

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  
Read & Stevens, Inc. ✓

3. ADDRESS OF OPERATOR  
P. O. Box 1518 Roswell, New Mexico 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface  
1980' FSL and 1980' FWL  
At proposed prod. zone  
Same

5. LEASE DESIGNATION AND SERIAL NO.  
NM 18821

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
MAR 31 1981

7. UNIT AGREEMENT NAME  
O. C. D.

8. FARM OR LEASE NAME  
ARTESIA, OFFICE  
North Haystack Federal

9. WELL NO.  
2

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
Sec 26, T5S, R26E

12. COUNTY OR PARISH  
Chaves

13. STATE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approximately 46 miles northeast of Roswell, New Mexico

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  
1440

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. 1320'

19. PROPOSED DEPTH  
6700'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3986.4

22. APPROX. DATE WORK WILL START\*  
April 1, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	12 3/4"	34#	30'	50 Sx "C" Circulate to surface
11"	8 5/8"	24#	1450'	700 Sx "H" " " "
7 7/8"	4 1/2"	10.5-11.6#	6700'	350 Sx Class "C"

## Mud Program:

- 0' - 30' Spud mud with Magcobar gel.  
30' - 1,450' Fresh water and native mud. Mud wt. 8.4, Visc. 30-32, no WL control.  
If seepage is noted add lost circulation material. If circulation is lost, drill dry to 1450' and set intermediate casing.  
1,450' - 4,500' Fresh water and native mud.  
4,500' - 5,700' Salt water gel, 4 % KCL, XPEL-G, Vis. 31-33, wt. 8.4-9.0%, no WL control.  
5,700' - T.D. salt water gel, 4 % KCL, XPEL-G, Vis. 31-45, Wt. 8.4-9.0%, plus flosal.

BOP Program: Blowout preventer stack and casing head will be independently pressure tested before drilling into the Wolfcamp formation. A daily check of the blowout preventer system will be made from 5700' to Total Depth.

Gas Sales are not dedicated.

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 George Smith Agent for:  
Read & Stevens, Inc. TITLE  
March 17, 1981 DATE

(This space for Federal or State office use)

APPROVED

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY MAR 27 1981 TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

\*See Instructions On Reverse Side



**N MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-120  
Effective 1-1-65

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

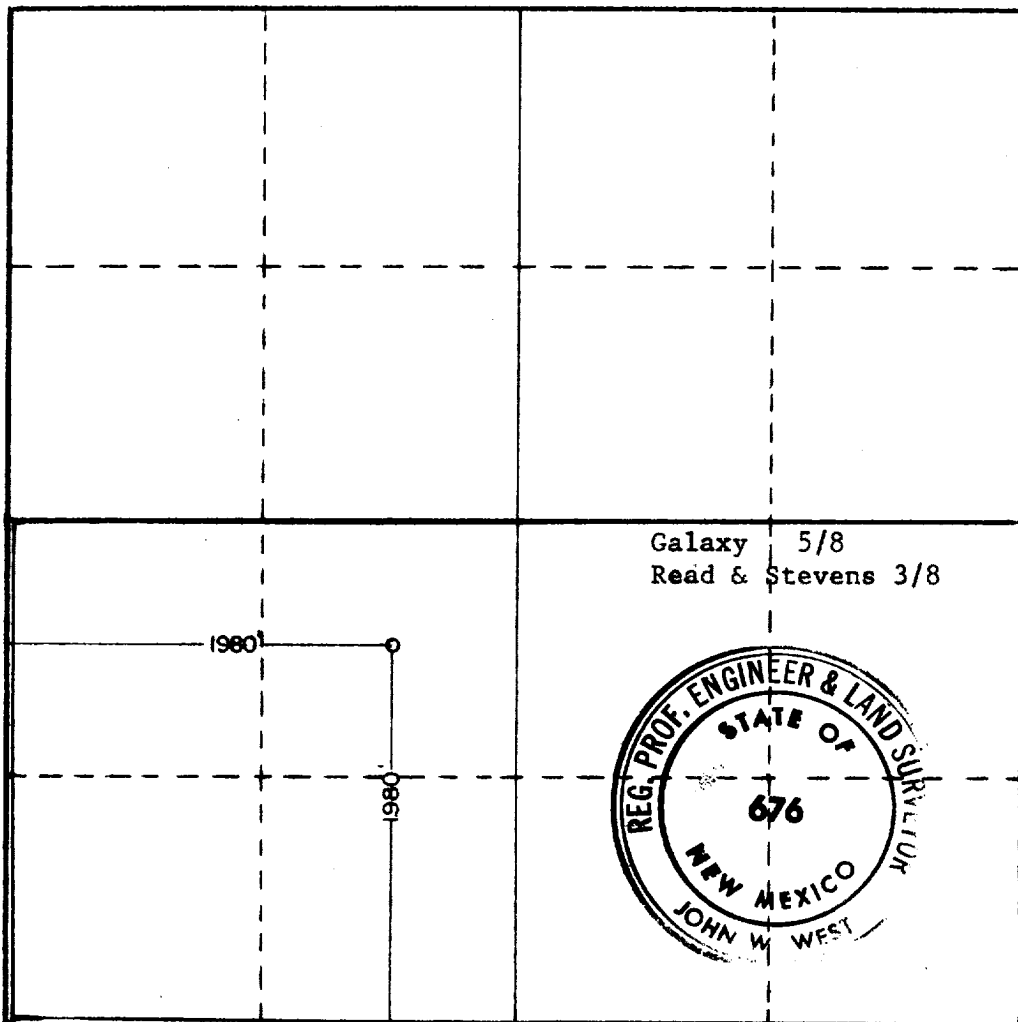
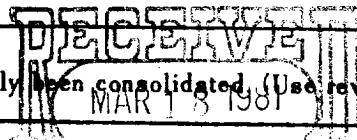
Operator <b>Read &amp; Stevens Inc.,</b>			Lease <b>North Hay Stack Federal</b>		Well No. <b>2</b>
Unit Letter <b>K</b>	Section <b>26</b>	Township <b>5 South</b>	Range <b>26 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>south</b> line and <b>1980</b> feet from the <b>west</b> line					
Ground Level Elev. <b>3986.4</b>	Producing Formation <b>Montoya</b>		Pool <i>Wildcat Montoya</i>	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 \_\_\_\_\_

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.



**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  
**Read & Stevens, Inc.**

Date  
**March 10, 1981**

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

**3-7-81**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6885**  
**Ronald J. Eldon 3239**

0 320 640 960 1280 1600 1920 2240 2560 2880 3200 3520 3840 4160 4480 4800 5120 5440 5760 6080 6400



# APPLICATION FOR DRILLING

READ & STEVENS, INC.  
North Haystack Federal Well No. 2  
1980' FSL & 1980' FWL, Sec. 26, T5S, R26E  
Chaves County, New Mexico  
Lease No.: NM 18821  
(Exploratory Well)

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

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

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

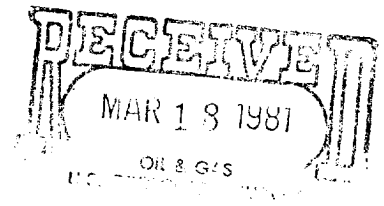
San Andres	1200'	Cisco	5700'
Glorietta	2900'	Mississippi	6400'
Tubb	3800'	Montoya	6500'
Abo	4500'	Granite	6600'
Wolfcamp	5250'	Total Depth	6700'

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

Water: Surface water between 100 to 300 feet.

Oil: San Andres approximately 1200'.  
Montoya approximately 6500'.

Gas: Abo approximately 4500'.  
Cisco approximately 5700'.  
Montoya approximately 6500'.



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 in each of the following:  

Cisco	5700' - 5800'
Montoya	6500' - 6550'

  
Logging: Gamma Ray                      Surface to T. D.  
          FDC/CNL:                      Int. Csg. to T. D.  
          Dual Ind. 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: April 1, 1981.  
Anticipated completion of drilling operations: Approx. 30 days.



MULTI-P T SURFACE USE AND OPERATIONS P.

READ & STEVENS, INC.  
North Haystack Federal Well No. 2  
1980' FSL & 1980' FWL, Sec. 26, T5S, R26E  
Chaves County, New Mexico  
Lease No.: NM 18821  
(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 as staked. The well is approximately 46 miles northeast of Roswell, New Mexico. The 46 miles consists of 30 miles of U.S. Highway 70, 12 miles of county maintained dirt road and 4.3 miles of ranch and oil field access roads.
- B. Directions: Travel northeast of Roswell on U. S. Highway 70, 26 miles from the U. S. Highway 285 and 70 overpass, north of Roswell. Turn north .3 mile past highway marker 363 onto the county road (Olive Road), passing a Mid-America Pipeline System pump station on your right as you turn onto the county road. Travel north on the county road for 12 miles crossing nine cattleguards. At the ninth cattleguard turn left (west) after crossing. Continue west 2 miles past the county road turnoff until you come to the South Van Eaton Ranch house on your left. Turn right (northwest) at the ranch house heading toward another ranch house and windmill. One mile past the first ranch house you will cross a cattleguard. Continue north for .8 mile then turn left (west) just south of the second ranch house, for .9 mile. Turn north crossing a cattleguard. This is the access road to the North Haystack Federal Well No. 1. Travel north toward well No. 1 for .4 mile past the cattleguard. The proposed location is staked and flagged at this point approximately 20 feet west of the existing access road.

2. PLANNED ACCESS ROAD:

- A. No additional new access road will be required for this location since the existing access road to Well No. 1 cuts directly through the wellsite location. The road will have to be bypassed to the east side of the drilling pad, since the drill site is only 20' west of the road at present.

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. The North Haystack Federal Well No. 1, 1320' North of the proposed drill site, is being set up for production of gas, but is shut in at present.
- 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 commercial sources or from the Van Eaton ranch surface tanks or wells within two miles of the drill site, if the water is available. The water will be transported over existing access roads, or a plastic line will be used.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche will be obtained for the drill site from a location approximately 1,000 feet north of the cattleguard on the access road in Sec. 26, T5S, R26E. This will be approximately 1,000 feet south of the drill site. A cut was made in the sandstone bluff during the construction of the access road to Well No. 1, and this exposed a caliche source that was used on Well No. 1 and will be used on this well site. No additional material from any other location is contemplated at this time. The 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

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until 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 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.



7. METHODS OF HANDLING WASTE DISPOSAL Cont.....

- 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: 250' X 215'
- C. Cut and Fill: The location will require a cut of 4' to 6' on the south and southwest which will be used for fill to the east and north.
- 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 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. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. This is in accordance with the agreement with the surface owner, Mr. Ed Denton, Kenna, NM, and Mr. Fred Van Eaton, the current leaseholder. 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 consists of rolling sand dunes 3' to 5' in height with the general slope of the land being 4' to 6' to the north and northeast. There is a small arroyo on the east side of the wellsite that comes down from the rock bluffs to the south.
- B. Soil: The topsoil at the wellsite is a red sandy clay underlain with sandstone.
- C. Flora and Fauna: The vegetative cover consists of very sparse miscellaneous grasses, including Black grama, Threeawn, Dropseed and plants of Mesquite, Skunkbrush, cacti, yucca and other



11. OTHER INFORMATION Cont....:

- C. miscellaneous desert flowers and weeds. The wildlife consists of jackrabbits, cottontail rabbits, coyotes, quail, lizards and rattlesnakes, and it is likely that other typical semi-arid desert wildlife inhabit the area, which is used for cattle grazing.
- D. Ponds and Streams: There are no rivers, streams, lakes or natural ponds in the area.
- E. Residences and other Structures: There is a vacant ranch house and windmill approximately 4,000' southeast of the wellsite location.
- F. Land Use: Cattle grazing
- G. Surface Ownership: The proposed wellsite and access road is on private surface with Federal minerals. An agreement has been made with Mr. Ed Denton, Kenna, New Mexico, the surface land owner, and Mr. Fred Van Eaton, the current leaseholder, to compensate for the damages and to rehabilitate and return the surface to its natural state in the event the well proves non-productive.
- 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.

12. OPERATOR'S REPRESENTATIVE:

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


Dan Lough  
830 W. Gore  
Lovington, New Mexico 88260  
Office Phone: (505) 396-5391  
Home Phone: (505) 396-4371

Joe Handley  
P. O. Box 1135  
Lovington, New Mexico 88260  
Office Phone: (505) 396-5391  
Home Phone: (505) 396-5449

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 Read & Stevens, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

March 16, 1981

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



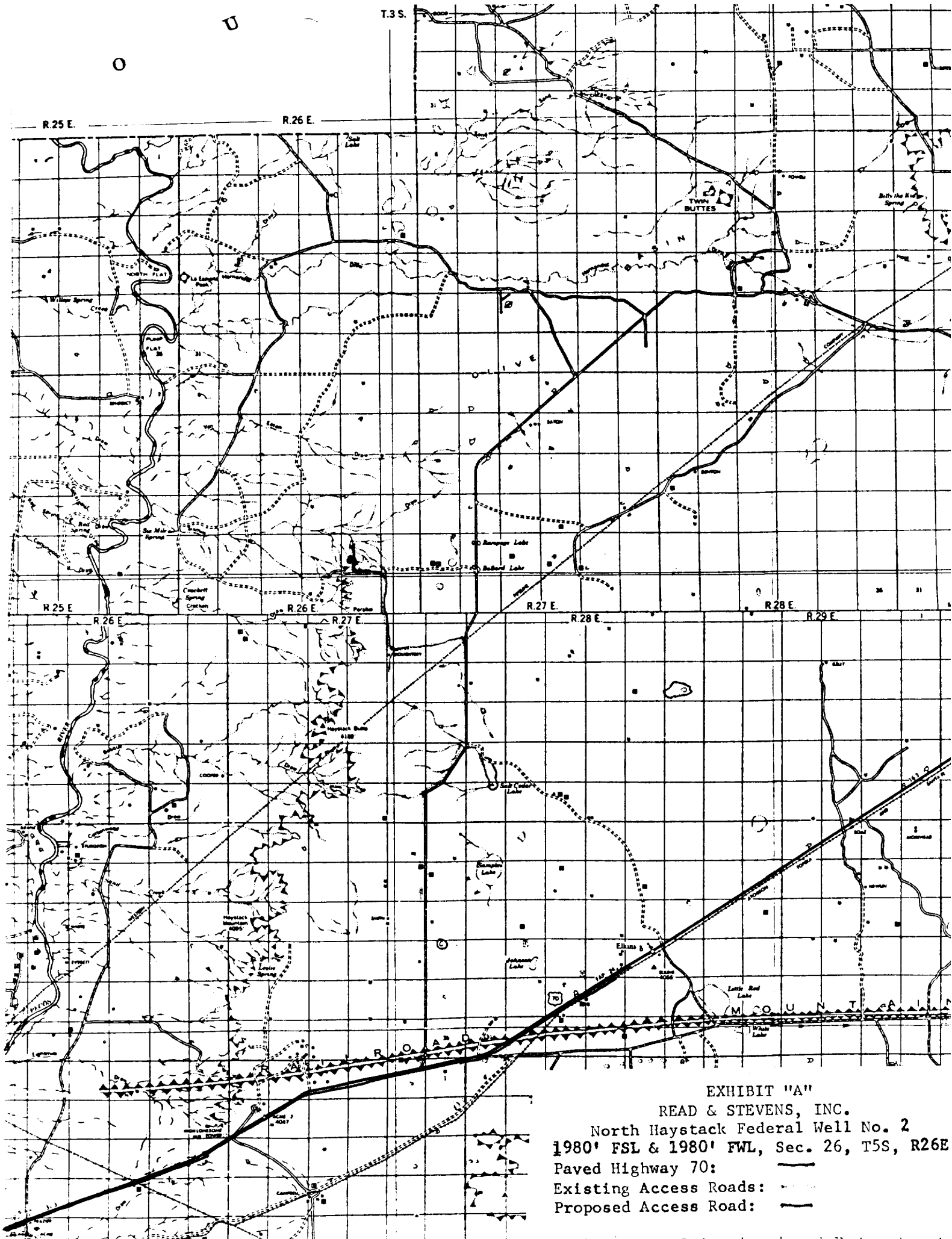


EXHIBIT "A"  
READ & STEVENS, INC.  
North Haystack Federal Well No. 2  
1980' FSL & 1980' FWL, Sec. 26, T5S, R26E  
Paved Highway 70: ———  
Existing Access Roads: - - -  
Proposed Access Road: ———





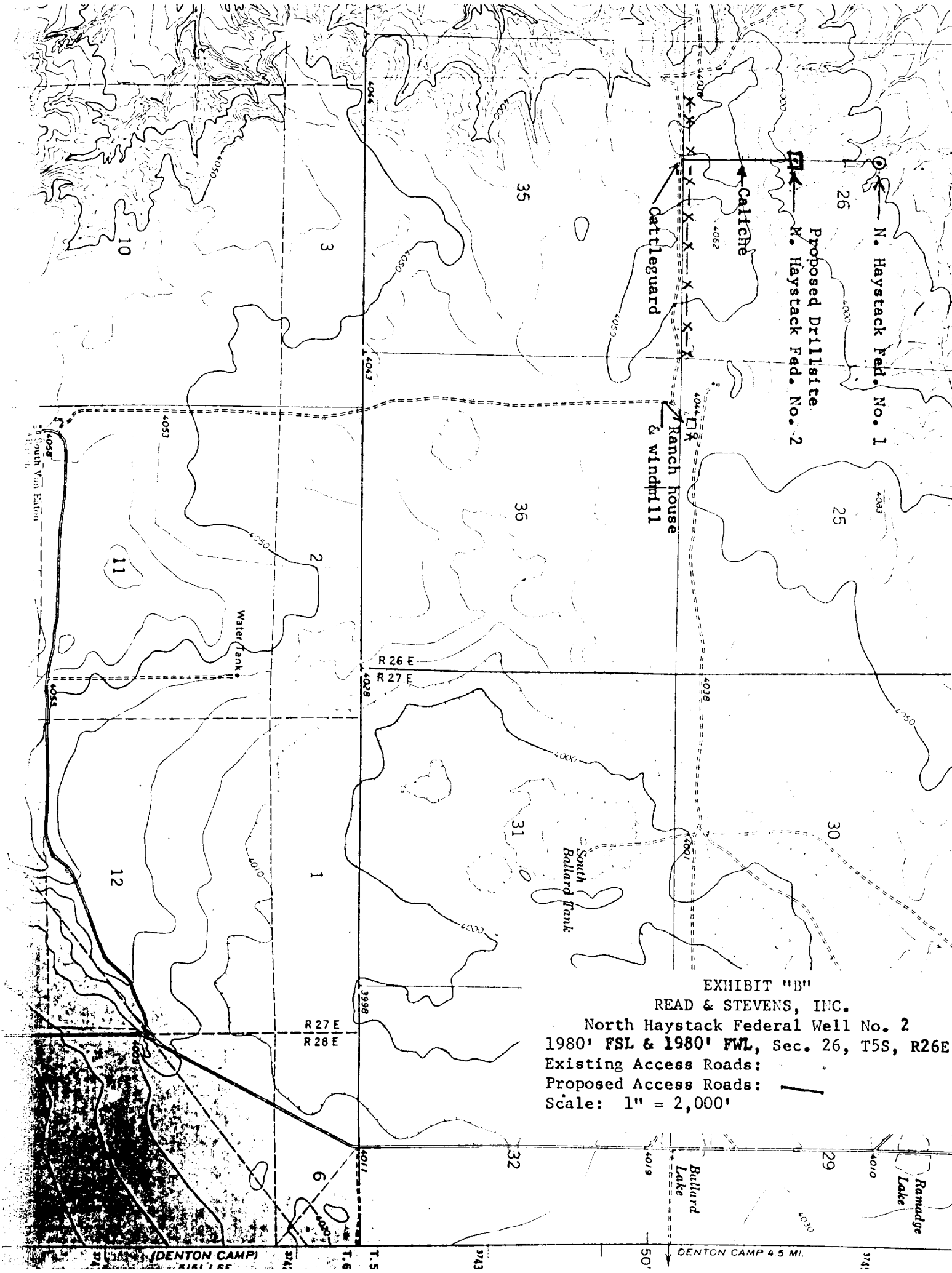


EXHIBIT "B"  
READ & STEVENS, INC.  
North Haystack Federal Well No. 2  
1980' FSL & 1980' FWL, Sec. 26, T5S, R26E  
Existing Access Roads:  
Proposed Access Roads:  
Scale: 1" = 2,000'

DENTON CAMP

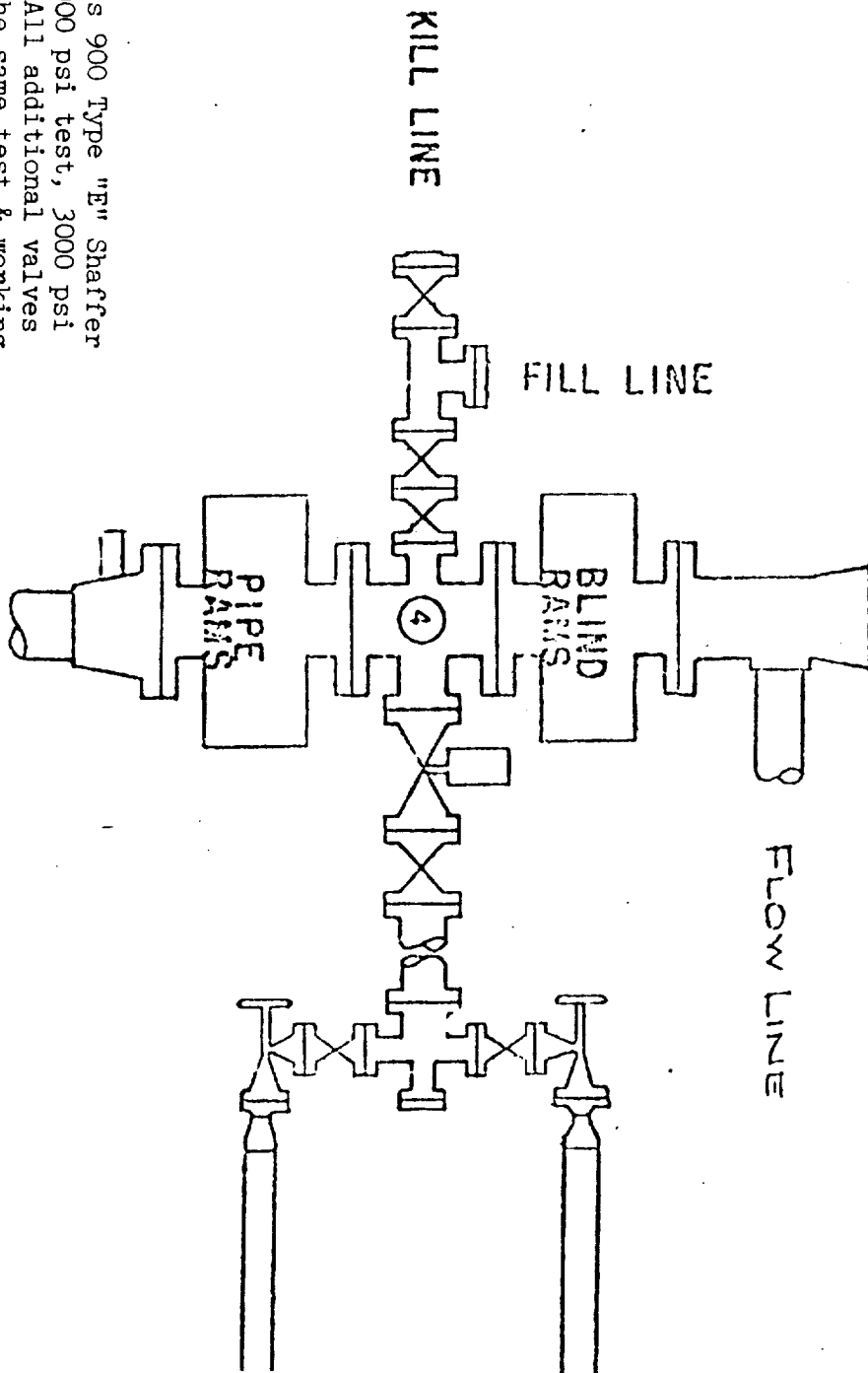
DENTON CAMP 4.5 MI.



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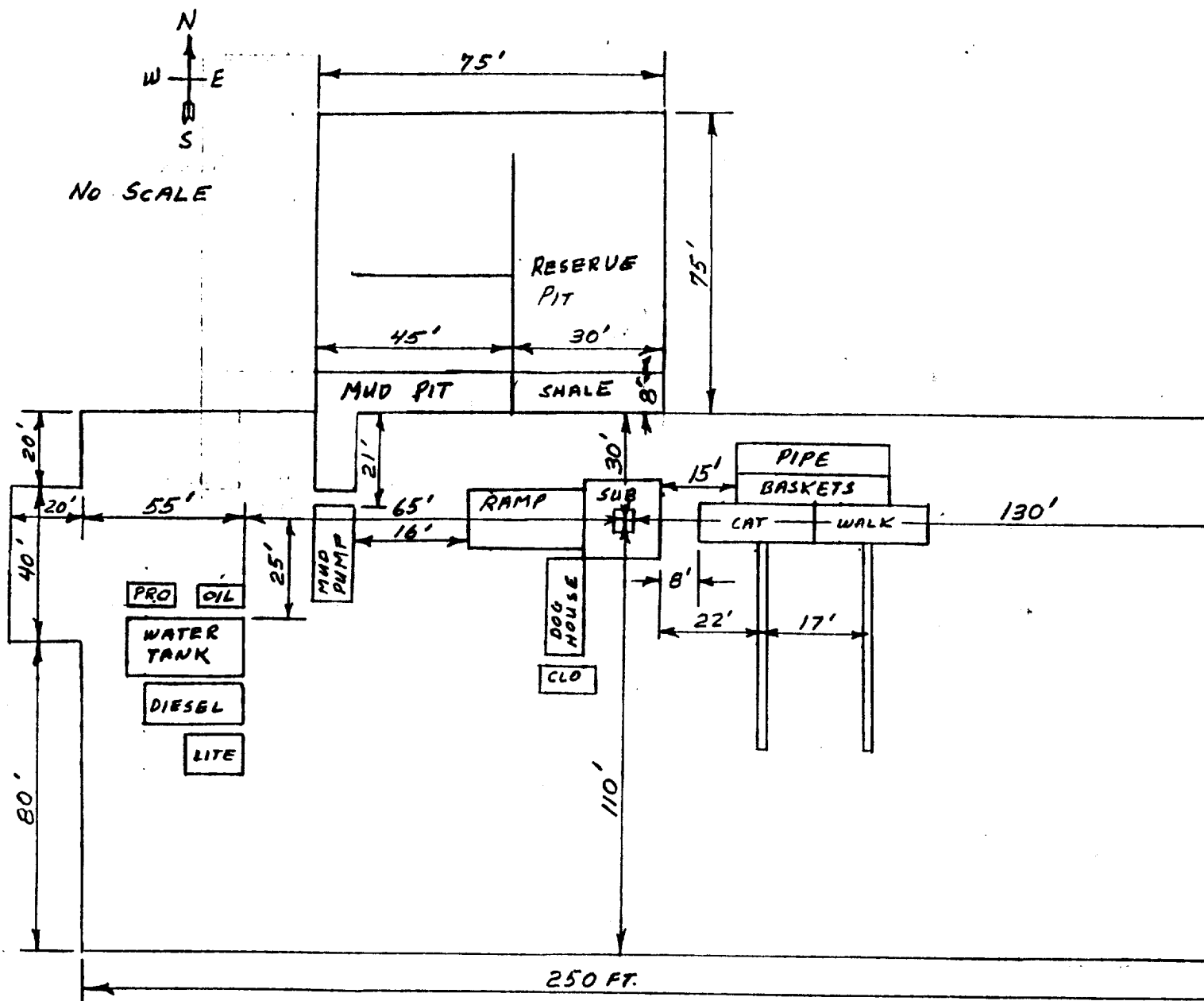
WEK DRILLING CO., INC. - Rig 1 & 3  
**BLOWOUT PREVENTER SPECIFICATION**



BOP's are 10" Series 900 Type "E" Shaffer Double Hydraulic 6000 psi test, 3000 psi working pressure. All additional valves & connections are the same test & working pressures.

EXHIBIT "D"  
 READ & STEVENS, INC.  
 BLOW OUT PREVENTER SPEC.  
 North Haystack Federal Well No. 2  
 Chaves County, N. M.





CELLAR 5'X5'X5'

THIS RIG EQUIPTED WITH SHAFFER TYPE E 10" SERIES 900 BOP WITH 4" BLIND RAMS, KILL LINE AND CHOKE MANIFOLD, KOOMEY HYDRAULIC CONTROLS AND ACCUMULATOR WITH REMOTE CONTROLS.

SIX FOOT SPACING BETWEEN OIL TANK, WATER TANK, DIESEL TANK AND LIGHT PLANT

20'X40' STINGER AREA AT WEST END OF LOCATION

