Bureau of Land Management
Del Norte Field Office
Del Norte, Colorado
Surface Use Plan of Operations

Company: Dan A. Hughes Co.; Well No. San Francisco Creek. #1

Location: Sec. 24, T 29N, R 5E NMPM

Lease No. COC 69530

All operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR § 3100 & 43 CFR § 3160), Onshore Oil and Gas Orders, the approved plan of operations and the conditions of approval. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

1. Existing Roads:

Location of proposed well in relation to town or other reference point: The well location is approximately 5 miles south of Del Norte, Colorado.

Proposed route to location: See attached project map.

Plans for improvement and/or maintenance of existing roads: Access would be from Del Rio County Road 13 to the Wagon Wheel Road which enters San Francisco Ranch Estates. County Road 13 to the Wagon Wheel Road which enters San Francisco Ranch Estates.

2. Planned Access Roads:

Location (centerline): The access road would be from the Wagon Wheel Road. Refer to Pad Location Drawing

Length of new access to be constructed: 0.25 miles on lease

Length of existing roads to be upgraded: 0 miles

Maximum total disturbed width: approximately 40 feet

Maximum travel surface width: 14 feet

Maximum grades: 6.94%

Turnouts: 0

Surface materials: Where soil conditions dictate, the use of stabilizing material would be used, otherwise existing natural surface materials would be used.

Drainage (crowning, ditching, culverts, etc): one 18 inch culvert where the access road enters the pad

Cattleguards: None

Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM right-of-way is required: 0 miles

Surface disturbance and vehicular travel would be limited to the approved location and access road. Any additional area needed must be approved by BLM in advance.

3. Location of Existing Wells: There are two plugged and abandoned oil or gas wells and one abandoned well location within a one mile radius of the proposed well. There are 20 permitted water wells within a one mile radius the proposed well (See Well Location Map).

4. Location of Production Facilities:

On-site facilities: If the well is a producer all or some of the following equipment would be applied for and installed on the location.

5-400 BBL oil tanks and 2-400 BBL salt water tanks.
1 high pressure 36" x 10' 3 phase separator
1 low pressure 30" x 10' 3 phase separator
1-6' x 20' heater treater
1-3 phase high pressure gas production unit
1 gas dehydrator
1 gas compressor
2 transfer pumps for handling produced fluids
1 large beam pumping unit and engine

Off-site facilities: None

Pipelines: None. If a pipeline becomes necessary it would be applied for at a later date.

Other: All permanent (in place for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, non-reflective color to match the standard environmental colors, as determined by the Authorized Officer. All facilities would be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

All site security guidelines identified in 43 CFR § 3162.7-5 and Onshore Oil and Gas Order No. 3 would be followed.

If a gas meter run is constructed, it would be located on lease within 500 feet of the wellhead. The gas flowline would be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

If a tank battery is constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain 1½ times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR § 3162.7 and Onshore Oil and Gas Order No. 4. If water is produced from the well; steel coated water tanks will be used.

5. Location and Type of Water Supply: All water needed for drilling purposes will be municipal water purchased from the town of Monte Vista, Colorado.

6. Source of Construction Material: Additional material, if needed, would be obtained from a private source.

7. Methods of Handling Waste Disposal:

No reserve pit will be constructed. A Closed loop drilling system will be used.

Wastewater will not be discharged on the surface at this site and the drilling of the well will not require a wastewater management plan.

All rubbish and debris will be kept in containers on the well site, and will be hauled to an approved disposal site upon completion of drilling and completion operations and as needed during such operations. There will be no chemical disposal of any type.

Self-contained, portable toilets will be used for human waste, and the waste will be disposed at an approved landfill. Sanitation will comply with local and state regulations for the disposal of human waste.

8. Ancillary Facilities: There will be no permanent camps of facilities, only trailers, garbage containers and portable toilets.

9. Well Site Layout:

See Pad Construction Drawing for the well pad layout and access to the pad.

All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR § 3162.6.

The blooie line will be located: At least 100 feet from the well head.

To minimize the amount of fugitive dust and spray escaping from the blooie pit, the following blooie line deflection method will be employed: water injection

10. Plans for Restoration of the Surface:

The top 2 to 3 inches of topsoil material will be removed from the location and stockpiled separately adjacent to the pad, see Pad Construction Diagram.

Immediately upon completion of drilling, all equipment that is not necessary for production shall be removed.

All road surfacing will be removed prior to the rehabilitation of roads.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be recontoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

The abandonment marker will be as specified by BLM.

Reclamation of the surface will commence as soon after construction, drilling and well completion are concluded, as is practicable. In the event of a dry hole, the drill site and roadways will be restored to their original condition as soon as possible, depending on weather and other extenuating circumstances.

All junk, debris, or other foreign material must be removed before initiating any dirt work to restore the location.

Portion of the location and access road not needed for production or production facilities will be reclaimed. All stockpiled topsoil, in proportion to the area being reclaimed, will be used in reclaiming areas without an on-going operation.

Site reclamation will include:

- Removing the road base material from the access road and any other surface that may be covered by such material;
- Recontouring the location to approximate natural contours, to the extent practicable; evenly redistributing stockpiled topsoil over the recontoured areas;
- Scarifying recontoured areas, including the access road, by use of a disk or harrow prior to seeding; and
- Drilling or broadcasting seeds.

The seed mix and rate used will be that recommended by the Authorized Officer. Seed will be drilled where-ever possible. If the seed is broadcast, then a harrow or some other implement will be dragged over the seeded area to assure seed coverage. The seed will be certified, pure live seed,

and the seed tags will be available if requested by the Authorized Officer. Certified weed free seed will be used to rehabilitate reclaimed land.

All hillsides and other places where the contractor has moved earthen materials to facilitate operations will be restored to as near original condition as practical. The surface of the re-contoured land will be left in a slightly roughened condition to collect precipitation and to promote seed germination. The site will be fenced until vegetation is reestablished.

Road base material, used in the construction of the access road and pad, will be removed from the site and disposed in a proper manner. The access road will be recontoured using of an excavator or similar equipment, rather than simply ripping the surface.

Culverts will be removed from the site and disposed in an approved landfill. The concrete cellar will be removed from the site and similarly disposed in a landfill, or with the approval of the Authorized Officer may be broken down into small pieces and buried during the recontouring on the site.

11. Surface and Mineral Ownership:

The surface of the proposed well site is owned by Dan A. Hughes Company and the mineral estate is administered by the Bureau of Land Management, United States Department of Interior.

12. Other Information:

Archeological Concerns:

A cultural survey was completed by Metcalf Archaeological Consultants and one prehistoric lithic scatter was identified. Metcalf Archaeological Consultants recommended this site as not eligible for inclusion on the National Register of Historic Places and further recommended a finding of "no historic properties affected".

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the BLM Field Office. Within five (5) working days, the BLM will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- A time frame for the BLM to complete an expedited review under 36 CFR § 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the BLM are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the BLM will assume responsibility for whatever recordation and

stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The BLM will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator will then be allowed to resume construction.

Other:

The operator would monitor for and treat any noxious weeds along the right of way, and on the well pad.

All waste oil will be disposed of properly at approved facilities.

All equipment and vehicles will be confined to the access roads and well pad.

Any facilities in an existing right of way that are damaged as a result of the oil and gas operations will be repaired or replaced.

Fire suppression equipment will be available to suppress any wildfires caused by construction or related activities. In the event of a wildfire, call the Pueblo Interagency Fire Dispatch Center (719-553-1600).