

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)Form approved.
Budget Bureau No. 42-R1425.UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-22662

5. LEASE DESIGNATION AND SERIAL NO.

LC029426(b)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

ARCO-Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Grayburg-Jackson

11. SEC., T., R., M., OR BLE.
AND SURVEY OR AREA

Sec. 10, T-17-S, R-31-E

12. COUNTY OR PARISH

13. STATE
New Mexico

Eddy

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

Viking Energy Corporation

3. ADDRESS OF OPERATOR

726 First National Bank Building-Odessa, Texas 79760

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

At surface

660' FNL, 1980' FEL

At proposed prod. zone

Same

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

8 miles East, Northeast Loco Hills

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

660'

18. DISTANCE FROM PROPOSED LOCATION*

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

1320'

16. NO. OF ACRES IN LEASE

120

19. PROPOSED DEPTH

5500'

Paddock

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3940 GR

22. APPROX. DATE WORK WILL START*

8-15-78

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#, H-40	800'	300 sacks
7 7/8"	4 1/2"	10.50#, K-55	5500'	725 sacks

Operator will utilize 3000# WP-6000# test, double ram blowout preventor

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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

Roy K. Valla

TITLE

Vice President

DATE

8-4-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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 O-102
Supersedes O-128
Effective 1-1-65

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

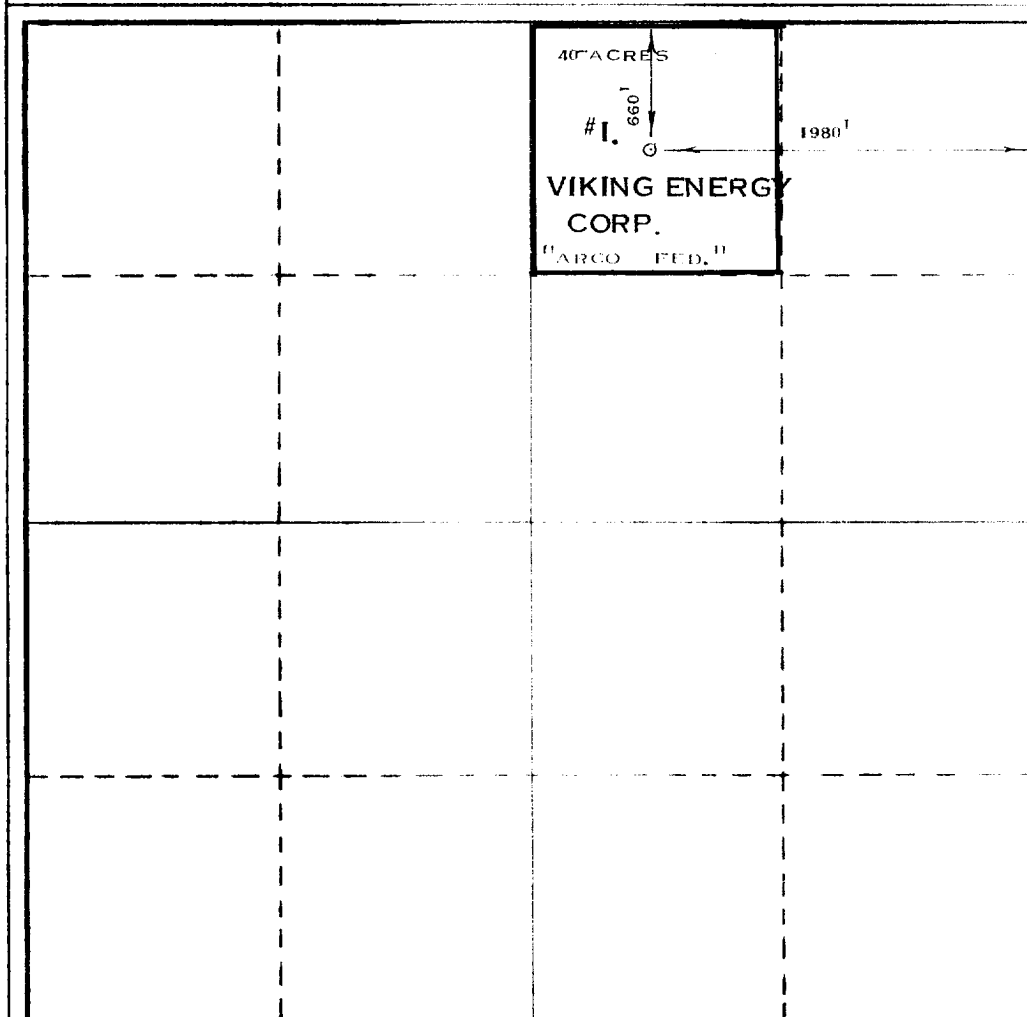
Operator VIKING ENERGY CORP.		Lease ARCO FEDERAL		Well No. I
Unit Letter "B"	Section 10	Township -17-S	Range -31-E	County EDDY
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 660 feet from the NORTH 1980 feet from the EAST </div>				
Ground Level Elev. 3940	Producing Formation GRAYBURG	Pool GRAYBURG - JACKSON		Dedicated Acreage 40 Acres

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).
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.



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R. Valla

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

Vice President

Viking Energy Corp.

August 4, 1978

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 is true and correct to the best of my knowledge and belief.

AUGUST 2, 1978

Professional Registered Engineer
and Legal Surveyor

MAX A. SCHUMANN JR.

1510



NMOCC COPY

United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

August 15, 1978

Viking Energy Corp.
726 First National Bank Bldg.
Odessa, Texas 79760

Viking Energy Corp.
No. 1-ARCO - Federal
660FNL 1980FEL Sec. 10, T17S, R31E
Eddy County Lease No. LC-029426(b)

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 5,500 feet to test the Paddock formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and his approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
4. All above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate sandstone brown (Federal Standard Color #20318 or 30318).

Sincerely,

(O&G Sgt.) JOE G. LARA

Joe G. Lara
Acting District Engineer



VIKING ENERGY CORPORATION
Arco-Federal Well No. 1 Lease No.: LC 029426(b)
660' FNL, 1980' FEL, Section 10, T-17-S, R-31-E
Eddy County, New Mexico

To supplement U.S.G.S. Form 9-331-C "Application to Drill", the following information is submitted:

1. See Form 9-331-C
2. See Form 9-331-C
3. The Geologic name of the surface formation is: Tertiary with some exposed triassic.
4. See Form 9-331-C
5. See Form 9-331-C
6. The estimated tops of important geologic markers are: Seven Rivers 2215', Queen 2840; Grayburg 3260', San Andres 3600'.
7. The estimated depth at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:
As above.
8. The proposed casing program including size, grade and weight per foot of each string has been indicated on form 9-331-C. All casing will be new.
9. See Form 9-331-C for amounts of cement. Surface casing will be cemented with Class "C" with 2% CaCl and production casing will be cemented with Class "C" with 0.5% CFR-2.
10. Additional data on BOP and pressure data not described on form 9-331-C is as follows:
Size: 10"-Series 900 - 1 set pipe rams-1 set blank rams.
Pressure ratings: 3,000# W.P. - 6,000# Test
Choke manifold: API Series 900, 3,000# W.P.-6,000# Test
Auxiliary equipment: 5,000# W.P. Kelly Cock, Full Opening Floor Valve
Closing Equipment: 80 gallon hydraulic accumulator
Testing procedure: blowout preventors, choke manifold and kelly
Cock will be tested to 3,000# upon installation.
Closing & Opening Frequency: Daily and on trips
11. The type of circulating mediums (mud systems) proposed on this well are as follows:
0-800' Fresh water spud mud.
800-5500' Brine w/corrosion inhibitor and paper as necessary.
12. Logging, Coring and Testing. There is no coring anticipated. DST,s may be run in the Seven Rivers, Queen, Grayburg and San Andres.
The following logs will be run:
Gamma Ray - Neutron-Formation Density and Laterolog.
13. No abnormal pressures or temperatures are anticipated.
14. Starting date will be approximately August 15, 1978 and completion approximately September 15, 1978.

SURFACE USE PLAN

Viking Energy Corporation
Arco-Federal Well No. 1 Lease No.: LC029426(b)
660' FNL, 1980' FEL, Section 10, T-17-S, R-31-E
Eddy County, 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.

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1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a highway map showing the location of the proposed well as staked. U.S. Highway 82 runs East from Loco Hills to Lovington, New Mexico. At a distance of 3.5 miles east from Loco Hills, a lease road turns North from U.S. Highway 82 and continues to within 1250 feet of the proposed location.
- B. Exhibit "B" is a plat showing existing roads from U.S. Highway 82 to the location. There will be 1250 feet of new road constructed to the location.

2. PLANNED ACCESS ROADS:

- A. Length and Width: New road required will be 10 feet wide and 1250 feet long. This new-road is labeled and indicated by dashed lines on Exhibit "B".
- B. Turnouts: No turnouts will be required on the new road.
- C. Culverts: None required.
- D. Cuts and Fills: None required.
- E. Gates, Cattleguards: No gates or cattleguards are required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one-mile radius are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. If the well is productive, the tank battery and flow line will be located on the well pad and no additional surface disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. Water will be purchased and trucked to the wellsite over the existing and proposed roads shown on Exhibits "A" and "C".

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in the SE $\frac{1}{4}$, Sec. 5, T-17-S, R-31-E. Location of the pit is shown on Exhibit "B".

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 pits are dry.
- C. Water produced during tests 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 trash pit is shown on Exhibit "C".
- F. All trash and debris will be buried or removed from the well-site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELLSITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit and trash pit.
- B. Only minor levelling of the wellsite will be required. No significant cuts and fills will be necessary.
- C. The reserve pit will be plastic lined.
- D. The location is staked and pad and pit area will be staked.

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 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. After abandonment - any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits should be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION:

- A. Topography: Land surface is undulating to gently rolling and duny. From an elevation of 3940 feet at the wellsite, the land surface slopes gently southwest at about 30'/mile.
- B. Soil: Soil is fine sand underlain by caliche.
- C. Flora and Fauna: The vegetative cover is generally sparse and consists of mesquite, shinny oak, and sparse range grasses. Wildlife consists of rabbits, coyotes, rodents and reptiles.
- D. Ponds and Streams: None.
- E. Residences and Other Structures: There are no occupied dwellings or windmills within 2 miles of the location.
- F. Land Use: Limited graying.
- G. Surface Ownership: Federal surface.
- H. Other Surface Data: General area is the old Grayburg-Jackson oil field.

12. OPERATORS REPRESENTATIVE:

The representatives responsible for assuring compliance with the approval surface use and operations plan are as follows:

Mr. E.G. Durrett - President
726 First National Bank Bldg.
Odessa, Texas 79761
Office Telephone : (915) 337-5407
Home Telephone : (915) 337-0759

Mr. R.K. Valla - Vice President
726 First National Bank Bldg.
Odessa, Texas 79761
Office Telephone : (915) 337-5407
Home Telephone : (915) 366-6704

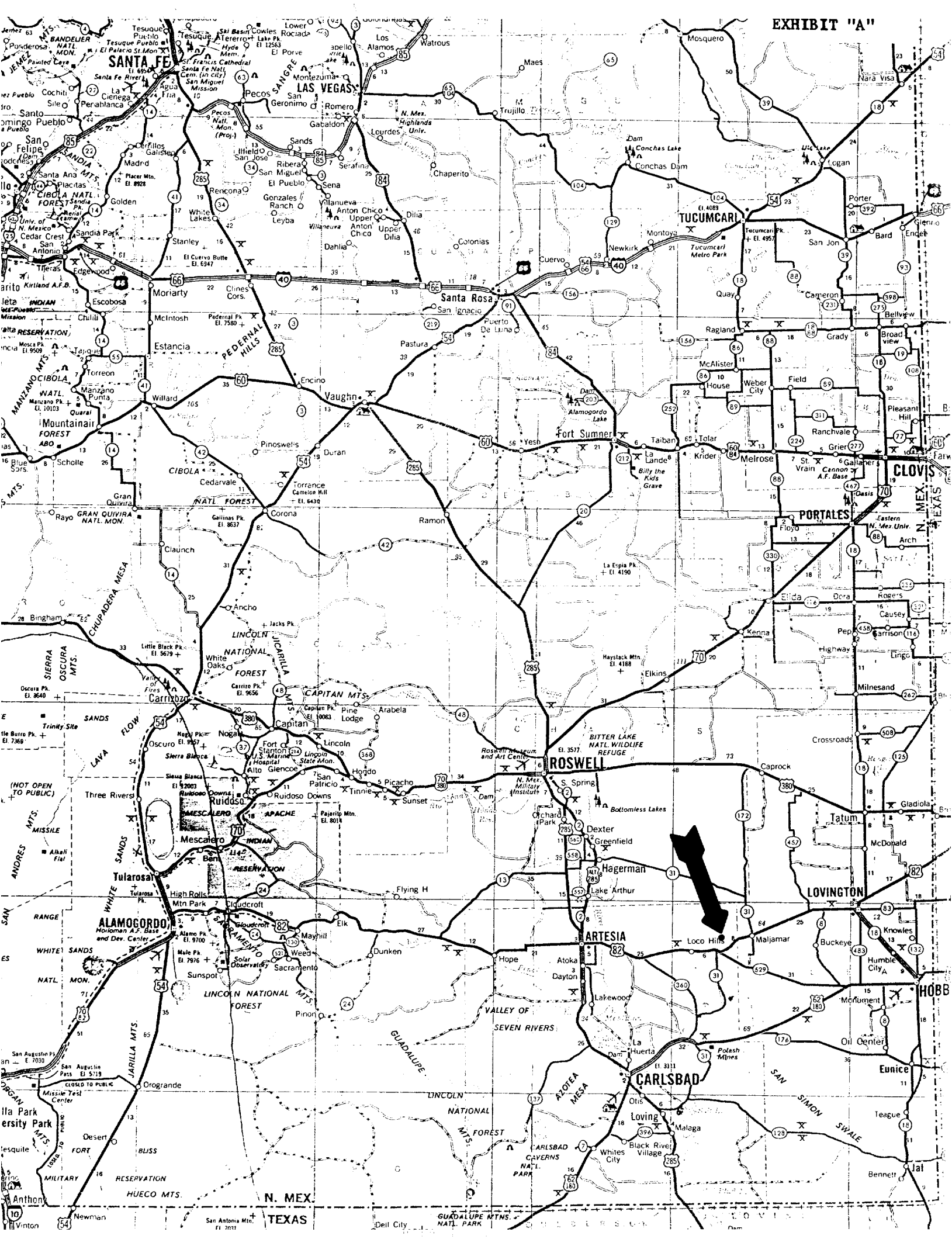
13. CERTIFICATION:

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 Viking Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

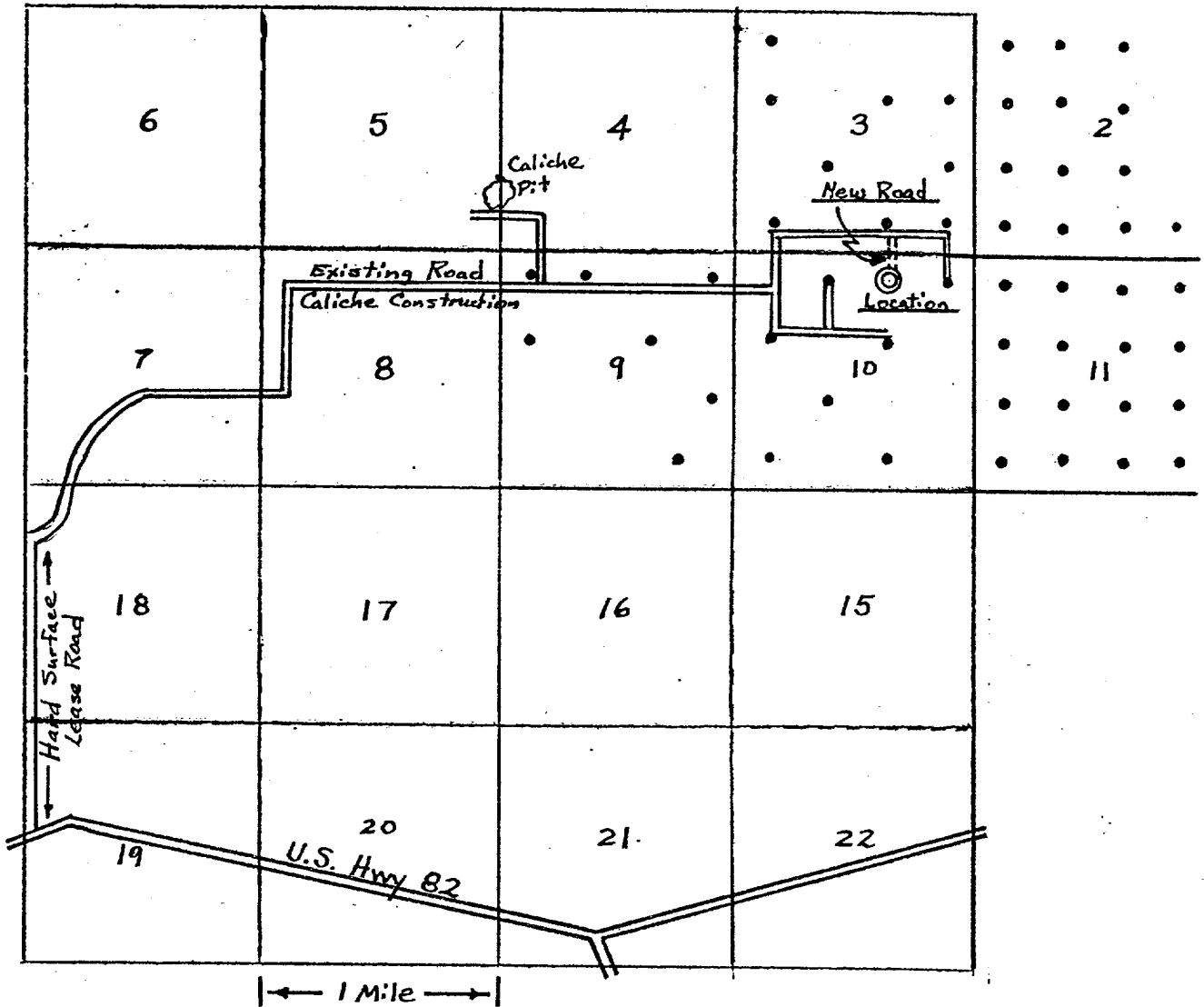
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R.K. Valla
R.K. Valla - Vice President





T-17-S, R-31-E



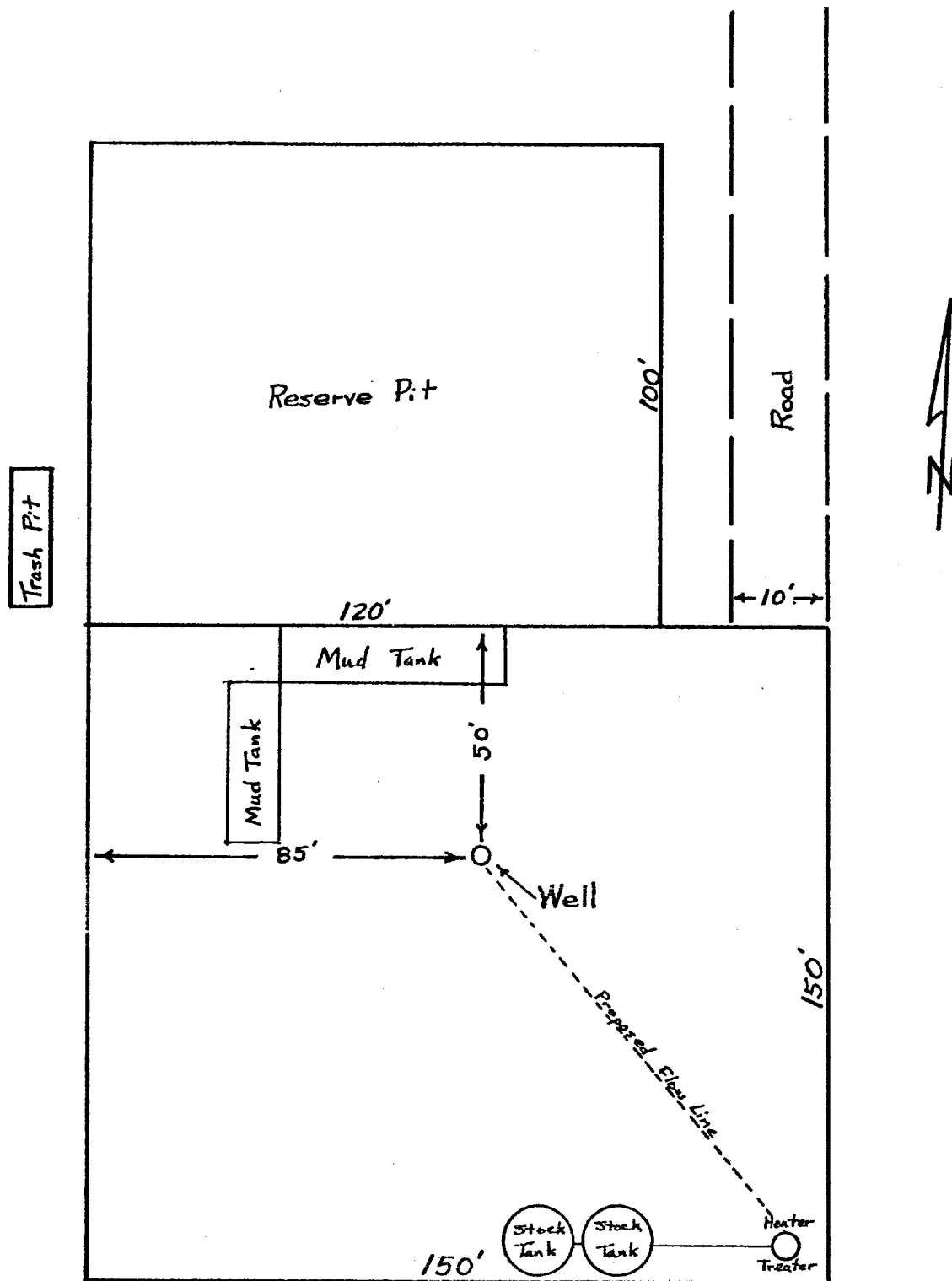


EXHIBIT "C"

Viking Energy Corporation
 Arco-Federal No.1
 660' FNL, 1980' FEL, Sec. 10, T-17-S, R-31-E
 Eddy County, New Mexico