

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

Tesoro Petroleum Corporation ✓

## 3. ADDRESS OF OPERATOR

8520 Crownhill, San Antonio, Texas

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

1980' FEL, 2080' FSL

At proposed prod. zone

Same.

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

18 miles N.W. of Carlsbad

## 15. DISTANCE FROM PROPOSED\*

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

660

## 16. NO. OF ACRES IN LEASE

640

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

9400

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3823 Gr.

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½	13-3/8	48	300	Circulate
12½	8-5/8	24	2000	Circulate
7-7/8	5½	17	9400	250 Sx. C1. H.

We propose to drill an undeviated hole to a total depth of 9400'. An evaluation will be with open hole logging and five DST's, two in the Wolfcamp, one in the Canyon, and two in the Morrow. Additional evaluation will be made by mudlogger from 5,000' to total depth, and sidewall cores may be taken after logging. The blowout preventer program is proposed as per the attached diagram.

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

*R. H. Denman*

TITLE

Director of Production Adm.

DATE

August 23, 1973

(This space for Federal or State office use)

*Subject to compliance with well control requirements dated 6-27-73 attached*

APPROVAL DATE

TITLE

DATE

DECLARED WATER BASIN

15 1/8"

NOTIFY USGS IN SUFFICIENT TIME TO WITNESS CEMENTING THE CASING.

\*See Instructions On Reverse Side

CEMENT DEPTH 8 1/8"

CASING MUST BE CIRCULATED

THIS APPROVAL IS VOIDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.  
EXPIRES NOV 30 1973

APPROVED

CONDITIONS OF APPROVAL, IF ANY:

R. L. BEEKMAN  
ACTING DISTRICT ENGINEER



# United States Department of the Interior

## GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210

June 22, 1973

### NOTICE

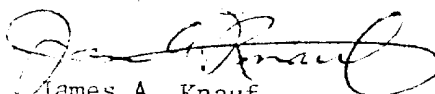
#### DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS DRILLED ON FEDERAL OIL AND GAS LEASES IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blowout preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the 3 7/8" casing string and before drilling into the Wolfecamp 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. In addition, the pipe rams and bag-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.
2. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.
3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.
4. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.
5. 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.
6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.
7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

  
James A. Knauf  
District Engineer

Lease No. NM-4399  
Well TESORO PET. CORP. - No. 1 HUBER 29  
Drillsite 2080/S 1980/E (S) 29-205-24E  
Depth 9400' MORRIS  
Approved AUGUST 31, 1973

**MEXICO OIL CONSERVATION COMMISSION**  
**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.

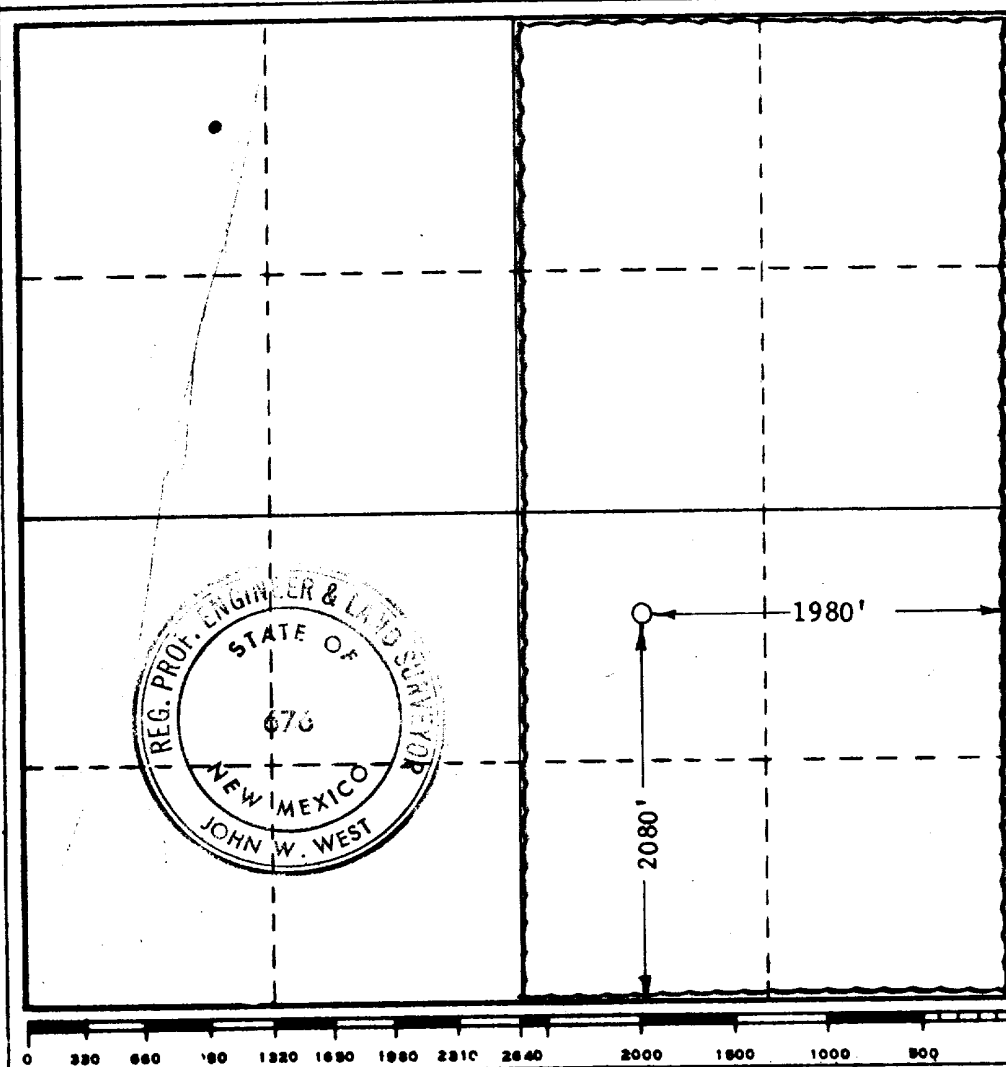
Operator <b>TESORO PETROLEUM CORPORATION</b>			Lease <b>HUBER 29 FEDERAL</b>		Well No. <b>1</b>
Unit Letter <b>J</b>	Section <b>29</b>	Township <b>20 SOUTH</b>	Range <b>24 EAST</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>2080</b> feet from the <b>SOUTH</b> line and <b>1980</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3823'</b>	Producing Formation <b>Wildcat</b>	Pool <b>Undesignated Wildcat</b>		Dedicated Acreage: <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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, force-pooling, etc?

☐ Yes   ☐ No   If answer is "yes," type of consolidation Not applicable.

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.

*R. H. Derman*

Name  
**R. H. Derman**  
 Position  
**Director of Production Adm.**  
 Company  
**Tesoro Petroleum Corporation**  
 Date  
**August 23, 1973**

**RECEIVED**  
**AUG 27 1973**  
 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  
**AUGUST 16, 1973**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **676**

August 23, 1973

Mr. James Knauf  
U.S.G.S.  
Post Office Drawer U  
Artesia, New Mexico 88210

Re: Application to drill Federal Lands  
Section 29-20S-24E, Eddy County,  
New Mexico.

Dear Mr. Knauf:

Attached hereto in quintuplicate is Form 9-331C, Application to Drill the subject well together with related plat.

The environmental requirements currently in effect for drilling on Federal and/or Indian lands are covered by the following:

1. Indicate existing roads: See attached U.S.G.S. topographic map of area.
2. Planned access road: See attached U.S.G.S. topographic map of area.
3. Location of existing wells: None.
4. Lateral roads to well locations: See attached U.S.G.S. topographic map of area.
5. Location of tank batteries and flow lines: The location of the tank battery will be adjacent to the well location. The flow lines have not been indicated, but would connect the well with tank battery facilities approximately 150' from the well head. Sales line connections for oil and/or gas will be determined when purchaser contracts are made.
6. Location and type of water supply: Water supply will be obtained from the round tank well approximately  $\frac{1}{2}$  mile SE of the proposed location.
7. Methods for handling waste disposal: Drill waste will be hauled using available commercial haulers in a manner acceptable to U.S.G.S.
8. Location of camps: None.
9. Location of air strips: None.
10. Rig layout, mud tanks, pits, etcetera: See attached diagram of Marcum Drilling Company, Rig #6.

Mr. James Knouf  
August 23, 1973

Page 2

11. Plans for restoration of the surface: All attempts will be made to restore the original contours of the drilling site and the location re-seeded as required.
12. Additional information: A detailed mud program and blowout preventer diagram are also attached.

If any additional information is desired, please call the undersigned at this number: (512) 824-0261, extension 227.

Yours very truly,

Original Signed By R. H. Denman

R. H. Denman  
Director of Production Administration

Attachments - 6

RHD:dh



A DIVISION OF DRESSER INDUSTRIES

Phone 345 682-4571

# Mud Supply, Inc.

P. O. Box 1704

Midland, Texas 79701

August 6, 1973

Company Tesoro Petroleum Corp. Location SE/4, Sec. 29, T-20-S, R-24-E  
Well Name Tesoro #1, Huber "29" Federal County Eddy County, New Mexico

## DRILLING DEPTHS AND MUD PROPERTIES

0' - 350'	Spud Mud		
350' - 1800'	Viscosity	-	40 - 50 sec/1000cc
	Lost-Circulation Material	-	30 lb/bbl.
	The above properties are necessary in the event of bad lost circulation.		
1800' - 5500'	Viscosity	-	28 - 30 sec/1000cc
	Weight	-	8.4 - 8.5 lbs/gal.
	Filtrate	-	No Control
5500' - 7000'	Viscosity	-	38 - 42 sec/1000cc
	Weight	-	8.6 - 8.8 lbs/gal.
	Filtrate	-	20cc
	Ph	-	11.0 - 11.5
7000' - TD	Viscosity	-	38 - 42 sec/1000cc
	Weight	-	9.0 - 9.2 lbs/gal.
	Filtrate	-	10cc - 20 cc
	Ph	-	11.0 - 11.5
	L. C. M.	-	As needed

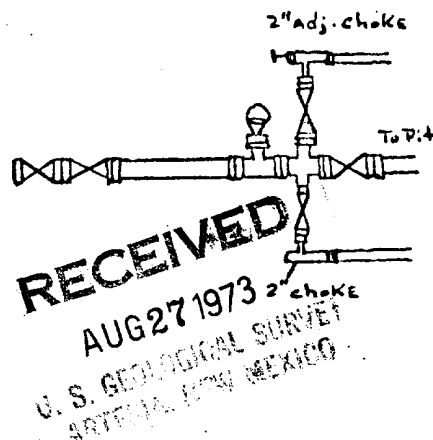
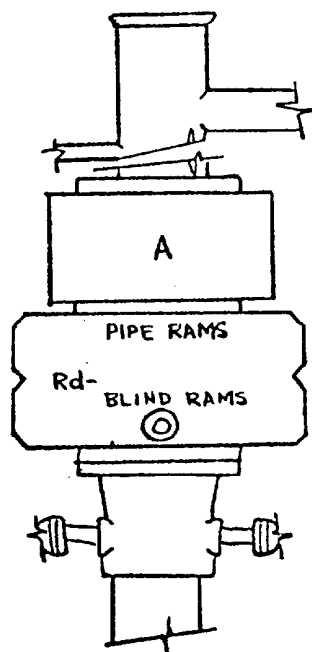
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AUG 27 1973  
SURVEY

MARCUM Drilling Company

Rig No. 6

Blowpreventer Assembly

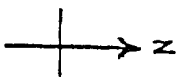
API Bul D-13



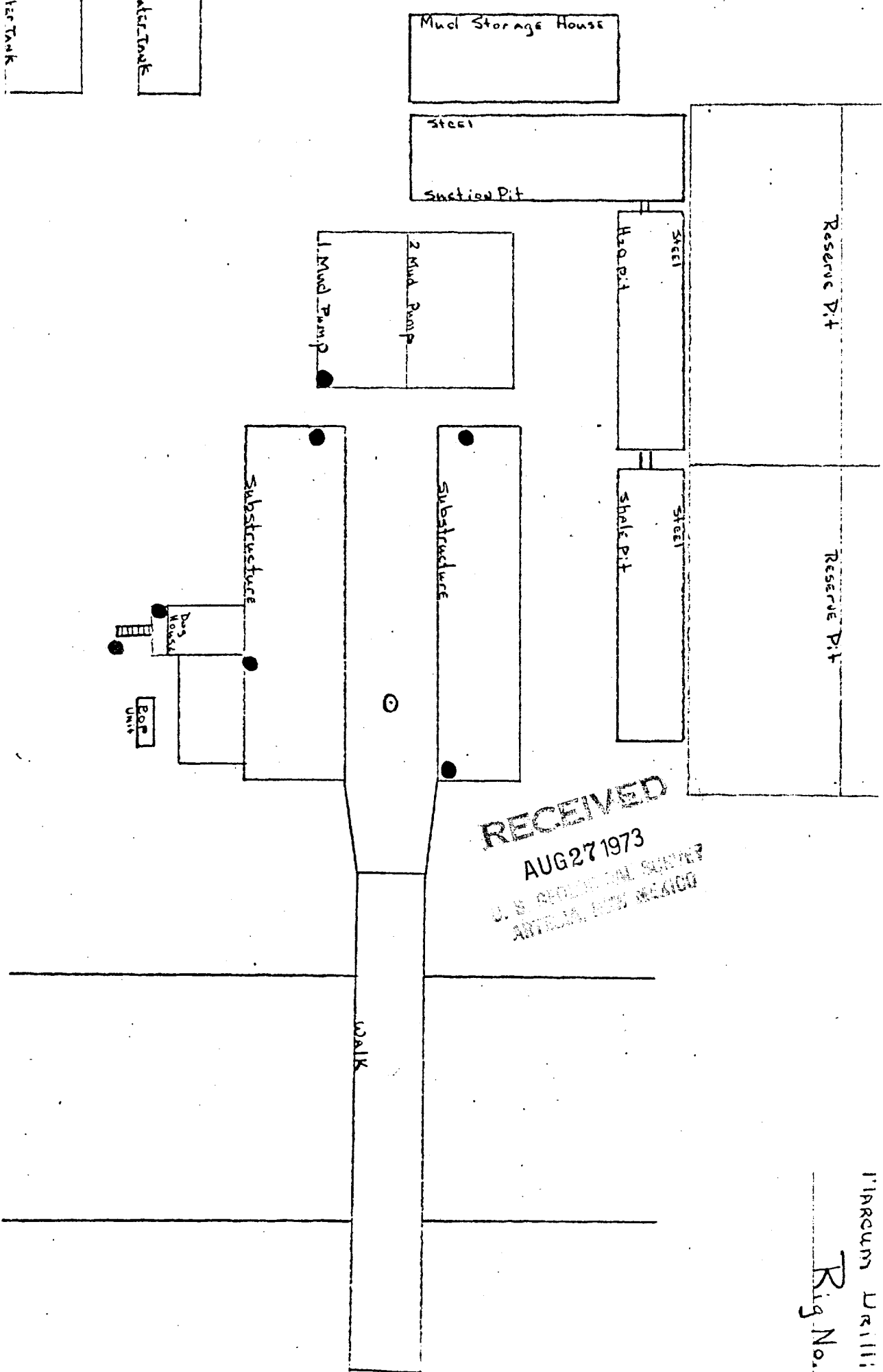
ARRANGEMENT RDA (G optional w/ operator)  
API CLASS SM-10" w/ 4" choke manifold



Vacuum Drilling Loop  
 Rig No. 6



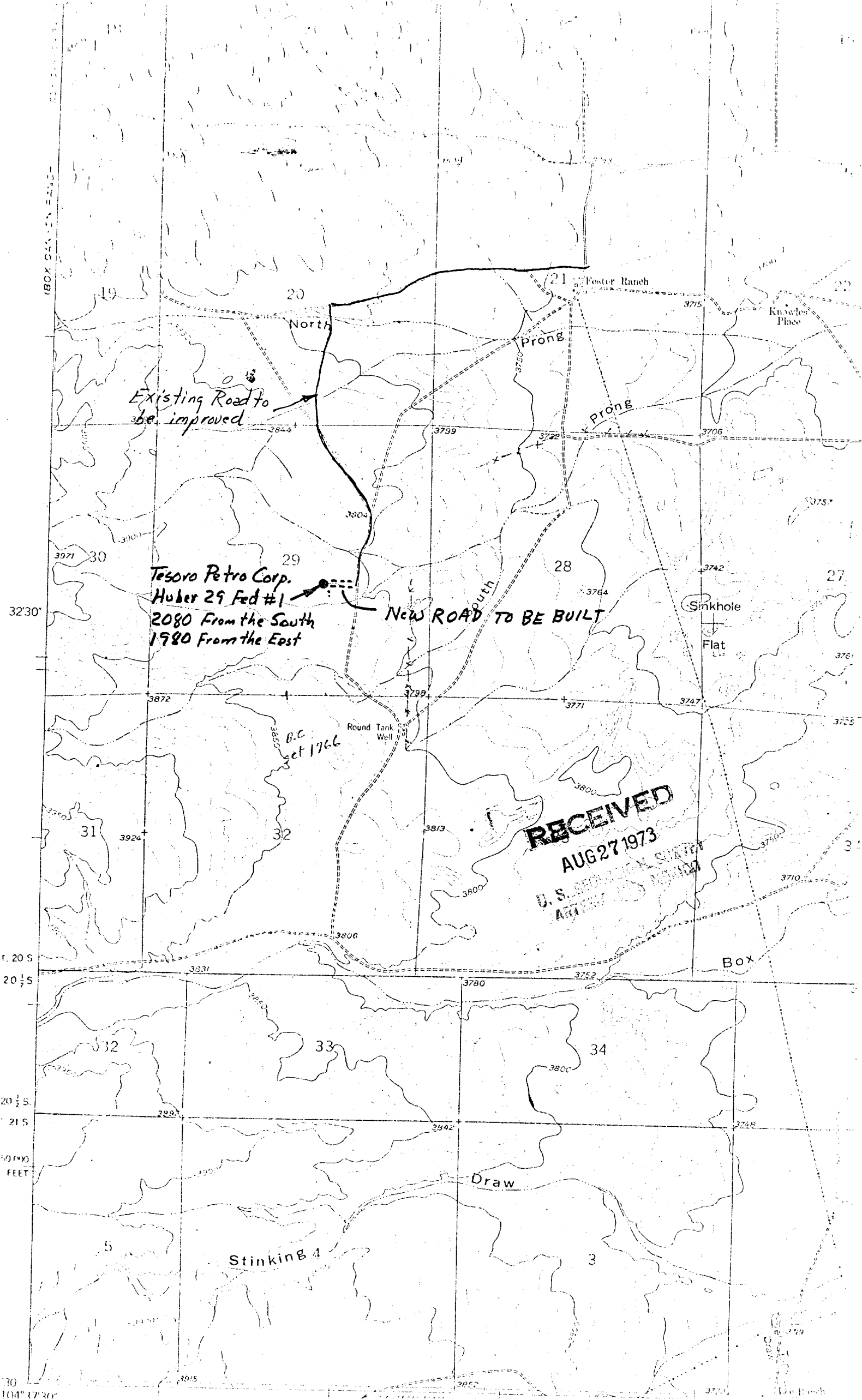
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 ARIZONA, NEW MEXICO



50000L Water Tank  
 50000L Water Tank  
 Light Plant  
 Crew House

Rig supervisor trailer

- Fire Extinguisher  
 Locations



Existing Road to  
be improved

Tesoro Petro Corp.  
Huber 29 Fed #1  
2080 From the South  
1980 From the East

NEW ROAD TO BE BUILT

RECEIVED  
AUG 27 1973  
U. S. GEOLOGICAL SURVEY  
AMERICAN MOUNTAIN

104° 17' 30"

30° 10' 00" S

30° 00' 00" S

29° 50' 00" S

29° 40' 00" S

29° 30' 00" S

29° 20' 00" S

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North

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South

Sinkhole

Flat

Box

Draw

Stinking 4