

ARTESIA, NEW MEXICO
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

C/SF

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

TRANSWESTERN GAS SUPPLY COMPANY ✓

3. ADDRESS OF OPERATOR

P.O. Box 2521, Houston, TX 77001

O. C. D.
ARTESIA, OFFICE

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

At surface

1980'/S

1980'/E

Sec. 8-6S-23E

At proposed prod. zone

Same

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

29 miles north-northwest of Roswell, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

1980'

16. NO. OF ACRES IN LEASE

2039.59

18. DISTANCE FROM PROPOSED LOCATION*

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

None

19. PROPOSED DEPTH

4500'

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

4175 GL

23.

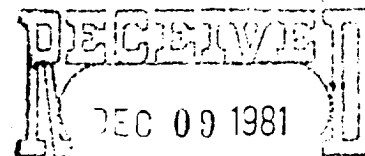
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48.0# K-55	60'	Redimix
12 1/4"	8 5/8"	24.0# K-55	1800'±	±950 sx Circulate
7 7/8"	4 1/2"	10.5# J-55	TD	±250 sx

Propose to drill to 4500'± to test Abo and intermediate formations.

See attached "Supplemental Drilling Data".

See Exhibit "D" for BOP information



Gas is dedicated

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U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

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

JERRY W. LONG

TITLE Agent

DATE December 9, 1981

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DEC 15 1981

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 8750

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

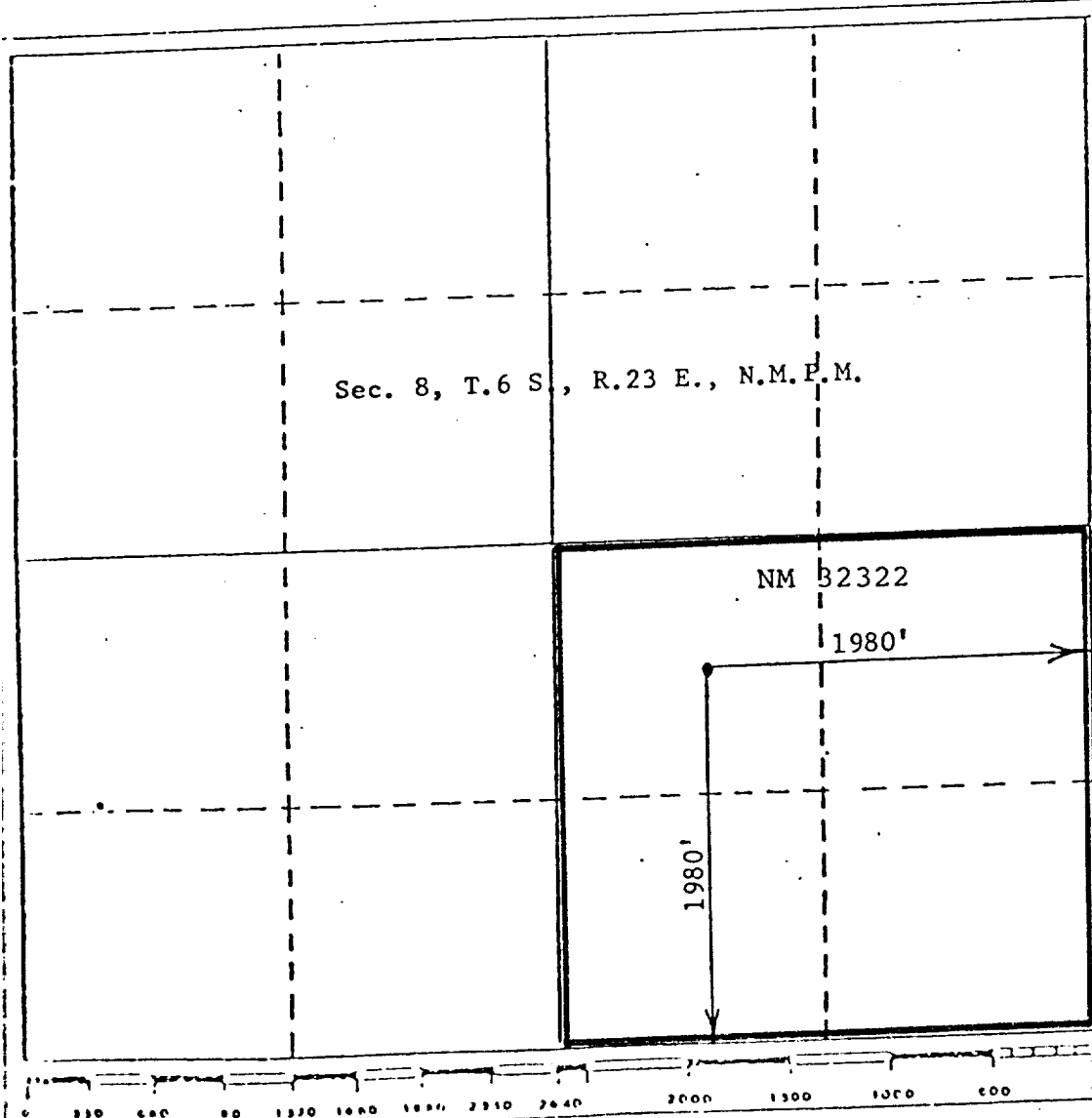
Operator Transwestern Gas Supply Company			Lease Middle Fork Federal		Well No. 0 8 1
Section Letter J	Section 8	Township 6 South	Range 23 East	County Chaves	
Actual Well Location of Well: 1980 feet from the South line and 1980 feet from the East line			Dedicated Acreage: (SE $\frac{1}{4}$) 160 Acres		
Ground Level Elev. 4175	Producing Formation Abo		Pool Undesignated Abo		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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). Single Lease
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 Division.



CERTIFICATION

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

Jerry W. Long
Name
JERRY W. LONG

Position

Agent

Company

TRANSWESTERN GAS SUPPLY CO

Date

December 9, 1981

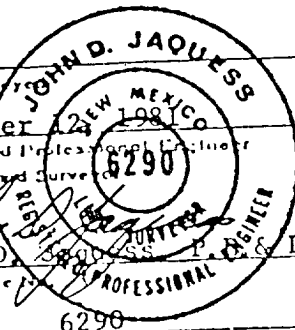
I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

October 12, 1981

Registered Professional Engineer and/or Land Surveyor

John D. Jaquess
John D. Jaquess, P.E. & L.S.
Certificate No. 6290



SUPPLEMENTAL DRILLING DATA

TRANSWESTERN GAS SUPPLY COMPANY
No.1 Middle Fork Federal
1980'/S 1980'/E Sec.8-6S-23E
Chaves County, N.M.

NM 32322

The following items supplement Form 9-331C in accordance with instructions contained in NTL-6.

1. SURFACE FORMATION: Permian San Andres

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

San Andres	Surface
Glorieta	750'
Tubb	2300'
Abo	3000'

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATION:

Water	- Surface to 300'
Gas	- 3000' to 4500'

4. PROPOSED CASING PROGRAM:

13 3/8" Casing	- Set two joints with rat hole machine and grout to surface.
8 5/8" Casing	- Set at 1800'± and cement with an estimated 950 sx of cement.
4 1/2" Casing	- Set to total depth and cement with an estimated 250 sx of cement to isolate all water, oil and gas zones.

Type of cement and additives will be determined by hole conditions. The intermediate casing and production casing will be tested to 1000 psi. before drilling cement out of the casing shoe.

5. PRESSURE CONTROL EQUIPMENT: Blowout preventer stack will consist of double-ram blowout preventer and rotating head rated to 3000#WP. A sketch of the BOP is attached.

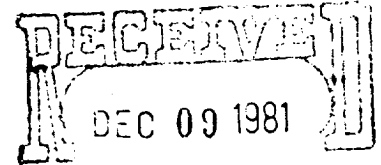
6. CIRCULATING MEDIUM: Hole for 13 3/8" conductor pipe will be drilled with a rat hole auger. Air will be used as the circulating medium for the remainder of the drilling. It is anticipated that a foam additive will be necessary until the intermediate casing is cemented.

7. AUXILIARY EQUIPMENT: Full-opening kelly cock, to fit the drill string in use, will be kept on the rig floor at all times.

8. TESTING, LOGGING AND CORING PROGRAM:
Samples: Surface casing shoe to TD
DST's: None anticipated
Logging: Gamma Ray-Neutron log and other logs as recommended by well-site geologist.
Coring: None anticipated
9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE: None anticipated. Maximum bottom-hole pressure should not exceed 1500 psi. Bottom-hole temperature will be about 110°F.
10. ANTICIPATED STARTING DATE: Drilling will commence about December 31, 1981. Drilling should be completed within 10 days. Completion operations (perforations and stimulation) will follow drilling operations.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

TRANSWESTERN GAS SUPPLY COMPANY
No.1 Middle Fork Federal
1980'/S 1980'/E Sec.8-6S-23E
Chaves County, N.M.



NM 32322

OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 29 miles north-northwest of Roswell, New Mexico.
- B. Directions: From the intersection of Hwy.285 and Hwy.70, north of Roswell, go 20 miles north on Hwy.285. Turn west on the County Road and go 2.4 miles. Go north 1.6 miles to the No.2 Fivemile Tank well. Follow new access road 1 mile west to the No.1 Middle Fork location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be 12' wide and about 1 mile long.
- B. Surfacing Material: The access road and pad will be surfaced with about 6" of compacted caliche, if soil conditions dictate surfacing.
- C. Maximum Grade: Less than 3%
- D. Turnouts: Two turn-outs will be constructed to permit passing.
- E. Drainage Design: The road will be constructed with a 6" crown and adequate drainage.

- F. Culverts: None necessary
- G. Cuts and Fills: The pad area slopes to the north and will require about 3' of cut on the south side.
- H. Gates, Cattle Guards: None necessary
3. LOCATION OF EXISTING WELLS:
- A. Existing wells are indicated on Exhibit "A".
4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
- A. There are no existing facilities on the lease.
- B. If the well is commercial, production and storage facilities will be constructed on the well pad.
5. LOCATION AND TYPE OF WATER SUPPLY:
- A. Water will be purchased from Corn Water Well No.2 in Sec.10-7S-23E. Since this well will be drilled with air, only minimal amounts of water will be required.
6. SOURCE OF CONSTRUCTION MATERIALS:
- A. Necessary caliche will be obtained from a pit on privately-owned land in the SE $\frac{1}{4}$ Sec.21-6S-23E.
7. METHODS OF HANDLING WASTE DISPOSAL:
- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".

- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.
8. ANCILLARY FACILITIES:
- A. None necessary
9. WELL SITE LAYOUT:
- A. Exhibit "C" indicates the relative location and dimensions of the well pad, mud pits, reserve pit and major rig equipment.
- B. The location is sloping to the north requiring about 3' cut on the south side.
10. PLANS FOR RESTORATION OF THE SURFACE:
- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the well is non-productive the disturbed area will be rehabilitated to Federal agency requirements and will be accomplished as expeditiously as possible.
11. OTHER INFORMATION:
- A. Topography: The topography is gently sloping to the north in the vicinity of the drill pad. Exhibit "B" is a contour map of the area.
- B. Soil: The soil is composed of moderately compacted sandy loam, hosting occasional chert and quartzite cobbles and gravels.
- C. Flora and Fauna: The flora consists of typical desert vegetation, such as yucca, mesquite, cactus and various grasses. Fauna consists of desert wildlife such as coyotes, rodents and snakes.

- D. Ponds or Streams: Drainage is toward the north discharging into Fivemile Draw which is about 2 miles north of the location.
- E. Residences and Other Structures: The nearest occupied dwelling is about 2 miles southwest. A windmill is located about 1 mile southeast.
- F. Archaeological, Historical and Other Cultural Sites: No artifacts were noted in the area of the pad or access roads. An archaeological survey was conducted by A.C.A. and a report furnished to BLM and USGS.
- G. Land Use: Grazing
- H. Surface Ownership: The well is located on Public surface. The Grazing Lessee is William D. McKnight.

12. OPERATOR'S REPRESENTATIVE:

Field Operations:

Mr. Hank Spruill
2801 North Main
Roswell, N.M. 88201
Ph. 505-624-2140-41

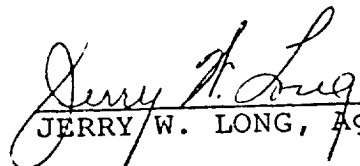
Land and Legal:

Mr. Bill Lawrence
Midland, TX 79701
Ph. 915-683-5241
683-5242
683-5243

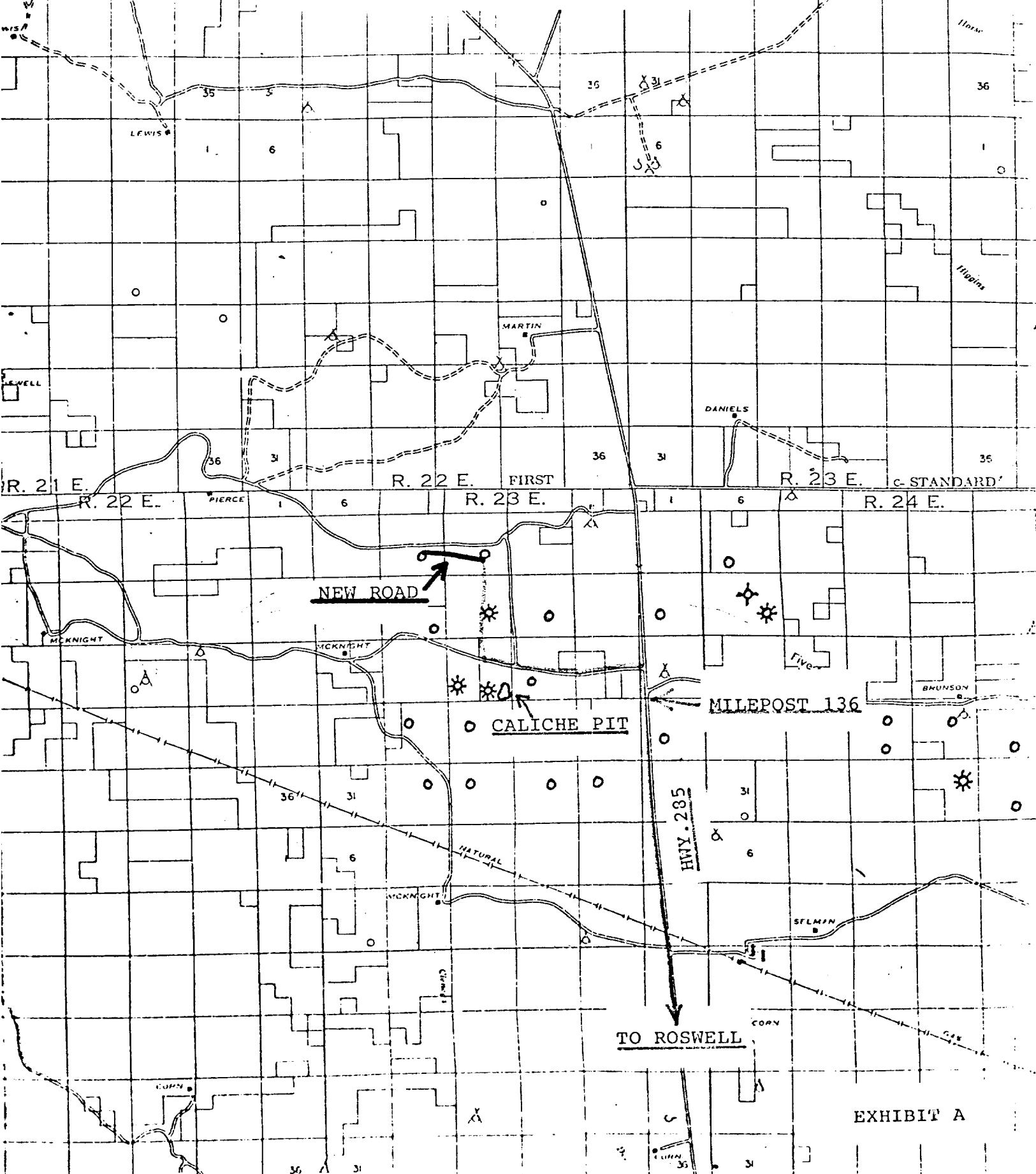
13. CERTIFICATION:

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; that the work associated with the operations proposed herein will be performed by TRANSWESTERN GAS SUPPLY COMPANY and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

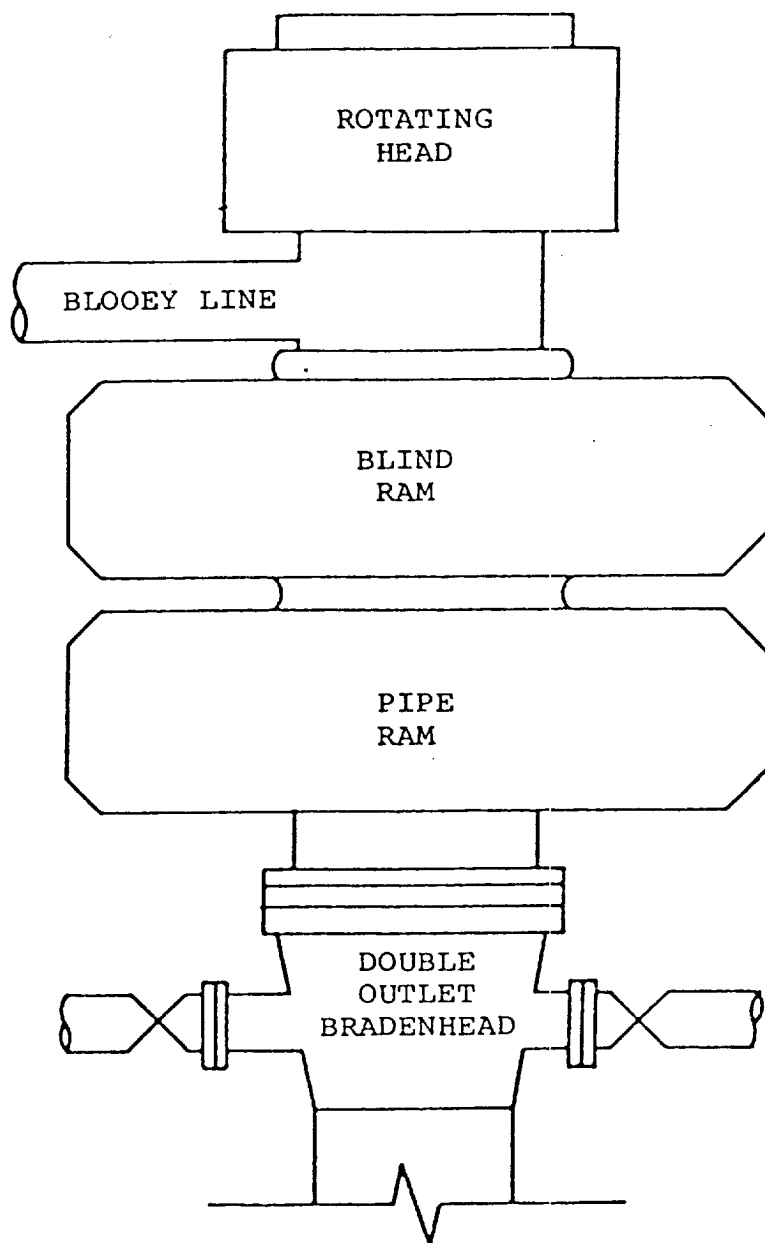
December 9, 1981
Date:


JERRY W. LONG, Agent

TRANSWESTERN GAS SUPPLY CO.
No.1 Middle Fork Federal
NWSE Sec8-6S-23E
Chaves County, N.M.



TRANSWESTERN GAS SUPPLY COMPANY
No.1 Middle Fork Federal
NWSE Sec.8-6S-23E
Chaves County, N.M.



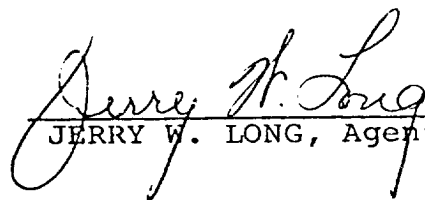
BOP STACK

3000 PSI WORKING PRESSURE

FEE SURFACE AGREEMENT

This is to advise that the Operator and Mr. William D. McKnight, the Fee Owner of that portion of the new access road lying in Section 9, have reached an agreement concerning damages for that part of the access road. The Operator has agreed to maintain the road as long as he needs it for his operations. When the road is no longer useful for operations, it will be restored to the satisfaction of the fee owner.

December 10, 1981
Date:


JERRY W. LONG, Agent