

DRILLING PLAN and SURFACE USE PROGRAM

Well No. 89-M
1625' From North & 790' From West
Section 3, 26N, 6W
Rio Arriba County, New Mexico

DRILLING PLAN

(1) Estimated Formation Tops:

Alamo	2405'
Pictured Cliffs	2995'
Chacra	3915'
Mesa Verde	4645'
Graneros	7220'
Dakota	7355'

(2) Alamo Water Sands:

Est. Top	2405'
Est. Bottom	2490'

- (3) A Schaeffer 10" Model LWP 6000# test BOP will be in use at all times while drilling below surface casing. BOP will be tested at least once every 24 hour period and so noted on daily report.
- (4) Approx 1000' 5 1/2" 17# K-55 8rd thd ST&C Smls casing on bottom. Approx 5520' 5 1/2" 15.5# K-55 8rd thd ST&C Smls casing run from 1000' off bottom to 1000' below surface. 1000' of 17# K-55 8rd thd LT&C Smls casing run from 1000' below surface to surface. Above are minimum grades and weights to be run.
- (5) Normally if there is no hole swelling clear water is used for circulating Medium to approximately 3000' then hole is mudded up using 9.0# plus Gel based mud from that point to TD.
- (6) Induction Electric and Density Logs will be run in open hole if possible.
- (7) No abnormal pressure or temperature expected. Normal Bottom hole pressures are below 3000#.

SURFACE USE PROGRAM:

(1) Topo Map of Caulkins Oil Company properties attached:

Locations circled with Red.
Access route marked Largo Canyon School location.
Existing roads will be maintained in same manner as before drilling New Well.

(2) No new roads.

- (3) Existing wells within one mile located on Topo Map.
- (4) Attached plat shows anticipated location of prodction equipment.
- (5) Drilling and completing water will be produced from Caulkins Well No. 130, located in NE 1/4 of NW 1/4 of Section 9, 26N 6W. Water well location identified on Topo Map.
All roads used to truck water will also be identified on Topo Map.
- (6) No construction materials needed.
- (7) All cuttings, chemicals and salt will be contained in reserve pit. A pit 8' X 8' X 6' deep will be dug near circulating pit and then fenced with fine woven wire to contain and burn all sacks and etc. A hole will be drilled to set portable toilet. After drilling completed sewage hole will be covered, also burn pit and area will be cleaned up and covered. Reserve pit will be used to contain all fluids recovered while completing and testing. Gas produced while cleaning up and testing will be flared in reserve pit to help dry up drilling fluids. Reserve pit shall be fenced at all times while it contains fluid. It will be covered as soon after well completion as is practical.
- (8) No ancillary facilities.
- (9) Suveyors location plat shows temporary pits, temporary rig equipment while drilling.
- (10) After well is completed location and all disturbed areas will be cleaned up then reseeded with seed Mix #1 to within 5' off all facilities. All equipment owned and operated by Caulkins Oil Company will be painted Green.
- (11) Surface ownership Federal.
- (12) NA
- (13) 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 which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Caulkins Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date 11-12-84

Name and Title Charles E. Veyum Superintendent
Caulkins Oil Company