3580	Y



APD ID: 10400048225

Submission Date: 09/30/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
549837	YATES	3525	0	0	GYPSUM	NONE	N
549838	SEVEN RIVERS	3250	275	275	DOLOMITE	NATURAL GAS, OIL	N
549839	QUEEN	2810	715	715	SANDSTONE	NATURAL GAS, OIL	N
549840	GRAYBURG	2410	1115	1115	DOLOMITE	NATURAL GAS, OIL	N
549841	PREMIER	2230	1295	1295	SANDSTONE	NATURAL GAS, OIL	N
549842	SAN ANDRES	2160	1365	1365	DOLOMITE	NATURAL GAS, OIL	N
549843	GLORIETA	820	2705	2705	SANDSTONE	NATURAL GAS, OIL	N
549844	YESO	710	2815	2815	SANDSTONE	NATURAL GAS, OIL	Y

## Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M

Rating Depth: 5000

**Equipment:** A 2000 psi BOP stack and manifold system will be used. A typical 2000 psi system is attached. If the equipment changes, then a Sundry Notice will be filed. System will meet Onshore Orders 2 (BOP) and 6 (H2S) requirements. The BOP equipment will consist of the following: - Double ram with blind rams (top) and pipe rams (bottom), - Drilling spool, or blowout preventer with 2 side outlets (choke side and kill side shall be at least 2 diameter), - Kill line (2 minimum), - At least 2 choke line valves (2 minimum), - 2 diameter choke line, - 2 kill valves, one of which will be a check valve (2 minimum), - 2 chokes, one of which will be capable of remote operation, - Pressure gauge on choke manifold, - Upper Kelly cock valve with handle available, - Safety valve and subs to fit all drill string connections in use, - All BOPE connections subjected to well pressure will be flanged, welded, or clamped, - A fill-up line above the uppermost preventer.

**Requesting Variance?** NO

**Variance request:**

**Testing Procedure:** The blowout preventer equipment (BOP) will consist of a 2000 psi rated, XLT type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. The 2M BOP will be installed on the 8.625 surface casing and used continuously until total depth is reached. All casing strings will be tested as per Onshore Order #2. This also includes a thirty-day test, should the rig still be operating on the same well in thirty days. Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drilling logs.



Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

**Choke Diagram Attachment:**

Condor\_4H\_BOP\_Choke\_20190930090242.pdf

**BOP Diagram Attachment:**

Condor\_4H\_BOP\_Choke\_20190930090248.pdf

**Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCTOR	20	14.0	NEW	API	N	0	80	0	80	3525	3445	80	OTHER	68.7	OTHER - Weld						
2	SURFACE	11	8.625	NEW	API	N	0	1230	0	1230	3525	2295	1230	J-55	24	ST&C	1.2	1.18	DRY	2	DRY	2
3	PRODUCTION	7.875	5.5	NEW	API	N	0	10432	0	3580	3525	-55	10432	J-55	17	LT&C	1.2	1.18	DRY	2	DRY	2

**Casing Attachments**

Casing ID: 1 String Type: CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

#### Casing Attachments

Casing ID: 2 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Condor\_4H\_Casing\_Design\_Assumptions\_20190930090407.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Condor\_4H\_Casing\_Design\_Assumptions\_20190930090349.pdf

#### Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	80	267	0.67	12	180	50	Ready Mix	None

SURFACE	Lead		0	1230	530	1.4	14.8	742	75	Class C	+ ¼ pound/sack cello flake + 2% CaCl2
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PRODUCTION	Lead		0	1053 2	465	1.9	12.8	883	80	35.65 poz Class C	1/4 pound/sack cello flake + 5 pounds per
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Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	1053 2	1450	1.3	14.8	1885	50	Class C	sack LCM-1 + 0.2% R-3 + 6% ge 0.6% R-3 + 1/4 pound/sack cello flake

### Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

**Describe what will be on location to control well or mitigate other conditions:** All necessary mud products will be on site to handle any abnormal hole condition that may be encountered while drilling this well. Circulation could be lost in the Grayburg and San Andres.

**Describe the mud monitoring system utilized:** An electronic/mechanical mud monitor with a minimum pit volume totalizer, stroke counter, and flow sensor will be used.

### Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1230	OTHER : Fresh water	8.5	9.2							
1230	3725	OTHER : Brine	9.9	10.2							
3725	1043 2	OTHER : Brine with gel & starch	9.9	10.2							

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

### Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

None

**List of open and cased hole logs run in the well:**

OTHER,

**Other log type(s):**

None

**Coring operation description for the well:**

No core, drill stem test, or log is planned.

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 1550

**Anticipated Surface Pressure:** 762

**Anticipated Bottom Hole Temperature(F):** 100

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

Condor\_4H\_H2S\_Plan\_20190930090722.pdf

### Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Condor\_4H\_Horizontal\_Plan\_20190930090743.pdf

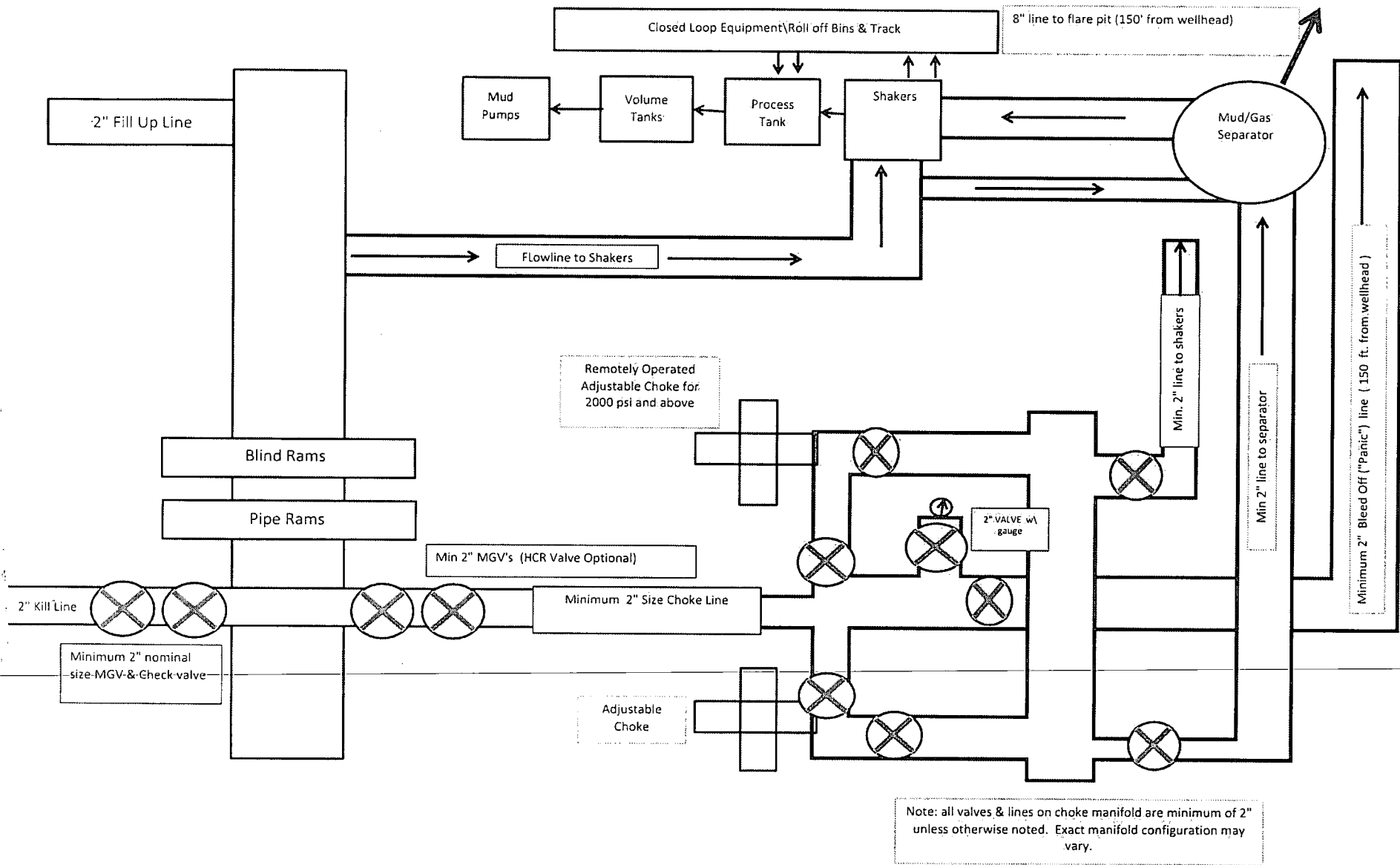
**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

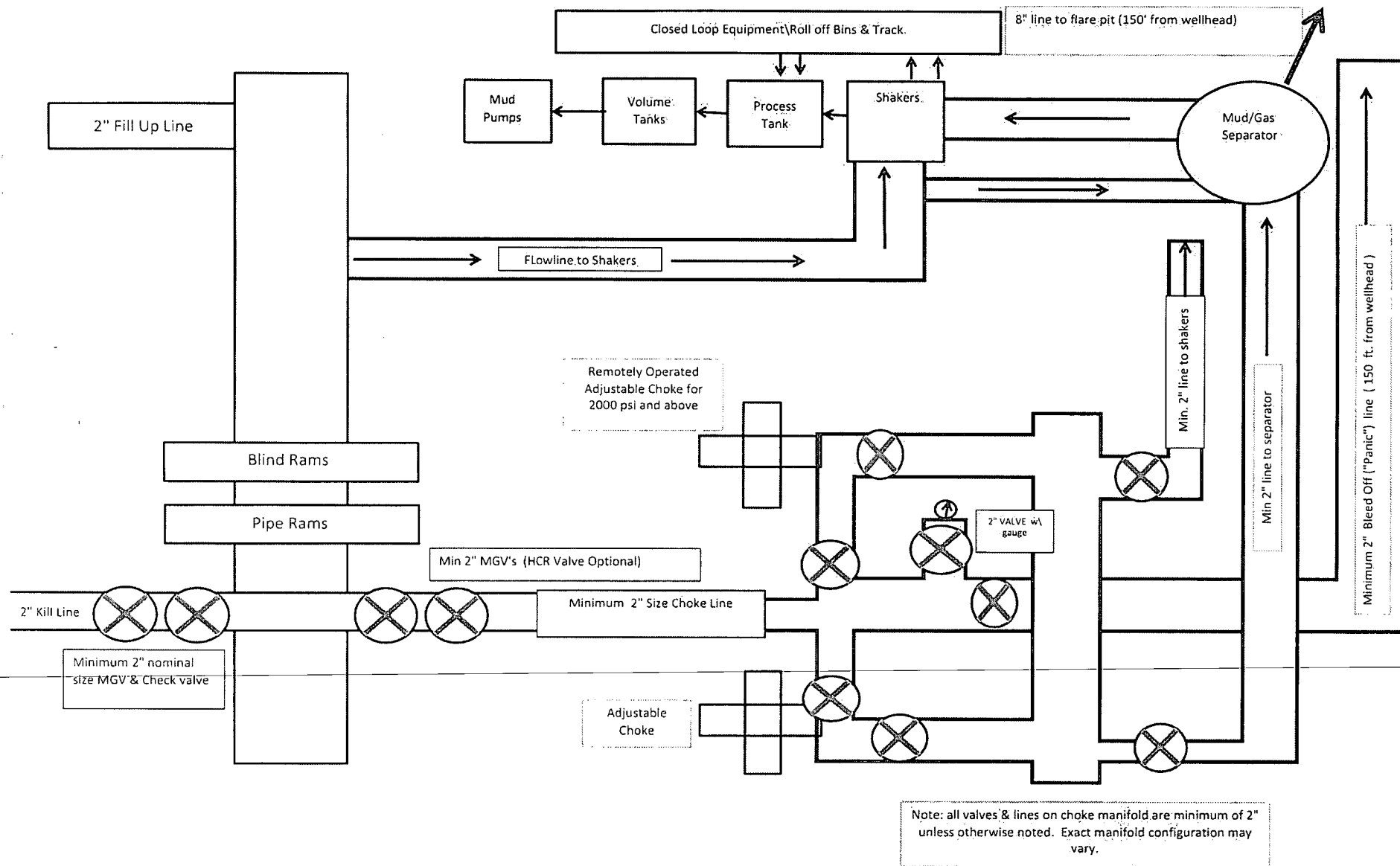
Condor\_4H\_Drill\_Plan\_20190930090754.pdf

**Other Variance attachment:**





**11" Minimum 2000 psi BOP and  
Minimum 2000 psi BOPE System Schematic  
W/ Closed Loop System Equipment**



**11" Minimum 2000 psi BOP and  
Minimum 2000 psi BOPE System Schematic  
W/ Closed Loop System Equipment**

## **Yeso Well – Surface – Intermediate – Production Casing**

### **Casing Design Criteria and Load Case Assumptions**

#### **Surface Casing (13 3/8" if loss of circulation is encountered while drilling surface hole. 8 5/8" surface casing if no loss of circulation is encountered while drilling surface hole.)**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure. Test surface casing to 1500 psi for 30 min.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

#### **Intermediate #1 Casing (8 5/8" if loss of circulation is encountered while drilling surface hole and 13 3/8" casing is set as surface casing. No intermediate casing if 8 5/8" casing is set as surface casing.)**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure. Test Intermediate casing to 1500 psi for 30 min.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

#### **Production Casing (5 1/2")**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: 4000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.5 ppg).



## **Yeso Well – Surface – Intermediate – Production Casing**

### **Casing Design Criteria and Load Case Assumptions**

#### **Surface Casing (13 3/8" if loss of circulation is encountered while drilling surface hole. 8 5/8" surface casing if no loss of circulation is encountered while drilling surface hole.)**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure. Test surface casing to 1500 psi for 30 min.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.3 ppg).

#### **Intermediate #1 Casing (8 5/8" if loss of circulation is encountered while drilling surface hole and 13 3/8" casing is set as surface casing. No intermediate casing if 8 5/8" casing is set as surface casing.)**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: Casing test per Onshore Oil and Gas Order No. 2 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure. Test intermediate casing to 1500 psi for 30 min.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (10.0 ppg).

#### **Production Casing (5 1/2")**

Collapse:  $DF_c=1.125$

- Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered.
- Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.47 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b=1.125$

- Pressure Test: 4000 psi casing test with an external force equal to the mud gradient in which the casing will be run (0.47 psi/ft), which is a more conservative backup force than pore pressure.

Tensile:  $DF_t=1.8$

- Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (9.5 ppg).

# Lime Rock Hydrogen Sulfide Drilling Plan Summary

- A. All personnel shall receive proper H<sub>2</sub>S training in accordance with Onshore Order 6 III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

- Well control equipment
  - a. Flare line 150' from wellhead to be ignited by flare gun.
  - b. Choke manifold with a remotely operated choke.
  - c. Mud/gas separator

- Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escapes packs — 4 packs shall be stored on the rig floor and contain sufficiently long air hoses as to not restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

- H<sub>2</sub>S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.

- a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
- b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.

- Mud program:

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.

■ Metallurgy:

- a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- b. All elastomers used for packing and seals shall be H2S trim.

■ Communication:

Communication will be via two-way radio in emergency and company vehicles. Cell phones and land lines where available.

## H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

<p><b><u>Company Offices</u></b> - Lime Rock Houston Office          Answering Service (After Hours)          Artesia, NM Office          Roswell, NM</p>	<p>713-292-9510          713-292-9555          575-748-9724          575-623-8424</p>
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KEY PERSONNEL					
Name	Title	Location	Office #	Cell #	Home #
MARK REID	OPERATIONS MANAGER	HOUSTON	713-292-9534	713-818-4438	SAME AS CELL
FRANK FALLERI	EAST ARTESIA PRODUCTION MANAGER	HOUSTON	713-360-5714	713-817-8275	
JERRY SMITH	ASSISTANT PRODUCTION SUPERVISOR	ARTESIA	575-748-9724	505-918-0556	575-746-2478
MICHAEL BARRETT	PRODUCTION SUPERVISOR	ROSWELL	575-623-8424	505-353-2644	575-623-4707
BOB CRAMER	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	405-365-2727	NA
DAVE WILLIAMSON	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	575-308-9980	NA

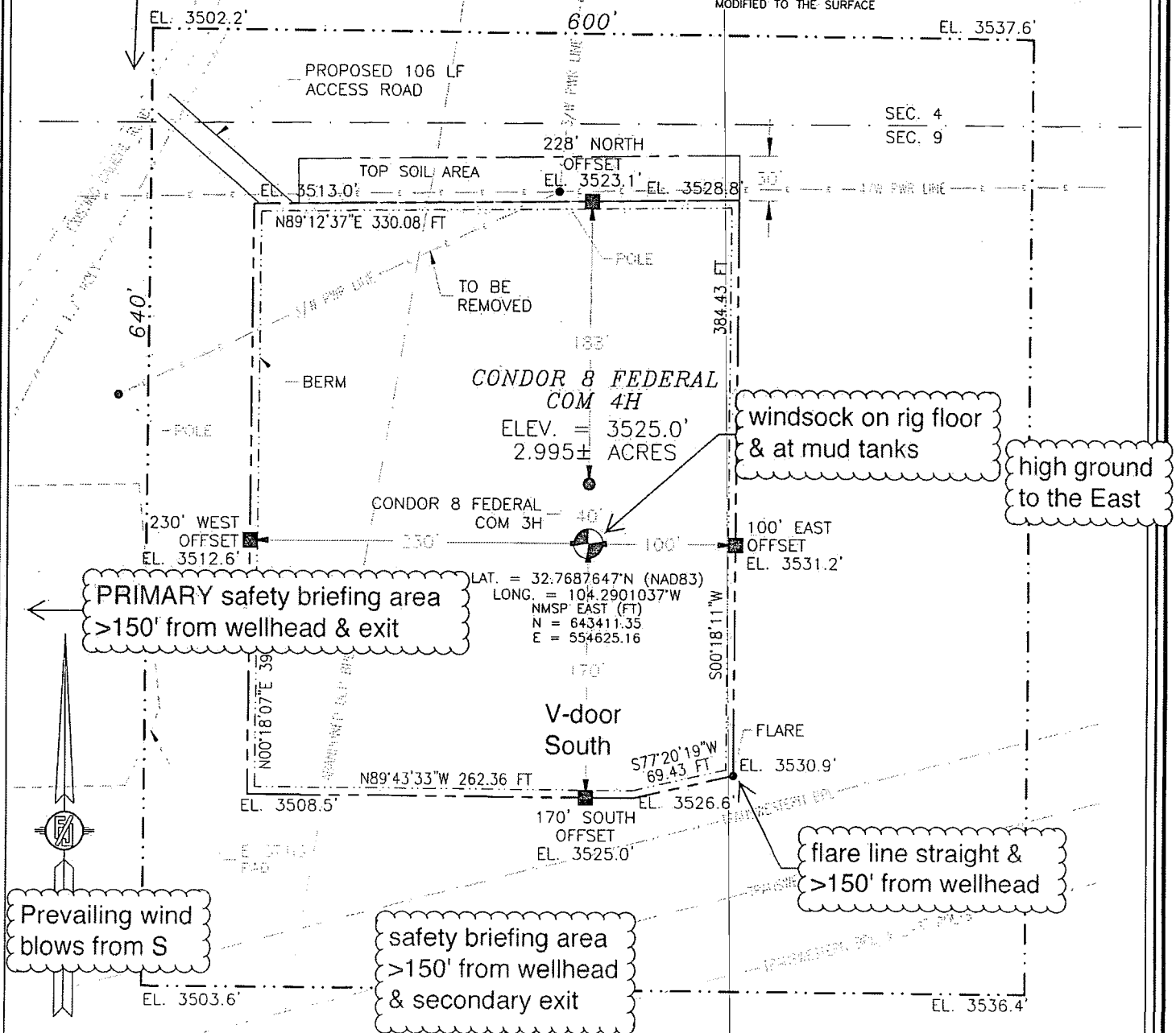
Agency Call List			
City	Agency or Office		Telephone Number
Artesia	Ambulance		911
Artesia	State Police		575-746-2703
Artesia	Sheriff's Office		575-746-9888
Artesia	City Police		575-746-2703
Artesia	Fire Department		575-746-2701
Artesia	Local Emergency Planning Committee		575-746-2122
Artesia	New Mexico OCD District II		575-748-1283
Carlsbad	Ambulance		911
Carlsbad	State Police		575-885-3137
Carlsbad	Sheriff's Office		575-887-7551
Carlsbad	City Police		575-885-2111
Carlsbad	Fire Department		575-885-2111
Carlsbad	Local Emergency Planning Committee		575-887-3798
Carlsbad	US DOI Bureau of Land Management		575-887-6544
State Wide	New Mexico Emergency Response Commission ("NMERC")		505-476-9600
State Wide	NMERC 24 hour Number		505-827-9126
State Wide	New Mexico State Emergency Operations Center		505-476-9635
National	National Emergency Response Center (Washington, D.C.)		800-424-8802

## H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Emergency Services				
Name	Service	Location	Telephone Number	Alternate Number
Boots & Coots International Well Control	Well Control	Houston / Odessa	1-800-256-9688	281-931-8884
Cudd Pressure Control	Well Control & Pumping	Odessa	915-699-0139	915-563-3356
Baker Hughes Inc.	Pumping Service	Artesia, Hobbs and Odessa	575-746-2757	SAME
Total Safety	Safety Equipment and Personnel	Artesia	575-746-2847	SAME
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	SAME
Assurance Fire & Safety	Safety Equipment and Personnel	Artesia	575-396-9702	575-441-2224
Flight for Life	Emergency Helicopter Evacuation	Lubbock	806-743-9911	SAME
Aerocare	Emergency Helicopter Evacuation	Lubbock	806-747-8923	SAME
Med Flight Air Ambulance	Emergency Helicopter Evacuation	Albuquerque	505-842-4433	SAME
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13 Street

# SITE MAP

warning signs  
& windsock



SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM CR 227 (LITTLE DIAMOND) AND CR 201 (CHALK BLUFF) GO  
SOUTHEAST ON CR 227 85', THEN EAST 340', TURN RIGHT ON  
CALICHE ROAD AND GO SOUTHEAST 0.1 OF A MILE, TURN RIGHT AND  
GO SOUTHWEST 0.1 OF A MILE TO ROAD SURVEY, FOLLOW FLAGS  
SOUTHEAST 196' TO THE NORTHWEST PAD CORNER FOR THIS  
LOCATION.

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT I AM QUALIFIED TO MEET THE NEW MEXICO STANDARDS FOR SURVEYING. IN WITNESS WHEREOF, I HAVE HEREON SET MY HAND AND SEAL.

FILMON E JARAYAN

7/31/19  
DATE

LIME ROCK RESOURCES II-A, L.P.  
CONDOR 8 FEDERAL COM 4H  
LOCATED 280 FT. FROM THE NORTH LINE  
AND 575 FT. FROM THE WEST LINE OF  
SECTION 9, TOWNSHIP 18 SOUTH,  
RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

*JULY 30, 2019*

SURVEY NO. 7039A.

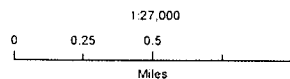
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

# Lime Rock Resources

Condor 8 Federal Com  
H2S Contingency Plan:  
Radius Map

Section 9, Township 18S, Range 27E  
Eddy County, New Mexico

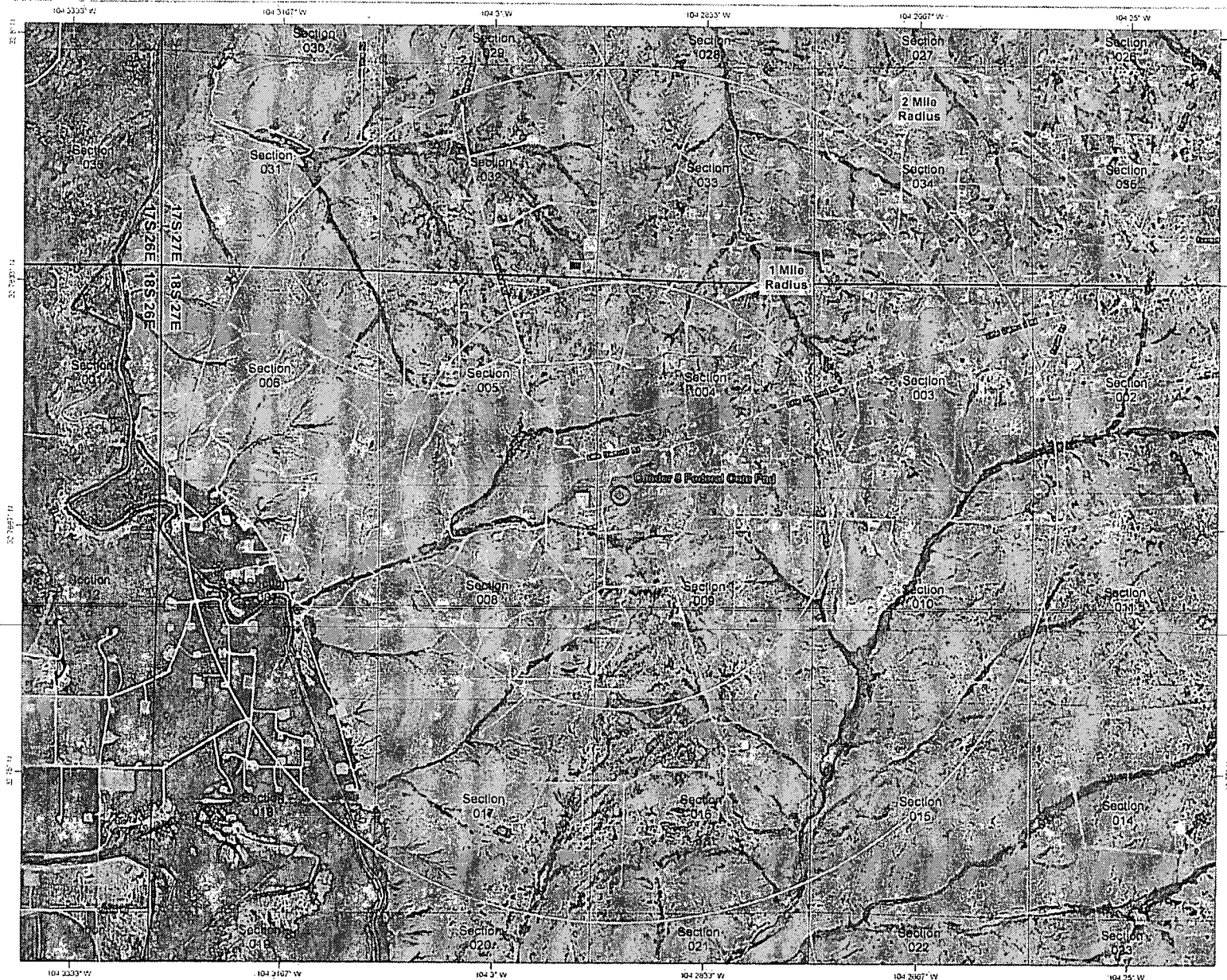
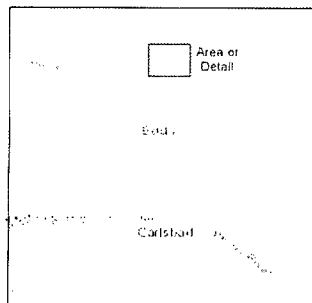
⊙ Proposed SHL



NAD 1983 New Mexico State Plane East  
FIPS 3001 Feet

PERMITS WEST, INC.

Prepared by Permits West, Inc., September 16, 2019  
for Lime Rock Resources





Project: Eddy County, NM  
Site: SEC 9 T18S R27E  
Well: Condor 8 Federal 4H  
Wellbore: Original Wellbore  
Design: Plan 2

#### Reference Details

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Latitude: 32° 46' 7.553 N  
Longitude: 104° 17' 24.373 W  
Ground Elevation: 3510.0  
KB Elevation: KB @ 3523.0usft



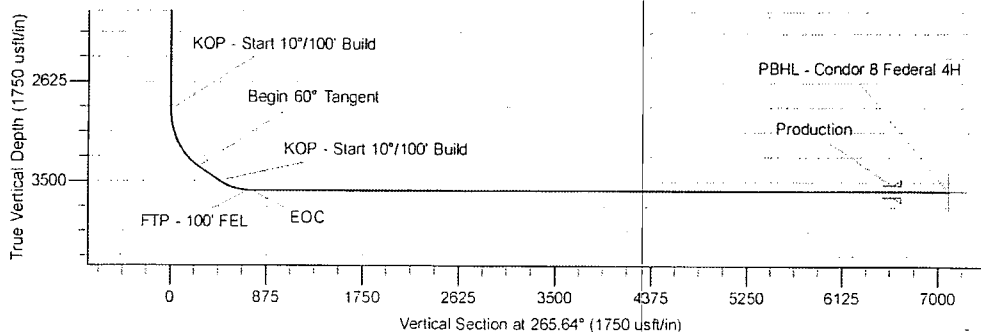
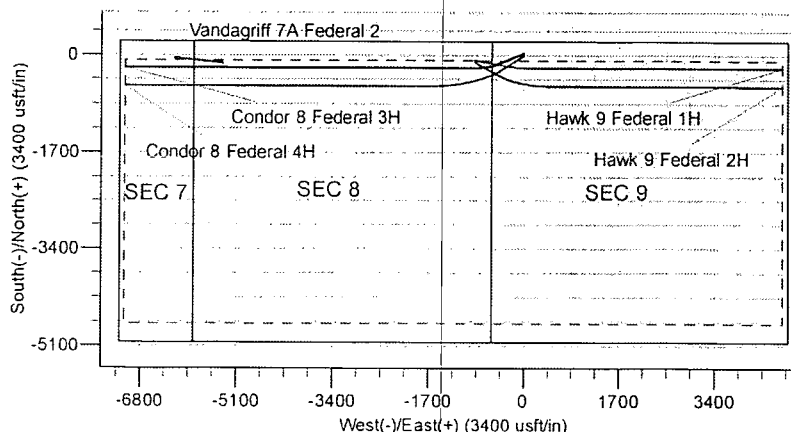
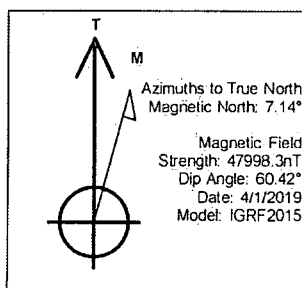
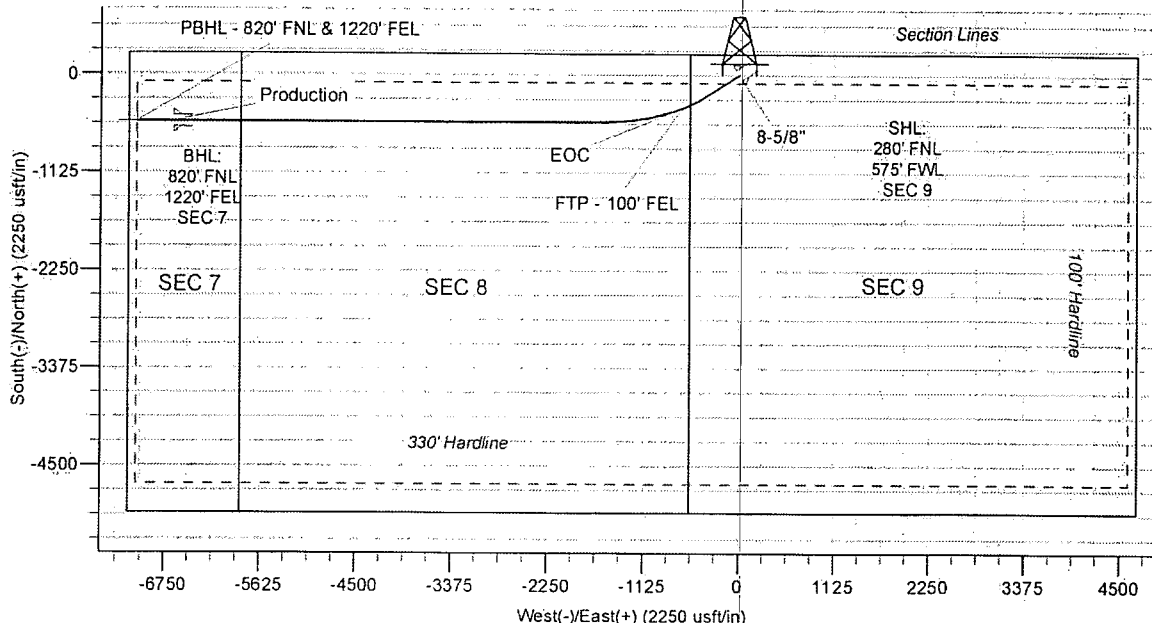
RPM Consulting, Inc.  
1600 Broadway, Suite 1510  
Denver, CO 80013  
303-595-7625

#### SECTION DETAILS

MD	Inc.	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2874.6	0.00	0.00	2874.6	0.0	0.0	0.00	0.00	0.0
3474.6	60.00	238.00	3370.8	-151.8	-242.9	10.00	238.00	253.8
3724.6	60.00	238.00	3495.8	-266.5	-426.6	0.00	0.00	445.6
4052.0	90.00	251.78	3580.0	-396.4	-710.1	10.00	26.13	738.2
4963.0	90.00	270.00	3580.0	-540.0	-1605.8	2.00	90.00	1642.2
10432.1	90.00	270.00	3580.0	-540.0	-7074.9	0.00	0.00	7095.5

#### CASING DETAILS

TVD	MD	Name	Size
1230.0	1230.0	Surface	8-5/8
3580.0	10000.0	Production	5-1/2





# Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Condor 8 Federal 4H
Company:	Lime Rock Resources	TVD Reference:	KB @ 3523.0usft
Project:	Eddy County, NM	MD Reference:	KB @ 3523.0usft
Site:	SEC 9 T18S R27E	North Reference:	True
Well:	Condor 8 Federal 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 2		

Project	Eddy County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		
Site	SEC 6, T10S		

Site	SEC 9 T18S R27E				
Site Position:					
From:	Lat/Long	Northing:	643,451.36 usft	Latitude:	32° 46' 7.949 N
Position Uncertainty:	0.0 usft	Easting:	554,625.37 usft	Longitude:	104° 17' 24.371 W
		Slot Radius:	13-3/16"	Grid Convergence:	0.02 °
Well	Carpenter 8.5				

Well	Condor 8 Federal 4H					
Well Position	+N/-S	-40.0 usft	Northing:	643,411.35 usft	Latitude:	32° 46' 7.553 N
	+E/-W	-0.2 usft	Easting:	554,625.16 usft	Longitude:	104° 17' 24.373 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,510.0 usft
Wellbore						

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	4/1/2019	(°)	(°)	(nT)
			7.14	60.42	47,998.30932902

Design	Plan 2		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
Vertical Section:	Depth From (TVD)	+N/-S	0.0
	(usft)	(usft)	Direction
	0.0	0.0	(°)
		0.0	265.64

Plan Survey Tool Program		Date: 4/16/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	10,432.1	Plan 2 (Original Wellbore)	MWD
				OWSG MWD - Standard

n Sections										
Measured	Inclination	Azimuth	Vertical			Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	+N/-S	+E/-W	Rate	Rate	Rate		
(usft)			(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,874.6	0.00	0.00	2,874.6	0.0	0.0	0.00	0.00	0.00	0.00	
3,474.6	60.00	238.00	3,370.8	-151.8	-242.9	0.00	0.00	0.00	0.00	
3,724.6	60.00	238.00	3,495.8	-266.5	-426.6	10.00	10.00	0.00	238.00	
4,052.0	90.00	251.78	3,580.0	-396.4	-710.1	0.00	0.00	0.00	0.00	
4,963.0	90.00	270.00	3,580.0	-540.0	-1,605.8	10.00	9.16	4.21	26.13	
10,432.1	90.00	270.00	3,580.0	-540.0	-7,074.9	2.00	0.00	2.00	90.00	
						0.00	0.00	0.00	0.00	PBHL - Condor 8 Fed

# Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Condor 8 Federal 4H
Company:	Lime Rock Resources	TVD Reference:	KB @ 3523.0usft
Project:	Eddy County, NM	MD Reference:	KB @ 3523.0usft
Site:	SEC 9 T18S R27E	North Reference:	True
Well:	Condor 8 Federal 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,230.0	0.00	0.00	1,230.0	0.0	0.0	0.0	0.00	0.00	0.00
8-5/8" - Surface									
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,874.6	0.00	0.00	2,874.6	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start 10°/100' Build									
2,900.0	2.54	238.00	2,900.0	-0.3	-0.5	0.5	10.00	10.00	0.00
3,000.0	12.54	238.00	2,999.0	-7.2	-11.6	12.1	10.00	10.00	0.00
3,100.0	22.54	238.00	3,094.2	-23.2	-37.1	38.8	10.00	10.00	0.00
3,200.0	32.54	238.00	3,182.8	-47.7	-76.3	79.7	10.00	10.00	0.00
3,300.0	42.54	238.00	3,262.0	-79.9	-127.9	133.6	10.00	10.00	0.00
3,400.0	52.54	238.00	3,329.4	-119.0	-190.4	198.9	10.00	10.00	0.00
3,474.6	60.00	238.00	3,370.8	-151.8	-242.9	253.8	10.00	10.00	0.00
Begin 60° Tangent									
3,500.0	60.00	238.00	3,383.5	-163.5	-261.6	273.3	0.00	0.00	0.00
3,600.0	60.00	238.00	3,433.5	-209.4	-335.0	350.0	0.00	0.00	0.00
3,700.0	60.00	238.00	3,483.5	-255.3	-408.5	426.7	0.00	0.00	0.00
3,724.6	60.00	238.00	3,495.8	-266.5	-426.6	445.6	0.00	0.00	0.00
KOP - Start 10°/100' Build									
3,800.0	66.82	241.60	3,529.5	-300.4	-484.8	506.3	10.00	9.04	4.78
3,900.0	75.97	245.86	3,561.4	-342.2	-569.7	594.1	10.00	9.15	4.26
4,000.0	85.19	249.79	3,577.8	-379.3	-661.0	687.9	10.00	9.22	3.93
4,015.0	86.58	250.37	3,578.9	-384.4	-675.1	702.3	10.00	9.24	3.83
FTP - 100' FEL									
4,052.0	90.00	251.78	3,580.0	-396.4	-710.0	738.1	10.00	9.24	3.82
EOC									

# Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Condor 8 Federal 4H
Company:	Lime Rock Resources	TVD Reference:	KB @ 3523.0usft
Project:	Eddy County, NM	MD Reference:	KB @ 3523.0usft
Site:	SEC 9 T18S R27E	North Reference:	True
Well:	Condor 8 Federal 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,100.0	90.00	252.74	3,580.0	-411.0	-755.7	784.8	2.00	0.01	2.00	
4,200.0	90.00	254.74	3,580.0	-439.0	-851.7	882.7	2.00	0.00	2.00	
4,300.0	90.00	256.74	3,580.0	-463.7	-948.7	981.2	2.00	0.00	2.00	
4,400.0	90.00	258.74	3,580.0	-484.9	-1,046.4	1,080.2	2.00	0.00	2.00	
4,500.0	90.00	260.74	3,580.0	-502.7	-1,144.8	1,179.7	2.00	0.00	2.00	
4,600.0	90.00	262.74	3,580.0	-517.1	-1,243.7	1,279.5	2.00	0.00	2.00	
4,700.0	90.00	264.74	3,580.0	-528.0	-1,343.1	1,379.4	2.00	0.00	2.00	
4,800.0	90.00	266.74	3,580.0	-535.4	-1,442.8	1,479.4	2.00	0.00	2.00	
4,900.0	90.00	268.74	3,580.0	-539.3	-1,542.8	1,579.3	2.00	0.00	2.00	
4,963.0	90.00	270.00	3,580.0	-540.0	-1,605.8	1,642.2	2.00	0.00	2.00	
5,000.0	90.00	270.00	3,580.0	-540.0	-1,642.8	1,679.1	0.00	0.00	0.00	
5,100.0	90.00	270.00	3,580.0	-540.0	-1,742.8	1,778.8	0.00	0.00	0.00	
5,200.0	90.00	270.00	3,580.0	-540.0	-1,842.8	1,878.5	0.00	0.00	0.00	
5,300.0	90.00	270.00	3,580.0	-540.0	-1,942.8	1,978.2	0.00	0.00	0.00	
5,400.0	90.00	270.00	3,580.0	-540.0	-2,042.8	2,077.9	0.00	0.00	0.00	
5,500.0	90.00	270.00	3,580.0	-540.0	-2,142.8	2,177.6	0.00	0.00	0.00	
5,600.0	90.00	270.00	3,580.0	-540.0	-2,242.8	2,277.3	0.00	0.00	0.00	
5,700.0	90.00	270.00	3,580.0	-540.0	-2,342.8	2,377.1	0.00	0.00	0.00	
5,800.0	90.00	270.00	3,580.0	-540.0	-2,442.8	2,476.8	0.00	0.00	0.00	
5,900.0	90.00	270.00	3,580.0	-540.0	-2,542.8	2,576.5	0.00	0.00	0.00	
6,000.0	90.00	270.00	3,580.0	-540.0	-2,642.8	2,676.2	0.00	0.00	0.00	
6,100.0	90.00	270.00	3,580.0	-540.0	-2,742.8	2,775.9	0.00	0.00	0.00	
6,200.0	90.00	270.00	3,580.0	-540.0	-2,842.8	2,875.6	0.00	0.00	0.00	
6,300.0	90.00	270.00	3,580.0	-540.0	-2,942.8	2,975.3	0.00	0.00	0.00	
6,400.0	90.00	270.00	3,580.0	-540.0	-3,042.8	3,075.0	0.00	0.00	0.00	
6,500.0	90.00	270.00	3,580.0	-540.0	-3,142.8	3,174.7	0.00	0.00	0.00	
6,600.0	90.00	270.00	3,580.0	-540.0	-3,242.8	3,274.4	0.00	0.00	0.00	
6,700.0	90.00	270.00	3,580.0	-540.0	-3,342.8	3,374.2	0.00	0.00	0.00	
6,800.0	90.00	270.00	3,580.0	-540.0	-3,442.8	3,473.9	0.00	0.00	0.00	
6,900.0	90.00	270.00	3,580.0	-540.0	-3,542.8	3,573.6	0.00	0.00	0.00	
7,000.0	90.00	270.00	3,580.0	-540.0	-3,642.8	3,673.3	0.00	0.00	0.00	
7,100.0	90.00	270.00	3,580.0	-540.0	-3,742.8	3,773.0	0.00	0.00	0.00	
7,200.0	90.00	270.00	3,580.0	-540.0	-3,842.8	3,872.7	0.00	0.00	0.00	
7,300.0	90.00	270.00	3,580.0	-540.0	-3,942.8	3,972.4	0.00	0.00	0.00	
7,400.0	90.00	270.00	3,580.0	-540.0	-4,042.8	4,072.1	0.00	0.00	0.00	
7,500.0	90.00	270.00	3,580.0	-540.0	-4,142.8	4,171.8	0.00	0.00	0.00	
7,600.0	90.00	270.00	3,580.0	-540.0	-4,242.8	4,271.5	0.00	0.00	0.00	
7,700.0	90.00	270.00	3,580.0	-540.0	-4,342.8	4,371.3	0.00	0.00	0.00	
7,800.0	90.00	270.00	3,580.0	-540.0	-4,442.8	4,471.0	0.00	0.00	0.00	
7,900.0	90.00	270.00	3,580.0	-540.0	-4,542.8	4,570.7	0.00	0.00	0.00	
8,000.0	90.00	270.00	3,580.0	-540.0	-4,642.8	4,670.4	0.00	0.00	0.00	
8,100.0	90.00	270.00	3,580.0	-540.0	-4,742.8	4,770.1	0.00	0.00	0.00	
8,200.0	90.00	270.00	3,580.0	-540.0	-4,842.8	4,869.8	0.00	0.00	0.00	
8,300.0	90.00	270.00	3,580.0	-540.0	-4,942.8	4,969.5	0.00	0.00	0.00	
8,400.0	90.00	270.00	3,580.0	-540.0	-5,042.8	5,069.2	0.00	0.00	0.00	
8,500.0	90.00	270.00	3,580.0	-540.0	-5,142.8	5,168.9	0.00	0.00	0.00	
8,600.0	90.00	270.00	3,580.0	-540.0	-5,242.8	5,268.6	0.00	0.00	0.00	
8,700.0	90.00	270.00	3,580.0	-540.0	-5,342.8	5,368.4	0.00	0.00	0.00	
8,800.0	90.00	270.00	3,580.0	-540.0	-5,442.8	5,468.1	0.00	0.00	0.00	
8,900.0	90.00	270.00	3,580.0	-540.0	-5,542.8	5,567.8	0.00	0.00	0.00	
9,000.0	90.00	270.00	3,580.0	-540.0	-5,642.8	5,667.5	0.00	0.00	0.00	
9,100.0	90.00	270.00	3,580.0	-540.0	-5,742.8	5,767.2	0.00	0.00	0.00	
9,200.0	90.00	270.00	3,580.0	-540.0	-5,842.8	5,866.9	0.00	0.00	0.00	
9,300.0	90.00	270.00	3,580.0	-540.0	-5,942.8	5,966.6	0.00	0.00	0.00	

# Planning Report

Database:	EDM Server Database	Local Co-ordinate Reference:	Well Condor 8 Federal 4H
Company:	Lime Rock Resources	TVD Reference:	KB @ 3523.0usft
Project:	Eddy County, NM	MD Reference:	KB @ 3523.0usft
Site:	SEC 9 T18S R27E	North Reference:	True
Well:	Condor 8 Federal 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Plan 2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,400.0	90.00	270.00	3,580.0	-540.0	-6,042.8	6,066.3	0.00	0.00	0.00
9,500.0	90.00	270.00	3,580.0	-540.0	-6,142.8	6,166.0	0.00	0.00	0.00
9,600.0	90.00	270.00	3,580.0	-540.0	-6,242.8	6,265.7	0.00	0.00	0.00
9,700.0	90.00	270.00	3,580.0	-540.0	-6,342.8	6,365.5	0.00	0.00	0.00
9,800.0	90.00	270.00	3,580.0	-540.0	-6,442.8	6,465.2	0.00	0.00	0.00
9,900.0	90.00	270.00	3,580.0	-540.0	-6,542.8	6,564.9	0.00	0.00	0.00
10,000.0	90.00	270.00	3,580.0	-540.0	-6,642.8	6,664.6	0.00	0.00	0.00
Production									
10,100.0	90.00	270.00	3,580.0	-540.0	-6,742.8	6,764.3	0.00	0.00	0.00
10,200.0	90.00	270.00	3,580.0	-540.0	-6,842.8	6,864.0	0.00	0.00	0.00
10,300.0	90.00	270.00	3,580.0	-540.0	-6,942.8	6,963.7	0.00	0.00	0.00
10,400.0	90.00	270.00	3,580.0	-540.0	-7,042.8	7,063.4	0.00	0.00	0.00
10,432.1	90.00	270.00	3,580.0	-540.0	-7,074.9	7,095.4	0.00	0.00	0.00
PBHL - 820' FNL & 1220' FEL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
hi/miss target									
Shape									
PBHL - Condor 8 Federal	0.00	0.00	3,580.0	-540.0	-7,074.9	642,868.46	547,550.48	32° 46' 2.202 N	104° 18' 47.234 W
- plan hits target center									
- Point									

Casing Points					Casing Diameter (")	Hole Diameter (")
Measured Depth (usft)	Vertical Depth (usft)	Name				
1,230.0	1,230.0	Surface			8-5/8	8-5/8
10,000.0	3,580.0	Production			5-1/2	5-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,230.0	1,230.0	0.0	0.0	8-5/8"	
2,874.6	2,874.6	0.0	0.0	KOP - Start 10°/100' Build	
3,474.6	3,370.8	-151.8	-242.9	Begin 60° Tangent	
3,724.6	3,495.8	-266.5	-426.6	KOP - Start 10°/100' Build	
4,015.0	3,578.9	-384.4	-675.1	FTP - 100' FEL	
4,052.0	3,580.0	-396.4	-710.0	EOC	
10,432.1	3,580.0	-540.0	-7,074.9	PBHL - 820' FNL & 1220' FEL	

Lime Rock Resources II-A, L.P.  
Condor 8 Federal Com 4H  
SHL: 280' FNL & 575' FWL Section 9  
BHL: 820' FNL & 1220' FEL Section 7  
T. 18 S., R. 27 E., Eddy County, NM

DRILLING PLAN PAGE 1

Drilling Program

1. ESTIMATED TOPS

<u>Name</u>	<u>TVD</u>	<u>MD</u>	<u>Content</u>
Yates gypsum	0'	0'	---
Seven Rivers dolomite	275'	275'	hydrocarbons
Queen sandstone	715'	715'	hydrocarbons
Grayburg dolomite	1115'	1115'	hydrocarbons
Premier sandstone (surf csg @ 1230')	1295'	1295'	hydrocarbons
San Andres dolomite	1365'	1365'	hydrocarbons
Glorieta sandstone	2705'	2705'	hydrocarbons
Yeso sandstone	2815'	2815'	hydrocarbons
(kick off point	3496'	3725'	hydrocarbons)
Total Depth	3580'	10432'	hydrocarbons

2. NOTABLE ZONES

Closest (0.43 mile southwest) water well (RA 03714) is 381' deep. Water bearing strata were reported from 325' to 350'. Yeso is the goal.

3. PRESSURE CONTROL

A 2000 psi BOP stack and manifold system will be used. A typical 2000 psi system is attached. If the equipment changes, then a Sundry Notice will be filed. System will meet Onshore Orders 2 (BOP) and 6 (H<sub>2</sub>S) requirements.

The blowout preventer equipment (BOP) will consist of a 2000 psi rated, "XLT" type, National VARCO double ram preventer that will be tested to a maximum pressure of 2000 psi. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom.

Lime Rock Resources II-A, L.P.

Condor 8 Federal Com 4H

SHL: 280' FNL & 575' FWL Section 9

BHL: 820' FNL & 1220' FEL Section 7

T. 18 S., R. 27 E., Eddy County, NM

DRILLING PLAN PAGE 2

The 2M BOP will be installed on the 8.625" surface casing and used continuously until total depth is reached. All casing strings will be tested as per Onshore Order #2. This also includes a thirty-day test, should the rig still be operating on the same well in thirty days.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drilling logs.

The BOP equipment will consist of the following:

- Double ram with blind rams (top) and pipe rams (bottom),
- Drilling spool, or blowout preventer with 2 side outlets (choke side and kill side shall be at least 2" diameter),
- Kill line (2" minimum),
- At least 2 choke line valves (2" minimum),
- 2" diameter choke line,
- 2 kill valves, one of which will be a check valve (2" minimum),
- 2 chokes, one of which will be capable of remote operation,
- Pressure gauge on choke manifold,
- Upper Kelly cock valve with handle available,
- Safety valve and subs to fit all drill string connections in use,
- All BOPE connections subjected to well pressure will be flanged, welded, or clamped,
- A fill-up line above the uppermost preventer.

Lime Rock Resources II-A, L.P.  
 Condor 8 Federal Com 4H  
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 T. 18 S., R. 27 E., Eddy County, NM

# DRILLING PLAN PAGE 3

## 4. CASING & CEMENT

Type	Setting Depth MD / TVD	Hole	Csg	#/ft	Grade	Csg Thread	API	Age
Conductor	80' / 80'	20"	14"	68.7	B	Weld	No	New
Surface	1230' / 1230'	11"	8.625 "	24	J-55	S T & C	Yes	New
Production	10432' / 3580'	7.875 "	5.5"	17	J-55	L T & C	Yes	New

All casing is designed with a minimum of:

Burst Safety Factor  
1.18

Collapse Safety Factor  
1.20

Tension Safety Factor  
2.00

casing	depth set MD	sacks cement	top	gallons per sack	density (ppg)	yield (cu ft per sack)	total cubic feet	% excess	blend
conductor	80'	267	GL	ready mix	12.0	0.67	180	50	ready mix
surface	1230'	530	GL	6.2	14.8	1.4	742	75	1
production lead	10532'	465	GL	9.8	12.8	1.9	883	80	2
production tail	10532'	1450	GL	6.2	14.8	1.3	1885	50	3

Surface casing blend (1) will be Class C + ¼ pound/sack cello flake + 2% CaCl<sub>2</sub>.  
 Centralizers will be installed as required by Onshore Order 2.

Production casing lead blend (2) will be 35:65 poz Class C + 5% NaCl + 1/4  
 pound/sack cello flake + 5 pounds per sack LCM-1 + 0.2% R-3 + 6% gel.

Production casing tail blend (3) will be Class C + 0.6% R-3 + ¼ pound/sack cello  
 flake.

Lime Rock Resources II-A, L.P.  
Condor 8 Federal Com 4H  
SHL: 280' FNL & 575' FWL Section 9  
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T. 18 S., R. 27 E., Eddy County, NM

DRILLING PLAN PAGE 4

Cement volumes will be adjusted based on caliper log volumes and depths of casing and adjusted proportionately for depth changes of the multi stage tool if applicable.

A 13.375", 48#, H-40, ST&C, New, API contingency string will be set at 375' in a reamed 17.5" hole if circulation is lost in cave or karst (cave & karst potential to 350') and not regained. Contingency string will be cemented to the surface with 400 sacks (536 cubic feet) Class C + ¼ pound per sack cello flake + 2% CaCl<sub>2</sub> mixed with 6.2 gallons per sack to yield 1.34 cubic feet per sack and 14.8 pounds per gallon. Excess >100%

Upon the setting of a 13.375" contingency casing string, a 13.625" x 13.375" weld on wellhead will be installed. A 13.375" to 11" adapter flange will be installed and the 11" XLT 2000 psi NOV double ram BOP/BOPE (Schematic attached) will be installed. The BOP will be tested against the casing to 70% of the internal yield pressure of the 13.375", 48#, H-40, ST&C (1211 psi) casing and held for 30 minutes before drilling out the 13.375" casing shoe. The formation will be drilled with a 10.75" bit approximately 50 feet past the 13.375" casing shoe into a competent formation and 8.625" casing will be set at approximately 425' (≥50' beyond the previous casing shoe) in the Seven Rivers and cemented with 410 sacks (549 cubic feet) Class C + ¼ pound per sack cello flake + 2% CaCl<sub>2</sub> mixed with 6.2 gallons per sack to yield 1.34 cubic feet per sack and 14.8 pounds per gallon. Excess >125%

##### 5. MUD PROGRAM

An electronic/mechanical mud monitor with a minimum pit volume totalizer, stroke counter, and flow sensor will be used. All necessary mud products will be on site to handle any abnormal hole condition that may be encountered while drilling this well. Circulation could be lost in the Grayburg and San Andres.



Lime Rock Resources II-A, L.P.  
 Condor 8 Federal Com 4H  
 SHL: 280' FNL & 575' FWL Section 9  
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 T. 18 S., R. 27 E., Eddy County, NM

# DRILLING PLAN PAGE 5

Interval (MD):	0' - 375' (if contingency string run)	0' - 1230'	1230' - 3725'	3725' - 10432'
Type	fresh water	fresh water	brine	brine w/ gel & starch
weight	8.5 - 9.2	8.5 - 9.2	9.9 - 10.2	9.9 - 10.2
pH	10	10	10 - 11.5	10 - 11.5
WL	NC	NC	NC	15 - 20
viscosity	28 - 34	28 - 34	30 - 32	32 - 35
MC	NC	NC	NC	1
solids	NC	NC	<2%	<3%
pump rate	300 - 350 gpm	300 - 350 gpm	350 - 400 gpm	400 - 450 gpm
other	LCM as needed	LCM as needed	salt gel & MF as needed, pump high viscosity sweeps to control solids	salt gel, acid, & MF as needed; pump high viscosity sweeps to control solids

## 6. CORES, TESTS, & LOGS

No core, drill stem test, or log is planned.

## 7. DOWN HOLE CONDITIONS

No abnormal pressure or temperature is expected. Maximum expected pressure is  $\approx 1550$  psi. Maximum expected temperature is  $\approx 100^\circ$  F.

No  $H_2S$  is expected during the drilling phase. Nevertheless,  $H_2S$  monitoring equipment will be on the rig floor and air packs will be available before drilling out of the surface casing. The mud logger will be warned to use a gas trap to detect  $H_2S$ . If any  $H_2S$  is detected, then the mud weight will be increased and  $H_2S$  inhibitors will be added to control the gas. An  $H_2S$  drilling operations contingency plan is attached.

Lime Rock Resources II-A, L.P.  
Condor 8 Federal Com 4H  
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T. 18 S., R. 27 E., Eddy County, NM

DRILLING PLAN PAGE 6

The well is located in a potential cave or karst area. Thus, lost circulation is possible down to 350'. Contingency casing string and cement plan is on Page 4.

#### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take  $\approx$  1 month to drill and complete the well.



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## SUPO Data Report

02/28/2020

APD ID: 10400048225

Submission Date: 09/30/2019

Highlighted data  
reflects the most  
recent changes

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Condor\_4H\_Road\_Map\_20190930090844.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

**ROW ID(s)**

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

### Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Condor\_4H\_Road\_Map\_20190930090914.pdf

New road type: RESOURCE

Length: 106.5

Feet

Width (ft.): 30

Max slope (%): 0

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Crowned and ditched

New road access plan or profile prepared? N

New road access plan attachment:

Access road engineering design? N

Access road engineering design attachment:

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Turnout?** N

**Access surfacing type:** OTHER

**Access topsoil source:** ONSITE

**Access surfacing type description:** Caliche

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:**

**Onsite topsoil removal process:** Grader

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### Drainage Control

**New road drainage crossing:** OTHER

**Drainage Control comments:** Crowned and ditched

**Road Drainage Control Structures (DCS) description:** None

**Road Drainage Control Structures (DCS) attachment:**

### Access Additional Attachments

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

Condor\_4H\_Well\_Map\_20190930090927.pdf

### Section 4 - Location of Existing and/or Proposed Production Facilities

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Production Facilities description:** Production will be piped via a 4 HDPE line to the Hawk 9 Federal Com 1H 2H pad. Fuel gas from that same pad will be piped via a 4 HDPE line to the Condor pad. Both 930' long pipelines will be laid on the surface and operate at 125 psi. No power line is planned by Lime Rock at this time. Production equipment (tanks, separators, heater-treaters, meters) will be on the east side of the Hawk 9 Federal Com 1H 2H pad and are described in those APDs.

**Production Facilities map:**

Condor\_4H\_Production\_Facilities\_20200211180334.pdf

### Section 5 - Location and Types of Water Supply

#### Water Source Table

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Water source type:** GW WELL

**Water source use type:** SURFACE CASING  
STIMULATION  
DUST CONTROL  
INTERMEDIATE/PRODUCTION  
CASING

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** WATER WELL

**Water source transport method:** TRUCKING

**Source land ownership:** PRIVATE

**Source transportation land ownership:** PRIVATE

**Water source volume (barrels):** 10000

**Source volume (acre-feet):** 1.28893096

**Source volume (gal):** 420000

**Water source and transportation map:**

Condor\_4H\_Water\_Source\_Map\_20190930091006.pdf

**Water source comments:** Water will be trucked from an existing 250 deep well (RA 09912) in SWSW 11-17s-26e or existing water station in SWSE 11-17s-26e, both are on private land.

**New water well?** N

### New Water Well Info

**Well latitude:**

**Well Longitude:**

**Well datum:**

**Well target aquifer:**

**Est. depth to top of aquifer(ft):**

**Est thickness of aquifer:**

**Aquifer comments:**

**Aquifer documentation:**

**Well depth (ft):**

**Well casing type:**

**Well casing outside diameter (in.):**

**Well casing inside diameter (in.):**

**New water well casing?**

**Used casing source:**

**Drilling method:**

**Drill material:**

**Grout material:**

**Grout depth:**

**Casing length (ft.):**

**Casing top depth (ft.):**

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**

### Section 6 - Construction Materials

**Using any construction materials:** YES

**Construction Materials description:** NM One Call (1-800-321-ALERT) will be notified before construction starts. An abandoned overhead power line will be removed. An abandoned pipeline will be purged and removed. Top 6 of soil and brush will be stockpiled north of the pad. V door will be to the south. A closed loop drilling system will be used. Caliche will be bought and hauled from an existing caliche pit on private land in E2NE4 18-18s-28e. Dirt contractor will be responsible for caliche.

**Construction Materials source location attachment:**

Condor\_4H\_Construction\_Methods\_20190930091024.pdf

### Section 7 - Methods for Handling Waste

**Waste type:** DRILLING

**Waste content description:** Drill cuttings, mud, salts, and other chemicals

**Amount of waste:** 500 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** Steel mud tanks

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE

**Disposal type description:**

**Disposal location description:** State approved disposal site at Halfway, NM

**Waste type:** GARBAGE

**Waste content description:** Trash

**Amount of waste:** 10 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** Portable trash cage

**Safe containmant attachment:**

**Waste disposal type:** OTHER **Disposal location ownership:** OTHER

**Disposal type description:** Public

**Disposal location description:** Eddy County landfill

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Waste type:** SEWAGE

**Waste content description:** Human waste

**Amount of waste:** 10 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** Chemical toilets

**Safe containmant attachment:**

**Waste disposal type:** OTHER

**Disposal location ownership:** OTHER

**Disposal type description:** Public

**Disposal location description:** Artesia sewage plant

### Reserve Pit

**Reserve Pit being used?** N

**Temporary disposal of produced water into reserve pit?** NO

**Reserve pit length (ft.)** Reserve pit width (ft.)

**Reserve pit depth (ft.)** Reserve pit volume (cu. yd.)

**Is at least 50% of the reserve pit in cut?**

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO

**Are you storing cuttings on location?** Y

**Description of cuttings location** Steel tanks on pad

**Cuttings area length (ft.)** Cuttings area width (ft.)

**Cuttings area depth (ft.)** Cuttings area volume (cu. yd.)

**Is at least 50% of the cuttings area in cut?**

**WCuttings area liner**

**Cuttings area liner specifications and installation description**

Operator Name: LIME ROCK RESOURCES II A LP

Well Name: CONDOR 8 FEDERAL COM

Well Number: 4H

### Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

### Section 9 - Well Site Layout

Well Site Layout Diagram:

Condor\_4H\_Well\_Site\_Layout\_20190930091057.pdf

Comments:

### Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Condor 8 Federal Com

Multiple Well Pad Number: 3H

Recontouring attachment:

Condor\_4H\_Recontour\_Plats\_20190930091117.pdf

Drainage/Erosion control construction: Crowned and ditched

Drainage/Erosion control reclamation: Harrowed on the contour

Well pad proposed disturbance  
(acres): 3  
Road proposed disturbance (acres):  
0.07  
Powerline proposed disturbance  
(acres): 0  
Pipeline proposed disturbance  
(acres): 0.64  
Other proposed disturbance (acres): 0  
Total proposed disturbance: 3.71

Well pad interim reclamation (acres): 0  
Road interim reclamation (acres): 0  
Powerline interim reclamation (acres):  
0  
Pipeline interim reclamation (acres):  
0.64  
Other interim reclamation (acres): 0  
Total interim reclamation: 0.64

Well pad long term disturbance  
(acres): 3  
Road long term disturbance (acres):  
0.07  
Powerline long term disturbance  
(acres): 0  
Pipeline long term disturbance  
(acres): 0  
Other long term disturbance (acres): 0  
Total long term disturbance: 3.07

Disturbance Comments:

**Reconstruction method:** No interim reclamation is planned. Entire pad is needed to safely drill, complete, and produce both 2 wells. Pad and road will be reclaimed within 6 months of the last well plugging. Reclamation will consist of removing caliche and deeply ripping on the contour. Disturbed areas will be contoured to match pre-construction grades.

**Topsoil redistribution:** Soil and brush will be evenly spread over disturbed areas and harrowed on the contour. Disturbed areas will be seeded in accordance with BLMs requirements. Noxious weeds will be controlled.

**Soil treatment:** None

**Existing Vegetation at the well pad:** Mesquite and/or creosote bush



**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Existing Vegetation at the well pad attachment:**

**Existing Vegetation Community at the road:** Mesquite and/or creosote bush

**Existing Vegetation Community at the road attachment:**

**Existing Vegetation Community at the pipeline:** Mesquite and/or creosote bush

**Existing Vegetation Community at the pipeline attachment:**

**Existing Vegetation Community at other disturbances:** Mesquite and/or creosote bush

**Existing Vegetation Community at other disturbances attachment:**

**Non native seed used?**

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?**

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation? N**

**Seed harvest description:**

**Seed harvest description attachment:**

**Seed Management**

**Seed Table**

**Seed Summary**

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

**Operator Contact/Responsible Official Contact Info**

**First Name:**

**Last Name:**

**Phone:**

**Email:**

**Seedbed prep:**

**Seed BMP:**

**Operator Name:** LIME ROCK RESOURCES II A LP

**Well Name:** CONDOR 8 FEDERAL COM

**Well Number:** 4H

**Seed method:**

**Existing invasive species?** N

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

**Weed treatment plan description:** To BLM standards

**Weed treatment plan attachment:**

**Monitoring plan description:** To BLM standards

**Monitoring plan attachment:**

**Success standards:** To BLM satisfaction

**Pit closure description:** No pit

**Pit closure attachment:**

## **Section 11 - Surface Ownership**

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**