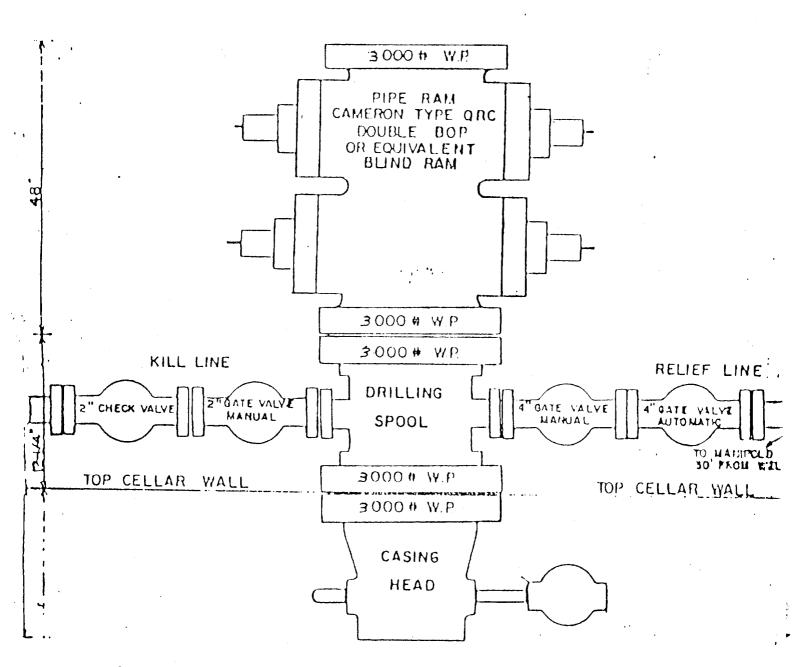
- 5. Part 1 Pressure Control Equipment consisting of double ram blow-out preventer, drilling spool, choke manifold, kill line and relief line, Inside Drill Pipe Blow preventer valve or Drill Pipe Safety Valve, and Kelly Safety Valve with 3000 psi working will be utilized in drilling the well.
  - Part 2 Schematic of the pressure control equipment is attached.
  - Part 3 Testing procedure of the pressure control equipment and frequency will be conducted in accordance with procedures in API, RP53 Bulletin, Recommended Practices for Blowout Prevention Equipment Systems. A visual inspection of the equipment will be made prior to installation. After initial installation, all equipment will be hydraulically tested with water and test plug at pressures equivalent to manufacturer's rated equipment pressure. Pressure control equipment will be operationally tested each round trip for a bit change, but not more than once per day. All equipment will be hydraulically tested at least once a month after the initial installation, or sooner as operations deem necessary.
- 6. Mud program is attached.
- 7. The rig will be equipped with a Kelly cock and a drill pipe sub with a full opening valve will be available on the rig floor. There will be no float at the bit. Monitoring of the mud system will be by pit volume totalizer and trip guard.
- 8. We plan to run a DST in the Ismay (8400'), the Desert Creek (8600') and the Barker Creek (9100'). A Dual Induction Laterolog and CNL-FDC with Gamma Ray will be run over zones of interest. We anticipate no cores will be cut.
- 9. We anticipate no abnormal pressures but pressure monitoring equipment will be on location and in use. There is no anticipation of abnormal temperatures. We anticipate only slight traces of H<sub>2</sub>S Gas, however, all necessary H<sub>2</sub>S monitoring and safety equipment will be on location and in use prior to penetration of potential H<sub>2</sub>S bearing zones.
- 10. We plan to start the well as soon as a rig is available upon approval of the application. We anticipate that drilling operations will begin by November 1, 1977. Approximately 50 days will be required to drill the well.



DRILLING CONTRACTOR FURNISHES EVERYTHING ABOVE CELLAR WALL.

SCHEMATIC CHOKE MANIFOLD

COMPANY	Enserch Exploration, Inc.	WELL Federal 1-30 (Penn)		
FIELD	Ute Dome (Penn)	LOCATION	Sec. 30 T32N R13W	
COUNTY	Jan Jual	STATE	New Mexico	

# RECOMMENDED DRILLING FLUID PROGRAM

Interval	Mud Weight	Viscosity	Fluid Loss (ml/30 min.)
(Feet)	(1bs/gal.)	(sec/qt.)	
0'-700'	Q / _ Q 7	20 26	

Spud in with a fresh water gel slurry. Adjust the viscosity, as needed, to clean the hole. Additional hole Cleaning can be accomplished with occasional sweeping with a viscosifier and/or gel. This is especially recommended prior to setting surface pipe. Add A selective flocculant at the flowline to flocculate drilled solids before they become incorporated into the drilling fluid dystem.

700'-10,00' 8.7 - 9.0 32 - 35 25 - 15 38 - 40\* 15 - 10\* 42 - 45 for logging & testing

Drill out casing shoe bypassing the shaker and dumping cement contamination to the reserve pit. Excess cement contamination should be treated out with soda ash. Gel will be used in this interval for viscosity with polymer additions of 0.05 to 0.10 lb/bbl. Caustic Soda will be added to maintain a pH of about 10.5 for some control of anhydrite in the Hermosa and for some corrosion control. Soda ash will be used to control anhydrite contamination.

Water loss in this part of the hold should be dropped to 10 - 15 cc at  $\pm$  8500' (Top of Paradox).

\*+ 8500' to T.D.

## MULTIPOINT DEVELOPMENT PLAN FOR SURFACE USE

Enserch Exploration, Inc. Federal 1-30 (Penn) San Juan County, New Mexico

- 1. Existing roads are shown on the attached maps
  - A. Staking plat attached.
  - B. The nearest town is LaPlata which is approximately 3-1/2 miles southeast of the location. However, the attached map shows access from Farmington, north on New Mexico Hwy 17, 14 miles, turn left (West) on existing road approximately one mile to Barker Dome Road. Cross cattle guard and go approximately two miles to water well. Turn right (North) on existing road and go approximately two miles to "Y" in road. Turn left on existing road approximately two miles to proposed well access road on left. Take access road approximately 500' to location.
  - C. Shown on map.
  - D. N/A
  - E. Shown on map. All roads are natural gravel roads.
  - F. No improvements are proposed on existing roads. They will be graded when necessary.

## 2. Planned access roads

As shown on attached map, we propose to construct approximately 500 ft. of access road from existing road to location by grading along natural contour of hill.

- (1) Maximum width of 16'.
- (2) No major grades.
- (3) No turnouts.
- (4) Drainage will be natural.
- (5) No culverts are to be installed and there will be no major cuts or fills.

- (6) No surfacing material will be used.
- (7) There will be no gates, cattleguards, or fence cuts.
- (8) Road has been center-line flagged.
- 3. Location of existing wells
  - 1. Water well located approximately 1-1/2 miles southwest EAST of location.
  - 2. Shown on attached sketch.
  - 3. None
  - 4. None
  - 5. None
  - 6. Shown on attached sketch.
  - 7. None
  - 8. None
  - 9. None
- 4. Location of existing and/or proposed facilities
  - A. None
  - B. 1. Production facilities will be located on the drilling pad.
    - 2. See attached sketch.
    - 3. Construction will be made with new materials. The tanks will be set on native soil pad covered with tar paper. The treater will be set on cement foundation.
    - 4. If the well is a flowing well, a HI-Lo safety valve will be installed on the well head wing. A Firewall will be installed around the tank battery to control any possible leakage and the tank battery will be fenced.
  - C. The disturbed areas no longer needed will be disked, top soil returned, and the area will be reseeded according to BLM specifications.

- 5. Location and type of water supply
  - A. Source of water supply will be the water well located at road intersection in Section 31 as shown on attached maps.
  - B. Water to be transported by tank truck over existing access roads shown on map.
  - C. None
- 6. Source of construction materials

None

- 7. Methods of handling waste disposal
  - 1. Cuttings will be buried in the reserve pit when it is backfilled after drying.
  - Drilling fluids will be collected in the reserve pit and allowed to evaporate and dry.
  - 3. Fluids produced while testing will be collected in temporary tanks. Small amounts of water will be placed in the reserve pit. All oil will be collected and sold.
  - 4. Sewage will be collected in a trench and buried below 5' of cover.
  - 5. Waste oil, grease, mud sacks, scrap wood and all combustible material resulting from drilling and testing operations will be burned in an 8' x 16' burning pit that is a minimum of 5' in depth. Small items of junk iron, i.e. chemical containers, tin cans, pipe protectors, etc. will be buried in a pit with a minimum of 5' of cover.
  - 6. Junk drilling cable and other large items of junk will be removed from the drilling site by the drilling contractor under the supervision of Enserch Exploration, Inc. After the rig has moved out, the area will be cleaned up by a roustabout crew under the supervision of Enserch Exploration, Inc.
- 8. Ancillary facilities

None

- 9. Well Site layout (plat attached).
  - 1. On plat.
  - 2. On plat.
  - 3. On plat.
  - 4. Reserve pit will not be lined.
- 10. Plans for restoration of surface.
  - 1. The drilling location will be leveled and contoured and the waste disposal pits backfilled upon completion of drilling.
  - 2. The area will be seeded per BLM specifications.
  - Pits will be fenced and maintained until they have dried and can be backfilled.
  - 4. Any oil on pit will be removed.
  - 5. All of the area except the pit will be leveled and contoured immediately after the rig has moved out. The pit will be allowed to dry then it will be backfilled and the entire area will be rehabilitated and seeded as per BLM specifications. It is anticipated that the seeding will be completed by October, 1978.

#### 11. Other information

- 1. The well pad will be built in slightly sloping terrain between the existing graded road and the high point of a ridge overlooking Oak Springs Canyon to the south. Drainage by sheet wash erosion and erosional gullies is to the north. There are several areas of sandstone/shale bedrock outcroppings in the proposed area of disturbance and numerous fragments of rock on the surface of the ground. The rather thin, poorly developed soil is a reddish brown sandy loam. Vegetation consists of juniper, pinon, morman tea, with scattered occurrences of Antelope bitterbrush, mountain mahogany, broad leaf yucca and snakeweed.
- 2. The surface is federally owned and is leased by Mr. Sterling Harris and is used for grazing.

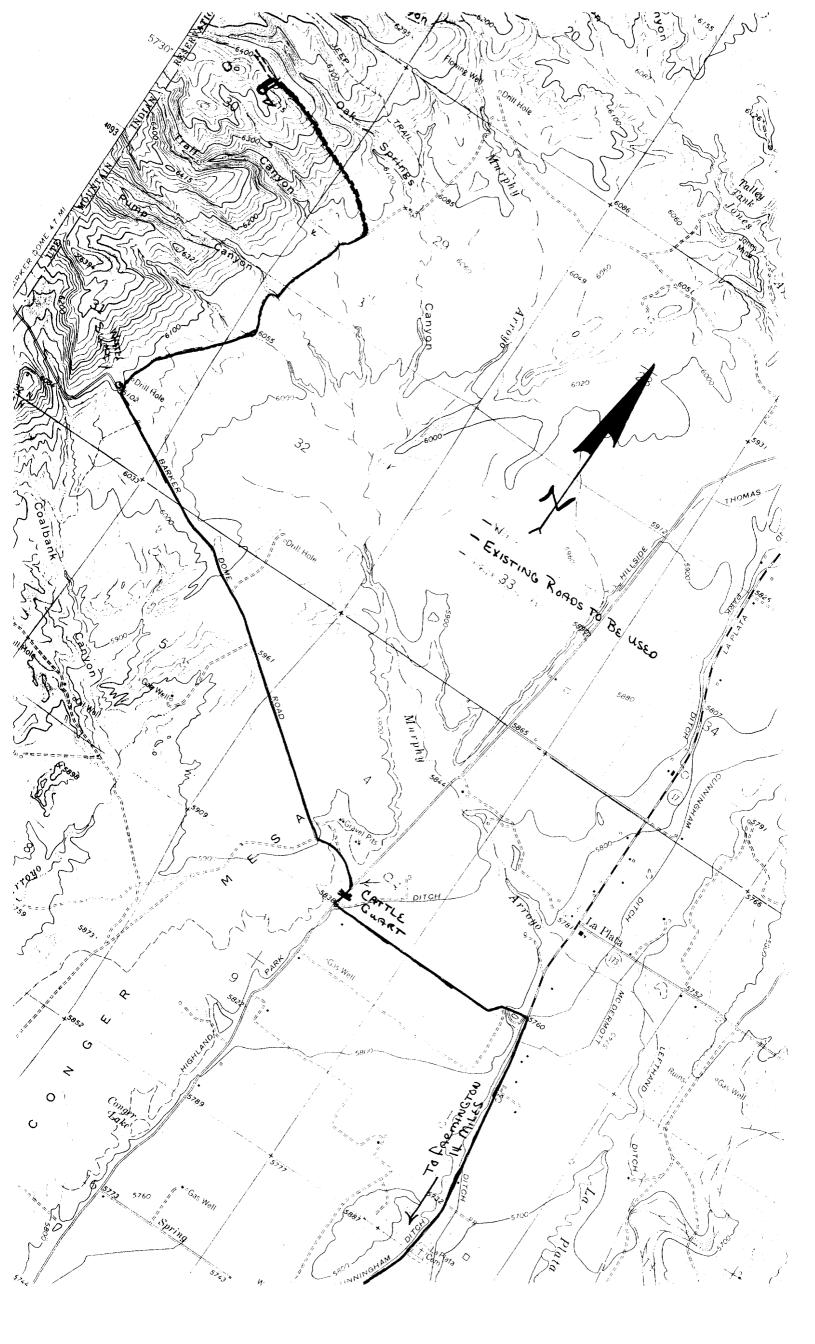
- Within a one mile radius, there are no water sources or occupied dwellings. There are no known archeological, historical, or cultural sites within the immediate area.
- 12. The well will be supervised by personnel under the direct supervision of Mr. E. A. Edwards-Regional Manager-Western Region Drilling Department, Enserch Exploration, Inc., Empire Central Building, Suite 800, 7701 N. Stemmons Freeway, Dallas, Texas 75247. Office Phone 214/630-8711.

### 13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillstie and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Enserch Exploration, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date		

Earl A. Edwards Regional Manager Western Region Drilling Department



FEDERAL 1-30 (PENN) SAN JUAN COUNTY, NEW MEXICO 19 24 20 SUPERIOR \$ 6174 EL. 1-58 10 3450 KO BWR PROPOSED (1-3/4 Prom)

FED (1-3/4 Prom)

ENSERCH EXP. 6483 ETA 2.76 TO 3317 Ko T32N 30 25 29 \$ 6424 EL. Buc 6293 EL 1-75 F TD 3053 Bus 170 303A 7-74 P 7-75-71 B.M.S \$ 6000 EL. FOUR STATES O OIL SVN 1-25 LOC 10 5291 36 31 32 WATER WELL R14W DRY HOLE RIBW & PRODUCING WELL PRODUCING PENN. WELL PROPOSED LOC. WATER WELL

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LOCATION OF EXISTING WELLS

LOCATION PRODUCTION PROLITIES

