

All valves 2"

All BCPs, flanges, spools, valves, & lines must be series 900 or 3000 psi working press.

Choke manifold must be at ground level and extended out from under substructure.

TENNECO OIL COMPANY

REQUIRED MINIMUM BLOWOUT PREVENTOR

HOOKUP

Denver, Colorado

### LACKEY 1

## 1. Existing Roads

- A. Proposed Well Site Location:
  The proposed well site location was surveyed and staked by a registered land surveyor and is located 1475' FNL and 1450' FEL, Section 23, Township 28 North, Range 9 West, San Juan County, New Mexico. (See Exhibit I Surveyors Plat).
- B. Planned Access Route:
  The planned access route begins in Blanco, New Mexico and goes east for 1.5 miles on Highway 17 to the junction of an improved surfaced road which turns southeasterly. It follows this road for approximately 4.5 mile to Five mile\_Crossing\_where the road turns west then continues

C. Access Road Labelled: southwest an additional 2.0 miles to the junctio of a gravel road which divides. The route goes Color Code: Red - Improved Surface along the right fork for an Blue - New Access Road Additional 2.0 miles to the loc. (See Exhibit II).

- D. Not applicable the proposed well is a development well.
- E. The proposed well is a development well. See Exhibit II for existing roads within a one mile radius.
- F. Existing Road Maintenance or Improvement Plan:
  The existing roads will require minimal maintenance.

## 2. Planned Access Roads

(All roads are existing roads.)

- A. Width:
  The average width of the road is twelve feet.
- B. Maximum Grades: Maximum grades will be six percent.
- C. Turnouts: There are no turnouts planned as sight distance is sufficient.
- D. Drainage Design: The road is center crowned to allow drainage. The road is flat primarily.
- E. Culverts Use Major Cuts and Fills:
  No culverts, cuts and fills will be needed as this location has an existing road to it and the location is flat.
- F. Surfacing Material:
  Native soil has been wetted, bladed and compacted to make the road surface, which is existing.

#### Planned Access Roads (Cont'd) 2.

- Gates, Cattleguards, Fence Cuts: No gates, cattleguards or fences will be needed.
- New Roads Centerlined Flagged: H. Existing Roads.

#### Location of Existing Wells 3.

The proposed well is a development well. Exhibit III shows existing wells within a one mile radius.

- Water Wells: None. Α.
- Abandoned Wells: None. . В.
- Temporarily Abandoned Wells: None. C.
- Disposal Wells: None. D. Drilling Wells: None. Ε.
- Producing Wells: See Exhibit III. F.
- Shut-In Wells: None: G. Injection Wells: None. Η.
- Monitoring or Observation Wells: None. I.

### Location of Existing and/or Proposed Facilities 4.

- Existing facilities within one mile owned or controlled Α. by Lessee/Operator: Existing facilities are shown on Exhibit II.
  - Tank batteries No tank batteries in this area.

Production facilities - See Exhibit II..

- (1) (2) (3) (4) Oil Gathering Lines - n/a
- Gas Gathering Lines n/a
- (5) Injection Lines - /n/a Disposal Lines - In/a
- New facilities in the event of production: В. (1) Facilities will be within dimensions of the drill pad.

(2) Dimensions are shown on Exhibit IV.

- Construction Materials/Methods: (3) Construction materials will be native to the site. Facilities will consist of a well pad.
- Protection of Wildlife/Livestock: (4) Facilities will be fenced as needed.

## 4. Location of Existing and/or Proposed Facilities (Cont'd)

- B. New facilities in the event of production: (cont'd)
  - (5) New facilities will consist of a tank, production unit, and wellhea
- C. Rehabilitation of Disturbed Areas:
  Following the completion of construction, those areas
  required for continued production will be graded to provide drainage and minimize erosion. Those areas unnecessary
  for use will be graded to blend with surrounding topography
  per BLM recommendations.

## 5. Location and Type of Water Supply

- A. Location and type of water supply:
  Water will be hauled from a private source.
- B. Water Transportation System: Water trucks will be used.
- C. Water wells: N/A:

## 6. Source of Construction Materials

- A. Materials:
  Construction materials will consist of soil native to the site. Any topsoil, if present, will be stripped and stockpiled as needed.
- B. Land Ownership; The planned site and access road is on federal land administered by the Bureau of Land Management.
- C. Materials Foreign to the Site: N/A.
- D. Access Roads:
  No additional roads will be required.

## 7. Methods for Handling Waste Disposal

- A. Cuttings:
  Cuttings will be contained in the reserve pit.
- B. Drilling Fluids: Drilling fluids will be retained in the reserve pit.
- C. Produced Fluids:
  Produced fluids, including produced water will be collected in the reserve pit. Any small amount of hydrocarbon that may be produced during testing will be retained in the reserve pit. Prior to clean up operations, the hydrocarbon material will be skimmed.

## 7. Methods for Handling Waste Disposal (Cont'd)

- D. Sewage:
  Sanitary facilities for sewage disposal will consist of at least one pit toilet, during the driller operations.
  The pit will be backfilled immediately following completion of the drilling operation.
- E. Garbage:
  There probably will not be much putriscible garbage to dispose of. However, it will be disposed of along with the refuse in a constructed burn pit, which will be fenced. The small amount of refuse will be burned and the pit will be covered with a minimum 36 inch cover upon completion.
- F. Clean-Up of Well Site:
  Upon the release of the drilling rig, the surface of the drilling pad will be prepared to accommodate a completion rig, if testing indicates potential productive zones. In either case, the "mouse hole" and "rat hole" will be covered to eliminate a potential hazard to livestock. The reserve pit will be fenced to prevent entry of livestock until the pit is backfilled. Reasonable clean up will be performed prior to final restoration of the site.

## 8. Ancillary Facilities

None required.

## 9. Well Site Layout

- A. Well site layout is shown on Exhibit IV.
- B. Location of pits, etc. See Exhibit IV.
- C. Rig orientation etc. See Exhibit IV.
- D. Lining of pits:

  Pits will not be lined. They will be covered with a fine mesh netting, if necessary, for the protection of wildlife if fluids are found to be toxic.

## 10. Plans for Restoration of Surface

A. Reserve pit clean up:
The pit will be fenced prior to rig release and shall be
maintained until clean up. Prior to backfilling any hydrocarbon material on the pit surface will be removed. The
fluids and solids contained in the pit shall be backfilled
with soil excavated from the site and with soil adjacent to
the reserve pit. The restored surface of the reserve pit will
be contoured as needed to minimize erosion. The reserve pit
area will be seeded per BLM recommendations during the
appropriate season following final restoration of the site.

# 10. Plans for Restoration of Surface (Cont'd)

- B. Restoration Plans Production Developed:
  The reserve pit will be backfilled and restored as described under Item A. In addition, those disturbed areas not required for production will be graded to blend with the surrounding topography, and seeded, per BLM recommendations. The portion of the drill pad required for production and turning areas will be graded to minimize erosion and provide access to production facilities under inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those under Item C. below.
- C. Restoration Plan No Production Developed:
  The reserve pit will be restored as described above. With
  no production developed, the entire surface disturbed by
  construction of the drilling pad will be restored. The site
  will be contoured to blend with the surrounding topography.
  The site will be seeded according to BLM recommendations. If
  the new access road is not required for other development
  plans, it will be obliterated and restored and seeded per
  BLM recommendations.
- D. Rehabilitation Time Table:
  Upon completion of operations the intial clean up of the well site will be performed. Final restoration of the site will be performed as soon as possible according to procedural guidelines published by the USGS and BLM. Seeding of the disturbed areas which are no longer required will be performed during the appropriate season, following final restoration.

## 11. Other Information

- A. Surface Description:
  The surface area where the proposed site is located is flat, appears to be where a location was previously built. It is 2.5 miles west of Largo Canyon.
- B. Surface Use Activities: The surface is federally owned and managed by the BLM. The predominant surface use is mineral exploration and production.
- C. Proximity of Water, Dwellings and Historical Sites:
  - Water: There are no reservoirs or streams in the immediate area.
  - Occupied Dwellings: There are no occupied dwellings or buildings in the area.
  - 3. Sites:
    An archeological reconnissance has been performed for this location and clearance has been granted.

## 12. Operator's Field Representative

Donald S. Barnes
Division Drilling Engineer
Tenneco Oil Company
720 South Colorado Blvd.
Penthouse
Denver, CO 80222
(303) 758-7130 Ext. 212

### 13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and subcontractos will conform to this plan.

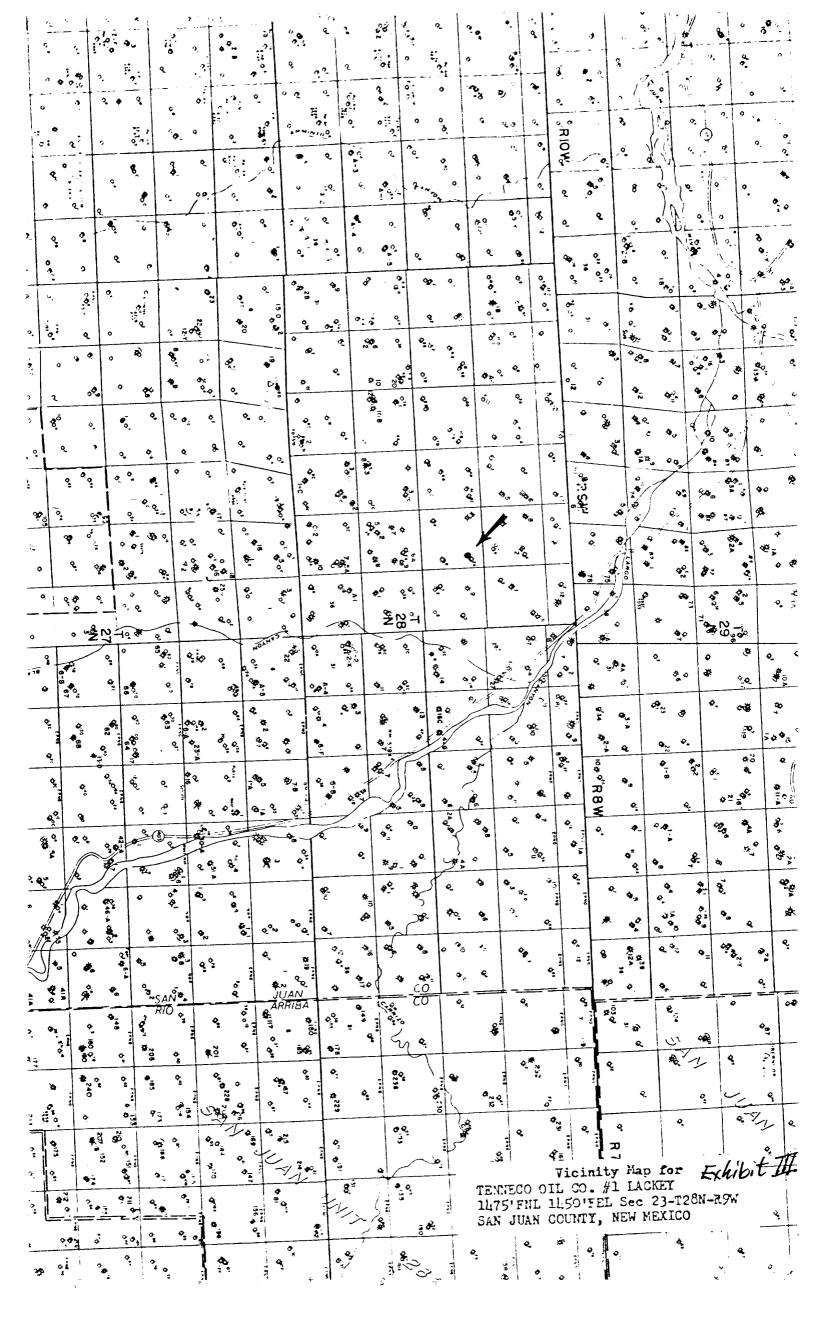
Date: 11-10-78

Division Production Manager

BLOOMFIELD QUADRANGLE

NEW MEXICO-SAN JUAN CO
DEPARTMENT OF THE INTERIOR
15 MINUTE SERIES (TOPOGRAPHIC GEOLOGICAL SURVEY

10745 255000 E 24 A 2500 FEET 10745 (565) Vicinity Map for TENNECO OIL CO. #1 LACKEY 1475'FNL 1450'FEL Sec 23-T28N-R9W SAN JUAN COUNTY, NEW MEXICO



## TENNECO OIL COMPANY

## **CALCULATION SHEET**

