

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-015-22118
5. LEASE DESIGNATION AND SERIAL NO.

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

Gulf Oil Corporation

3. ADDRESS OF OPERATOR

Box 670, Hobbs, New Mexico 88240

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

At surface

1650' FS & EL, Section 19, 24-S, 26-E APR 13 1977

At proposed prod. zone

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

O. C. C.
ARTEBIA, OFFICE

10. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

11,800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3435.8' GL

22. APPROX. DATE WORK WILL START*

As Soon as Approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20" H-40	94#	45'	Circulate
13 3/4"	10-3/4" K-55	40.50#	1,900'	Circulate
9-1/2"	7-5/8" S-95	26.40#	8,300'	500 sacks (TOC at approx 1800')
6-1/2"	5" N-80	18.00#	Liner 11,800'*	Circulate to top of liner.
* Top at 8,000'				

BOP: See Drawing No. 4 attached.

Mud Program: 0' to 1900', 10# brine water; 1900' to 8300', brackish salt water with mud sweep to clean hole and before running casing; 8300' to 9500', brine water; 9500' to TD, Salt water Polymer with Dextrid/Drispac weighted with soda ash to 10.5# and barite in excess of 10.5#; viscosity 30-35 sec; fluid loss 4 cc or less; KCL 4%.

Gas is Dedicated to Transwestern Gas Company.

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MAR 07 1977

U.S. GEOLOGICAL SURVEY
ARTEBIA, 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 stratigraphic thickness. Give blowout preventer program, if any.

24.

SIGNED

W. B. Holland

TITLE

Area Production Manager

DATE

March 4, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

APR 12 1977

ACTING DISTRICT ENGINEER

TITLE
THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES JUL 12 1977

*See Instructions On Reverse Side

DECLARED WATER BASIN

C. MEN. BEHIND THE
CASINO MUST BE CIRCULATEDNOTIFY USGS IN SUFFICIENT TIME TO
WITNESS CEMENTING THE CASING.

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.

GULF OIL COMPANY			Lease Estill AD - Federal			Well No. 1		
Section 19	Township 24 South	Range 26 East	County Eddy					
Actual Well Location of Well:								
1650 feet from the south line and			1650 feet from the east line					
Ground Level Elev. 3435.8	Producing Formation Penn		Pool White City Penn Gas			Dedicated Acreage 640 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 _____

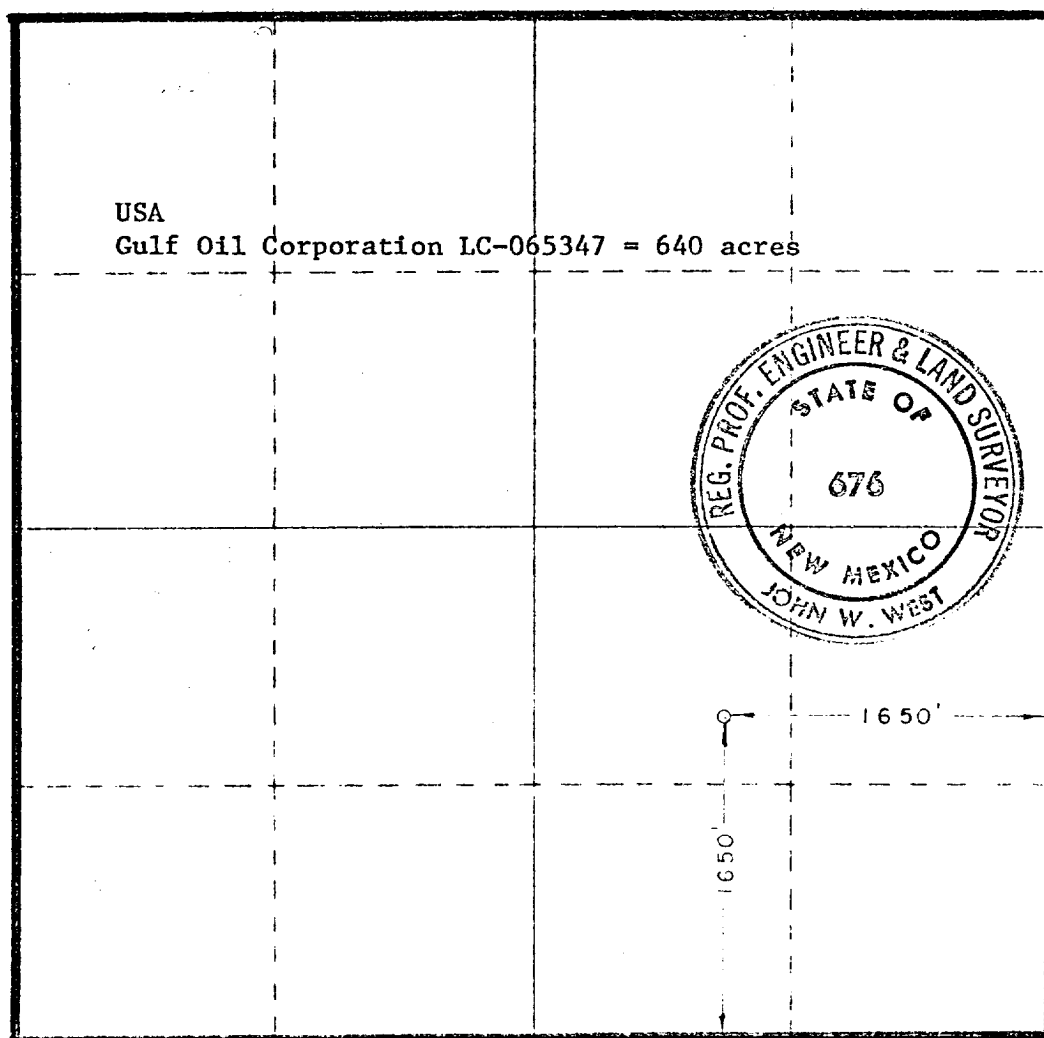
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

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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ARTESIA, NEW MEXICO



CERTIFICATION

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

G. D. Borland

Name

G. D. BORLAND

Position

Area Production Manager

Company

Gulf Oil Corporation

Date

March 4, 1977

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.

Date surveyed

Feb. 22, 1977

Registered Professional Engineer and a Land Surveyor

John W. West

Certificate No.

676

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

ADDITIONS - DELETIONS - CHANGES SPECIFY

hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds, after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps, or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote-acting manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure-reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure-reducer shall be available to limit opening fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, or equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

*To include derrick floor mounted controls.

Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT

HOBBS AREA

March 3, 1977

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, New Mexico 88240

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Application for Permit To Drill
Proposed Estill "AD" Federal #1
Eddy County, New Mexico

MAR 07 1977

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

U. S. G. S.
P. O. Drawer "U"
Artesia, NM 88210

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany application for permit to drill.

Well: Estill "AD" Federal Well #1.

1. Location: 1650' FS&EL Section 19-T24S-R26E, Eddy Co., N.M.

2. Estimated Tops of Geologic Markers:

Delaware - 1600'; Bone Spring - 5200'; Wolfcamp 8300'; Strawn - 10,150';
Atoka - 10,350'; Morrow - 11,000'; Barnett - 11,700'.

3. Estimated Depths at which Anticipated Gas or Oil Bearing Formation Expected:

Strawn	10,150-250'	Atoka	10,600-670'
Morrow	11,000-700'	All may produce gas.	

4. Casing Program and Setting Depths:

<u>Section</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Setting Depth</u>
Surface	10-3/4"	40.50#	K-55	1,900'
Intermediate	7-5/8"	26.40#	S-95	8,300'
Production	5	18#	N-80	11,800'

5. Pressure Control Equipment: The minimum specifications for pressure control equipment can be seen on the attached Drawing #4 of Gulf's blowout preventer hookup for 5000 psi working pressure. A testing company will test BOP's, choke manifold and casing to their rated working pressures after installation and each thirty days thereafter.

6. Circulating Media: 0-1900' - 10# brine water; 1900-8300' - brackish salt water with mud sweep to clean hole and before running casing; 8300-9500' - brine water; 9500'-T.D. - salt water polymer with Dextrid/Driscac weighted with soda ash to 10.5 ppg and barite in excess of 10.5 ppg; viscosity 30-35 sec; fluid loss 4 cc or less; KCl 4%.

(continued)



7. Auxiliary Equipment: 5000-psi-rated Kelly cock and full-opening floor valve. During nipple-up on 7-5/8" casing, the following items will be installed:
- a. Rotating head with hydraulic-operated valve.
 - b. Automatic choke.
 - c. Flowline separator with manifold.
 - d. Pit volume recorder.
8. Testing, Logging and Coring Programs:
- a. Formation testing may be done at any depth where samples, drilling rate or log information indicate a possible show of oil or gas.
 - b. Open-hole logs will be run at total depth.
 - c. Coring is not planned.
9. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate any abnormal pressure or temperature; however, remote-control BOP's as shown on Drawing #4 and special equipment listed in Paragraph #7 will be utilized. The presence of hydrogen sulfide gas is not anticipated.
10. Anticipated Starting Date and Duration: Drilling operations should start between April 1 and April 15, 1977 and be completed in 75 days.



C. D. BORLAND
Area Production Manager

RLV:ec
Att'd.

Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

March 2, 1977

P. O. Box 670
Hobbs, New Mexico 88240

Re: Surface Development Plan
Proposed Estill "AD" Federal Well No. 1
Eddy County, New Mexico

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U. S. Geological Survey
P. O. Drawer "U"
Artesia, NM 88210

MAR 07 1977

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Gentlemen:

The surface use and operations plan for the proposed Estill "AD" Federal Well No. 1 are as follows:

1. Existing Roads:

- A. Exhibit "1A" is a portion of a topographic map showing the location of the proposed well as staked. Eleven miles southwest of Carlsbad and five miles northeast of White's City on U. S. Highway 62-180, a paved road goes south-east through Sections 19, 20 and 29, T24S, R26E, approximately one mile southeast of Highway 62-180 the pavement ends.
- B. Exhibit "1B and 1C" is a plat showing all existing roads within a one-mile radius of the wellsite, and the planned access road.

2. Planned Access Road:

- A. Length and Width: Turn Southwest off County Road 1000 feet from U. S. 62-180 and new road required will be twelve feet wide and 1700 feet long, consisting of graded caliche six inches deep, watered and compacted. This new road is labeled and color-coded red on Exhibits "1B and 1C" and "2A".
- B. Turnouts: None required.
- C. Culverts: One culvert will be installed where new road begins at County Road.
- D. Cuts and Fills: None required.
- E. Gates, Cattleguards: None required.

3. Location of Existing Wells:

- A. Existing wells within a one-mile radius are shown on Exhibit "3A".



4. Location of Existing and/or Proposed Facilities:

- A. Production facilities will be located on the well pad, and no additional surface disturbance will occur.

5. Location and Type of Water Supply:

- A. Water for drilling will be purchased from a supplier and transported by truck to the wellsite over the existing and proposed roads shown in Exhibits "1B and 1C" and "2A".

6. Source of Construction Materials:

- A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in the SW/4 of SE/4 Section 30, T24S, R26E. The pit is on Federal land. (Shown on Exhibit "6A".)

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 in Exhibit "9A".
- 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 required.

9. Wellsite Layout:

- A. Exhibit "9A" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and major rig components.
- B. Only minor levelling of the wellsite will be required.
- C. The reserve pit will be plastic-lined.
- D. The pad and pit area has been staked and flagged.

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 well-site in as 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 levelled within 90 days after abandonment.

11. Other Information:

- A. Topography: Land surface is rolling foothills on the eastern slope of the Guadalupe Mountains.
- B. Soil: Soil is sandy, underlaid by rock and caliche.
- C. Flora and Fauna: The vegetative cover is generally sparse and consists of mesquite, yucca, sandsage and perennial native range grasses. Wild life in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles and doves.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structures: The nearest occupied dwelling is a ranch house 1-1/2 miles southeast of the wellsite. There are no known water wells in the near vicinity of the wellsite.
- F. Land Use: Grazing and hunting in season.
- G. Surface Ownership: Wellsite is on Federal surface.

12. Operator's Representative:

Gulf Energy and Minerals Company-U.S.
A Division of Gulf Oil Corporation
P. O. Box 670
Hobbs, NM 88240
Telephone No. 505/393-4121
Area Production Manager, C. D. Borland

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

March 2, 1977

Date



C. D. Borland

Area Production Manager

Attachments

RLV/dch

SE

R26E

NEW MEXICO
(EDDY COUNTY)
CARLSBAD CAVERNS EAST QUADRANG
15-MINUTE SERIES

5148 IV (West Carlsbad) 1960 1961 1962 20' 1963 CARLSBAD (CIVIC CENTER) 13 MI. CARLSBAD ARMY AIR FIELD 7 MI. R. 26 E 1968 152000 FEET 1970

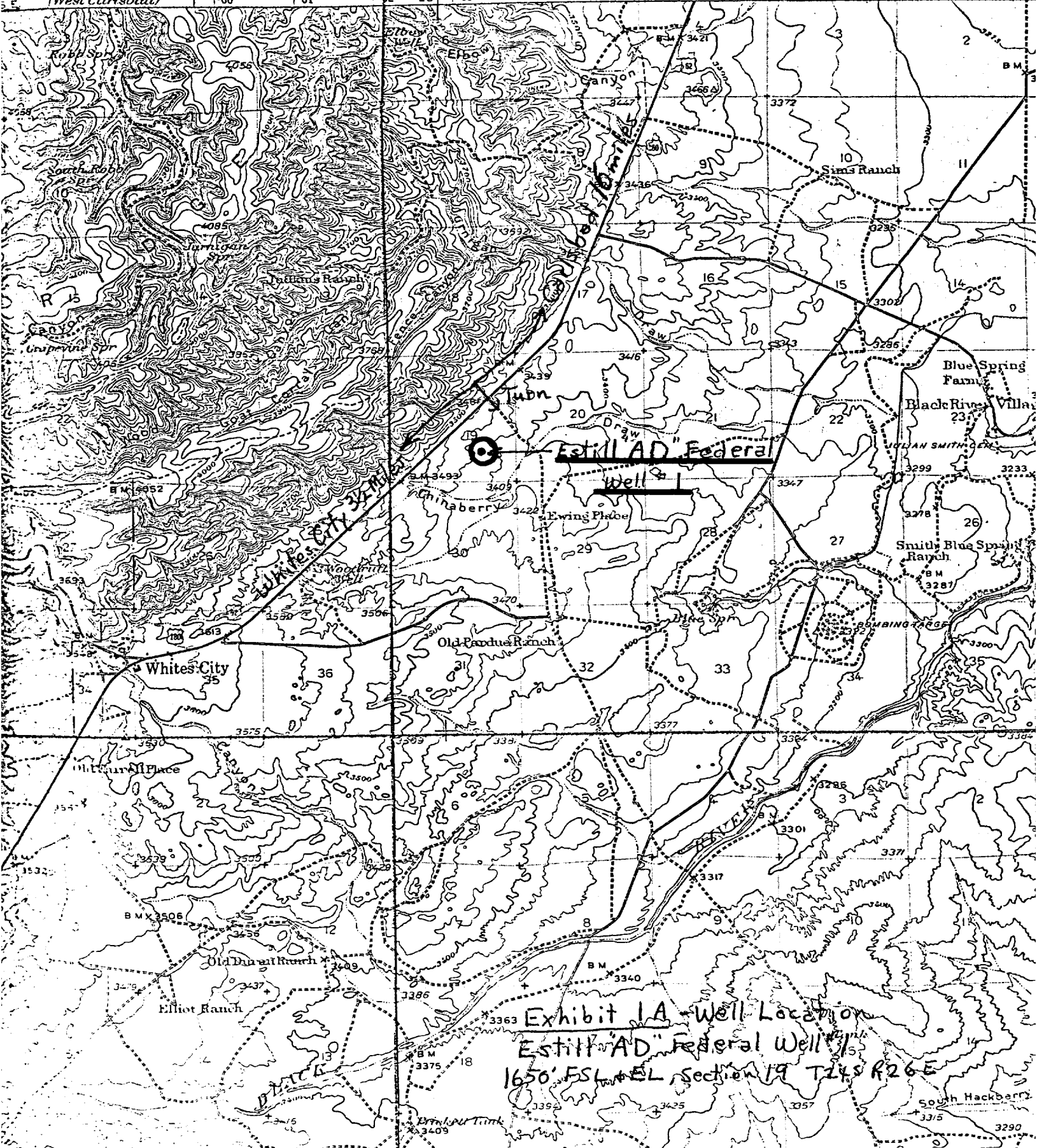


Exhibit 1A Well Location
Estill AD Federal Well
1650 FSL EL Section 19 T14S R26E