#### SUBMIT IN TRIPLICATE\*

Form approved

	DODMIN IN THEIR	Budget Bureau No. 42-
	(Other instructions on	Buuget Bureau No. 42-
UNITED STATES	reverse side)	20-031-20

DEDICATE OF THE INTEDIOD					30-031	- 20SE	
DEPARTMENT OF THE INTERIOR					5. LEASE DESIGNATION AND SERIAL NO.		
GEOLOGICAL SURVEY					175-598	№ <b>-5981</b>	
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					6. IF INDIAN, ALLOTTER	6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
1a. TYPE OF WORK	L [	DEEPEN	PL	UG BACK 🗆	7. UNIT AGREEMENT N	AME	
b. TYPE OF WELL OIL GA: WELL WE	S OTHER	e-ntry	SINGLE ZONE	MULTIPLE ZONE	S. FARM OR LEASE NAME OF THE PROPERTY OF THE P		
2. NAME OF OPERATOR  James L. Ludwick					9. WELL NO.		
3. ADDRESS OF OPERATOR P.O. BOX 70					10. FIELD AND FOOL, OR WILDCAT  **11dcat Mesquer 1  11. SEC., T., B., M., OR BLK.  AND SURVEY OR AREA  Jec. 26, 120ii, 16ii		
Farmington, New Mexico 87401							
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 660 660 660 660							
At proposed prod. zone							
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*  2 miles No Star Lake Compressor Station			12. COUNTY OR PARISH	13. STATE			
15. DISTANCE FROM PROPOS LOCATION TO NEAREST PROPERTY OR LEASE LI (Also to nearest drig.	NE, FT.	660 •	. NO. OF ACRES IN 2560		17. NO. OF ACRES ASSIGNED TO THIS WELL		
8. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  19. PROPOSED DEPTH 26.50*  20. ROTARY OR CABLE TOOLS  Completely.							
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6710° or		22. APPROX. DATE WORK WILL START*  #hen Approved					
23.		PROPOSED CASING	AND CEMENTIN	G PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT SETTING DEPTH		DEPTH	QUANTITY OF CEMENT		

(Said ATTAUHHAHTA)



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.

venter program, it any.			
Original Signed By: SIGNED CLAUDE C. KENNEDY	TITLE	Agent	DATE 2-27-79
(This space for Federal or State office use)			
PERMIT NO.		APPROVAL DATE	DECELVEN
APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	TITLE		RECELVED
, A			MAR 1 1979

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\*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY DURANGO, COLO.

### JAMES L. LUDWICK

## FORMATION INFORMATION AND DRILLING PRACTICES

WELL:

STAR LAKE #1

LOCATION:

660° FNL & 660° FEL Sec. 26 - T20N-R6W McKinley Co., NM

LEASE NUMBER:

NM-5981



U. S. GEOLOGICAL SURVEY DURANGO, COLO.

- 1. Surface Formation: Kirtland
- 2. Tops from E. Log: Pictured Cliffs 412
  Chacra 785
  Menefee 1545
  Point Lookout 2510
- 3. Estimated depths of expected oil, gas, or water. Will test zone: 2468-78
- 4. Proposed casing program:

Casing as presently in the well:

New 8-5/8 @ 83° cemented 85 sacks

New 4-1/2 @ 2640° cemented 350 sacks

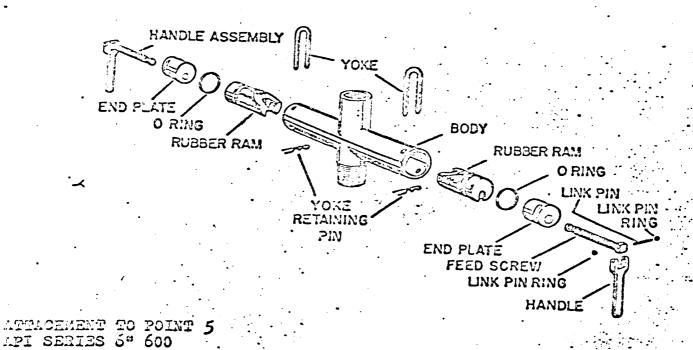
5. Specifications for pressure control equipment.

The attached schematic shows the type of blow out prevention to be used while drilling. The unit will be tested to 800 PSI with rig pump prior to drilling from under surface. Both blind and pipe rams will be tested.

- 6. Drilling Fluid: Clear Water
- 7. Auxiliary equipment:
  - a. Bit float
  - b. Full opening stabbing valve to be used when Kelly is not in string.
- 8. Logging Coring Testing: NONE
- 9. Abnormal temperatures, pressure, or hazardous conditions:
  None expected.
- 10. Starting date:

Anticipated starting date will be 4-1-1979 or when approved Re-entry and zone test will require about 6 days.

# BLOWOUT PREVENTERS



### JAMES L. LUDWICK

### SURFACE DEVELOPMENT PLAN

WELL:

STAR LAKE #1

LOCATION:

660° FNL & 660° FEL Sec. 26 - T20N - R6W McKinley Co., NM

LEASE NUMBER;

NM-5981

1) Existing roads. (Shown in green)

The attached topographic map shows all existing roads within three (3) miles of the proposed location. All roads are in fair condition and will require a minimal amount of work to upgrade them to handle normal drilling activity traffic.

2) Planned access road. (Shown in red)

The new access road will be approximately 20' wide and 1 mile long. No cut, fill, turnouts, or culverts will be needed. No fences, gates or cattle guards will be crossed. Maximum grade will be 5%. Water bars will be used where needed to aid drainage and help prevent erosion.

3) Location of existing wells.

All wells (water, abandoned, disposal, and drilling) are shown and so labeled on the attached topographic map.

4) Location of existing production facilities.

All production facilities are to be contained within the proposed location.

James L. Ludwick does not own or control any tank batteries, production facilities or production, gathering and service lines within three miles of the proposed location.

5) Location and type of water supply.

Water for drilling will be trucked from Chapman's water hole, approximately 35 miles northwest of the location. This water is privately owned.

6) Source of construction material.

Any construction material required for road or location will be excess material accumulated during building of such sites.

7) Methods of handling waste material.

(Refer to attached well site layout.)

All material that can be safely burned will be so disposed when weather conditions permit.

All nonburnable waste (drilling fluids, cuttings, chemicals, etc.) will be held in the reserve pit until dry, and then buried. Any oil that accumulates on the pit will be removed prior to leaving the pit to dry. Pits will be fenced during dry out, then completely back-filled with dirt prior to preparing the location for production or abandonment.

Page 2 (cont.)

7) Any solid waste that can not be buried will be taken from the location and properly destroyed.

Al portable chemical toilet will be supplied for human waste.

8) Ancillary facilities.

None planned.

Well site layout.

The attached layout shows the drilling rig with all supporting facilities. Cut and fill, required for pad construction, is also shown.

10) Plans for restoration of surface.

Restoration of the well site and access road will begin within 90 days of well completion, weather permitting.

Should the well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed and leveled. Both road and location will have top soil replaced and will be reseeded when germination can occur.

Should the well be commercial, that portion of location not needed for operation will be repaired as above. The portion of the location needed for daily production operations, and the access road, will be kept in good repair and clean.

In either case, cleanup of the site will include burning any safely burnable material, filling of all pits, and proper disposal of any nonburnable material that can not be safely buried. Any oil that has accumulated on the pits will be trucked away.

11) Other information.

General topography of the area may be seen on the attached map.

This location is one mile west of the Continental Divide at Ceja Del Raton Mesa. The site has a small westerly slope. The area is sandy and is covered with sage brush and native grasses. There is evidence of sheep and small animal life in the area.

Surface at this location belongs to the State of New Mexico.

There are no occupied dwellings in the area.

There were no archaeological or cultural sites visible on the location. The archaeologist's report has been approved as in the well file.

12.

Claude C. Kennedy Consultant 4949 San Pedro, N.E. Suite 47 Albuquerque, New Mexico 87109 Phone: 883-9624

13. 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 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 George E. Coleman, and his contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

December 10, 1978

Original Signed By:

CLAUDE C. KENNERY

Claude C. Kennedy

2-27-79

Original Signal Sys CLAUDE C. MINNEDY

@ RIG MUD PUMP WORKING PIT WORKING RESERVE LOCATION AS BUILT EAST & WEST SIDE WAS LEVEL SOUTH SIDE REQUIRED 2' FILL NORTH SIDE REQUIRED 2'TO 5' CUT NEW SITE LAYOUT: JAMES L. LUDWICK (RE-ENTRY) \*/ STAR LAKE SEC. 26, TZON, REIL 660' FNL, 660' FEL

