

Surface Use Plan  
**Hallertau 5 Federal #16H**  
Cimarex Energy Co.  
UL: M, Sec. 5, 26S, 32E  
Lea Co., NM

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what is submitted in this surface use plan without approval. If any other disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be submitted for approval prior to any new surface disturbance.

**1. Existing Roads:**

- Please see Exhibit B and C-1 for existing access road planned to be used to access the proposed project.
- Cimarex Energy will improve or maintain existing roads in a condition the same as or better than before the operations began. Cimarex Energy will repair pot holes, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
- Cimarex Energy will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.
- Cimarex Energy will obtain written BLM approval prior to the application of surfactants, binding agents, or other dust suppression chemicals on the roadways.
- The maximum width of the driving surface will be 14.' The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
- Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of the surface use plan.

Beginning at the intersection of Jal Highway/Highway 128 and J-1/Oral road to the south (Located in the SW ¼ of Section 15-24S-32E, N.M.P.M) Proceed in a southerly direction approximately 10.5 miles to the junction of this road and Pipeline road to the west; Turn right and proceed in a westerly direction approximately 1.8 miles to the junction of this road and an existing road to the North; turn right and proceed in a northerly direction approximately 220' to the existing Hallertau 5 Federal 4H well pad and the proposed location.

**2. New of Reconstructed Access Roads:**

- No new access road planned.

**3. Well Radius Map**

Please see Exhibit A for wells within one mile of the proposed well SHL and BHL.

**4. Proposed or Existing Production Facilities:**

- If on completion this well is a producer, a tank battery will be used and the necessary production equipment will be installed and production will be sent to the Hallertau 5 Federal CTB West Battery.
- Please see Exhibit P and Exhibit P-1 for location of the off pad central tank battery.
- Cimarex Energy proposes to install two 4" steel lines to the Hallertau 5 Federal CTB West battery.
- An additional road 1389.86' to access the battery will be constructed. Please see Exhibit P-2.
- Allocation will be based on well test. Route is on lease, please see Exhibit G-1. Any changes to on lease route will be submitted via sundry notice. If route is off lease, a right of way will be submitted to the BLM for approval.

**5. Gas Pipeline**

- Cimarex plans to construct an on lease gas pipeline to service this battery location.
- Please see Exhibit G for pipeline route.
- Specification of pipeline: 12" LP Steel, 8" HP Steel, 4" HP Steel
- Lines will be buried and will require a construction width of 30'.
- Length: 1829'
- MAOP of 12", 8" & 4": 1440 psi.
- Anticipated working pressure of 12": 300 psi, Anticipated working pressure of 8" & 4": 1100 psi.

**6. Flowlines**

- Cimarex Energy plans to construct on lease flowlines to service the well.
- Specifications of line: one 4' HP steel for oil, gas, and water production. One 4" HP steel for gas lift.
- Both lines will be buried 10'-20' North of the access road.
- Length of Gas Lift Line: 607'
- Length of Flowlines: 607'
- MAOP: 1500 psi.
- Anticipated working pressure: Oil, gas & water prod: 200-300 psi, Gas lift: 1100 psi.

**7. Salt Water Disposal**

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- Cimarex plans to construct an off lease SWD pipeline to service this battery location.
- SWD well name: Paduca AIU Federal SWD, Well Number: 1 SWD
- Operator of SWD: Cimarex Energy Co
- API of SWD well: 30-025-31177
- SWD Permit #: SWD-1384
- Please see Exhibit I for pipeline route.
- Specification of pipeline: 4" surface poly, 12" buried poly
- The 4" line will be surface and the 12" line will be buried, both will require a construction width of 30'.
- Length: 12,525'
- MAOP of 4" line: 125 psi, MAOP of 12" line: 300 psi.
- Anticipated working pressure of 4" line: 110 psi. Anticipated working pressure of 12" line: 225
- Pipeline will be constructed 20-30' from and parallel to an existing route.

#### **8. Electric Lines**

- Cimarex Energy plans to construct a new on lease electric line to service the well.
- Cimarex Energy plans to install an on lease overhead electric line from the proposed well to an existing overhead electric line at the Hallertau 5 Federal CTB West. The proposed electric line will be 1758.27' in length. 4-40' poles, 480 volt, 4 wire, 3 phase. The electric line will exit off the South side of the well location and travel East then North for 1758.27' along the access road until it would intercept the existing electric line. The electric line will be routed on the East side of the access road and 25-35' from and parallel to the access road. Please see Exhibit H for proposed route information.

#### **9. Water**

- A temporary surface fresh water pipeline(s) will be utilized for this project.
- The surface pipeline(s) will follow the road from a frac pit to the well.
- Cimarex plans to lay the fresh water surface pipeline(s) prior to commencement of the simulation job.
- Fresh water will be purchased from a 3<sup>rd</sup> party
- See Exhibit J for proposed route
- Specification of line: 10" lay-flat surface pipeline
- Length: 9,504'
- Operating pressure: <140 psi

#### **10. Construction Material**

If possible, native caliche will be obtained from the excavation of drill site. The primary way of obtaining caliche will be by "turning over" the location. This means caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu yds is the max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
- An approximate 120' x 120' area is used within the proposed well site to remove caliche.
- Subsoil is removed and piled alongside the 120' by 120' area within the pad site.
- When caliche is found, material will be stockpiled within the pad site to build the location and road.
- Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- Once well is drilled, the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in Exhibit D – Rig Layout Diagram.

In the event that no caliche is found onsite, caliche will be hauled in from BLM-approved caliche pit.

#### **11. Methods of Handling Waste**

- Drilling fluids, produced oil, and water from the well during drilling and completion operations will be stored safely and disposed of properly in a NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal site.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other waste will be removed and disposed of properly at a state approved disposal site.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.



**12. Ancillary Facilities:**

No camps or airstrips to be constructed.

**13. Well Site Layout:**

- Exhibit D: Rig Layout
- Exhibit D-2: Well Site layout plat
- Mud pits in the closed circulation system will be steel pits and the cuttings will be stored in steel containment pits.
- Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements. Exhibit D-1: Interim Reclamation Diagram.

**14. Interim and Final Reclamation**

- Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.
- In areas planned for interim and final reclamation, surfacing materials will be removed and returned to a mineral pit or recycled to repair or build roads and well pads.
- Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.
- If the well is a dry hole, the pad and road area will be re-contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.
- Should the well be a producer, those areas of the location not essential to production facilities and operations will be reclaimed and seeded per BLM requirements. Exhibit D-1 illustrates the proposed Interim Reclamation.

**15. Surface Ownership:**

- The wellsite is on surface owned by Bureau of Land Management, 620 E Greene St, Carlsbad, NM 88220, 575-234-5972.
- A copy of Surface Use Agreement has been given to the surface owner.
- The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.

**16. Other Information:**

- Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- In lieu of an archaeological survey report, Cimarex will be submitting an MOA for this well pad and proposed road as they are located within the MOA boundary.
- There are no known dwellings within 1½ miles of this location.

**17. On Site Notes and Information:**

Onsite with BLM (Jeff Robertson) & Cimarex (Barry Hunt) on 2/9/17. V-Door East. Frac pad NW corner (West). Top soil west. Interim reclamation: All sides. Hallertau 5 Federal CTB West: 400' x 400'. Center stake at 900 FSL & 1031 FWL. BLM will require an off location berm constructed along the entire east side of battery. Battery site moved much closer to the 4H due to playa area to east of original requested area.