

## SURFACE USE AND OPERATIONS PLAN

Krause WN Federal #4E  
SE SE Section 33-T28N-R11W  
N.M.P.M., San Juan County, New Mexico

1. EXISTING ROADS: A portion of topographic map is attached showing the existing roads within a one (1) mile radius of the location (colored green). Main access will be from Bloomfield, New Mexico, approximately 6½ miles north. None of the existing roads will require any improvement. However, due to road conditions, weather, etc., these roads will be maintained to whatever extent is required.
2. PLANNED ACCESS ROAD: The planned access road will leave the existing road approximately 5300 feet N.E. of this location. The road will be approximately 18' wide (sufficient to handle drill equipment). The grade will not exceed 8%. There will be no cattle-guards or culverts. The road will cross over the siphon of the N.A.P.I. Big Canal.
3. LOCATION OF EXISTING WELLS: Existing wells within one (1) mile radius of this location are shown on the attached map.
4. EXISTING AND/OR PROPOSED FACILITIES: ARCO Oil & Gas Company, Division of Atlantic Richfield Company, has several existing wells within the area, two of which are listed below:

Krause WN Federal #5 SW½ Section 28-T28N-R11W  
Krause WN Federal #6 NE½ Section 29-T28N-R11W

The above wells each have 1-300 bbl storage tank and production unit which is located approximately 150' from the well head and is connected to the well with a buried gas line.

There are numerous other Krause WN Federal wells proposed for this area, but due to the drilling rig availability it is not possible at this time to anticipate which wells will be drilled prior to the drilling of this well. The production facilities for this well will be similar to the above wells.

5. WATER SUPPLY: It is anticipated that water will be obtained from the San Juan River, approximately 6½ miles north of this location. The water will be trucked over New Mexico Highway 44, existing roads and the planned access road in item number 2 above.
6. CONSTRUCTION MATERIALS: None anticipated.
7. WASTE DISPOSAL: Cuttings and drilling fluids will be disposed of in the reserve pit. A trash or burn pit will be used to dispose of trash, garbage, etc. If the reserve pit is sufficiently dry when the well is completed, both the reserve and trash pit will be filled. If the reserve pit is not sufficiently dry when the well is completed, it will be fenced for the protection of livestock and wildlife to be filled at such time when it is sufficiently dry.  
  
Produced fluids will be disposed of in the reserve pit. Any oil accumulation on the reserve pit during drilling and completion operations will be skimmed off and held in a temporary storage tank for later disposition. Trash and debris cleanup will be commenced as soon as the completion rig moves out.
8. ANCILLARY FACILITIES: None are proposed.
9. WELL SITE LAYOUT: Per the attached sketches. The reserve pit will be approximately 100' by 100' and will be unlined.
10. RESTORATION OF SURFACE: Other than the area needed for operation and production facilities the site will be contoured as near as possible to its original state. Reseeding or any other restoration will be as specified by the Bureau of Indian Affairs and the United States Geological Survey. Any stockpiled topsoil will be distributed over the disturbed area for final grading and reseeded.
11. OTHER INFORMATION: Vegetation in this area consists of cedar trees; rabbit, bitter, and mahogeny brush; morman tea, yucca, and native grass. Drainage is to the north into Kutz Canyon and into the San Juan River, about 7½ miles north.

This location will require a 20' cut on the southwest side and an 8' fill on the