

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

Eagle Oil &amp; Gas Co.

## 3. ADDRESS OF OPERATOR

510 Hamilton Building Wichita Falls, Texas 76301

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

At surface

1980' FSL and 660' FEL

At proposed prod. zone

Same

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

Approximately 16 miles east/northeast of Artesia, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

660'

## 16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

None

## 19. PROPOSED DEPTH

9,500'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3590.9 GR

## 22. APPROX. DATE WORK WILL START\*

November 5, 1980

## 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#	420'	400 Sx Class "C" Circulated
11"	8 5/8"	24#	1880'	1150 Sx Class "C"
7 7/8"	4 1/2" or 5 1/2"	11.6 or 17#	9500'	350 Sx Class "H"

## Mud Program:

0-420: Drill with fresh spud mud 8.5-10.0 ppg.

420-3800': Drill with fresh water, M.W. 8.7 - 9.0 ppg., Vis. 28-34.

3800-9500': Drill with KCL water, M.W. 8.7 - 9.5 ppg., vis. 30-35, fluid loss  
12-20 cc.

Possible addition of loss circulation material between 420-3800'.

BOP Program: At 1880', install and test to 3000#, pipe rams, blind rams (middle)  
bag-type preventer and choke manifold, BOP accumulator volume will  
be sufficient to operate the bag preventer and blind rams with a  
snap-action through the close, open, close sequence.

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Gas Sales are dedicated to Gas Company of New Mexico.

NOV 07 1980

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.

ARTESIA OFFICE

## 24.

SIGNED

*George H. Stewart*

TITLE

Agent for:

Eagle Oil &amp; Gas Co.

DATE

October 27, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

(Orig. Sgd.) GEORGE H. STEWART

ACTING DISTRICT ENGINEER

APPROVED BY

TITLE

DATE OCT 29 1980

CONDITIONS OF APPROVAL, IF ANY:

**N MEXICO OIL CONSERVATION COMMISS**  
**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>Eagle Oil &amp; Gas Co.</b>			Lease <b>Crow Flats "A" Fed.</b>		Well No. <b>1</b>
Tract Letter <b>1</b>	Section <b>19</b>	Township <b>16 South</b>	Range <b>28 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well:					
<b>1980</b> feet from the <b>south</b> line and		<b>660</b> feet from the <b>east</b> line			
Ground Level Elev. <b>3590.9</b>	Producing Formation <b>Morrow</b>	Pool <b>Crow Flats Morrow</b> <b>Undesignated</b>		Dedicated Acreage: <b>320</b> 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 Communitization

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.

<p align="center"><b>RECEIVED</b></p> <p align="center"><b>OCT 28 1980</b></p> <p align="center"><b>U.S. GEOLOGICAL SURVEY</b> <b>ARTESIA, NEW MEXICO</b></p> <p align="center"><b>STATE OF NEW MEXICO</b> <b>LAND SURVEYOR</b> <b>JOHN W. WEST</b></p>	<p>Yates Drilling      10%</p> <p>Abo Pet.            10</p> <p>Martin Yates 111   10</p> <p>Yates Pet.           70%</p> <p>N.M. State Lease LG-8379</p> <p>Samedan Oil Corp   50%</p> <p>Dow Chem. Corp    50%</p> <p>NM 14477</p> <p>Mesa Pet. Corp      50%</p> <p>InterNorth           50%</p> <p>NM 8940</p>
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**CERTIFICATION**

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

*George R. Smith*  
 Name

George R. Smith  
 Position

**Agent for:**

Company  
**Eagle Oil & Gas Co.**

Date  
**October 27, 1980**

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  
**Oct. 21, 1980**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 0063**  
**Ronald J. Eidson 3239**





United States Department of the Interior

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GEOLOGICAL SURVEY

SPECIAL APPROVAL STIPULATIONS

NOV 07 1980

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

O. C. D.  
ARTESIA, OFFICE

EAGLE OIL AND GAS COMPANY  
Crow Flats "A" Fed Com No. 1  
NE 1/4 Sec. 19 T. 16S R. 28E  
Eddy County New Mexico  
Lease No. NM-8940

N/O. 1

THE SPECIAL STIPULATIONS CHECK MARKED BELOW ARE APPLICABLE TO THE ABOVE-DESCRIBED WELL AND APPROVAL OF THIS APPLICATION TO DRILL IS CONDITIONED UPON COMPLIANCE WITH SUCH STIPULATIONS. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE SPECIAL STIPULATIONS PURSUANT TO TITLE 30 CFR 290.

- ☒ A. 13 3/8" surface casing should be set in the Rustler Anhydrite formation and cement circulated to the surface. If surface casing is set at a lesser depth, the \_\_\_\_\_ casing must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler after cementing around the shoe with sufficient cement to fill to the base of the salt section.
- ☒ B. Before drilling below the 8 5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- ☐ C. Casing protectors will be run on drill pipe while drilling through the \_\_\_\_\_ casing. Protectors will be of sufficient number and of sufficient outside diameter to protect the casing.
- ☒ D. Minimum required fill of cement behind the \_\_\_\_\_ casing is to \_\_\_\_\_
- ☒ E. After setting the 8 5/8" casing string and before drilling into the WOLF CANYON formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- ☒ F. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the WOLF CANYON formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
- (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- ☒ G. All pits containing toxic liquids will be fenced and covered with a fine mesh netting, if necessary for the protection of livestock or wildlife.
- ☒ H. Above ground permanent structures and equipment shall be painted in accordance with the Painting Guidelines. The paint color is to simulate:
- ☒ Sandstone Brown, Fed. Std. 595-26318 or 30318
- OR ☒ Sagebrush Gray, Fed. Std. 595-26357 or 36357
- ☐

- ☒ I. A kelly cock will be installed and maintained in operable condition.
- ☒ J. The ARTESIA Sub-District Office is to be notified in sufficient time for a representative to witness:
- (a) Spudding
- (b) Cementing casing
- \_\_\_\_\_ inch
- \_\_\_\_\_ inch
- \_\_\_\_\_ inch
- (c) ~~BOP tests~~
- ☐ K. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the U. S. Geological Survey, P. O. Box 26124, Albuquerque, New Mexico 87125. The effective date of the agreement must be prior to any sales.
- ☐ L. A Gamma Ray-Compensated Neutron log is required from the base of the salt section to the surface with cable speed not to exceed 30 feet per minute.
- ☒ M. At least one working day prior to constructing the well pad, access roads and/or related facilities, the operator or dirt contractor shall notify the authorized officer (Bureau of Land Management, CARLSBAD area). He shall also notify the Authorized Officer within two working days after completion of earth-moving activities.
- ☒ N. All access roads constructed in conjunction with the drilling permit (APD) will be limited to a 12 foot wide driving surface, excluding turn-arounds. Surface disturbance associated with construction and/or use of the road will be limited to 20 feet in width. If well is a producer, all roads will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measures deemed necessary by the authorized officer of the BLM. The following is a general guide for the spacing of water bars:
- % Slope
- |                        |         |
|------------------------|---------|
| less than 2% . . . . . | 200 ft. |
| 2% to 4% . . . . .     | 100 ft. |
| 4% to 5% . . . . .     | 75 ft.  |
| more than 5% . . . . . | 50 ft.  |
- ☒ O. Other special stipulations
- a. Any permanent pit containing waste oil must be fenced and covered with mesh wire.

b. Upon abandonment the location will be re-seeded. This is due to critical short grass habitat.

APPLICATION FOR DRILLING

EAGLE OIL & GAS CO.  
Crow Flats "A" Federal Com. Well No. 1  
1980' FSL & 660' FEL, Sec. 30, T16S, R28E  
Eddy County, New Mexico  
Lease No.: NM 8940  
(Exploratory Well)

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Eagle Oil & Gas Co. submits the following items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation is the Seven Rivers.
2. The estimated tops of geologic markers are as follows:

Yates	262'	Canyon	7940'
Queen	972'	Strawn	8578'
San Andres	1755'	Atoka	9000'
Glorietta	3200'	Morrow	9220'
Abo	5200'	Total Depth	9500'
Wolfcamp	6450'		
Cisco	7520'		
3. The estimated depths at which anticipated water, oil, or gas formations are expected to be encountered:

Water: At the Glorietta between 3200' - 3354'.

Oil: Queen at approximately 972' - 1755'.  
Premier between 1715' - 1755'.  
Wolfcamp between 6820' - 7130'.

Gas: Atoka between 9150' - 9165'.  
Morrow between 9220' - 9524'.
4. Proposed Casing Program: See Form 9-331C.
5. Pressure Control Equipment: See Form 9-331C and Exhibit "E".
6. Mud Program: See Form 9-331C.
7. Auxiliary Equipment: Blowout preventer, gas detector, kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging and Coring Program:

Drill Stem Tests: One possible test in each of the following:

Wolfcamp:	6820'-7130'
Atoka:	9150'-9165'
Morrow:	9220'-9524'

Logging: GammaRay: Surface to T. D.  
FDC/CNL Int. Csg. to T. D.  
Dual Induction Laterolog Int. Csg. to T. D.

Coring: None.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight.
10. Anticipated starting date: November 5, 1980.  
Anticipated completion of drilling operations: Approx 60 days.

MULTI-1 SURFACE USE AND OPERATIONS PLAN

EAGLE OIL & GAS CO.  
Crow Flats "A" Federal Com. Well No. 1  
1980' FSL & 660' FEL, Sec. 19, T16S, R28E  
Eddy County, New Mexico  
Lease No.: NM 8940  
(Exploratory Well)

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, 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 operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a New Mexico State Highway map showing the well location as staked. The well is approximately 18 miles northeast of Artesia, NM. The 18 miles consists of 9.6 miles of U. S. Highway 82, 7 miles of oil field and pipeline right of way dirt roads. See Exhibit "B" for more detail of the proposed location and access roads.
- B. Directions: Travel east of the junction of U. S. Highway 285 and 82 in Artesia, 9.6 miles on U. S. Highway 82, to the electric power station on the left (north). Turn left on the dirt access road just east of the power station, traveling 3.7 miles along the power line to a "Y" just west of the old gas company camp. Turn northwest traveling approximately 2.3 miles to a cattleguard passing a pipeline station on the right. Cross the cattleguard and turn right crossing under the powerline taking the right hand road northeast, which is a continuation of the Dog Canyon Road. Travel 2.7 miles from the cattleguard to the El Paso Natural Gas Co. pipeline ROW crossing. Turn right at the El Paso Natural Gas Co. sign and follow the pipeline ROW for approximately .3 mile passing an abandoned wellsite on the right. The proposed access road will start on the left of the ROW just past the old wellsite and is staked and flagged.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be 12 feet wide (20' ROW) and approximately 1,000 feet long, from the point of origin from the existing pipeline ROW to the southwest corner of the drilling pad. The new access road is labeled and color coded red on Exhibit "A" and "B". The road has been staked and flagged.
- B. Construction: The new road will be constructed with existing surface materials and also grading and topping with compacted caliche where necessary.
- C. Turnouts: There will be at least one 20 foot turnout for passing.
- D. Culverts: There will be one culvert at the turn after crossing the cattleguard on the Dog Canyon Road.
- E. Cuts and Fills: None.
- F. Gates, Cattleguards: None required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one to two mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities on this lease at the present time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with both fresh and brine water. The water will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Existing surface materials will be used where possible. Caliche for surfacing the remainder of the road and the well site pad will be obtained from an existing pit located on State land in the SE $\frac{1}{4}$ , SE $\frac{1}{4}$ , Sec. 35, T16S, R27E. Top soil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except for those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing material to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted to the USGS for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. 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.
- H. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILIARY FACILITIES:

A. None Required:

9. WELLSITE LAYOUT:

A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged.

B. Mat Size: 270' X 260'.

C. Cut and Fill: The location will require a 2 - 3 foot cut on the north and filled to the south side of the pad.

D. The surface will be topped with compacted caliche and the reserve pit will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations all equipment and other materil 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 an aesthetically pleasing a condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION:

A. Topography: The land surface in the vicinity of the wellsite is relatively smooth with 2 to 3 foot slope per 100 feet to the south.

B. Soil: The topsoil at the wellsite is a limey sandy loam, underlain with gypsum and with occasional outcrops of limestone that also make up part of the rocky cliffs about 600 feet to the north of the wellsite.

C. Flora and Fauna: The vegetative cover consists of very sparse miscellaneous frasses, including Tobosa, Grama, Three-on, Bristle. Miscellaneous plants including Mesquite, Creosote, Cactus, Yucca Javelina and other miscellaneous desert flowers and weeds. Rabbits were the only wildlife observed but it is likely that other typical semi-arid desert wildlife inhabit the area, which is used for cattle grazing.

D. Ponds and Streams: None in the immediate vicinity.



11. OTHER INFORMATION cont.....:

- E. Residences and Other Structures: There are no residences or other structures in the vicinity of the wellsite.
- F. Land Use: Cattle Grazing.
- G. Surface Ownership: Federal surface and minerals.
- H. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey has been conducted by New Mexico Archaeological Services, Inc., P. O. Box 1341, Carlsbad, New Mexico 88220, and their report has been submitted to the appropriate government agencies.
- I. The appropriate Right of Way owners and surface leaseholder have been notified of this application and the crossing of their property.

12. OPERATOR'S REPRESENTATIVE:

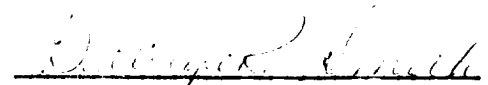
- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Don Bennett	Junior Bishop
Petroleum Technical Services	Petroleum Technical Services
Suite 400 Building of the Southwest	Suite 400 Bldg. of the Southwest
Midland, Texas 79701	Midland, Texas 79701
(915) 684-6603/Office	(915) 684-6603/Office
(915) 694-9763/Home	(915) 684-6264/Home

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 the 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 Eagle Oil & Gas Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

October 27, 1980



George R. Smith  
Agent for Eagle Oil & Gas Co.  
Phone: (505) 623-4940

NEW MEXICO STATE HIGHWAY DEPARTMENT  
PLANNING AND PROGRAMING DIVISION  
BUREAU OF PUBLIC ROADS

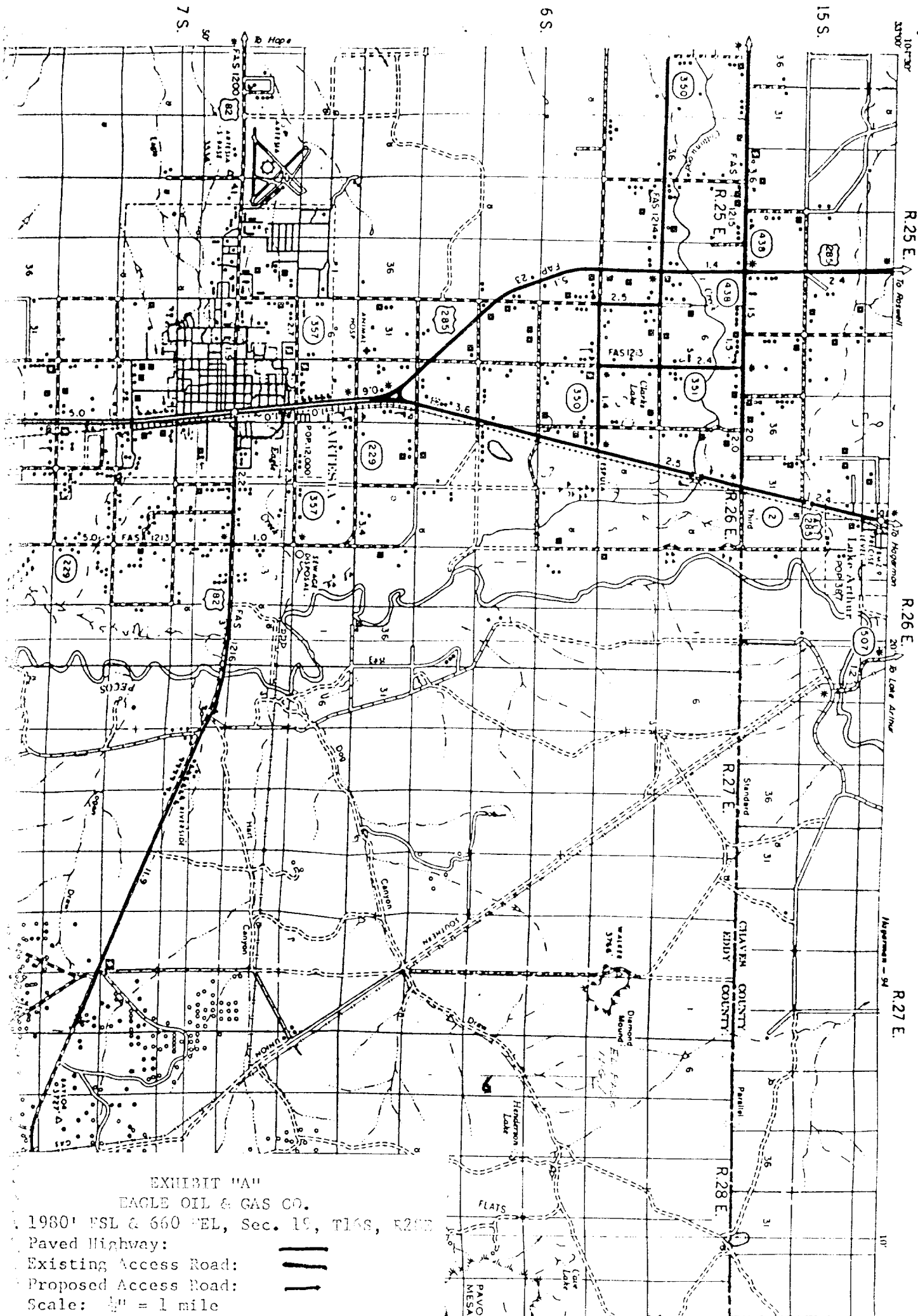


EXHIBIT "A"

EAGLE OIL & GAS CO.

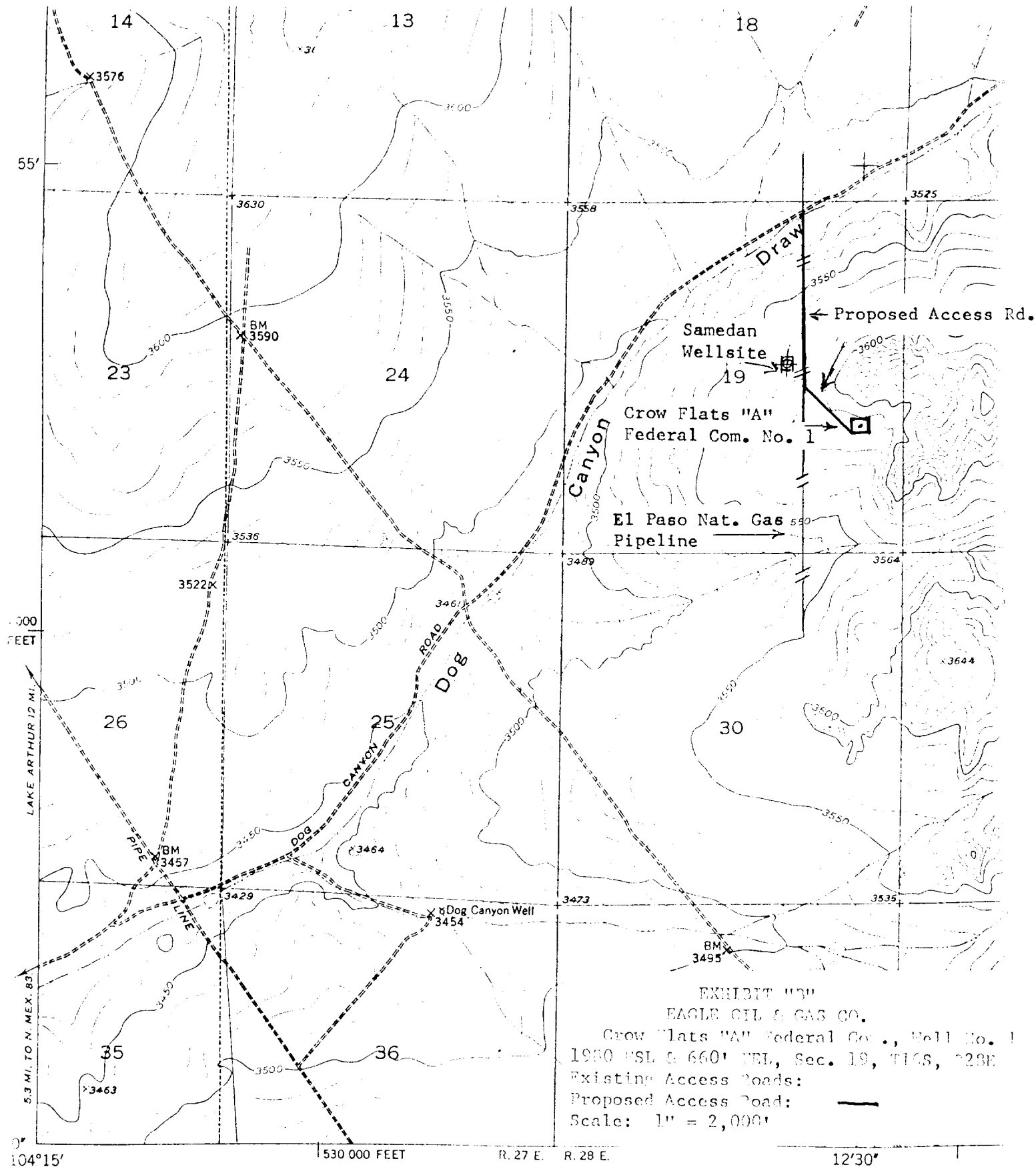
1980' FSL & 660' EL, Sec. 19, T16S, R28E

Paved Highway:

Existing Access Road:

Proposed Access Road:

Scale: 1" = 1 mile



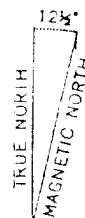
Mapped, edited, and published by the Geological Survey

Control by USGS and USC&amp;GS

Culture and drainage in part compiled from  
aerial photographs taken 1947

Topography by plane-table surveys 1951

Polyconic projection. 1927 North American datum  
10,000-foot grid based on New Mexico coordinate system,  
east zone



# 900 SERIES

## MORANCO RIGS 5-6-9

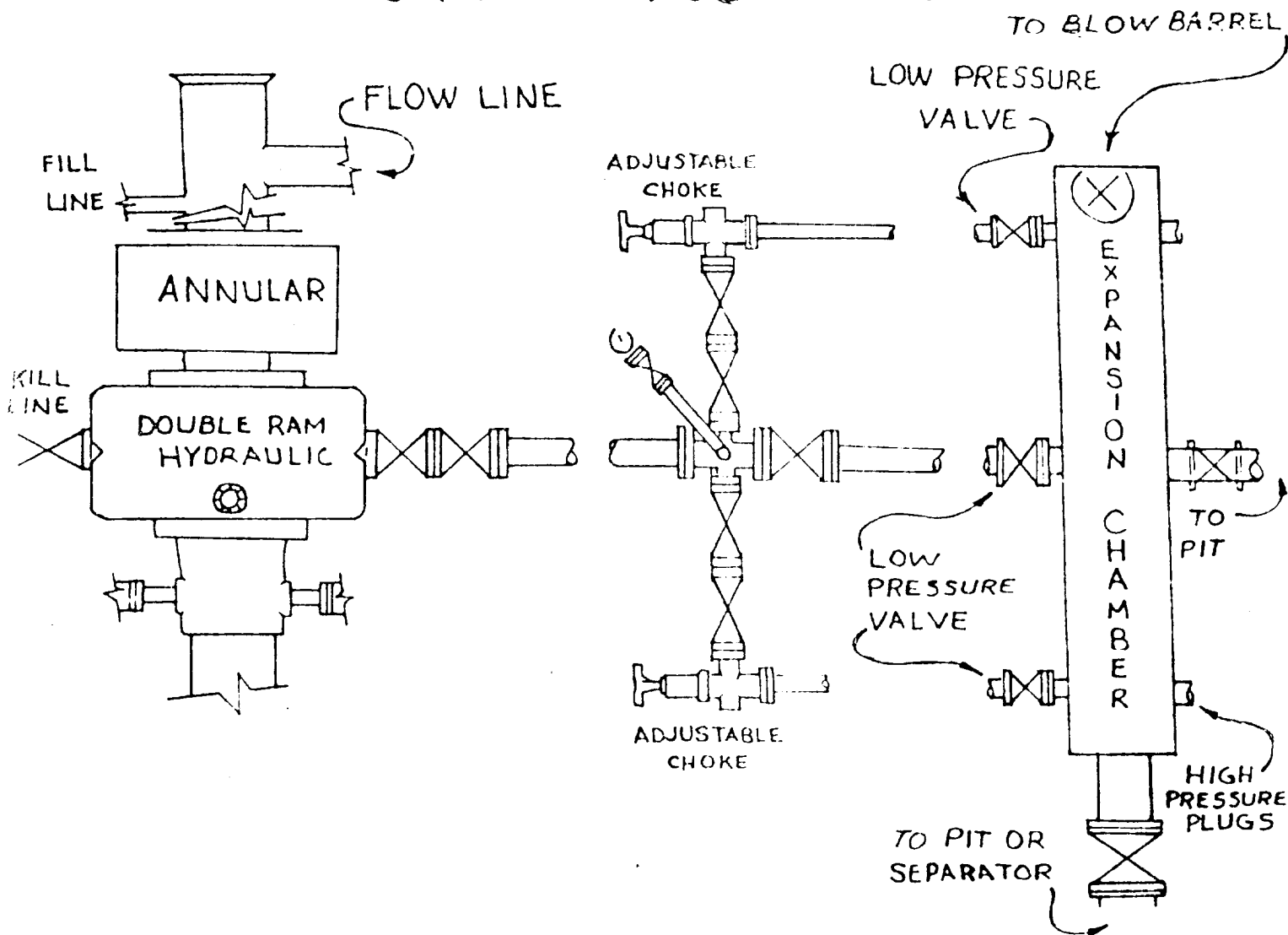


EXHIBIT "D"  
 EAGLE OIL & GAS CO.  
 BLOWOUT PREVENTER SPEC.  
 Crow Flats "A" Federal Com. Well No. 1  
 Eddy County, New Mexico

A hand-drawn site plan of a well field. The plan shows a rectangular area with overall dimensions of 140' by 120'. A dashed line indicates a boundary or path. Key features and dimensions include:

- WELL BORE**: A circular feature with a diameter of 42'.
- W/CELLAR 8' X 2' X 5'**: A rectangular structure adjacent to the well bore.
- STEEL PITS**: Two rectangular pits, one measuring 65' by 75' and another measuring 60' by 14'.
- BURN PIT 8' X 30'**: A rectangular pit located near the bottom left corner.
- RESERVE PITS**: A series of rectangular pits along the top edge, with dimensions 20', 35', 35', 35', and 35'.
- Other Dimensions**: Various other dimensions are marked, including 125', 100', 45', 30', 40', 60', 140', and 120'.

STANDARD LOCATION PLAT

EXHIBIT "E"  
EAGLE OIL & GAS CO.  
RIG LAYOUT  
Crow Flats "A" Federal Com., Well No. 1