

N.M.O.C.D. COPY

SUBMIT IN TO JCATE*
(Other instructions on
reverse side)Form approved,
Budget Bureau No. 42 R1425.

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

OCT 15 1980

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Read & Stevens, Inc. ✓

O. C. D.

3. ADDRESS OF OPERATOR

P. O. Box 1518 Roswell, New Mexico 88201

ARTESIA, OFFICE

4. LOCATION OF WELL (Report location clearly and in accordance with applicable requirements.)

At surface 990' FWL & 1650' FNL

At proposed prod. zone

Same

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

Approximately 12 mi. E. of Lake Arthur

U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

15. DISTANCE FROM PROPOSED*

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

990'

16. NO. OF ACRES IN LEASE

2520

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

9100'

20. ROTARY OR CABLE TOOLS

Rotary

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

3567.0 GR

22. APPROX. DATE WORK WILL START*

October 28, 1980

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 #	400'	400 SX Class "C" Circulate
11"	8 5/8"	24 #	1700'	200 SX Class "H"
7 7/8"	4 1/2"	10.5, 11.6#	9100'	500 Sx Class "C"

Mud Program:

- 0' - 400' Spud mud with Magcobar gel and lime. If seepage is noted, add lost circulation material. If circulation is lost, dry drill to 400'.
- 400' - 5,200' Fresh water and native mud. Mud wt. 8.4#, Vis. 30-32, WL no control.
- 5,200' - 8,000' Magcogel and oil type drilling fluid. Mud wt. 8.5# - 8.8#, Vis. 30-32, 3-4% oil, WL no control.
- 8,000' - 9,100' Fresh water, low solids spersene mud system with CMC, 3% MCL, starch, Drispak, and salt gel, Mud Wt. 9.0-9.5#, Vis. 32-34, WL 10 cc or below, PH 9 - 9.5.

BOP Program: At 1700', 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.

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 A. Smith

TITLE

Agent for:

Read & Stevens, Inc.

DATE

September 26, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DISTRICT ENGINEER

DATE

OCT 03 1980

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

**NL MEXICO OIL CONSERVATION COMMISS.
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

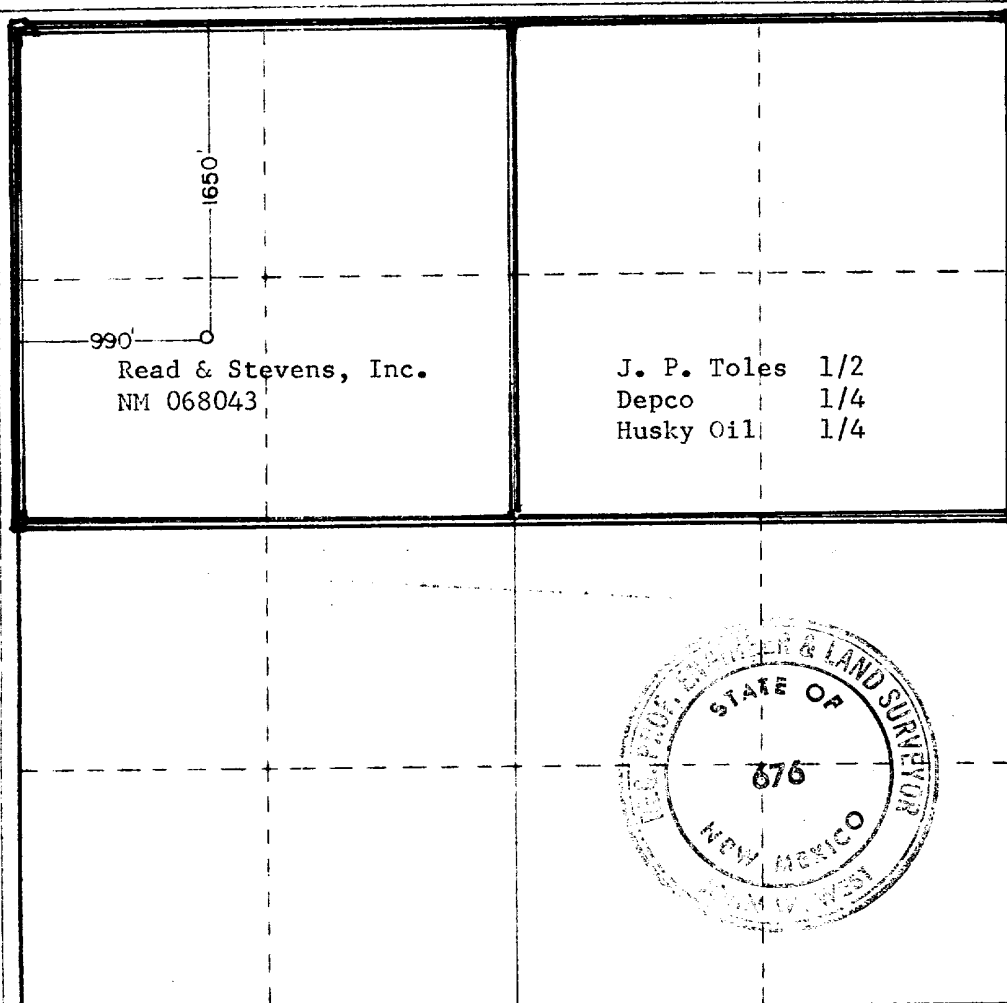
All distances must be from the outer boundaries of the Section.

Operator Read & Stevens, Inc.,			Lease Harris Federal Com		Well No. 5
East Letter E	Section 25	Township 15 South	Range 27 East	County Chaves	
Actual Well Location of Well: 1650 feet from the North line and 990 feet from the West line					
Ground Level Elev. 3567.0	Producing Formation Atoka	Pool Buffalo Valley Basin		Dedicated Acreage: 320 Acres	

- 1 Outline the acreage dedicated to the subject well in 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, forced pooling, or otherwise? Communitization
☒ 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
Sept. 29, 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
9-19-80
 Registered Professional Engineer and/or Land Surveyor

John W. West
 Certificate No. **JOHN W. WEST 678**
PATRICK A. ROMERO 6863
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960



United States Department of the Interior

GEOLOGICAL SURVEY

SPECIAL APPROVAL STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

PRAD STEVENSON HARRIS FED COM No. 5	
OPERATOR 25-155-27E	WELL DESIGNATION CHAVES
S-T-R	COUNTY
NM 068043	
LEASE NO.	

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. 12 3/4" 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 7/8" casing string and before drilling into the WORK CAMP 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 WORK CAMP 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. 595-20318 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) ~~BOH 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, ROSWELL 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

Any permanent pit containing waste oil must be fenced and covered with mesh wire.

APPLICATION FOR DRILLING

READ & STEVENS, INC.

~~990' FWL & 1650' FNL, Sec. 25, T15S, R27E~~ ⁵ Harris Federal Corp.
Chaves County, New Mexico
Lease No.: NM 068043
(Development 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:

Queen	1077'	Cisco	7352'
San Andres	1673'	Canyon	7667'
Glorieta	3228'	Strawn	8163'
Tubb	4541'	Atoka	8580'
Abo	5345'	Chester	8850'
Wolfcamp	6525'	Total Depth	9100'

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

Water: Approximately 200 - 400' for surface water.

Gas: Atoka at approximately 8700'.

Oil: San Andres at approximately 1680'.

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:

Strawn	8163' - 8263'
Atoka	8580' - 8680'

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: October 20, 1980.
Anticipated completion of drilling operations: Approximately 35 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

READ & STEVENS, INC.

~~Depco Federal Well No. 1~~ 990' FWL & 1650' FNL, Sec. 25, T15S, R27E

Chaves County, New Mexico

Lease No.: NM 068043

(Development Well)

RECEIVED
OCT 14 1980
U.S. GEOLOGICAL SURVEY
ARTESIA, 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, 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 12 miles east of Lake Arthur, New Mexico. A portion of the 11 miles of existing access road is paved for nearly two miles with the remainder a well maintained gravel county road.
- B. Directions: Travel south from Roswell on Alternate Highway 285 to Lake Arthur, New Mexico. Turn left (east) onto county road 507. There is an old white closed service station on the right side of the highway at the turnoff, with a "Worms for Sale" sign. Road 507 is paved for 1.5 miles then changes to a well maintained gravel road. Continue east on the gravel road .5 mile turning southeast for a mile crossing the Pecos River. Turn left (east) after crossing the bridge and a cattle guard traveling easterly approximately 1.8 miles to a "Y" in the road. Take the right hand fork traveling easterly for approximately 5 miles passing a surveyor's red flagged stake near a fence corner post. Turn southeast passing "White Lake" on the right side of the road. This is a small natural pond, presently holding water. Continue approximately .6 mile past the flag (fence corner post). The new access road will start at this point and run north for 2700' to the southeast corner of the McClellan Federal Well No. 1 drill pad which has not been constructed yet, but has been approved and is staked and flagged. The new access road for the Depco Federal Well No. 1 will start at this point on the northeast corner of the McClellan well site and will run northeast for approximately 3400 feet to the southwest corner of the drill pad.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be 12 feet wide (20' ROW) and approximately 3400 feet long, from the point of origin from the northeast corner of the McClellan Fed. Well No. 1 drill pad to the southwest corner the drilling pad. The new access road is labeled and color coded in red on Exhibit "A" and "B". The road has been staked and flagged.
- B. Construction: The new road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.

2. PLANNED ACCESS ROAD: cont.....

- C. Turnouts: There will be at least two turnouts, which will increase the road width to 20 feet for passing.
- D. Culverts: None required, but some possible low water crossings.
- E. Cuts and Fills: None required.
- F. Gates, Cattleguards: None required.

3. LOCATION OF EXISTING WELLS:

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

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 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. Caliche for surfacing the road and the well site pad will be obtained from an existing pit located on Federal surface and minerals located in the SE $\frac{1}{4}$ of Sec. 24, T15S, R27E. 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 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 separate disposal application will be submitted to the USGS for approval.
- E. Oil produced during operations will be stored in tanks until sold.

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

- 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. ANCILLARY 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: 225' X 210'.
- C. Cut and Fill: The location will require a 2.5 - 3 foot cut on the north and will be filled to the south.
- D. The surface will topped with compacted caliche and the reserve pit will be plastic lined.

10. PLANS FOR RESTONATION 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 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 a gently sloping hill (2.5 - 3 ft./100ft.) to the south and southwest, from an elevation of 3567 feet.
- B. Soil: The topsoil at the wellsite is an alkali clay underlain with limestone and with occasional outcrops of limestone rock.
- C. Flora and Fauna: The vegetative cover consists of very sparse miscellaneous grasses, including Tobosa, Grama, Three-on, also

11. OTHER INFORMATION: cont.....

- C. cont... mesquite, yucca, cactus and other miscellaneous desert flowers and weeds. The only wildlife observed were an occasional lizard, jackrabbits and cottontails, but 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 are no residences or other structures within a mile of the well site except a tank battery location to the south.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed location is on 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.

12. OPERATOR'S REPRESENTATIVE:

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

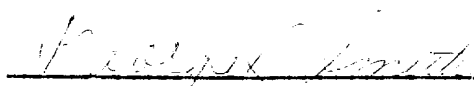
Dan Lough
830 W. Gore
Lovington, New Mexico 88260
Office Phone: (505) 396-5391
Home Phone: (505) 396-4371

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.

September 26, 1980


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

20'

10'

04°00'

(CH LINE SEE SHEET 2)

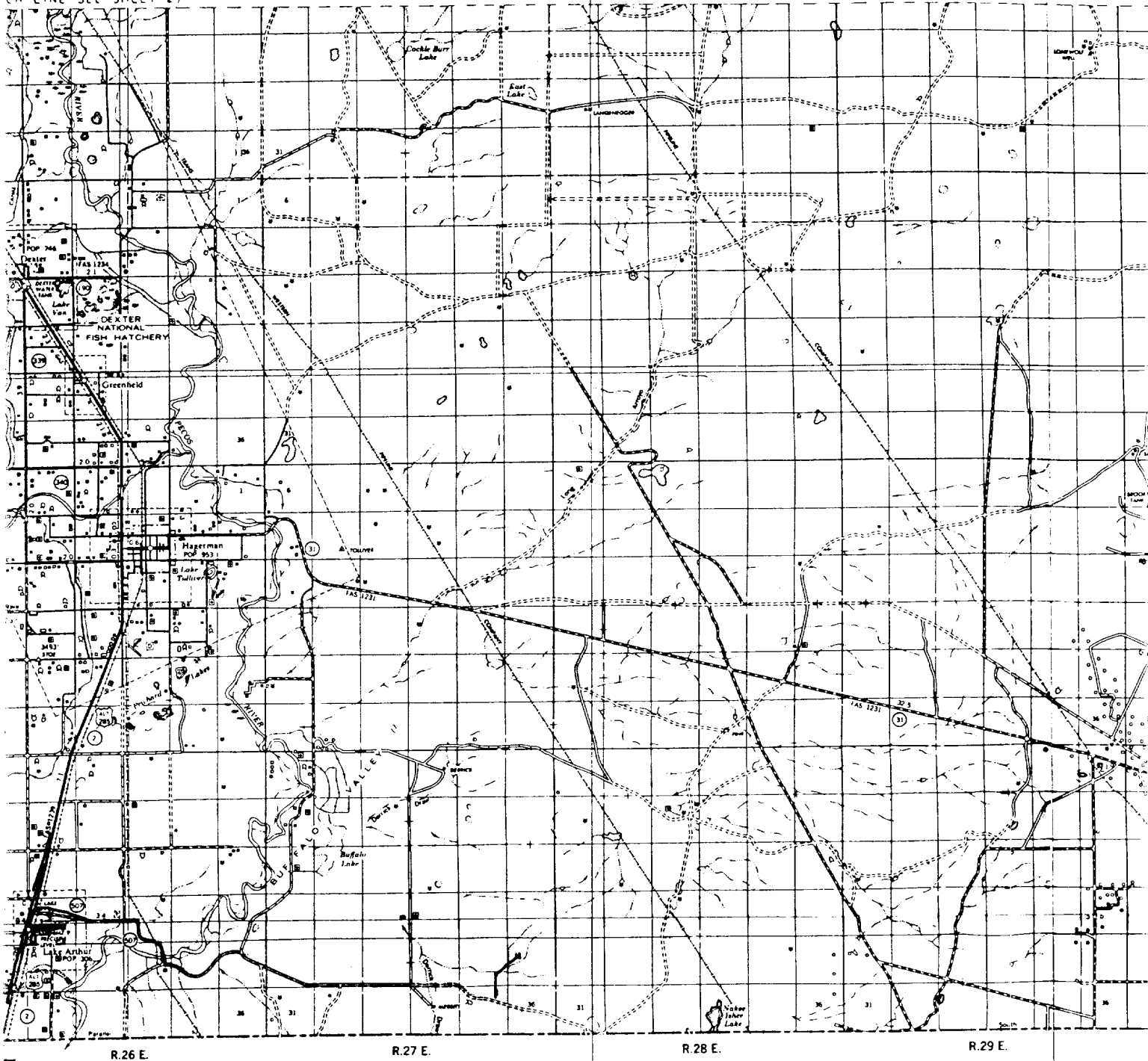


EXHIBIT "A"

READ & STEVENS, INC.

READ & STEVENS, INC.
~~Deposited with the U.S. Patent Office~~
 990' FWL & 1650' FNL, Sec. 25

990' FWL & 1650' FNL, Sec. 25, T15S, R27E

Paved Road:

Existing Access Road:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

104°15' 33°00' 9.2 MI. TO N. MEX. SI. 1230' (NINEMILE WELL) R. 27 E. R. 28 E.

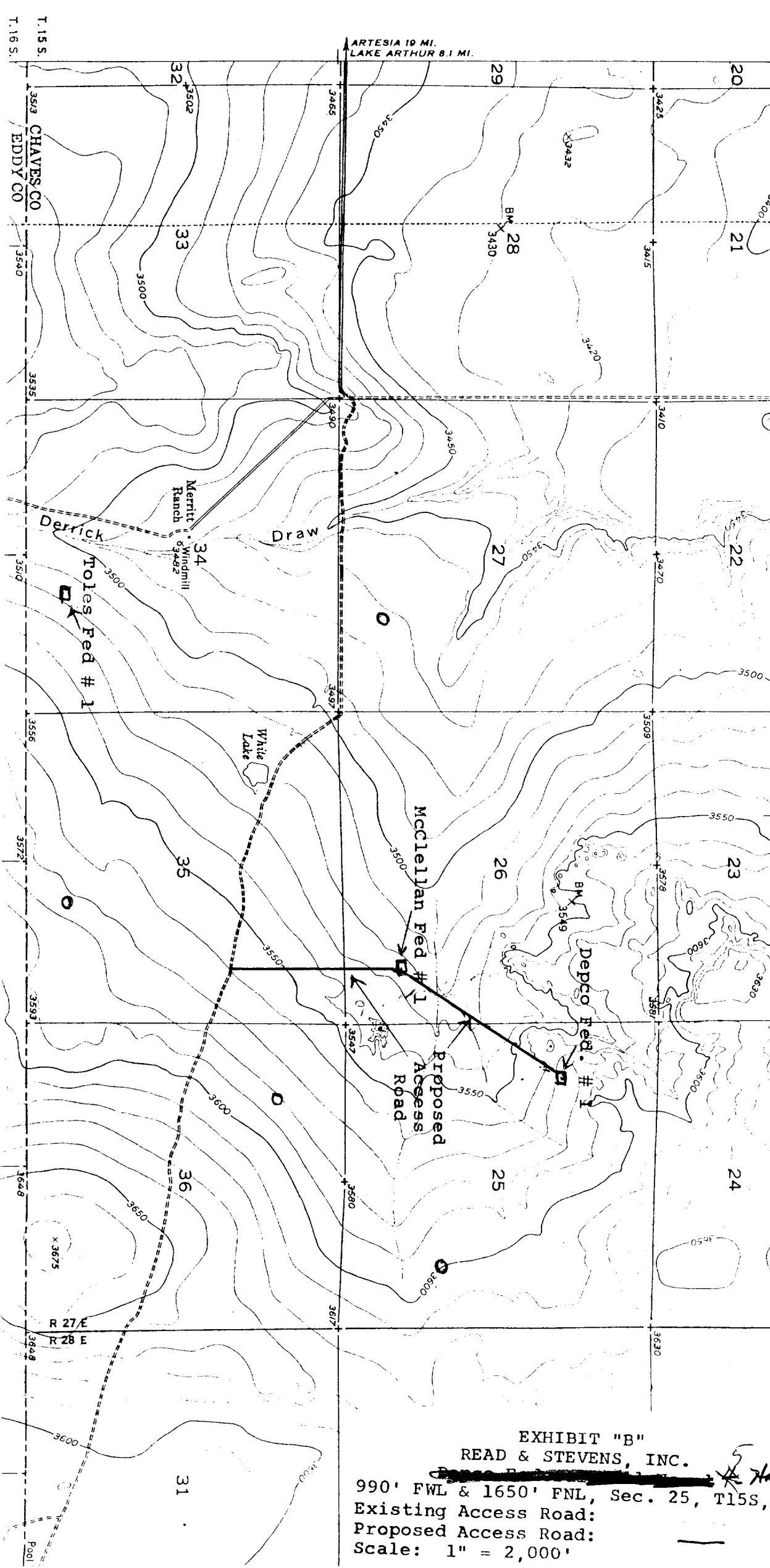
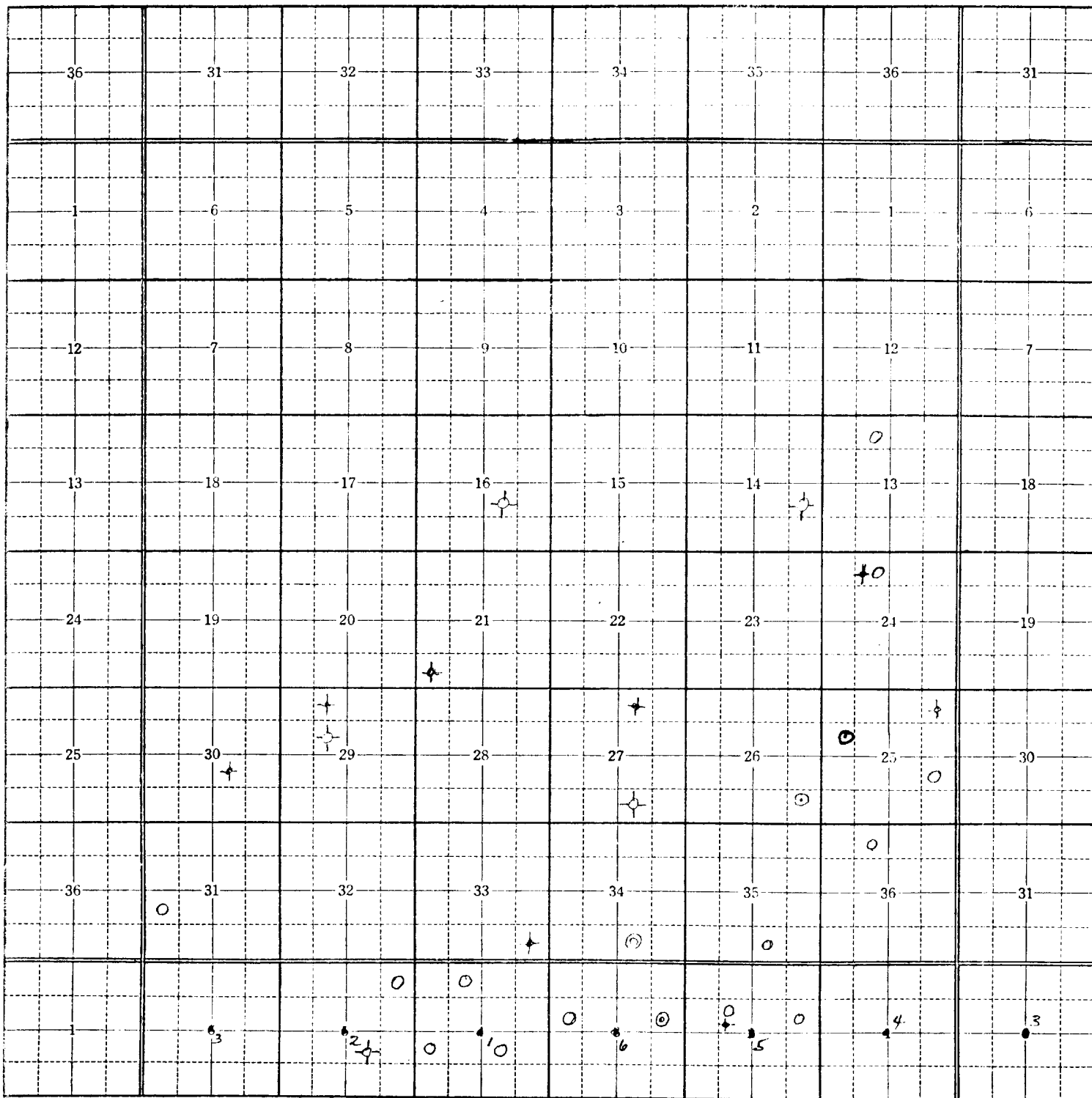


EXHIBIT "B"
READ & STEVENS, INC.
Harris Fed. Com
990' FWL & 1650' FNL, Sec. 25, T15S, R27E
Existing Access Road:
Proposed Access Road:
Scale: 1" = 2,000'

Township 15 S, Range 27 E, County Chaves, State New Mexico

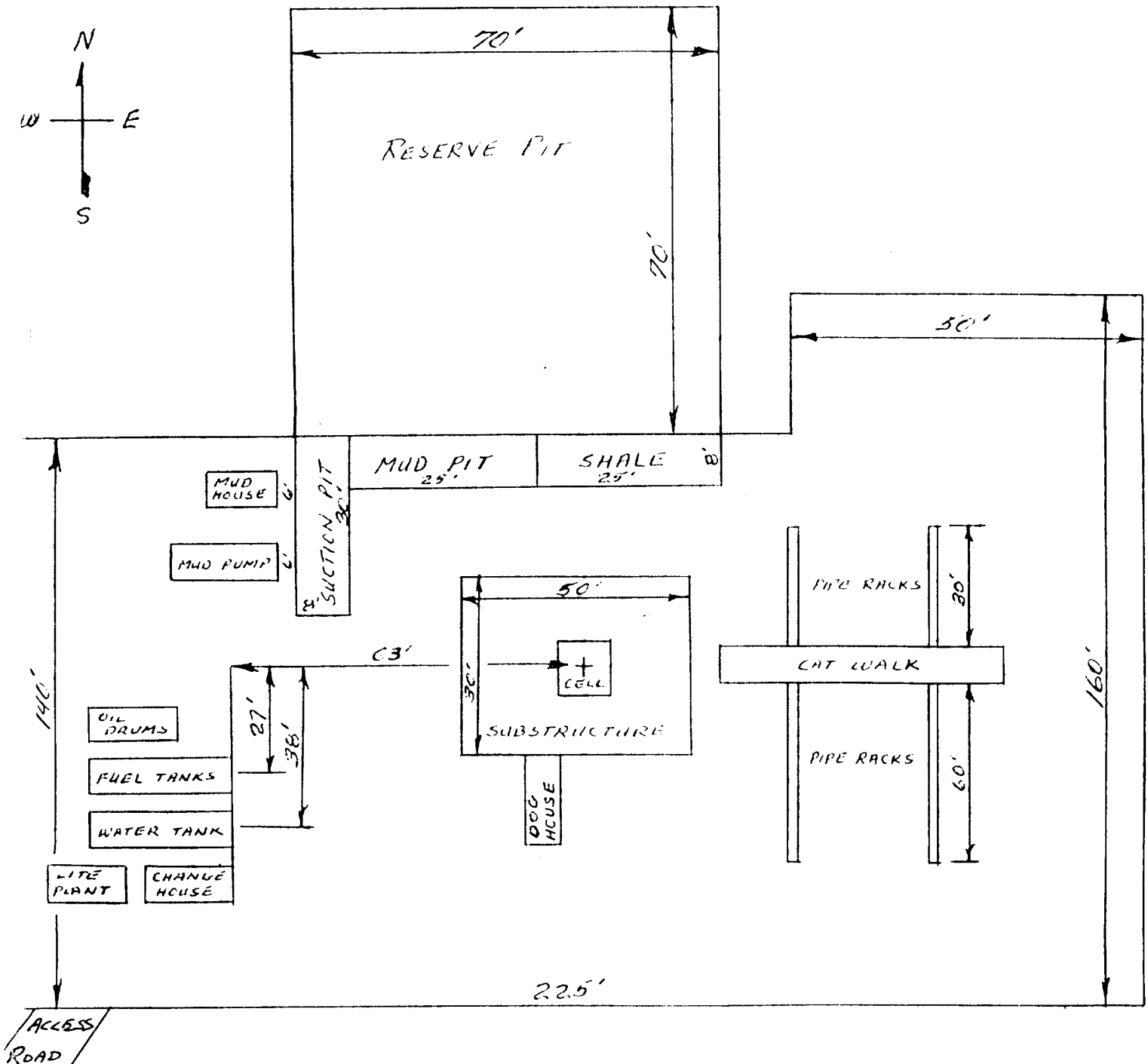
Island Township Plat



Producing Gas Well ○
Producing Oil Well ○
Plugged & Abandoned ○
Proposed Location ○

5 Harris Fed Con

EXHIBIT "C"
READ & STEVENS, INC.
Existing Wells



CELLAR

THIS RIG IS EQUIPTED WITH SHAFFER LUIS SERIES 900 DOUBLE BOP HYDRAULIC OPERATED - WITH BLANKS 4" AND 4 1/4" WITH SIDE CONNECTIONS -

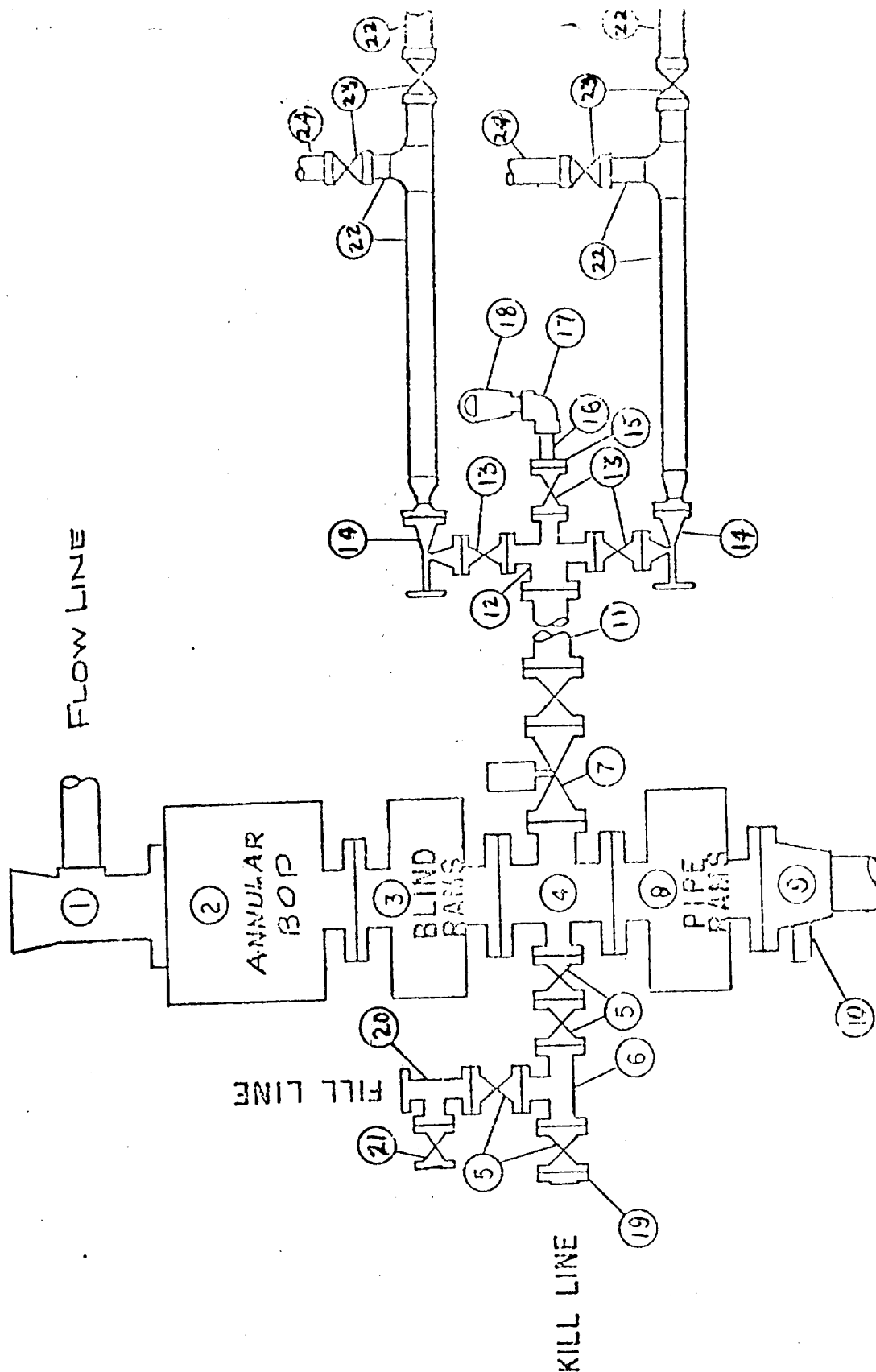
MAINTAIN 3' SPACING BETWEEN OIL DRUMS, FUEL TANKS, WATER TANK AND CHANGE HOUSE -

PUT CASING TOOLS ON NORTH SIDE OF RIG

EXHIBIT "E"
READ & STEVENS, INC.
RIG LAYOUT

5 - Harris Federal Co.

WEK DRILLING CO., INC. - Rig 2
BLOWOUT PREVENTER SPECIFICATION



5 *Haris Fed Con*

EXHIBIT "D"
 READ & STEVENS, INC.

BLOW OUT PREVENTER SPEC.
 Chaves County, N. M.