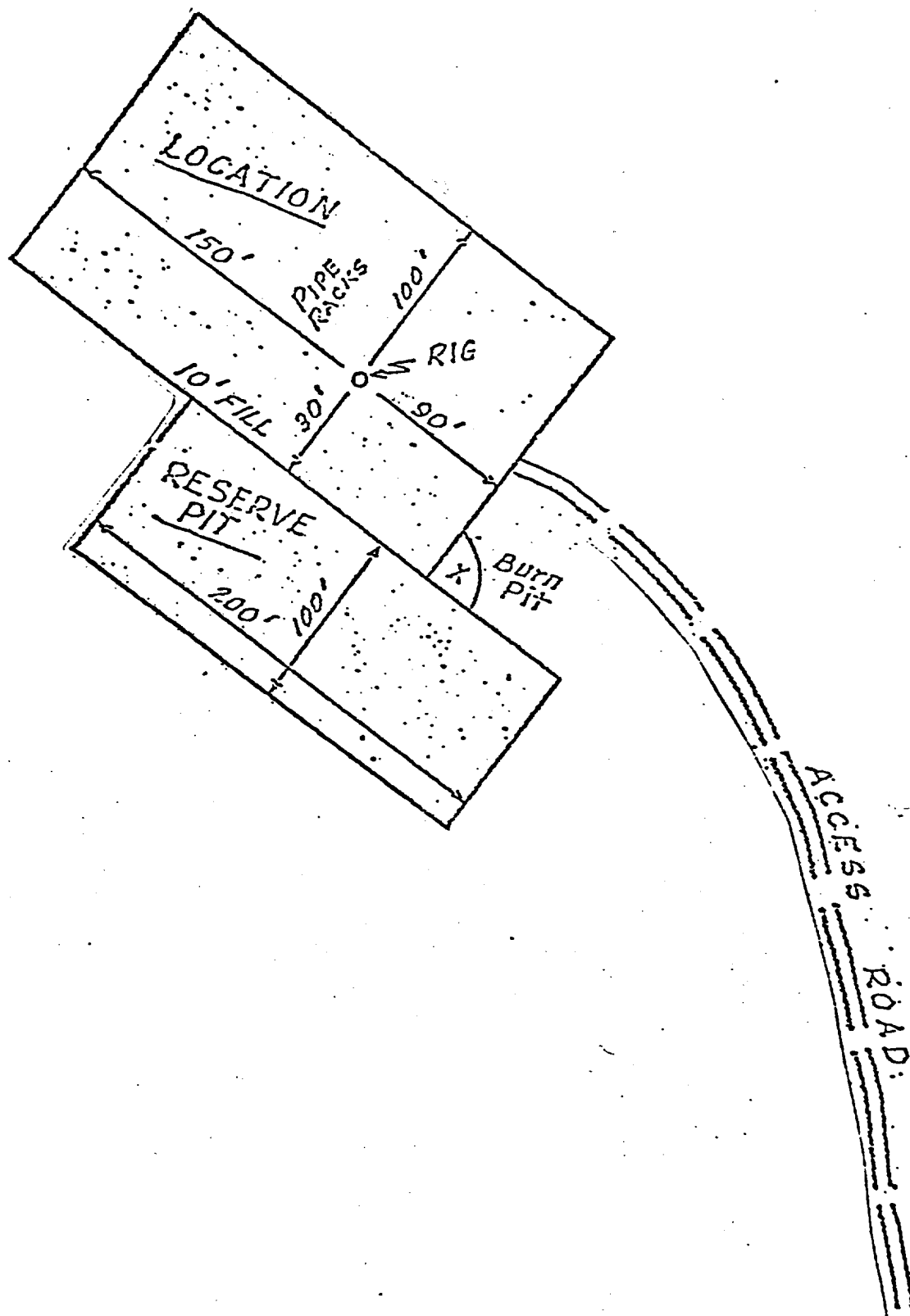


Vicinity Map for TENNECO OIL CO.

Showing well location in the
NW $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$,
Section 35, T26N, R11W,
N.M.P.M., San Juan County,
New Mexico

Date: 8 September, 1975 Scale: 1"=2000'

SAN JUAN ENGINEERING CO.



7 POINT WELL CONTROL PROGRAM

1. Surface casing: 8 5/8" OD, 24#/ft, approximately 600', grade K-55, new.
2. Casinghead will be 10" 900 series, 3000 psi pressure rating.
3. No intermediate casing will be run.
4. Blowout Preventors: Hydraulic, double ram 10", series 900. One set of rams will be provided for each size drill pipe being used. One set of blind rams will be in the preventor at all times. Fill lines, kill lines and relief lines will be 2". Relief line will contain a variable choke.
5. (1) Kelly cock will be in use at all times.
(2) A stabbing valve to fit drill pipe will be on the floor at all times.
(3) Mud will be monitored visually.
6. Anticipated BHP

This is an area of known pressures. Maximum pressure will not exceed 2600 psi. at total depth.
7. Drilling Fluids:
0 - 600 Spud mud
600 - TD Low solids, water base, estimated weight will be 8.5 to 9.5 lbs. per gallon. This mud will provide a hydrostatic pressure of \pm 2900 psi at total depth of 6200'.

SURFACE USE PLAN

1. Shown on attached map.
2. Shown on attached map, road will be ± 1000' long and 16' wide.
3. Shown on attached map.
4. Shown on attached map.
5. This will be a dry gas well and will not require a tank battery.
6. Water will be hauled from the San Juan River or nearest wash.
7. All waste disposal will be buried in the reserve pit when the location is cleaned up.
8. No camps will be required.
9. No airstrip will be required.
10. Shown on attached diagram.
11. Topsoil will be stock piled if any is present. Upon completion or abandonment of this well the location will be cleaned and levelled and a dry hole marker installed if applicable. Reseeding will be to BLM specifications.
12. This location is sandy, semi desert, typical for this area. Vegetation is sage brush, scrub cedar and very little grass.

PROGNOSIS TO DRILL AND COMPLETE

DIVISION DENVER
LEASE: Gallegos
LOCATION: SE/4
 Section 35, T 26N, R 11W
 San Juan County, New Mexico

DATE: SEPTEMBER 9, 1975

WELL NO.: 13

FIELD: Basin Dakota

ESTIMATED ELEVATION: 6370

ESTIMATED TOTAL DEPTH: 6200

PROJECTED HORIZON: Dakota

DRILLING, CASING AND CEMENT PROGRAM:

1. Set 600' of 8 5/8, 24#/ft, K-55, ST&C, surface casing in a 12 1/4" hole and circulate with cement with a maximum of 3% CaCl₂.
2. Install BOP and test both sets of Rams to 1000 psi for 15 minutes.
3. Drill 7 7/8 hole below surface casing, following mud program on page 2.
4. Log as per logging program on page 2, or wellsite geologist.
5. If productive, set 5 1/2" 15.5#/ft, K-55, ST&C casing to T.D. Cement in two stages: 1) TOC above Gallup, and 2) TOC to base of surface casing.
6. If non-productive, P&A as per U.S.G.S. or N.M.O.G.C.C.

7. Anticipated Formation Tops:

Pictured Cliffs	1550	Greenhorn	5950
Cliff House	2430	Dakota	6000
Point Lookout	4000	Dakota "B"	6098
Mancos	4200	T.D.	6200
Gallup	5090		
Sanastee	5590		

Surface - 5500 +

Fresh water with gel if needed for good hole conditions. Minimum solids requested. No WL control.

5500 - T.D.

WL 9 cc or less and raise vis with gel so hole will log (50 or greater vis probably).

CORING AND TESTING PROGRAM:

No Cores or DST's.

DEVIATION SURVEYS:

1. Survey surface hole at 100' intervals. Maximum allowable deviation at 250' is $1/2^{\circ}$.
2. FROM SURFACE TO TOTAL DEPTH DEVIATION SURVEYS MUST BE TAKEN EVERY 500' OR EACH TRIP WHICHEVER IS FIRST. This may entail running the TOTCO on wireline. Record each survey on the A.A.O.D.C. Drilling Report sheet. Maximum allowable change in deviation is 1° per 100'.

SAMPLES:

30' samples from 5000' to T.D. or as directed by wellsite geologist.

WELL SURVEYS:

LOGS: Dual Induction and combined CNL-FDC.
Interval will be designated by wellsite geologist.

B.O.P.:

PREVENTORS MUST BE CHECKED FOR OPERATION EVERY 24 HOURS, AND THE CHECK MUST BE RECORDED ON THE A.A.O.D.C. DRILLING REPORT SHEET.

Tenneco Oil
A Tenneco Company

Suite 1200
Lincoln Tower Building
Denver, Colorado 80203
(303) 292-9920



September 16, 1975

U. S. Geological Survey
Box 959
Farmington, New Mexico 87401

Re: Application for Permit to Drill
Gallegos 13.

Gentlemen:

Attached are five copies each of the Application for Permit to Drill, Surveyor's Plat, Vicinity Map, Location Access Map, 12 Point Surface Use Plan, 7-Point Well Control Plan, and Prognosis to Drill and Complete for the above captioned well.

We are planning to commence drilling operations as soon as permits are approved.

Yours very truly,

TENNECO OIL COMPANY

A handwritten signature in cursive script that reads "D. D. Myers".

D. D. Myers
Division Production Manager

TFD:df

Encl.

SEP 22 1975

U. S. GEOLOGICAL SURVEY