

# ILLEGIBLE

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 42-R1425.

30-039-21364

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER ☐

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Caulkins Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 740, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface 1/2 mile from the East and 1010 From the South

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

2.5 miles Southeast of Blanco, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drilg. unit line, if any)

1010

16. NO. OF ACRES IN LEASE

1600

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1230

19. PROPOSED DEPTH

3225

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4412 ft.

22. APPROX. DATE WORK WILL START\*

April 20, 1977

23.

### PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
10 3/4"	8 5/8"	21	100	Sufficient to circulate
7 7/8"	6 1/2"	10.5	3225	425 Sacks

Surface formation San Jose. No abnormal pressure or temperature anticipated.

It is proposed to drill well to 3225' using gel based 9# mud. Drill pipe float will be used with float installed at bit. SS Induction log will be run providing hole conditions permit tools to open hole, if not Neutron log will be run in pipe.

Now 1 1/2" E-40, 10.5# casing will be cemented at TB with 325 sacks 50-50 pas containing 10 # gel per sack, followed by 100 sacks Neat cement.

Casing will have rotating scratchers and centralizers through Pictured Cliffs Zone.

Now 1" 10 rd thd. V-55 Ni tubing will be run to top of Pictured Cliffs perforation.

A Shaffer 8" Model HMP, 6000# test, 3000# BP Blowout Preventor will be in use at all times while drilling below 100'. Blowout Preventor will be tested at least once during each 24 hour day.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*Armando E. Vargas*

TITLE

Superintendent

DATE

March 17, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

MAR 13 1977

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

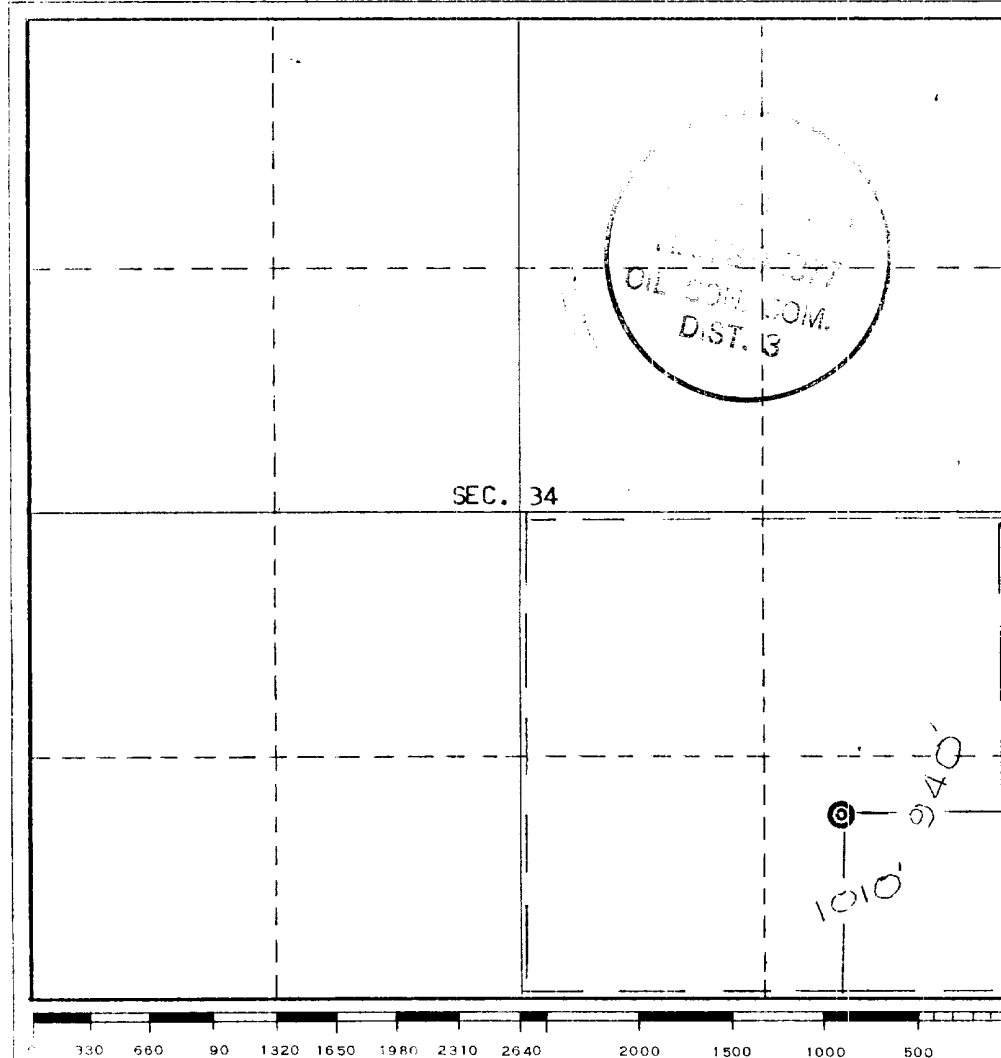
Operator <b>Caulkins Oil Company</b>			Lease <b>NM 03547</b>		Well No. <b>44</b>
Section <b>P</b>	Section <b>34</b>	Township <b>27 North</b>	Range <b>6 West</b>	County <b>Rio Arriba</b>	
Actual Well Location of Well:					
<b>1010</b> feet from the <b>South</b> line and		<b>940</b> feet from the <b>East</b> line			
Ground Level Elev. <b>6612</b>	Producing Formation <b>Pictured Cliffs</b>	Pool <b>South Blanco</b>	Dedicated Acreage <b>160</b> <input checked="" type="checkbox"/> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Walter C. Cargue  
 Position Superintendent  
 Company Caulkins Oil Co.  
 Date March 17, 1977

**REGISTERED PROFESSIONAL SURVEYOR**  
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same are true and correct to the best of my knowledge and belief.  
**ERNEST N. ECHOHAWK**

Date Surveyed March 5, 1977  
 Registered Professional Engineer and/or Land Surveyor  
E. V. Echohawk  
 Certificate No. 3602  
**E.V. Echohawk LS**

# CAULKINS OIL CO.

Post Office Box 780  
Farmington, New Mexico 87401

March 17, 1977

United States Dept. of the Interior  
Geological Survey  
Post Office Box 1309  
Durango, Colorado 81301

Gentlemen:

Following is our multi-point development plan for surface use and restoration for our well No. 44, located in Southeast Quarter of Section 34 27N 6W, Rio Arriba County, New Mexico.

- (1) Location to be built adjacent to existing road. Copy of Topo map showing proposed location and existing roads in area.
- (2) No new road required. Access roads from Ercan Camp to location marked on Topo map.
- ((3) Location of existing wells shown on Topo map.
- (4) No tank battery or production facilities required. Note: Gas Company of New Mexico as purchaser of gas will apply for permit for pipelines and production equipment.
- (5) Water will be hauled from Caulkins Oil Company well number 130, located in Northwest Quarter of Section 9 26N 6W, Rio Arriba County, New Mexico, identified with red circle on topo map. Roads on Federal lands used haul water from water well to location also shown on topo map.
- (6) No construction materials needed for roads of location.
- (7) All cuttings, trash, garbage and etc, will be confined to reserve pit and small fenced pit on location. After rig is moved out, area will be cleaned up, small pit covered and reserve pit fenced until fluid in pit evaporates. Reserve pit will be covered as soon as it dries sufficiently to proceed without damage to outside surface.
- (8) No camp required.
- (9) Layout plat for location and reserve pit attached. Location lays on hillside with approx. 6% slope. A 6' cut on North end of location will be required. When complete slopes on location will no more than 3:1. Reserve pit will be built from earth materials, banks will be packed by tractor and pit will not be lined.
- (10) Reserve pit will be covered and cleaned up then reseeded with BLM recommended seeding program with 2 $\frac{1}{2}$ # Crested Wheatgrass, 2 $\frac{1}{2}$ # Smooth Brome, 1# Fourwing Saltbrush (dewinged) and 1# Nomad Alfalfa per acre. Reseeded area will include all location and reserve pit area to within 5' of all facilities. Seeding shall be done between July 15 and Oct. 15. All facilities maintained by Caulkins Oil Company shall be painted Grey, Number 36357.

(11) New location will be along side existing road, area to be disturbed has medium coverage of Blue Gama and sage brush. Soil is sandy clay loam.

(12) Operator's Representative:

Charles Verquer, Supt.  
Post Office Box 780  
Farmington, New Mexico, 87401

Phone: 325 0481

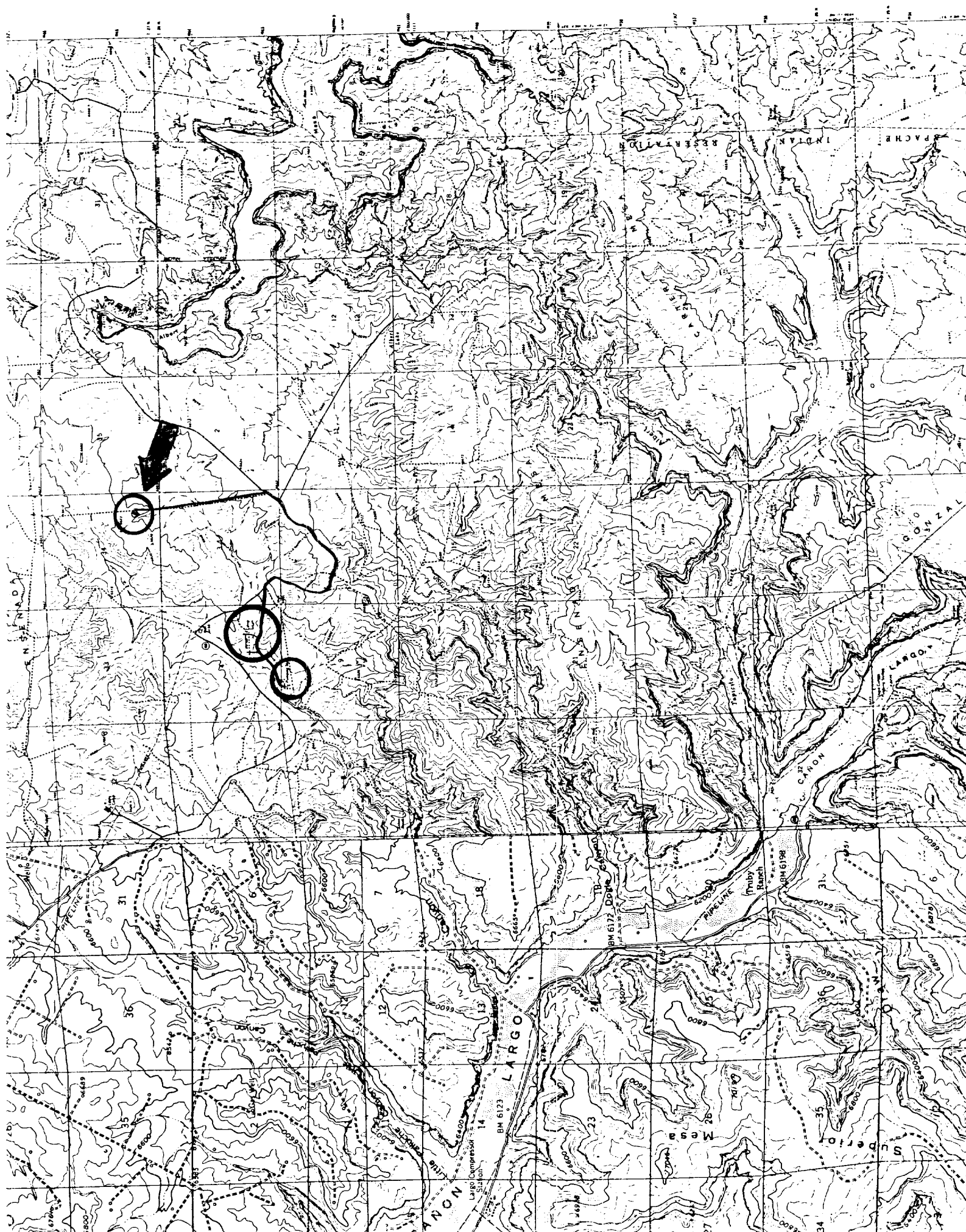
(13) Certification:

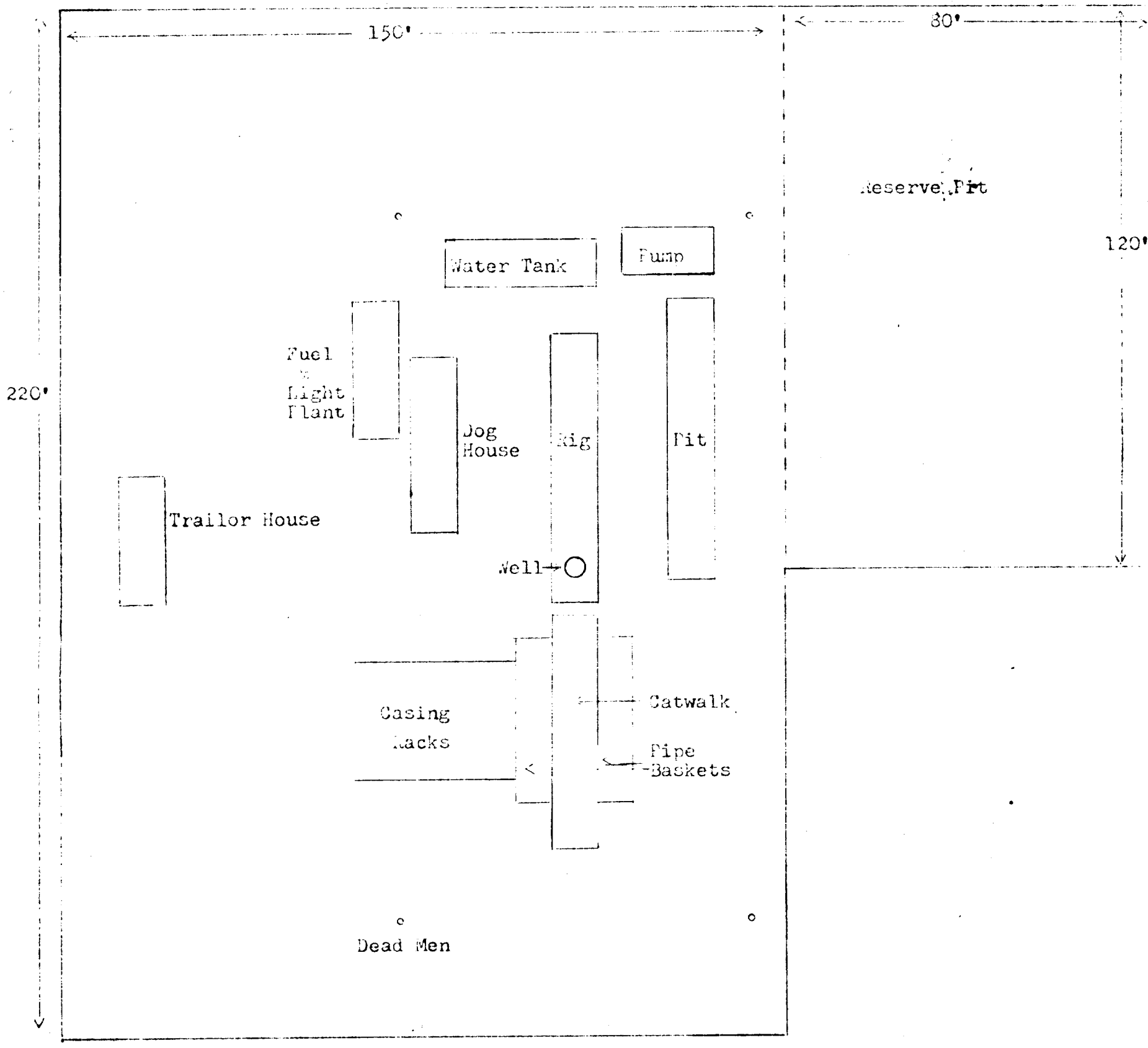
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and; that the work associated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

March 17, 1977

Date

Charles E. Verquer  
Charles E. Verquer, Supt.





Scale - 1 inch = 25'

Well Number 44  
 SE SE Section 34 27N 6W  
 Rio Arriba County, New Mexico

**NEW MEXICO OIL CONSERVATION COMMISSION  
MULTI-POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122  
Revised 12-1-55

Pool <b>South Blanco</b>		Formation <b>Pictured Cliffs</b>		County <b>Rio Arriba</b>	
Initial <b>X</b>	Annual	Special	Date of Test <b>6-19-77</b>		
Company <b>Caulkins Oil Company</b>		Lease <b>Breech "A"</b>		Well No. <b>44</b>	
Unit <b>P</b>	Sec. <b>34</b>	Twp. <b>27 N</b>	Range <b>6 W</b>	Purchaser <b>Gas Company of New Mexico</b>	
Casing <b>4.5</b>	Wt. <b>10.5</b>	I.D. <b>4.000</b>	Set at <b>3250</b>	Perf. <b>3152</b>	To <b>3214</b>
Tubing <b>1"</b>	Wt. <b>1.7</b>	I.D. <b>1.049</b>	Set at <b>3178</b>	Perf. <b>3178</b>	To
Gas Pay: From <b>3152</b> To <b>3214</b>		L <b>3178</b> G <b>3178</b>		GL Bar. Press.	
Producing Through:		Casing		Tubing <b>Yes</b>	
Date of Completion <b>5-18-77</b>		Packer		Reservoir Temp.	
				Type Well — Single — Braden head — G.G. or G.O. Tool	
				<b>Single Gas</b>	

**OBSERVED DATA**

Tested Through: Prever <input type="checkbox"/> Choke <input checked="" type="checkbox"/> Meter <input type="checkbox"/>					Type of Tests				
FLOW DATA					TUBING DATA		CASING DATA		DURATION OF FLOW HR.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig.	Diff. h <sub>w</sub>	Temp. °F.	Press. psig.	Temp. °F.	Press. psig.	
1.	<b>7 days</b>					<b>1065</b>		<b>1065</b>	
2.						<b>62</b>		<b>607</b>	
3.									
4.									
5.									

**FLOW CALCULATIONS**

No.	Coefficient (24 Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor $F_t$	Gravity Factor $F_g$	Compress. Factor $F_{pv}$	Rate of Flow Q-MCF PD @ 15.025 psia
1.	<b>14.1605</b>		<b>74</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1048</b>
2.							
3.							
4.							
5.							

**PRESSURE CALCULATIONS**

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.	Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____ deg.	Specific Gravity Flowing Fluid _____
$F_c = (1 - e^{-S})$ _____	$P_c = P_w^2$ _____

No.	$\frac{P_w}{P_t}$ psia	$P_t^2$	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2 (1 - e^{-S})$	$P_w^2$	$P_c^2 - P_w^2$	Cal $\frac{P_w}{P_c}$	$\frac{P_w}{P_c}$
1.						<b>383,161</b>	<b>776,768</b>		
2.									
3.									
4.									
5.									

ABSOLUTE POTENTIAL: 14.73 MCFPD; n .85

COMPANY Caulkins Oil Company WITNESSED \_\_\_\_\_

ADDRESS P.O. Box 340, Bloomfield, N.M. COMPANY \_\_\_\_\_

AGENT AND TITLE Charles Auger  
Superintendent

This acreage dedicated to Gas Company of New Mexico