

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Read & Stevens, Inc. ✓

505/622-3770

3. ADDRESS AND TELEPHONE NO.

P. O. Box 1518

Roswell, NM 88402

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

At surface

1650 FNL & 2100' FWL

001 10 1993

At proposed prod. zone

Same

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

44 road miles NE of Roswell, NM

16. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

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

1650'

18. NO. OF ACRES IN LEASE

2232

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.

3203'

19. PROPOSED DEPTH

6400'

20. ROTARY OR CABLE TOOLS

Rotary

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

3856' GL

22. APPROX. DATE WORK WILL START*

October 11, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------------|-----------------|---------------|-----------------------|
| 11 1/2" | 8 5/8" J-55 | 24# | 1100' | Circ. 650 sx "C" |
| 7 7/8" | 5 1/2" J-55 | 15.5# | 6400' | Tie back w/850 sx "C" |

MUD PROGRAM:

0' - 30': Fresh water native mud:
30' - 1450': Fresh water native mud:
1450' - 6000': Cut brine mud:
6000' - 6400': Cut brine mud:

MUD WT.

8.4 ppg
8.4 ppg
9.0 ppg
9.0 ppg

VIS.

30
30+
30+
38

W/L Control

No W/L control.
No W/L control.
No W/L control.
W/L cont. 10cc.

BOP PROGRAM:

A 10" 3000 psi wp Schaffer Type E double hydraulic BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling out with 7 7/8". The BOP will be tested daily.

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT IN ADVANCE.

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 George Smith Agent for:

TITLE Read & Stevens, Inc.

Sept. 16, 1993

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Shirley L. Allen

TITLE Area Manager

DATE 10/14/93

*See Instructions On Reverse Side



Lease - 4 copies
Lease - 3 copies

C&L CONSERVATION DIVISION

STRICTLY
Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

STRICTLY
Drawer DD, Artesia, NM 88210

STRICTLY
Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | | | |
|--|-------------------------------------|----------------------------|---------------------------------------|--|----------------------|
| Operator Read & Stevens, Inc. | | | Lease West Haystack Federal | | Well No. 5 |
| Section Letter F | Section 19 | Township 6 South | Range 27 East | County Chaves | |
| Actual Footage Location of Well: 1650 feet from the North line and 2100 feet from the West line | | | | | |
| Ground level Elev. 3856 | Producing Formation Cisco | | Pool Haystack Cisco | Dedicated Acreage: 320 Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

317.60

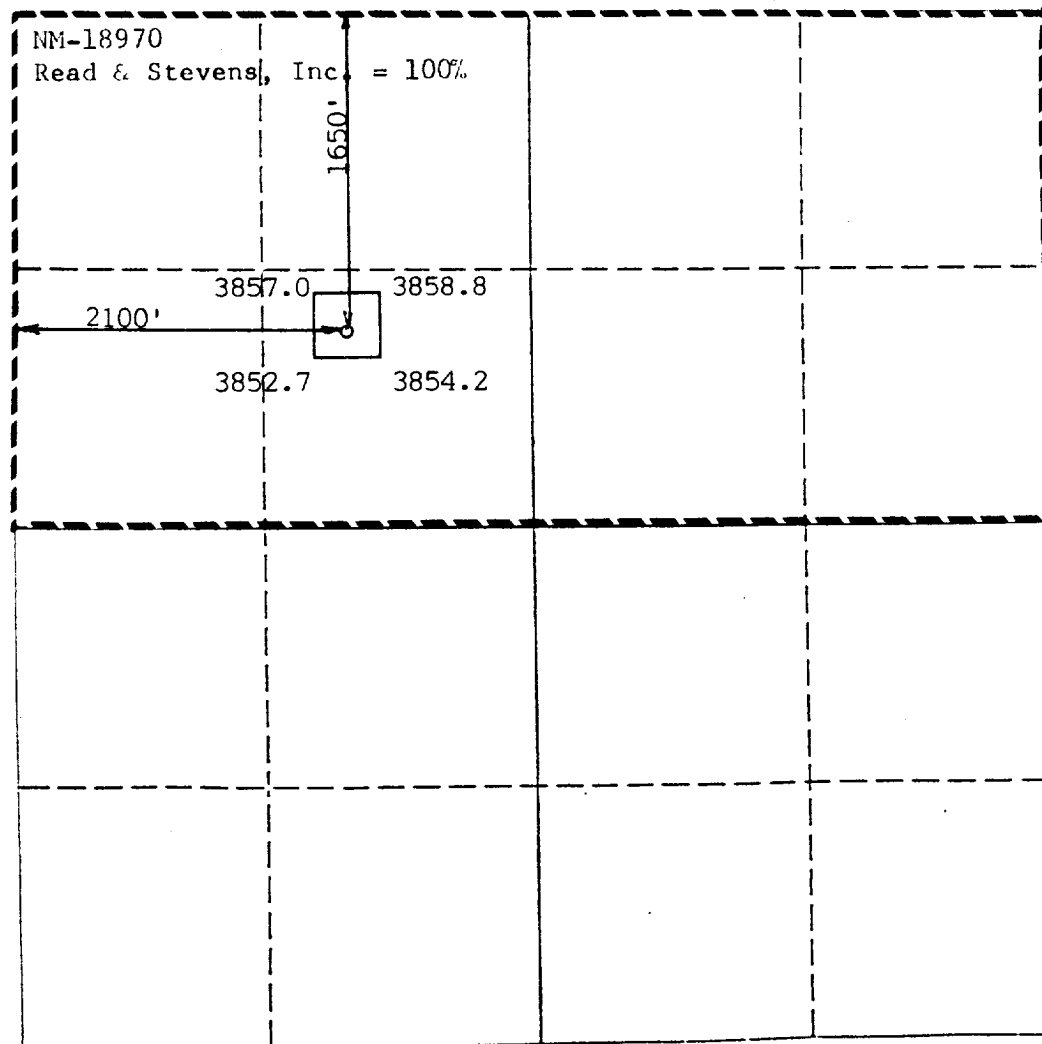
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, 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 communization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name

George R. Smith

Position

Agent for:

Company

Read & Stevens, Inc.

Date

September 16, 1993

SURVEYOR CERTIFICATION

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.

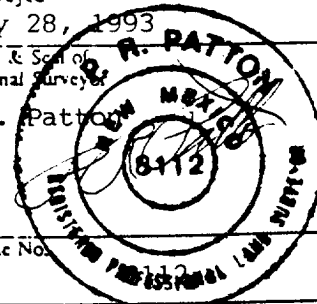
Date Surveyed

July 28, 1993

Signature & Seal of Professional Surveyor

P.R. Patton

Certificate No.





APPLICATION FOR DRILLING

READ & STEVENS, INC.
West Haystack Federal, Well No. 5
1650' FNL & 2100' FWL, Sec. 19-T6S-R27E
Chaves County, New Mexico
Lease No.: NM-18970
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Read & Stevens, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

| | | | |
|------------|-------|-------------|-------|
| Queen | 560' | Wolfcamp | 4970' |
| San Andres | 990' | Cisco | 5580' |
| Glorieta | 2170' | Mississippi | 6100' |
| Abo | 4260' | T.D. | 6400' |

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 200' - 400'.

Gas: Possible in the Abo below 4260'.
Possible in the Cisco below 5580'.

Oil: Possible in the San Andres below 990'.

4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
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: None unless warranted.

Logging: T.D. to surface casing: G/R, CNL-LDT, DLL

Coring: None planned.
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. Estimated BHP = 2800 psi with a temperature of 115°.
10. H₂S: None encountered in previous wells drilled in the area.
11. Anticipated starting date: October 11, 1993.
Anticipated completion of drilling operations: Approx. 3 weeks.



MULTI POINT SURFACE USE AND OPERATIONS PLAN

READ & STEVENS, INC.
West Haystack Federal, Well No. 5
1650' FNL & 2100' FWL, Sec. 19-T6S-R27E
Chaves County, New Mexico
Lease No.: NM-18970
(Development 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 environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo Quad map showing the location of the proposed well as staked. The well site location is approximately 44 road miles northeast of Roswell, New Mexico. Traveling northeast from Roswell on U.S. Highway 70, there will be approximately 25 miles of paved highway: 11 miles of county maintained gravel road and 8 miles of ranch/oilfield roads.
- B. Directions: Travel northeast from Roswell, NM on U.S. Highway 70 for approximately 25 miles from the U.S. Highway 285/70 overpass north of Roswell, turn north .3 mile east of highway marker 363 onto the Olive county road. Continue north for 11 miles, then turn west after crossing cattle guard for 2 miles to the South Van Eaton ranch house. Turn south, circling ranch house, then south for 1 mile and west for 1.4 mile, turning west at fork to the Read & Stevens, Inc., Federal "I" well on Haystack Butte. Continue west past the Federal "I" well for one mile to the West Haystack Fed. Well No. 2 well site; then .3 mile west to the turnoff road to the West Haystack, Fed. Well No. 1. The proposed access road is staked on the north side opposite the No. 1 access road. The proposed access road will run north 1000 feet, then northwest 1700' to the southeast corner of the proposed drill site.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a width of 12 feet (24' R/W) and will be approximately 2700 feet in length. The proposed access road is flagged and is color coded red on Exhibit "B".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche and will be properly drained. Repair work will be done on the existing access road from Haystack Butte by grading and topping with caliche as needed and install proper drainage.
- C. Turnouts: One or two may be required, which will increase the road width to 20 feet for passing.
- D. Culverts: A low water crossing will be built on the draw 500 feet SE of the location.
- E. Cuts and Fills: None, except to level 1 to 3 foot sand dunes.
- F. Gates, Cattleguards: One cattleguard will be required.
- G. Off Lease R/W: There is an existing off lease R/W for the existing access road issued for the West Haystack Fed., Well No. 4. See Exhibit "B".



3. LOCATION OF EXISTING WELLS:

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are gas production facilities on the lease at this time at the West Haystack, #1 well site, 660' FSL & 1980' FEL, Sec. 19-T6S-R27E.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if needed, will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from a private well at the South Van Eaton Ranch house in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 11-T6S-r27E and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained from a private pit in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 22-T6S-R27E, which is staked and arch. cleared. The topsoil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except 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 materials 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 a separate disposal application will be submitted to the BLM 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 contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary land fill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.



9. WELL SITE 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, 400' X 400'.
- B. Mat Size: 245' X 180', plus 75' X 100' reserve pits and 20' X 20' stinger.
- C. Cut & Fill: Leveling and filling of 2-3 foot sand dunes will be required.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

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 well site in an aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced and screened until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment or when dry enough to work.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located in an area of hummocky terrain of 2-3 foot sand dunes located 500 feet north of a north fork of the Bosque Draw and 10,000 feet west of Haystack Butte. The location has a slight southwesterly slope of 1-2% from an elevation of 3856'.
- B. Soil: The topsoil at the well site is a reddish brown fine sandy clay loam of the Faskin-Roswell complex soils series.
- C. Flora and Fauna: The vegetation cover is a poor grass cover of three-awn, sand and spike dropseed, grama, bristlegrass, buffalo, muhly and other miscellaneous native grasses along with plants of mesquite, yucca, sage, cacti, fourwing saltbush and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: There is an intermittent stream in the north fork of the Bosque Draw 500 feet to the south.
- E. Residences and Other Structures: The Mark Cooper ranch house is 8000 feet to the southwest.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals



11. OTHER INFORMATION; cont.....

- H. There is no evidence of any archaeological, historical or cultural sites on the proposed location or the rerouted road. An archaeological survey has been conducted by Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, and their report has been submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

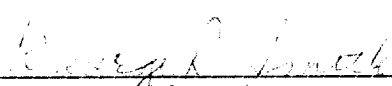
- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Carl Little
Read & Stevens, Inc.
4129 N. Grimes
Hobbs, NM 88240
Office Phone: (505) 623-1996
Home Phone: (505) 392-8777

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site 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 Read & Stevens, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

September 16, 1993



George R. Smith
Agent for: Read & Stevens, Inc.





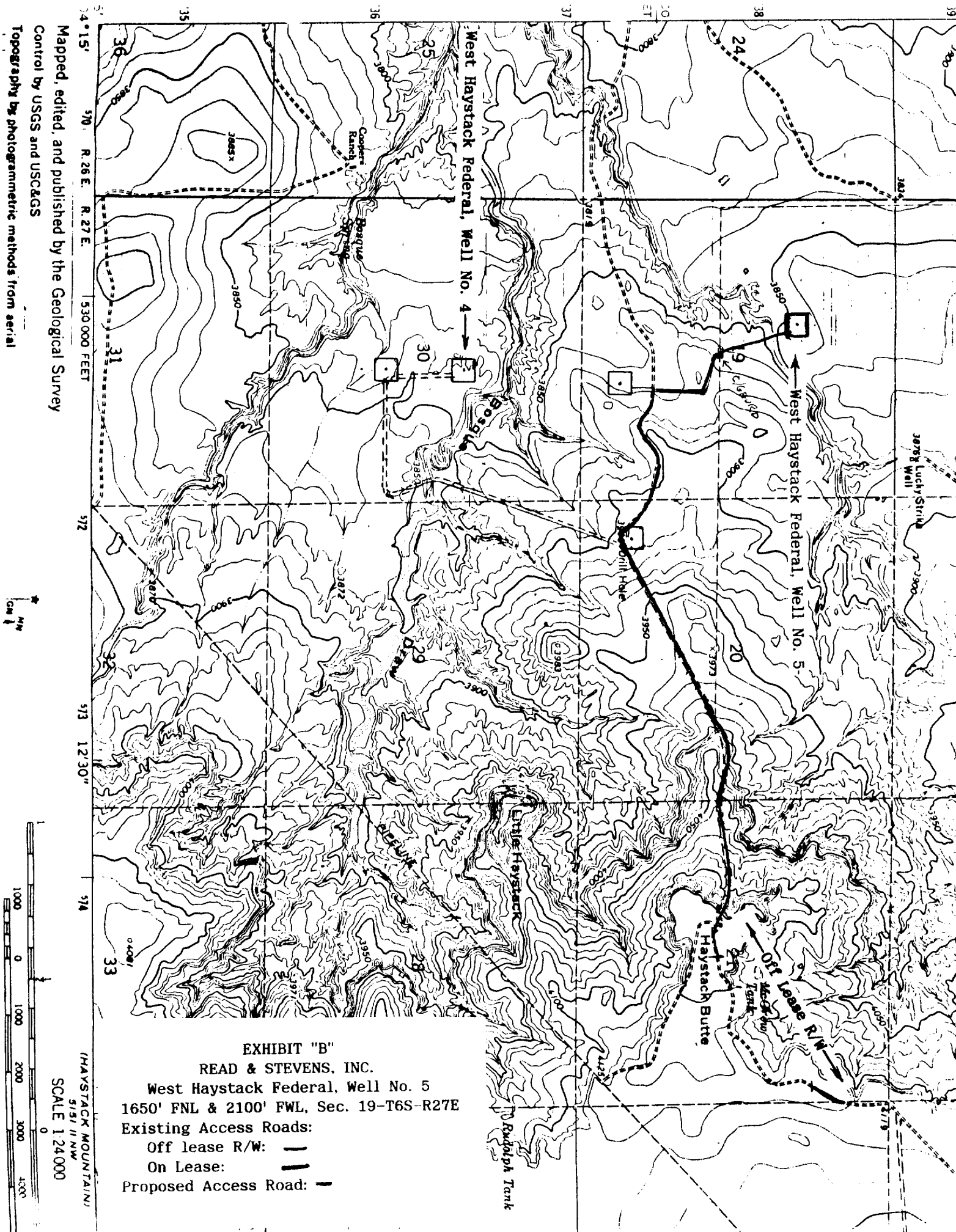
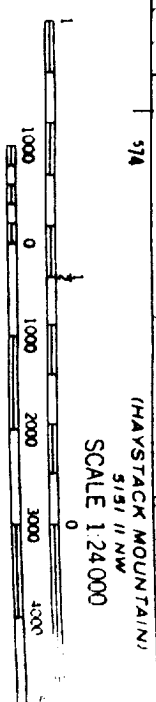


EXHIBIT "B"
 READ & STEVENS, INC.
 West Haystack Federal, Well No. 5
 1650' FNL & 2100' FWL, Sec. 19-T6S-R27E
 Existing Access Roads:
 Off lease R/W: ———
 On Lease: ———
 Proposed Access Road: ———



Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Topography by photogrammetric methods from aerial





1/22/90

W E K R₁₉ #1

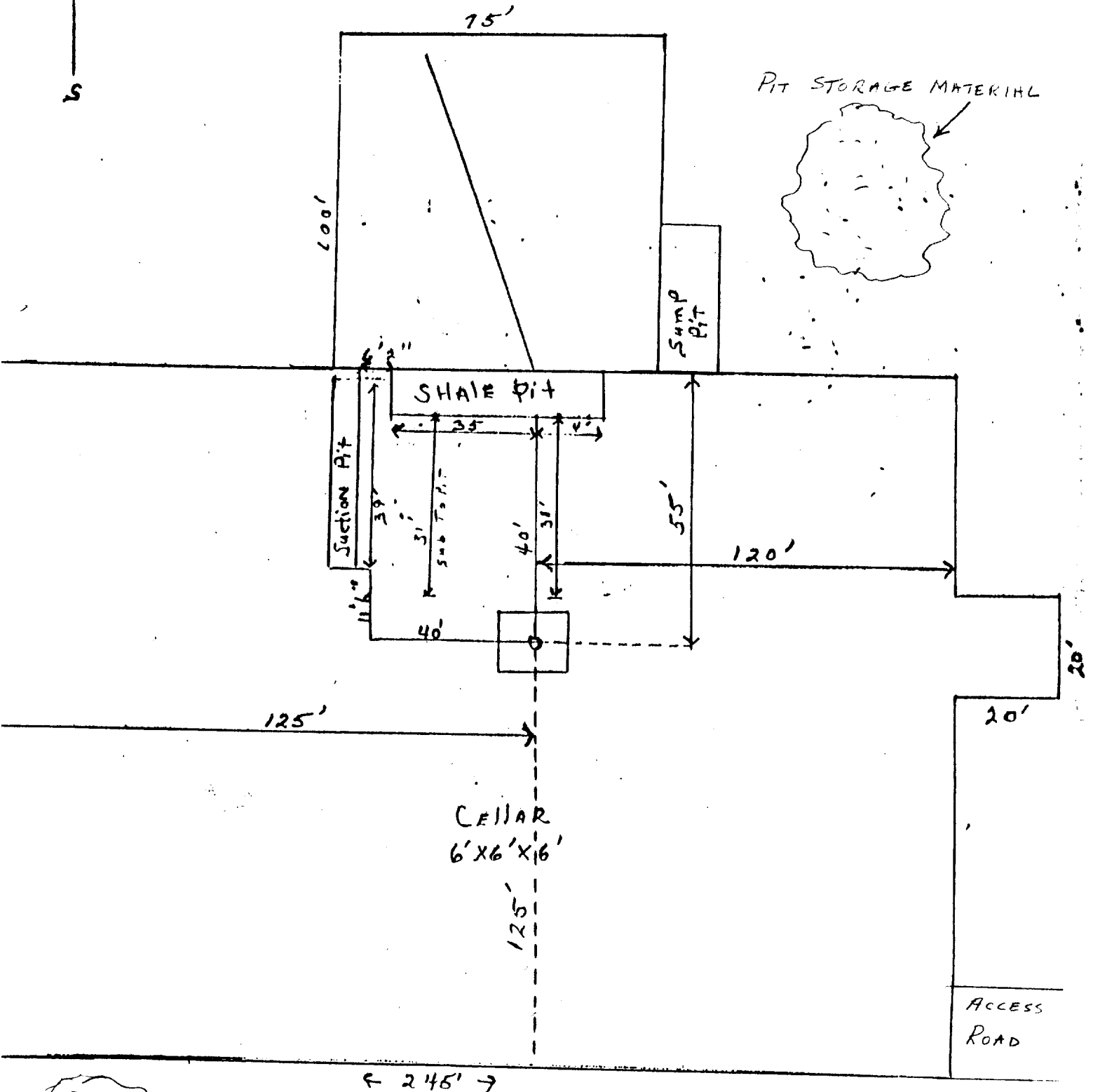
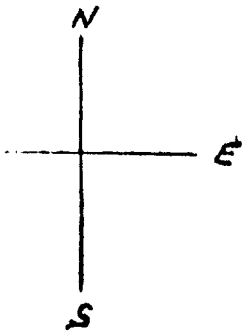


EXHIBIT "D"
READ & STEVENS, INC.
West Haystack Federal, Well No. 5
Pad & Pit Layout



RIG #301

BLOWOUT PREVENTOR ARRANGEMENT

10" SHAFFER TYPE "E", 3000 psi WP

80 GALLON, 4 STATION KOOMEY ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

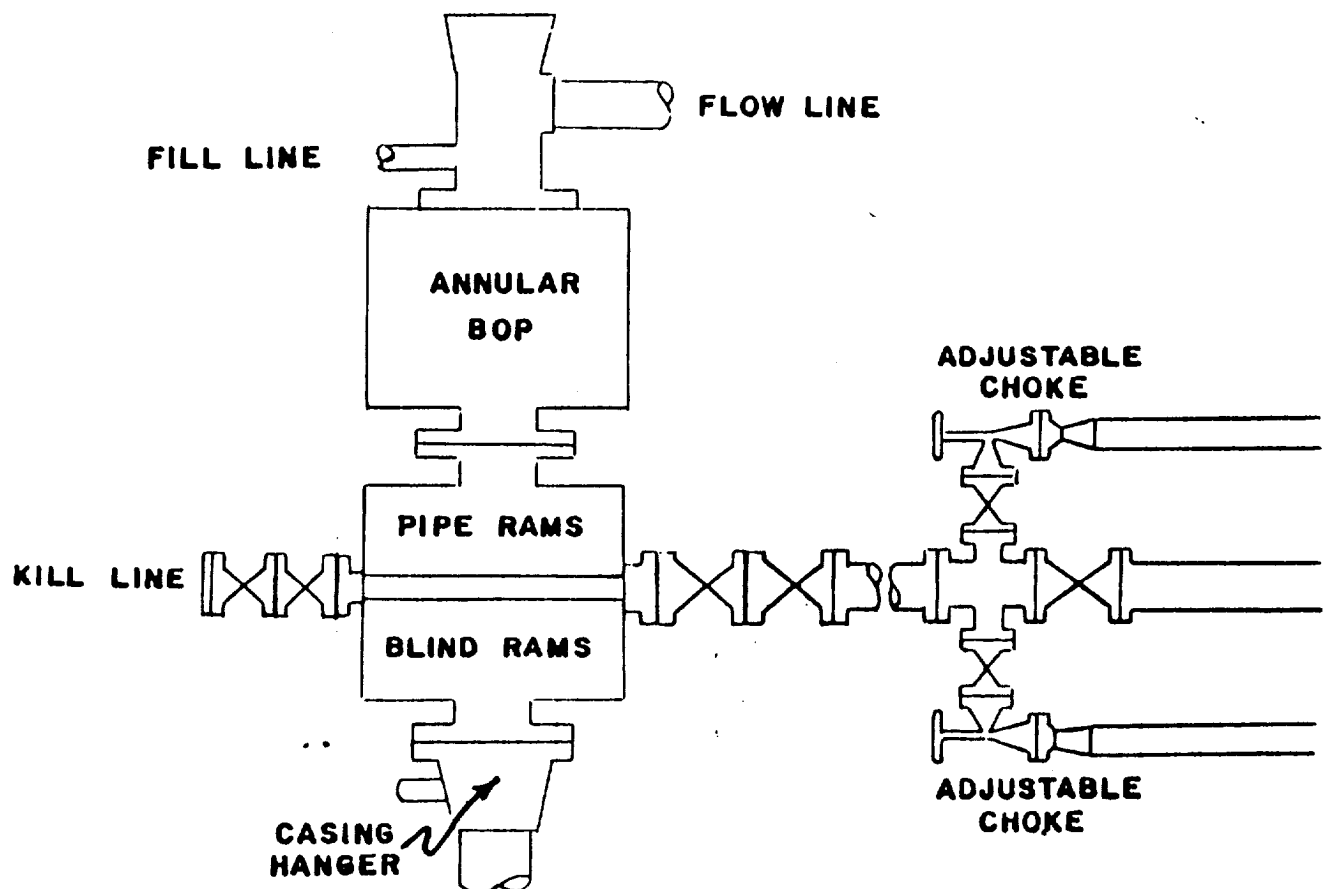


EXHIBIT "E"
READ & STEVENS, INC.
West Haystack Federal, Well No. 5
BOP Specifications

