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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-23269

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
POLLUX, LTD. / O. C. D. ARTESIA, OFFICE

3. ADDRESS OF OPERATOR
2905 SOUTH MONACO, DENVER, COLORADO 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
1980' FNL AND 660' FEL OF SECTION 27

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
9 MILES SOUTHWEST OF CARLSBAD, 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
560

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.
11,000

19. PROPOSED DEPTH
11,000

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3608.5 GR

22. APPROX. DATE WORK WILL START*
MARCH 31, 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# H-40	400	CIRCULATE
12-1/4"	8-5/8"	32# K-55	2200	CIRCULATE
7-7/8"	5-1/2"	17&20# N-80	11,000	450 SACKS

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA
BOP SKETCH
SURFACE USE AND OPERATIONS PLAN

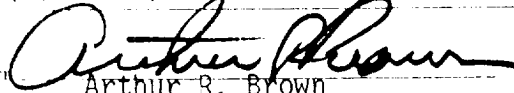
GAS IS NOT COMMITTED.

DUE TO RIG SHORTAGE, CABLE TOOLS MAY BE USED TO DRILL SURFACE HOLE

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MAR 26 1980

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present production 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
Pollux, Ltd. DATE March 26, 1980

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE 3-31-80

APPROVED BY TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO CONSERVATION COMMISSION
WILL LOCATION AND APPEAL DECISION

Pollux, Ltd.,

Rock Tank Fed. Com.

1

27th 25th

Eddy

1980

North

East

30th

Morrow

Wildcat

320

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APR 4 1980

O. C. D.

ARTESIA, OFFICE

To be communitized

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MAR 26 1980

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Arthur R. Brown

Arthur R. Brown

Agent for

POLLUX, LTD.

MARCH 26, 1980

MARCH 22, 1980

John W. West

JOHN W. WEST

PATRICK A. ROMERO

Ronald J. Edson

678

6888

1243



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

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APR 4 1980

O. C. D.
ARTESIA, OFFICE

March 31, 1980

Pollux, Ltd.
2905 South Monaco
Denver, Colorado 80222

Gentlemen:

POLLUX, LTD.

N.E. Rock Tank Fed Com No. 1
1980 FNL 660 FEL Sec. 27 T.22S R.25E
Eddy County Lease No. NM 11462

Above Data Required on Well Sign

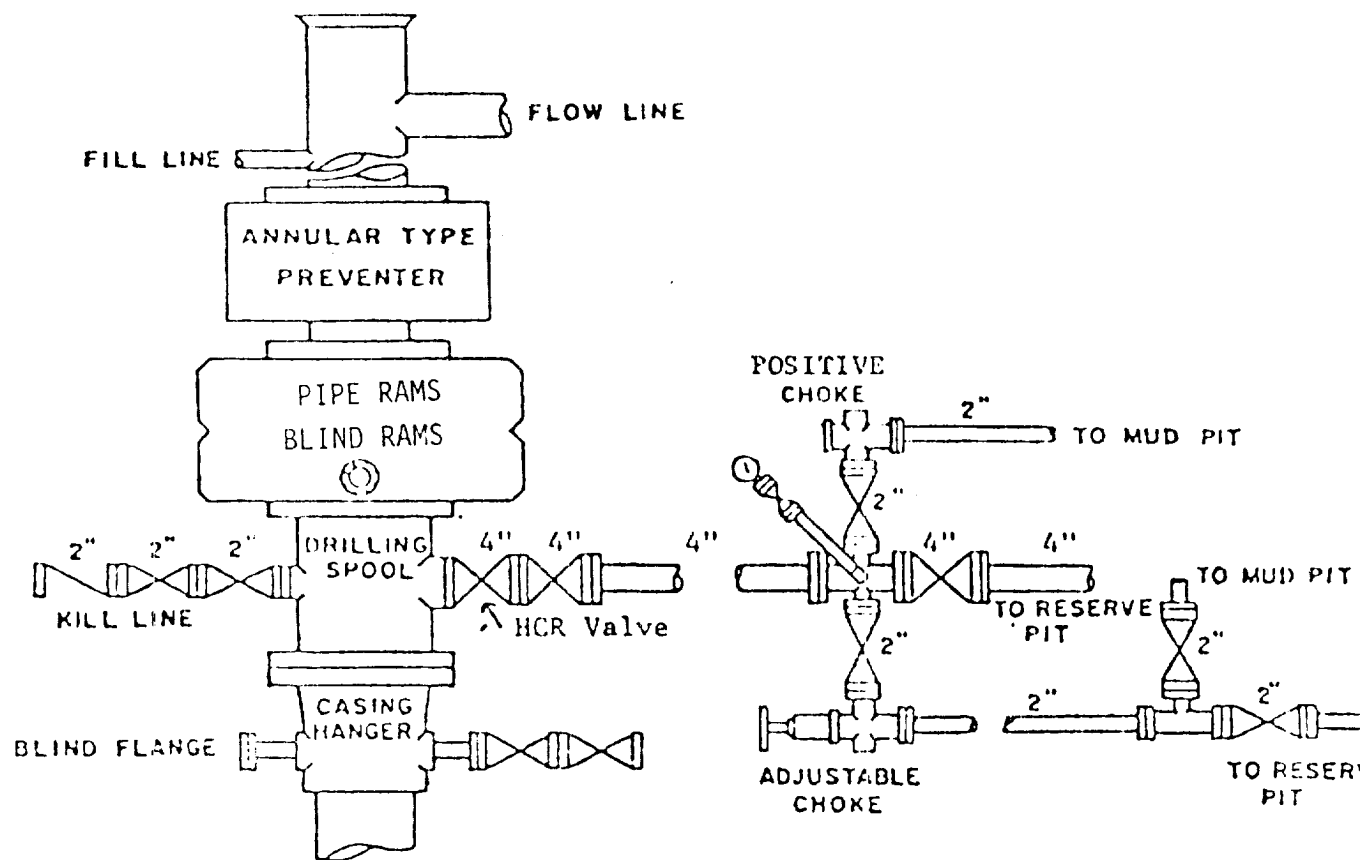
Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 11,000 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
4. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
6. 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.
7. A kelly cock will be installed and maintained in operable condition.

8. After setting the 8-5/8" casing string and before drilling into the Wolfcamp 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.
9. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp 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.
10. Notify the Survey by telephone 24 hours prior to spudding well.
11. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.
12. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.
13. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart
Acting District Engineer



EOP STACK

RAM TYPE PREVENTERS
5000 PSI WORKING PRESSURE

ANNULAR TYPE PREVENTER
3000 PSI WORKING PRESSURE

SUPPLEMENTAL DRILLING DATA

POLLUX, LTD.
WELL NO.1 NE ROCK TANK FEDERAL COM

1. SURFACE FORMATION: Tansil.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Delaware	2200
Bone Springs	4700
Wolfcamp	7800
Cisco	8500
Strawn	9500
Atoka	9800
Morrow	10,500
Barnett	11,000

3. ANTICIPATED POSSIBLE WATER AND HYDROCARBON BEARING ZONES:

Fresh Water	Capitan Reef
Gas	Morrow

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing program is shown on Form 9-331 C.

Cement for surface casing will be approximately 500 sacks of Class "C". Cement to circulate.

Cement for intermediate casing will be approximately 800 sacks of "Light" tailed in with 200 sacks of Class "C". Cement to circulate.

Cement for production casing will be approximately 450 sacks of Class "H".

Cement quantities and additives may be varied to suit well conditions at the time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout preventer stack will consist of two 5000 psi working pressure ram type preventers and one 3000 psi working pressure annular type preventer.

Sketch of BOP stack is attached.

6. CIRCULATING MEDIUM:

Surface to 400 feet: Fresh water with gel or lime as needed for viscosity control.

400 to 2200 feet: Fresh water with gel as needed for viscosity control.

2200 to Total Depth: Water base circulating medium treated as necessary for control of pH and water-loss. Weighted as necessary for well control.

7. AUXILIARY EQUIPMENT:

Drill string safety valves will be maintained on the rig floor in the open position while drilling operations are in progress.

8. TESTING, LOGGING AND CORING PROGRAMS:

Drill stem tests will be made when samples and drilling rate data are sufficient to indicate a possible pay zone.

It is planned that electric logs will include a Compensated Neutron Formation Density log and Dual Laterlog.

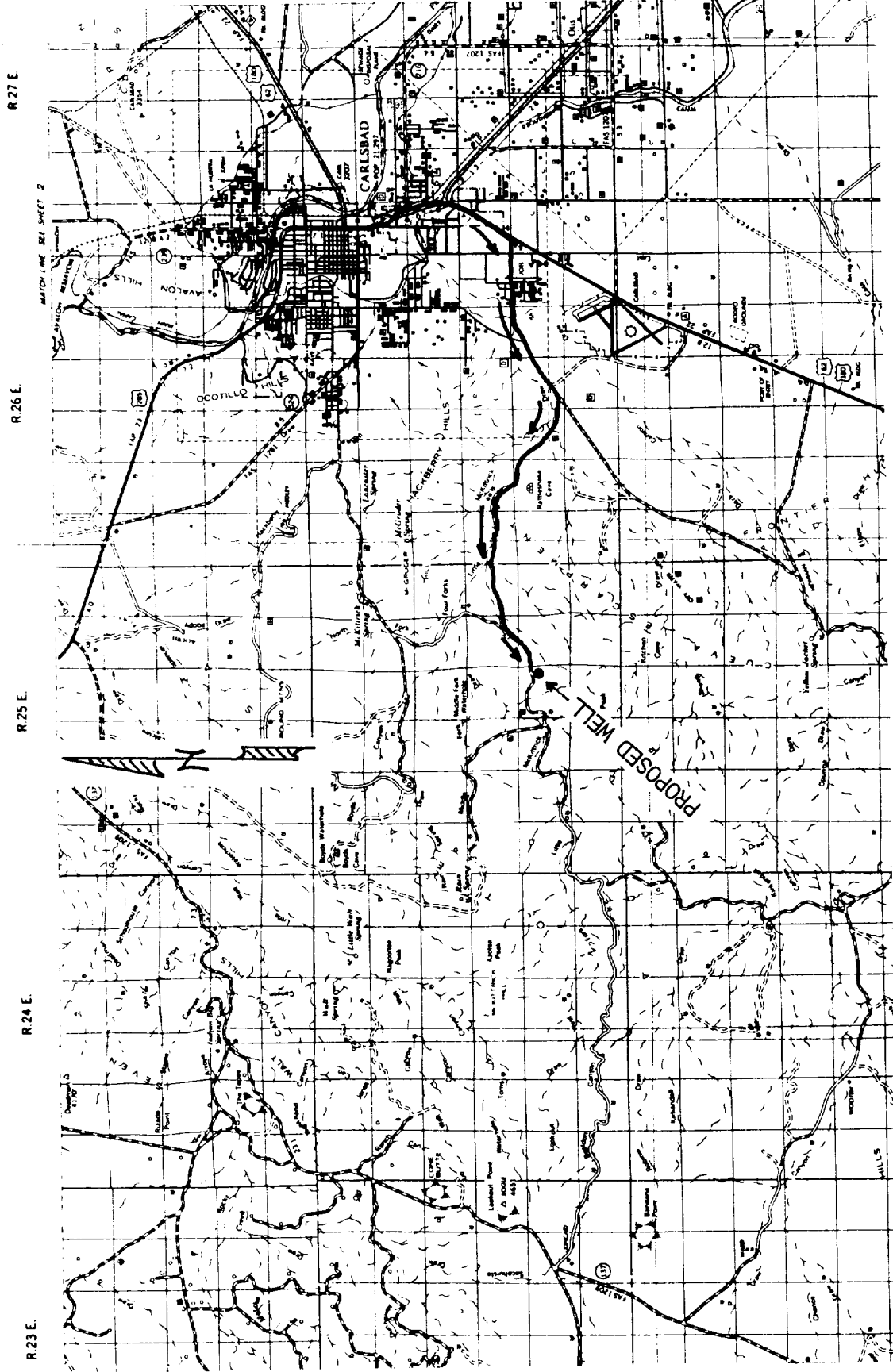
No cores are planned.

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE GAS:

Abnormal pressures may be present in the Atoka and Morrow formations.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence on or before March 31, 1980, with drilling and completion operations lasting about 90 days.



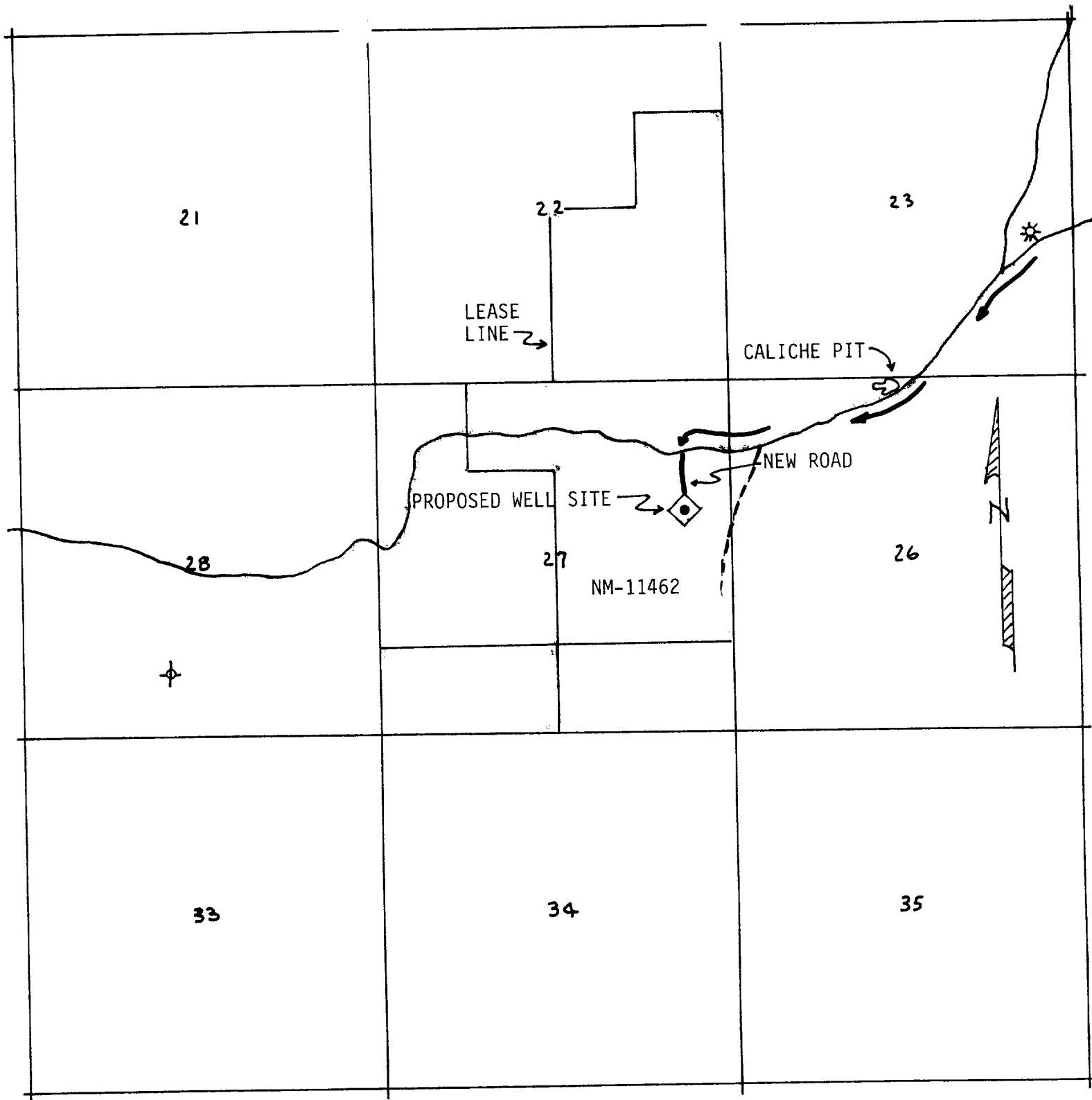
ATTACHMENT "A"

POLLUX, LTD.

WELL NO.1 NE ROCK TANK FEDERAL COM

1980'FNL & 660'FEL SEC.27, T.22 S., R.25 E.

EDDY COUNTY, NM SCALE: 1" = 3 MI.



LEGEND:

- Proposed Well
- ⊛ Gas Well
- ⊕ Plugged Well
- New Road
- Existing Good Caliche Road
- Two-Track Road

ATTACHMENT "B"

POLLUX, LTD.

WELL NO.1 NE ROCK TANK FEDERAL COM
 1980'FNL & 660'FEL SEC.27, T.22 S., R.25 E.
 EDDY COUNTY, NM SCALE: 1" = 2000'

SURFACE USE AND OPERATIONS PLAN

RECEIVED

FOR

MAR 26 1980

**U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO**

POLLUX, LTD.

WELL NO.1 NE ROCK TANK FEDERAL COM
1980'FNL & 660'FEL SEC.27, T.22 S., R.25 E.
EDDY COUNTY, NEW MEXICO

LOCATED: 9 air miles southwest of Carlsbad, New Mexico.

FEDERAL LEASE NUMBER: NM 11462.

LEASE ISSUED: April 1, 1970, for ten years. Lease expires
March 31, 1980, unless diligent drilling operations
are in progress on such date and the next year
lease rental has been timely paid.

RECORD LESSEE: Holly Energy (7/8) Read and Stevens (1/8)

OPERATOR'S AUTHORITY: Designated operator.

ACRES IN LEASE: 560.

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: Laurie Jo Kincaid
1050 Standpipe Road
Carlsbad, New Mexico 88220

POOL: Wildcat. Statewide Rules.

ATTACHMENTS: A. General Road Map
B. Plat Showing Existing Wells and Existing Roads
C. Drilling Rig Layout

1. EXISTING ROADS:

- A. Attachment "A" is a portion of a road map showing the location of the proposed well as staked. To go to the well site from Carlsbad, New Mexico, go south on US 62-180 3.6 miles (Stuckeys) and turn west off highway onto a paved road (Hidalgo). Go west and southwest 3.4 miles and turn right off paved road onto a good caliche road. From this point, go 6.2 miles, passing a ranch house at 2.5 miles, a gas well at 5.1 miles and a caliche pit at 5.6 miles. The proposed well site is about 850 feet south of the 6.2-mile point.
- B. Attachment "B" is a plat showing existing roads in the vicinity of the well site. Existing roads are color coded on the plat.
- C. Any repair to the existing caliche road does not appear necessary at the present time.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be 12 feet wide and approximately 650 feet long. The new road is labeled and color coded red on Attachment "B". The center line of the proposed new road, from the beginning to the well site, has been staked and flagged with the stakes being visible from any one to the next.
- B. Surfacing Material: Six inches of caliche, watered, compacted and graded.
- C. Maximum Grade: Three percent.
- D. Turnouts: None required.
- E. Drainage Design: New road will be crowned with drainage to both sides.
- F. Culverts: None required.
- G. Cuts and Fills: None required for access road.
- H. Gates and Cattle Guards: None required. The new road does not involve any fences.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells in the area are shown on Attachment "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. This lease is undeveloped at present and there are no production facilities on the lease.
- B. If the proposed well is productive, necessary production facilities will be located on the well pad and no additional surface disturbance will be necessary.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is not contemplated that a water well will be drilled. Water necessary for drilling operations will be purchased and moved to the well site by temporary pipeline layed on the ground or by truck using existing and proposed roads shown on Attachment "B".

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. There is a caliche pit on Federal land in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.26, T. 22 S., R. 25 E. Location of the caliche pit is shown on Attachment "B". Caliche needed for surfacing the road and well pad will be trucked from this pit over existing and proposed roads.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. 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. Location of the trash pit is shown on Attachment "C".

- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Attachment "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit and trash pit, and the location of major rig components.
- B. Clearing and levelling of the well site will be required. There will be an approximate four-foot cut at the southern part of the well site and a corresponding fill in the northern part of the well site.
- C. The pad and pit area has been staked and flagged.

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 will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible.

11. OTHER INFORMATION:

- A. Topography: The land surface in this area is gently sloping and undulating. Regionally, land slope is to the north.
- B. Soil: Top soil at the well site is a shallow, gravelly, sandy loam.

- C. Flora and Fauna: The vegetative cover is sparse and consists of mesquite, yucca, creosote bush, algerita, greasewood, weeds and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structures: The nearest occupied dwelling, a ranch house, is approximately 1-3/4 miles to the northeast. The nearest windmill is approximately one mile to the west.
- F. Archaeological, Historical and Other Cultural Sites: None observed in the area.
- G. Land Use: Grazing, and hunting in season.
- H. Surface Ownership: Federal.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use and Operations Plan is:

Dalton Kincheloe
859 Petroleum Building
Roswell, New Mexico 88201
Office Phone: 505-622-7246
Home Phone: 505-622-8216

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; that the work associated with the operations proposed herein will be performed by Pollux, Ltd. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

March 26, 1980
Date


Arthur R. Brown, Agent for
POLLUX, LTD.