

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-005-60782

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.

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 any State requirements.)*

At surface
660' FSL and 1980' FEL

At proposed prod. zone

Same

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

Approximately 10 miles east of Lake Arthur, New Mexico

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

1800

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

9,100'

20. ROTARY OR CABLE TOOLS

Rotary

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

3518.2 GR

22. APPROX. DATE WORK WILL START*

Sept. 10, 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' and set surface casing.
- 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 Magcogel and Magco CMC. Mud wt. 9.0-9.5#, Vis. 40-45, WL 10 or below, Ph. 9-9.5. Circulate portion of reserve pit when mudding up at 8,000'.

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.

Agent for:

SIGNED

Read & Stevens, Inc.

DATE Sept. 2, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION

SEP 12 1980

Form No. 1
Supersedes O-12-
Effective 1-1-77

All distances must be from the outer boundaries of the Section

READ & STEVENS INCORPORATED			TOLES FEDERAL			O. C. D. ARTESIA, OFFICE		
O	34	15 SOUTH	27 EAST	CHAVES COUNTY				
660 feet from the SOUTH line and			1980 feet from the EAST line					
3518.2		Atoka		Und. Diamond Mound Atoka			320	

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 _____

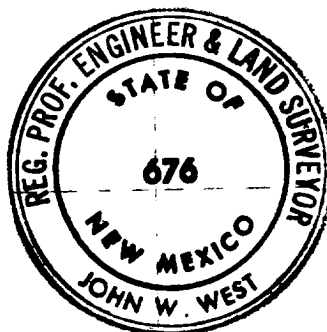
If answer is "no," list the owners and tract descriptions which have actually been consolidated (use reverse side of this form if necessary.) _____

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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U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO



CERTIFICATION

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

George R. Smith

Agent for:

Read & Stevens, Inc.

September 2, 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.

AUGUST 23, 1980

J. P. Toles
NM 0115465A

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6863
Ronald J. Eidson 3239



N.M.O.C.D. COPY
United States Department of the Interior
GEOLOGICAL SURVEY
SPECIAL APPROVAL STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

READ + STEVENS, Inc. TOLES FED No. 1	
OPERATOR	WELL DESIGNATION
SEC 34, T15S, R27E	CHAVES
S-47R	COUNTY
NM-011546A	
LEASE NO.	

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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 5/8" casing string and before drilling into the WOLF 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 WOLF 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 fire 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

☐ Sagebrush Gray, Fed. Std. 595-26357 or 36357

☐

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- ☒ 1. A kelly cock will be installed and maintained in operable condition.
- ☒ 2. 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
- ☐ 3. 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.
- ☐ 4. 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.
- ☒ 5. 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.
- ☒ 6. 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. |
- ☒ 7. Other special stipulations

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

APPLICATION FOR DRILLING

READ & STEVENS, INC.
Toles Federal, Well No. 1
660' FSL & 1980' FEL, Sec 34, T15S, R27E
Chaves County, New Mexico
Lease No.: NM 0115465A
(Exploratory Well)

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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:

Oil: San Andres at approximately 1680'.

Gas: Atoka at approximately 8700'.

4. Proposed Casing Program: See Form 9-331C.

5. Pressure Control Equipment: See Form 9-331C.

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.
NDC/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: September 10, 1980.

Anticipated completion of drilling operations: Approx. 35 days.

MULTI-JOINT SURFACE USE AND OPERATIONS PLAN

READ & STEVENS, INC.
Toles Federal, Well No. 1
660' FSL & 1980' FEL, Sec 34, T15S, R27E
Chaves County, New Mexico
Lease No.: NM 0115465A
(Exploratory Well)

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SEP 3 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 10 miles east of Lake Arthur, New Mexico. A portion of the 10 miles is paved and the remainder is 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 a white building on the right of the highway at the turnoff, with a "Worms for Sale" sign. Road 507 is paved for 1.5 miles then is a well maintained gravel road. Continue east on the dirt portion for .5 mile turning Southeast for a mile crossing the Pecos River. Turn left (east) after crossing the bridge traveling easterly approximately 5 miles coming to a junction in the road. Turn southeast .8 mile passing the Merritt ranch house on the left. The planned access road will start at this point traveling east of the existing access road for approximately 1,500'.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be 12 feet wide (20' ROW) and approximately 1,500' long, from the point of origin from the existing access road 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 by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: There will be one turnout, which will increase the road width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattleguards: One cattleguard is required several hundred feet east of the point of origin where the existing ranch fence will be cut and crossed.

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3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one to two mile radius are shown on Exhibit "B" and "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 fresh 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 in the SW $\frac{1}{4}$ Sec. 12 T16S, R27E. This is on top of the Diamond Mound. 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 regulation 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.

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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 1 - 2' cut on the east and will be filled to the west.
- 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 materila 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. This location is on private surface and if the proposed well is non-productive an agreement has been made with the surface owner that all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be followed 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 level with a gentle slope to the west from an elevation of 3518.2' at about 10' in 400'.
- B. Soil: The topsoil at the wellsite is a loamy clay underlain with gypsum with an occasional outcrop of gypsum.
- C. Flora and Fauna: The vegetative cover consists of very sparse miscellaneous grasses, including Tobosa, Grama, Three-on and also Mesquite, yucca and cactus and other miscellaneous desert flowers and weeds. The only wildlife observed were lizards and jackrabbits, 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, except for a small intermittent pond shown as White Lake in Sec. 35, T15S, R27 E, on Exhibit "B".

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O. G. D.
ARTESIA OFFICE

11. OTHER INFORMATION cont.....:

- E. Residences and other Structures: The Merritt ranch house is approximately 2,000' Northwest of the wellsite. There are no other structures or windmills in the immediate vicinity of the well site.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed access road and well site is on private surface with Federal minerals. An agreement has been made with the surface owner to cross his land 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:

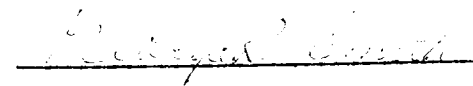
Dan Lough
830 W. Gore
Lovington, New Mexico 88260
Office Phone: (505) 396-5391
Home Phone: (505) 396-4371

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.

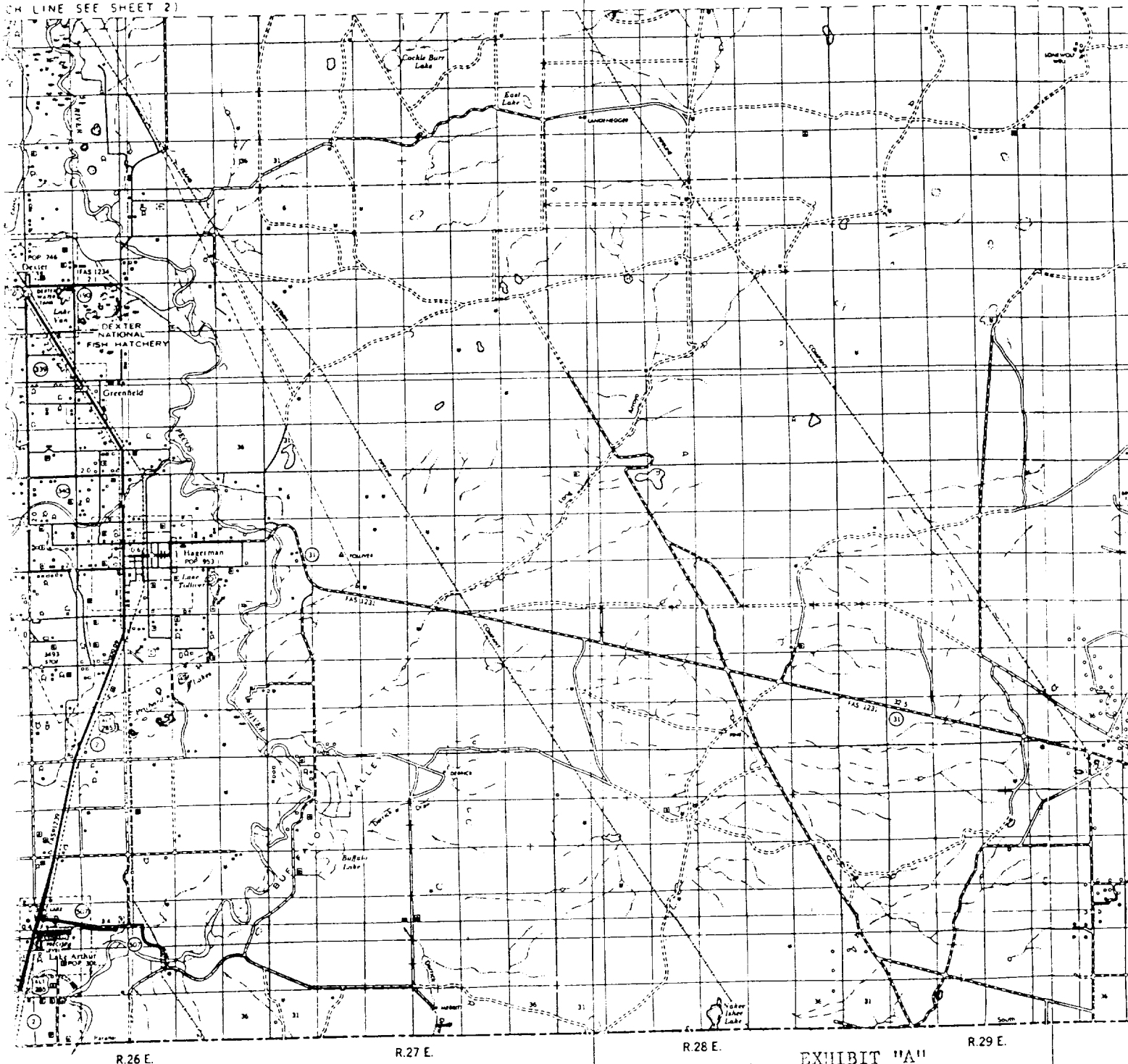
September 2, 1980


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

104°00'

O. C. D.
ARTESIA, OFFICE

ON LINE SEE SHEET 2)



R.26 E.

R.27 E.

R.28 E.

R.29 E.

EXHIBIT "A"

READ & STEVENS, INC.

Toles Federal Well No. 1

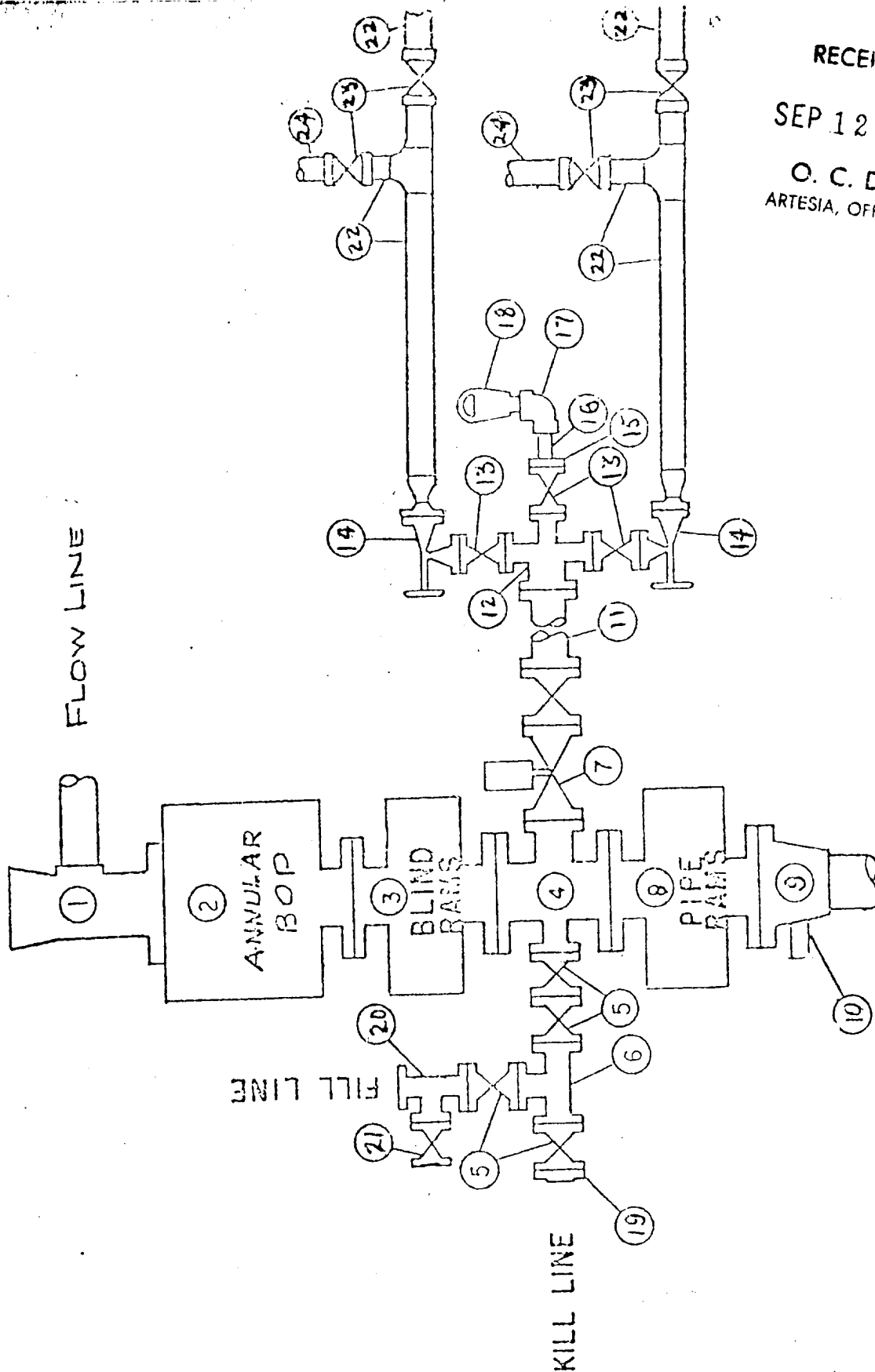
660' FSL & 1980' FEL, Sec. 34, T15S, R27E

Paved Road:

Existing Access Roads:

Proposed Access Road: _____

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



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EXHIBIT "D"
 READ & STEVENS, INC.
 BLOW OUT PREVENTER SPEC.
 Toles Federal Well No. 1
 Chaves County, New Mexico

10/15/74

WEK MILLING CO., INC. - RIG 2
EQUIPMENT DESCRIPTION

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W. S. A.
ALBERTA, CANADA

Equipment should be at least 3,000 psi WP or higher unless otherwise specified.

Bell nipple.

Hydril bag type preventer

Ram type pressure operated blowout preventer with blind rams.

Flanged spool with one 3-inch and one 2-inch (minimum) outlet.

2-inch (minimum) flanged plug or gate valve.

2-inch by 2-inch by 2-inch (minimum) flanged tee.

3-inch gate valve.

Ram type pressure operated blowout preventer with pipe rams.

Flanged type casing head with one side outlet.

2-inch threaded (or flanged) plug or gate valve.

Flanged on 5000# WP, threaded on 3000# WP or less.

3-inch flanged spacer spool.

3-inch by 2-inch by 2-inch by 2-inch flanged cross.

2-inch flanged plug or gate valve.

2-inch flanged adjustable choke.

2-inch threaded flange.

2-inch XXH nipple.

2-inch forged steel 90° Ell.

Cameron (or equal.) threaded pressure gage.

Threaded flange.

2-inch flanged tee.

2-inch flanged plug or gate valve.

2½-inch pipe, 300' to pit, anchored.

2½-inch SE valve.

2½-inch line to steel pit or separator.

TES:

Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.

The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.

Kill line is for emergency use only. This connection shall not be used for filling.

Replacement pipe rams and blind rams shall be on location at all times.

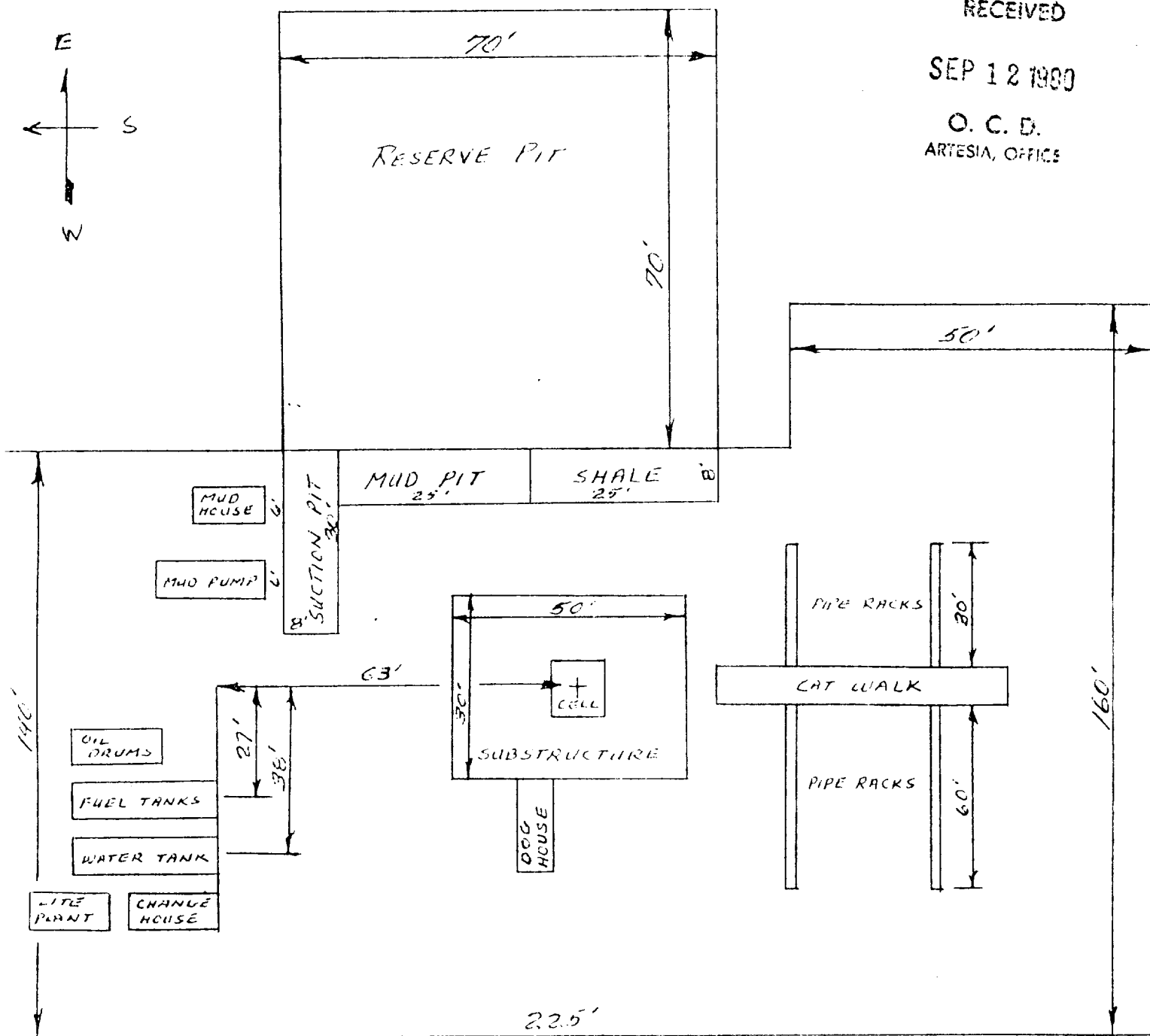
Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.

Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

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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