

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 6 9 41 AM '92 APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK
CABLE ☐ DRILL ☒ DEEPEN ☐
2. NAME OF OPERATOR
Paloma Resources, Inc. ✓
3. ADDRESS AND TELEPHONE NO.
703 E. Berrendo, Roswell, New Mexico 88201
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
330' FSL & 330' FEL
At proposed prod. zone
Same
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approx. 10 miles Southeast of Loco Hills, New Mexico
15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 330'
16. NO. OF ACRES IN LEASE
40
17. NO. OF ACRES ASSIGNED
TO THIS WELL
40
18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 330'
19. PROPOSED DEPTH
4100'
20. ROTARY OR CABLE TOOLS
rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3640' GR
22. APPROX. DATE WORK WILL START*
ASAP

5. LEASE DESIGNATION AND SERIAL NO.
NM-12212
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME, WELL NO.
Keohane "C" Fed.
9. API WELL NO.
#2
10. FIELD AND POOL, OR WILDCAT
Mugart (yates, 7-Riv, GR)
11. SEC., T., R., M., OR BLM.
AND SURVEY OR AREA
Sec. 21-T18S-R31E
12. COUNTY OR PARISH
Eddy
13. STATE
NM

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	680'	circulate to surface
7 7/8"	5 1/2"	15.5#	4100'	500 sx.-suff. to cover pays +/- 200' into surface casing

MUD PROGRAM
0-680' F.W. Gel, LCM, Spud Mud
680'-2480' Brine water
2480'-4100' Brine, Starch, Salt Gel.

BOP PROGRAM
BOP's will be installed at the onset of drilling. They will consist of a double ram hydraulic BOP with a working pressure rating of 3000#. BOP's will be tested daily. See attached diagram for BOP.

Post ID-1
4-12-92
New Loc x API

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.

SIGNED [Signature] TITLE V.P. Operations DATE 12/23/91

(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 _____ TITLE _____ DATE 3-31-92

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

3640

APPLICATION FOR PERMIT TO DRILL

Paloma Resources, Inc.
Keohane "C" Fed. #32
330' FSL & 330' FEL
Sec. 21-T18S-R31E
Eddy County, New Mexico

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

1. The geologic surface formation is sandy alluvium. The ground elevation is 3640' on the ground level.

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

Anhydrite	630'
Salt	860'
Base of Salt	1975'
Yates	2440'
7-Rivers	2675'
Queen	3166'
Penrose	3478'

3. Estimated depths at which water, oil, or gas formation are expected to be encountered are as follows:

Fresh Water 65'--150'

Oil & Gas 7-rivers, Queen, Penrose from 2675'--3500'

Fresh water zones will be protected by the 8 5/8" casing string which will be cemented back to the surface.

4. Proposed Casing Program:
See Form 3160-3

5. Pressure Control Equipment:
See Form 3160-3 and attached BOP diagram.

6. Mud Program:
See Form 3160-3.

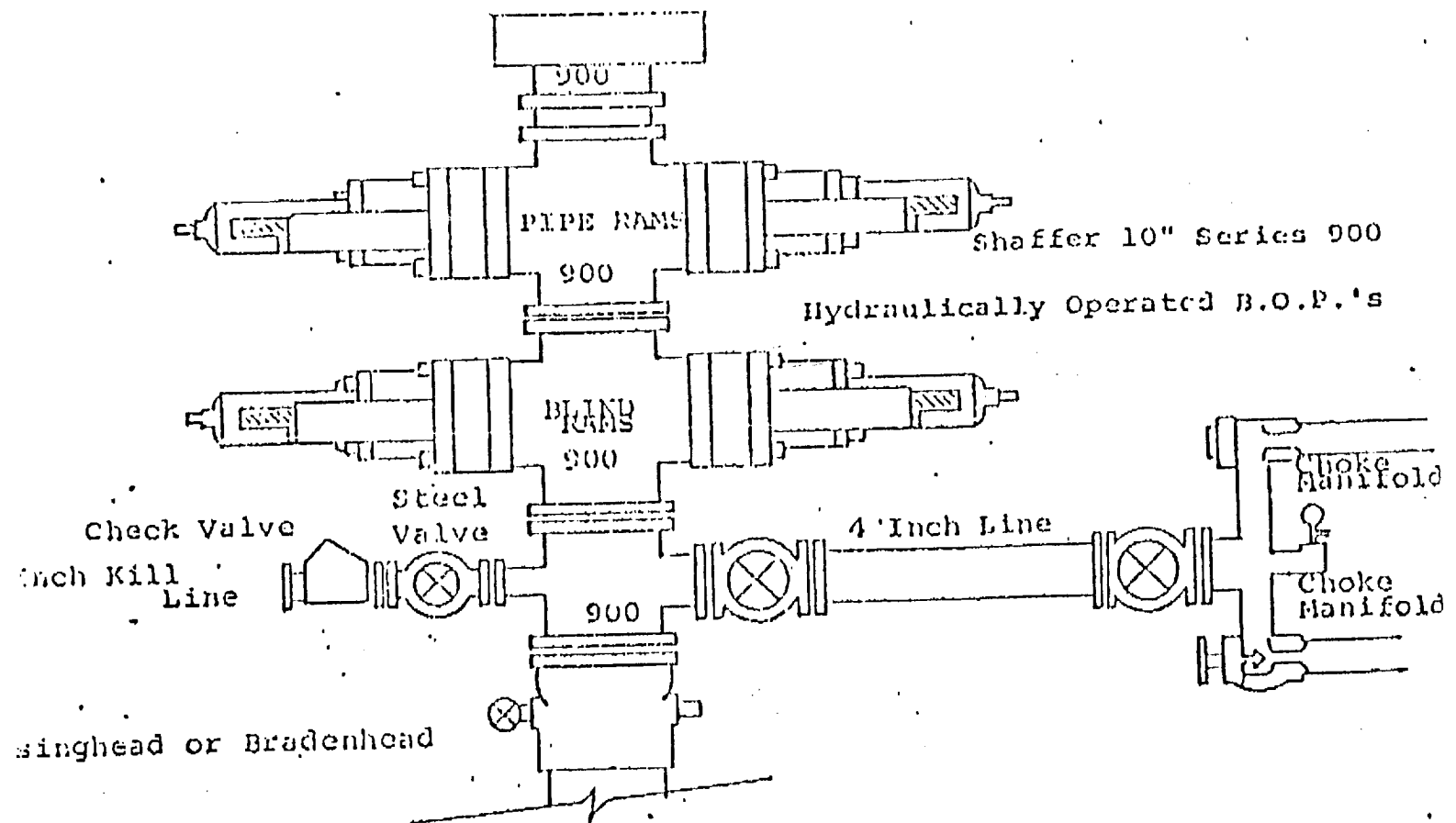
7. Auxilliary Equipment:
Upper & lower Kelly cock valves, Full opening stabbing valve with drill pipe connection, flow sensor, PVT.

8. Testing, Logging, and Coring Program:
Samples: From base of surface casing to TD.
DST's: As warranted from shows in samples.
Coring: None expected.
Logging: CNL-FDC, Gamma Ray, Dual Laterolog, caliper.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated Starting Date:
As soon as possible after approval of APD.

EXHIBIT B



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- All preventers to be hydraulically operated with secondary manual controls installed prior to drilling out from under casing.
- Choke outlet to be a minimum of 4" diameter.
- Kill line to be of all steel construction of 2" minimum diameter.
- All connections from operating manifolds to preventers to be all steel.
- hole or tube a minimum of one inch in diameter.
- The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate the B.O.P.'s.
- All connections to and from preventer to have a pressure rating equivalent to that of the B.O.P.'s.
- Inside blowout preventer to be available on rig floor.
- Operating controls located a safe distance from the rig floor.
- Hole must be kept filled on trips below intermediate casing. Operator not responsible for blowouts resulting from not keeping hole full.
- D. P. float must be installed and used below zone of first gas intrusion.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Paloma Resources, Inc.
Keohane "C" Fed. #32
330' FSL & 330' FEL
Sec. 21-T18S-R31E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental affect associated with the operations.

1. EXISTING ROADS

Exhibit A is a portion of the USGS Greenwood Lake Quadrangle showing the well area and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 10 miles southeast of Loco Hills, New Mexico and the access route to the location is indicated in red markings. All roads shall be maintained in a condition equal to that which existed before the start of construction.

From Loco Hills, NM, take Hwy 82 to intersection of Hwy 222. Take Hwy 222 south for approximately 6 miles to lease road. Follow existing lease road to beginning of new lease road south to new drill site. Approximately 330' of new road will be constructed south from the existing lease road to the new wellsite.

2. PLANNED ACCESS ROADS.

- A. The proposed new access road will be 330' in length from the existing road to the northeastern corner of the drill pad. The road will lie in the north-south direction.
- B. The access road will be crowned and ditched to a 12' wide travel surface.
- C. The gradient on all road built will be less than 5%. No turnouts will be necessary on the new access road.
- D. If needed, the road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a nearby local source.
- E. The centerline for the new road has been flagged and is readily visible.
- F. Culverts in the access road will not be used. The road will be constructed to utilize natural drainage of the topography.

3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS.

- A. Water wells: None Known.
- B. Disposal Wells: None Known.
- C. Drilling wells: None within one mile being drilled.
- D. Producing Wells: Several--The closest being within 465'.
- E. As shown on Exhibit "A".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

- A. There are currently production facilities on the Keohane "C" Fed. #1 well which is located 660' FSL & 660' FEL in the same SE/4.
- B. If the well proves to be commercially productive, a flowline will be laid from the planned wellsite to the Keohane "C" Fed. #1 tank battery. This line will be laid along the road right of way. A map or plat showing the well pad facilities and off pad facilities will be submitted.

5. LOCATION AND TYPE OF WATER SUPPLY.

Water will be purchased locally from a private source and trucked over the access roads by a commercial trucking firm and stored in tanks on the wellsite.

6. SOURCE OF CONSTRUCTION MATERIALS.

If needed, construction materials will be obtained from the drill site's excavations or from a local source. These materials will be transported over the access route by truck.

7. METHODS FOR HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted at a later date.
- D. Oil produced during operations will be stored in tanks until sold, & hauled by authorized transporters.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with to the utmost.
- F. Trash, waste paper, garbage and junk will be buried in a sperate trash pit and covered with a minimum of 36 inches of dirt. All waste material will be contained to prevent scattering by the wind.
- G. 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 are required.

9. WELLSITE LAYOUT.

- A. Exhibit C shows teh relative location and dimensions of the well pad, reserve pits, etc.
- B. The location of the surface is slightly sloping.
- C. The reserve pits will be plastic lined.
- D. A 400' X 400' area has been staked and flagged.

10. PLANS FOR RESTIORATION OF THE SURFACE.

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any containing fluids, will be fenced until they are dry and have been levelled.

- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the state will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment of the operations.

11. OTHER INFORMATION.

- A. Topography: The land surface in the vicinity of the wellsite is sandy alluvium. The immediate area of the wellsite is discussed in paragraph 9B above and also in the Archaeological Report.
- B. Flora & Fauna: The vegetative cover on the wellsite consists of mesquite, saltbrush, sand sage, shinnery oak, and miscellaneous desert growth. No wildlife was observed in the area but is probably those typical of semi-arid desert land. The area is used primarily for cattle grazing and access to other production facilities.
- C. Waterways: There are none in the area.
- D. There are no inhabited dwellings in the vicinity.
- E. An archeological study is attached for your information. The surface owner is being notified of our intentions to drill. The minerals are by the federal government.

12. OPERATOR'S REPRESENTATIVE.

The field representatives responsible for assuring compliance with the approved surface use plan are:

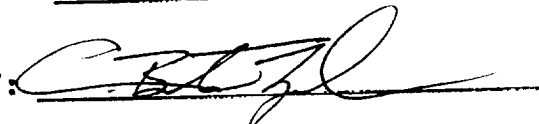
Gene Lee
Paloma Resources, Inc.
703 E. Berrendo
Roswell, New Mexico 88201

(214) 871-5556

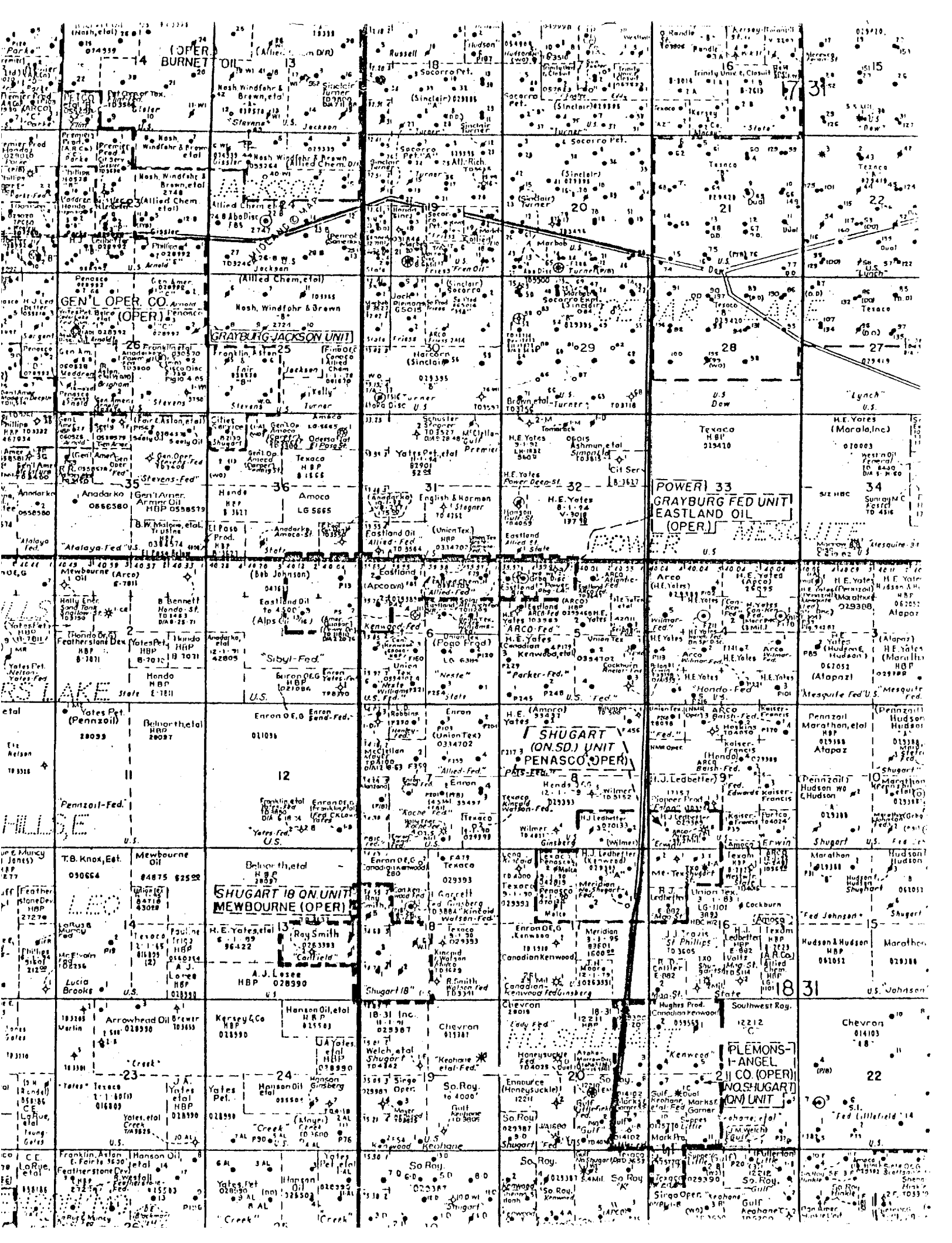
13. CERTIFICATION:

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 this 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 Southwest Reserves Operating Co., Inc. and its contractors and subcontractors in conformity with this plan and conditions under which it is approved.

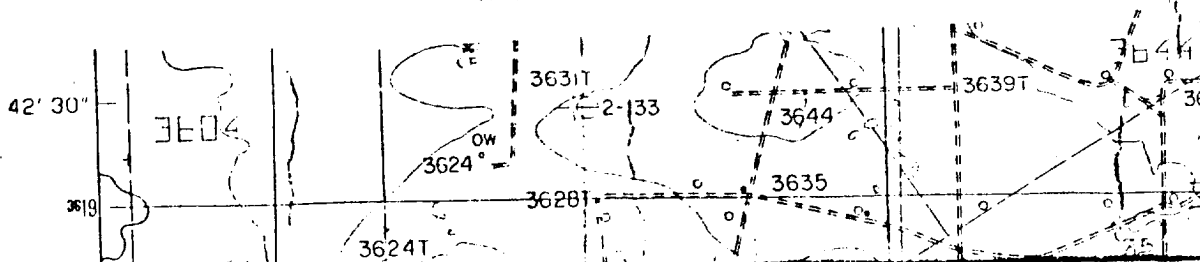
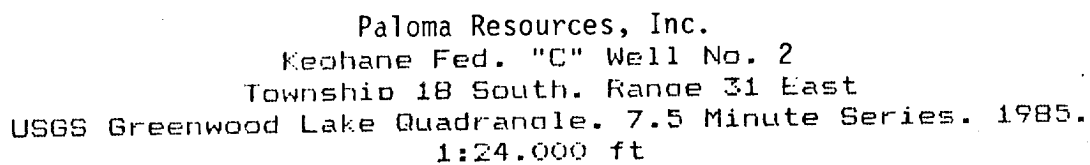
DATE: 11/27/91

BY: 

C. Bruton Lynch
Paloma Resources, Inc.



103° 52' 30"
32° 45' 11"



Paloma Resources, Inc.

WELL LOCATION

SECTION 21, T.18 S., R.31 E., NMPM, EDDY COUNTY,
NEW MEXICO.

R. 31 E.

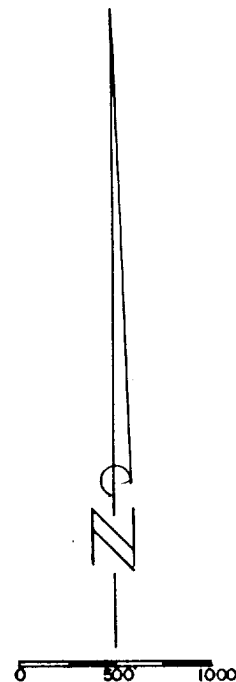
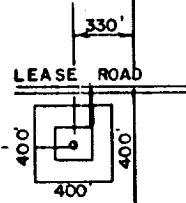
JOB No.

T.
18
S.

— 21 —

KEOHANE FEDERAL "C" WELL #2
330'/S & 330'/E
SEC.21, T.18 S., R.31 E.,
ELEVATION 3640
SANDY TERRAIN

U.S.A.



RECEIVED

RECEIVED

**ATTACHMENT
TO**

APPLICATION FOR PERMIT TO DRILL

JAN 31 12 53 PM '92

CAL
APR 1 1992
Paloma Resources, Inc.
703 E. Berrendo
Roswell, New Mexico 88201

CARI
AREA 1
15

**RE: Keohane "C" Fed. #2
Sec. 21-T18S-R31E**

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. Hydrogen Sulfide Training.

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor approved by the BLM and certified in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in the special maintenance requirements. Use of chemicals to prevent H₂S damage will be discussed also.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures will be emphasized and all personnel will be certified in these areas. Regular checks of all personnel will be done to keep only certified H₂S trained employees on the wellsite.
- C. A copy of the contents and requirements that are contained in the H₂S Drilling Operations Plan as well as the Public Protection Plan.

There will be an initial training session just prior to encountering a known or portable H2S zone (within 3 days or 500') and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the wellsite. All personnel will be required to carry documentation that they have received the proper training.

2. H2S Safety Equipment and Systems

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500' above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S gas. All equipment will be provided by certified companies with certified instructors.

A. Well Control Equipment

1. Flare line with electronic igniter or continuous pilot.
2. Choke manifold with a minimum of one remote choke.
3. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
4. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head, and flare gun with flares.

B. Protective Equipment for Essential Personnel:

1. Mark II Surviveair 30 minute units located in the dog house and at briefing areas, as indicated on well site diagram.

C. H2S Detection and Monitoring Equipment:

1. Two portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 12 PPM are reached.
2. One portable SO2 monitor positioned near flare line.

D. Visual Warning Systems:

1. Wind direction indicators as shown on well site diagram.

2. Caution and Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See examples.

E. Mud Program:

1. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
2. A mud-gas separator and an H2S gas buster will be utilized.

F. Metallurgy:

1. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
2. All elastomers used for packing and seals shall be H2S trim.

G. Communications:

1. Radio communications in company vehicles including mobile, cellular and /or 2-way radios.

H. Well Testing:

1. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface.

WARNING

YOU ARE ENTERING AN H₂S
AREA - AUTHORIZED PERSONNEL ONLY

1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CK WITH AMOCO FOREMAN AT MAIN OFFICE

AMOCO PRODUCTION CO.



1-307-347-6555

