

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-043-20523  
5. LEASE IDENTIFICATION AND SERIAL NO.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

NM-31580  
6. IF INDIAN, ALLOTTEE OR TRUST NAME

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

7. UNIT AGREEMENT NAME

b. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME

2. NAME OF OPERATOR  
Black Oil - *Marlebru Inc.*

MARLEBRU FEDERAL

3. ADDRESS OF OPERATOR  
P. O. Box 537 - Farmington, New Mexico 87401

9. WELL NO.

2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 330' FNL and 1650' FEL

10. FIELD AND POOL, OR WILDCAT

Wildcat *M.V.*

At proposed prod. zone  
Same

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec 19, T18N, R4W, NMPM

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

12. COUNTY OR PARISH

Sandoval

15. STATE

New Mexico

2 miles West of Torreon Trading Post, 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  
1270.44

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. 2000'

19. PROPOSED DEPTH  
1700'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6684 GR

22. APPROX. DATE WORK WILL START\*  
November 30, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH -	QUANTITY OF CEMENT
10"	8 5/8"	24 #	60'	Sufficient to circulate
6 3/4"	4 1/2" (if needed)	10.5 #	± 1700	80 SX

This action is subject to administrative  
review to 30 CFR 290.

This well will be spud in Quaternary terrace gravels and will be drilled with mud to total depth in the Cretaceous Point Lookout Formation after setting and cementing 8-5/8" surface casing. We will run electric logs at total depth and set 4 1/2" casing for production if warranted. Well will be cored if oil sands are encountered. We estimate the following formation tops:

Cretaceous Menefee Formation - Surface  
Cretaceous Point Lookout Formation - 1700'

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON, D.C. 20548  
WITH ATTACHED  
"GENERAL REQUIREMENTS"

Eastland Oil Petco No. 1 Federal was drilled 1100' of the proposed location and to the same depth. It encountered no abnormal temperatures or pressures. No other potential hazards are anticipated. Pressure control equipment will include 60 feet of 8 1/2" 24.00# surface casing cemented to surface. We do not plan on using a preventer unless required. Bottom hole pressure is anticipated to be 800 PSI or less. Mud program will call for 9.2 lb/gal mud with hydrostatic head of 750 PSI at 1500 feet. Mud weight will be increased if necessary for (OVER PLEASE)

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 *James B. Clark* TITLE *Manager*

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY *James B. Clark* TITLE

CONDITIONS OF APPROVAL, IF ANY

NWCCG

\*See Instructions On Reverse Side



## Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plate, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-711-396

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839-171

higher pressures. Mud will be low solids low water loss.

The well will be mud-logged from surface to T. D. with a

total hydrocarbon sniffer and a hydrogen flame chromatograph:

If oil sands are encountered the well will be cored. At T.D.

the well will be logged with Dual Induction Laterlog and

porosity tool (probably Density Log). The well will be spud

as soon as approval is received, and is anticipated to take

over one week from move-in to logging.

All distances must be from the outer boundaries of the Section.

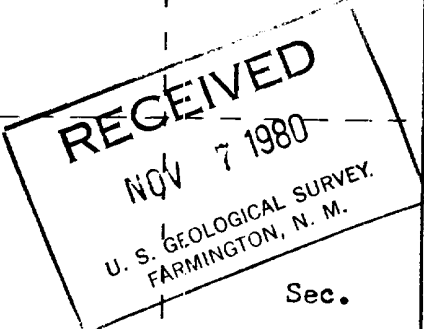
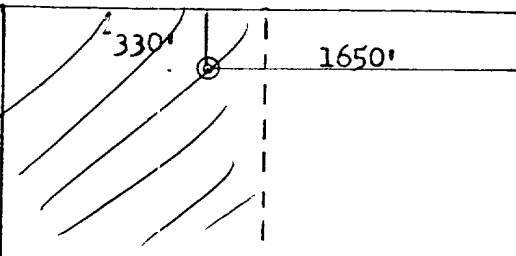
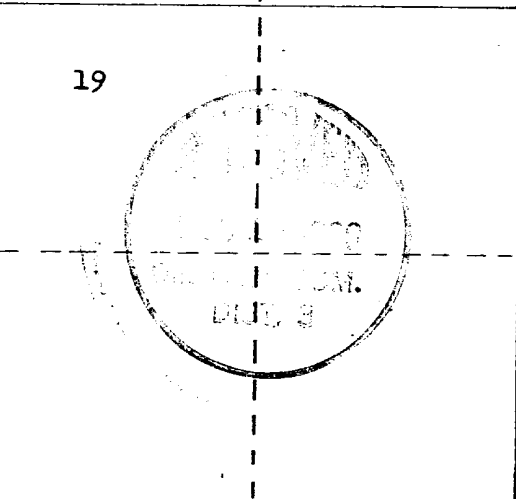
Operator <b>BLACK OIL-COLORADO PLATEAU GEOL. SERVICES</b>		Lease <b>MARLEBRU-FEDERAL</b>		Well No. <b>2</b>
Unit Letter <b>B</b>	Section <b>19</b>	Township <b>18N</b>	Range <b>4W</b>	County <b>Sandoval</b>
Actual Footage Location of Well: <b>330'</b> feet from the <b>North</b> line and <b>1650'</b> feet from the <b>East</b> line				
Ground Level Elev: <b>6684</b>	Producing Formation <b>M.V.</b>	Pool <b>W.C.</b>	Dedicated Acreage: <b>40</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 \_\_\_\_\_

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.

Scale: 1"=1000'

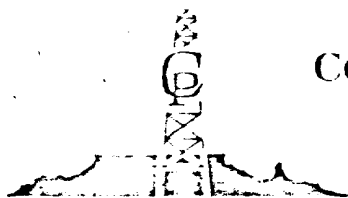
CERTIFICATION

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

Name: John S. Hale  
Position: Surveyor  
Company: John S. Hale & Son  
Date: Oct 15 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.

Date Surveyed: October 15, 1980  
Registered Professional Engineer and Land Surveyor: Fred B. Kerr, Jr.  
Certificate No. 3950



# COLORADO PLATEAU GEOLOGICAL SERVICES, INC.

P. O. Box 537

FARMINGTON, NEW MEXICO 87401

(505) 325-9671

October 14, 1980

- ☆ Surface & Sub-Surface Studies
- ☆ Well Site Supervision
- ☆ Exploration Program Planning & Supervision
- ☆ Property Development and Management

United States Department of Interior  
Geological Survey - Farmington District  
P. O. Box 959  
Farmington, New Mexico 87401

RE: Multi-point surface use & operations plan  
for Black Oil - CPGS, Inc.  
Marlebru Federal No. 2  
NW $\frac{1}{4}$  of NE $\frac{1}{4}$ , Section 19, T. 18 N., R. 4 W.,  
Sandoval County, New Mexico

Gentlemen:

In compliance with governmental requirements, I hereby respectfully submit the following environmental surface use and operating plan data to accompany the application for permit to drill the above referenced test well.

1. Existing roads - Enclosure 1 is a zerox copy of a portion of the USGS 15 minute Albuquerque quadrangle topographic map on a scale 1 to 250,000 which shows the proposed wellsite in relation to Torreon and other small towns in the area. The proposed route from Hiway 44 is shown in red. Access to the location from Torreon Trading Post is by driving westerly 1 $\frac{1}{2}$  miles to Julio Juan Canyon, then northwesterly by  $\frac{1}{2}$  mile of dirt road to the drill site as indicated by the attached vicinity map (Enclosure 2). All other existing roads within a three mile radius are dirt roads in fair to excellent condition.
2. Planned access roads - Existing dirt roads will be utilized to within 1/16 mile of drill-site from which point a minimum width graded access road will be prepared to drillsite. This road will be on a less than 10% grade and will terminate at the drillsite. No culverts or surfacing material will be necessary. No fences will be cut and no additional gates or cattle guards will be needed.
3. Location of tank batteries, production facilities, and production, gathering and service lines. - None at present. If production is established at this well, adequate production facilities including a tank battery will be installed on location immediately southeast of the wellsite. Sumps will be fenced to prevent hazards to wild life and livestock.
4. Location of existing wells - The only existing known water well within a two mile radius is shown on Enclosure No. 2 circled in green.

5. Location and type of water supply (rivers, creeks, lakes, ponds, and wells). - Water for drilling this well will be trucked from a private water pond located in Section 22, Township 18, N., Range 4 West., via existing roads.
6. Source of construction materials. - No additional constructing materials are anticipated. If they are required they will be brought in by existing roads as set out in paragraphs 1 and 2 from Cuba, New Mexico.
7. Methods for handling waste disposal. - A reserve pit will be utilized for waste disposal. Trash will be buried four feet below the surface. Following drilling, mud pits will be fenced and allowed to dry, then filled with surface soil previously excavated. If necessary, produced oil or water will be trucked off the location.
8. Ancillary facilities - None planned at present time.
9. Wellsite layout - Wellsite layout is shown on Enclosure 3. The rig for this operation is small and no extensive cuts or fills are necessary. The location is flat and the only location construction necessary is digging of the pits, and minimum leveling of the surface. A cross section of the location is shown in Enclosure 4.
10. Plans for restoration of the surface. - If oil production is established, adequate production facilities including tank battery will be installed. The location except for wellhead site, production equipment, and necessary access road will be restored to original condition as much as possible by back-filling any cuts and leveling any fill to the original contours. (location is however essentially flat). Reseeding if necessary will be done on areas which have been disturbed. If no production is found following drilling the location will be restored by leveling to original topography and reseeding as necessary. Only the dry holmarker will remain on the original site and the access road will be abandoned and reseeded as required. No reshaping of topography or drainage systems or soil treatments are anticipated inasmuch as the location is on a flat terrace covered by loose, wind blown sand and scarce grass cover.
11. Other information. - The wellsite is located on a topographically flat terrace or pediment. This feature is covered by a loose thin cover of wind blown sand and thin soil. The soil is a brown sandy soil that supports a sparse vegetation of desert grasses and scattered Pinon and Juniper trees. Animal life in the area includes coyotes, rattlesnakes, and cottontail & jack rabbits. The surface is owned by the Federal Government and leased for grazing. No steep hillsides, gullies, water ponds, wells, lakes, or streams; occupied dwellings, or other facilities are in the near promimity of the location. No archeological historical or cultural sites are in the immediate vicinity.

12. Lessees' or operators' representatives - The operators field representative will be Mr. Bruce A. Black. He can be reached at P. O. Box 537, Farmington, New Mexico - Phone 325-9671 or 325-7855.

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 statement 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 Black Oil and Colorado Plateau Geological Services and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Oct 15 - 1980

(Date)

Bruce A. Black

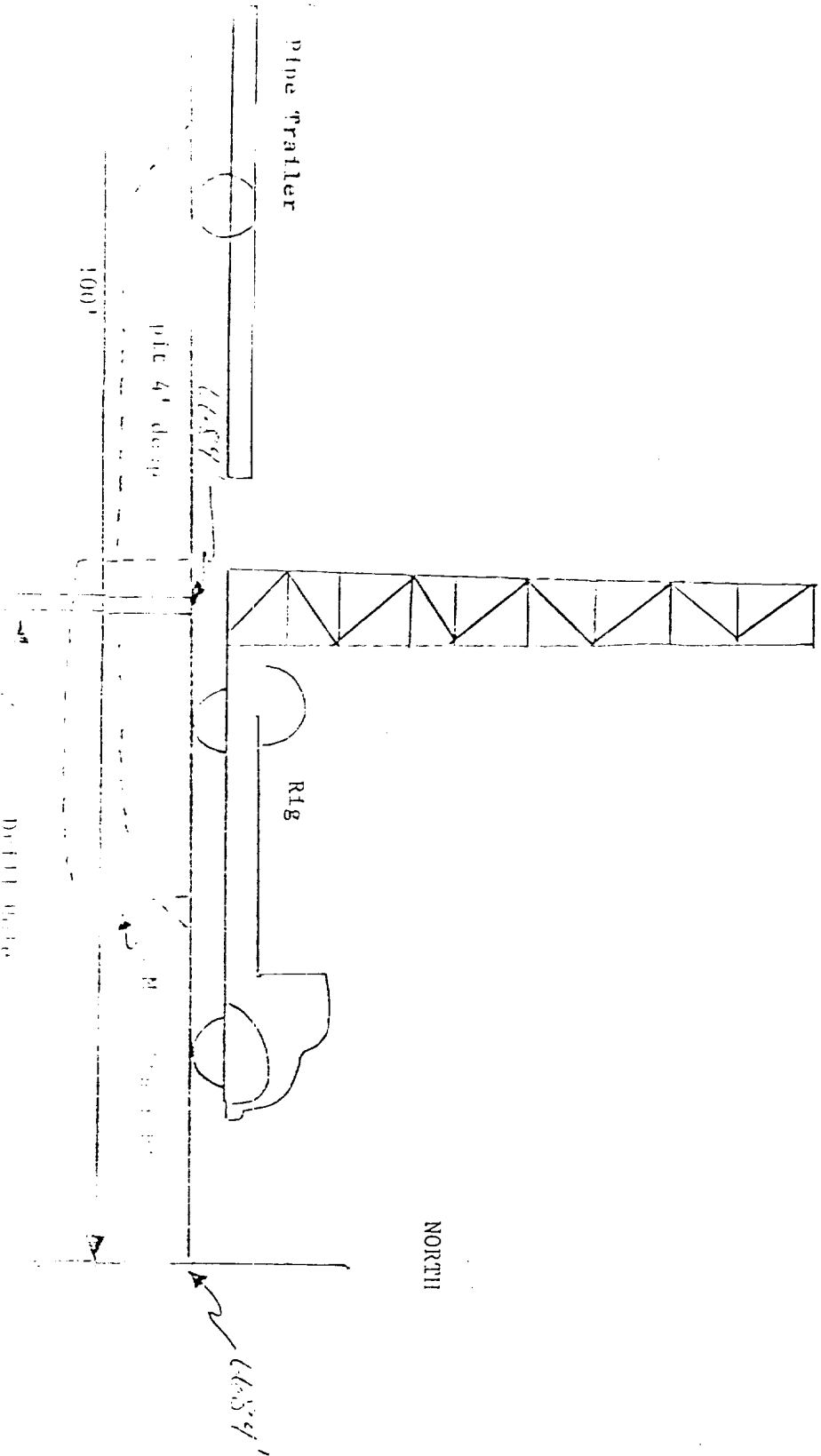
(Name and Title)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name & Title)

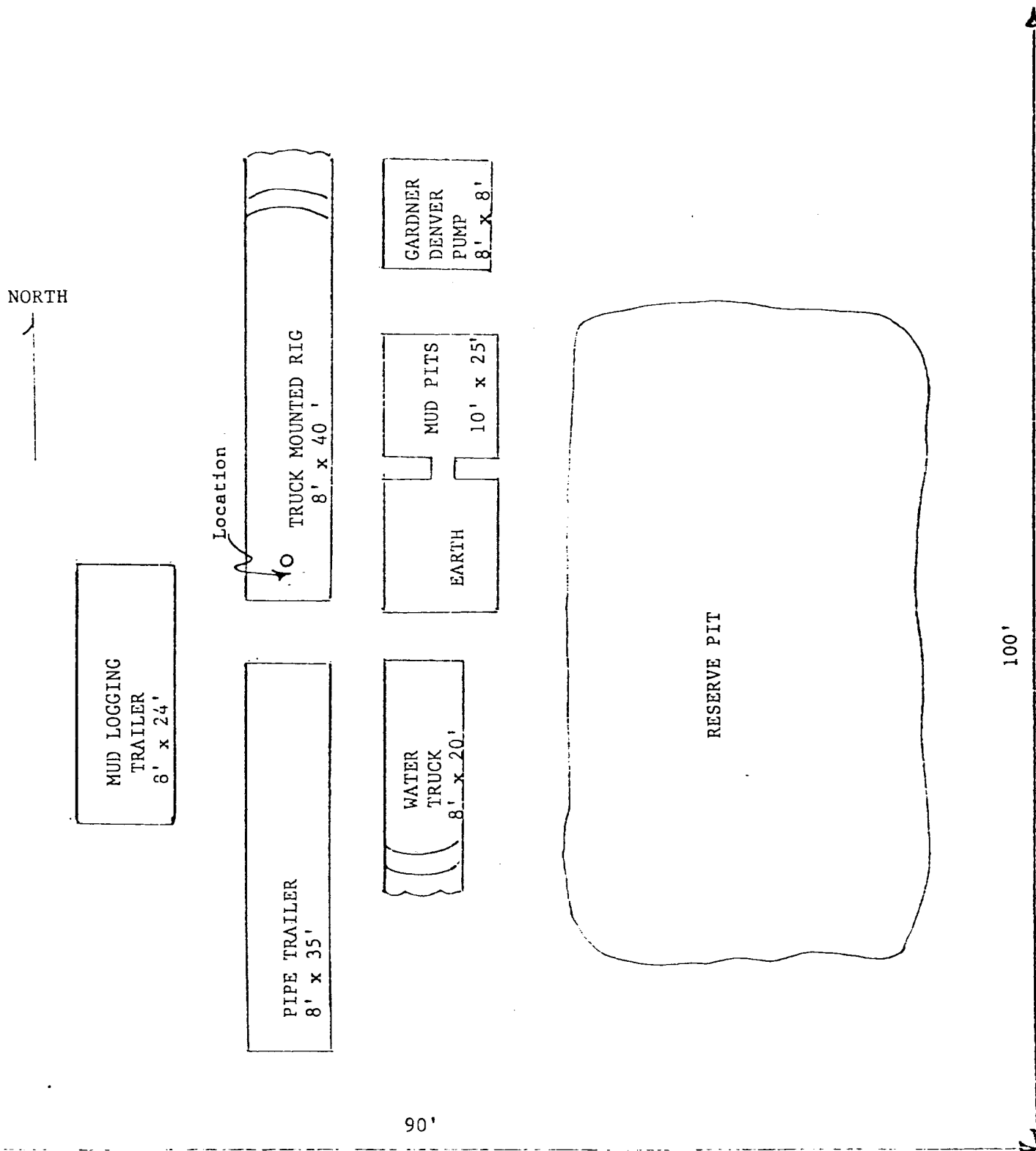
# CROSS SECTION

Black Oil and Colorado Plateau Geological Services  
MARLBURU FEDERAL NO. 2  
Section 19, T. 18 N., R. 4 W.,  
Sandoval County, New Mexico



Location Layout:

Black Oil and Colorado Plateau Geological Services  
MARLEBRU FEDERAL NO. 2  
Section 19, T. 18 N., R. 4 W  
Sandoval County, New Mexico





## 10 MI. TO NEW MEXICO 40

100

R 3 E

45'

318

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071010

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10 147.  
1 151.

This is a detailed topographic map of a region in New Mexico. The map is oriented with North at the top. It features a grid system with letters A through J along the top and numbers 1 through 10 along the right side. The map shows the Santa Fe National Forest, which is labeled in large, bold letters. To the west of the forest is Rio Arriba County, and to the east is McKinley County. The map includes numerous contour lines indicating elevation, with labels such as 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000, 10100, 10200, 10300, 10400, 10500, 10600, 10700, 10800, 10900, 11000, 11100, 11200, 11300, 11400, 11500, 11600, 11700, 11800, 11900, 12000, 12100, 12200, 12300, 12400, 12500, 12600, 12700, 12800, 12900, 13000, 13100, 13200, 13300, 13400, 13500, 13600, 13700, 13800, 13900, 14000, 14100, 14200, 14300, 14400, 14500, 14600, 14700, 14800, 14900, 15000, 15100, 15200, 15300, 15400, 15500, 15600, 15700, 15800, 15900, 16000, 16100, 16200, 16300, 16400, 16500, 16600, 16700, 16800, 16900, 17000, 17100, 17200, 17300, 17400, 17500, 17600, 17700, 17800, 17900, 18000, 18100, 18200, 18300, 18400, 18500, 18600, 18700, 18800, 18900, 19000, 19100, 19200, 19300, 19400, 19500, 19600, 19700, 19800, 19900, 20000, 20100, 20200, 20300, 20400, 20500, 20600, 20700, 20800, 20900, 21000, 21100, 21200, 21300, 21400, 21500, 21600, 21700, 21800, 21900, 22000, 22100, 22200, 22300, 22400, 22500, 22600, 22700, 22800, 22900, 23000, 23100, 23200, 23300, 23400, 23500, 23600, 23700, 23800, 23900, 24000, 24100, 24200, 24300, 24400, 24500, 24600, 24700, 24800, 24900, 25000, 25100, 25200, 25300, 25400, 25500, 25600, 25700, 25800, 25900, 26000, 26100, 26200, 26300, 26400, 26500, 26600, 26700, 26800, 26900, 27000, 27100, 27200, 27300, 27400, 27500, 27600, 27700, 27800, 27900, 28000, 28100, 28200, 28300, 28400, 28500, 28600, 28700, 28800, 28900, 29000, 29100, 29200, 29300, 29400, 29500, 29600, 29700, 29800, 29900, 30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600, 31700, 31800, 31900, 32000, 32100, 32200, 32300, 32400, 32500, 32600, 32700, 32800, 32900, 33000, 33100, 33200, 33300, 33400, 33500, 33600, 33700, 33800, 33900, 34000, 34100, 34200, 34300, 34400, 34500, 34600, 34700, 34800, 34900, 35000, 35100, 35200, 35300, 35400, 35500, 35600, 35700, 35800, 35900, 36000, 36100, 36200, 36300, 36400, 36500, 36600, 36700, 36800, 36900, 37000, 37100, 37200, 37300, 37400, 37500, 37600, 37700, 37800, 37900, 38000, 38100, 38200, 38300, 38400, 38500, 38600, 38700, 38800, 38900, 39000, 39100, 39200, 39300, 39400, 39500, 39600, 39700, 39800, 39900, 40000, 40100, 40200, 40300, 40400, 40500, 40600, 40700, 40800, 40900, 41000, 41100, 41200, 41300, 41400, 41500, 41600, 41700, 41800, 41900, 42000, 42100, 42200, 42300, 42400, 42500, 42600, 42700, 42800, 42900, 43000, 43100, 43200, 43300, 43400, 43500, 43600, 43700, 43800, 43900, 44000, 44100, 44200, 44300, 44400, 44500, 44600, 44700, 44800, 44900, 45000, 45100, 45200, 45300, 45400, 45500, 45600, 45700, 45800, 45900, 46000, 46100, 46200, 46300, 46400, 46500, 46600, 46700, 46800, 46900, 47000, 47100, 47200, 47300, 47400, 47500, 47600, 47700, 47800, 47900, 48000, 48100, 48200, 48300, 48400, 48500, 48600, 48700, 48800, 48900, 49000, 49100, 49200, 49300, 49400, 49500, 49600, 49700, 49800, 49900, 50000, 50100, 50200, 50300, 50400, 50500, 50600, 50700, 50800, 50900, 51000, 51100, 51200, 51300, 51400, 51500, 51600, 51700, 51800, 51900, 52000, 52100, 52200, 52300, 52400, 52500, 52600, 52700, 52800, 52900, 53000, 53100, 53200, 53300, 53400, 53500, 53600, 53700, 53800, 53900, 54000, 54100, 54200, 54300, 54400, 54500, 54600, 54700, 54800, 54900, 55000, 55100, 55200, 55300, 55400, 55500, 55600, 55700, 55800, 55900, 56000, 56100, 56200, 56300, 56400, 56500, 56600, 56700, 56800, 56900, 57000, 57100, 57200, 57300, 57400, 57500, 57600, 57700, 57800, 57900, 58000, 58100, 58200, 58300, 58400, 58500, 58600, 58700, 58800, 58900, 59000, 59100, 59200, 59300, 59400, 59500, 59600, 59700, 59800, 59900, 60000, 60100, 60200, 60300, 60400, 60500, 60600, 60700, 60800, 60900, 61000, 61100, 61200, 61300, 61400, 61500, 61600, 61700, 61800, 61900, 62000, 62100, 62200, 62300, 62400, 62500, 62600, 62700, 62800, 62900, 63000,

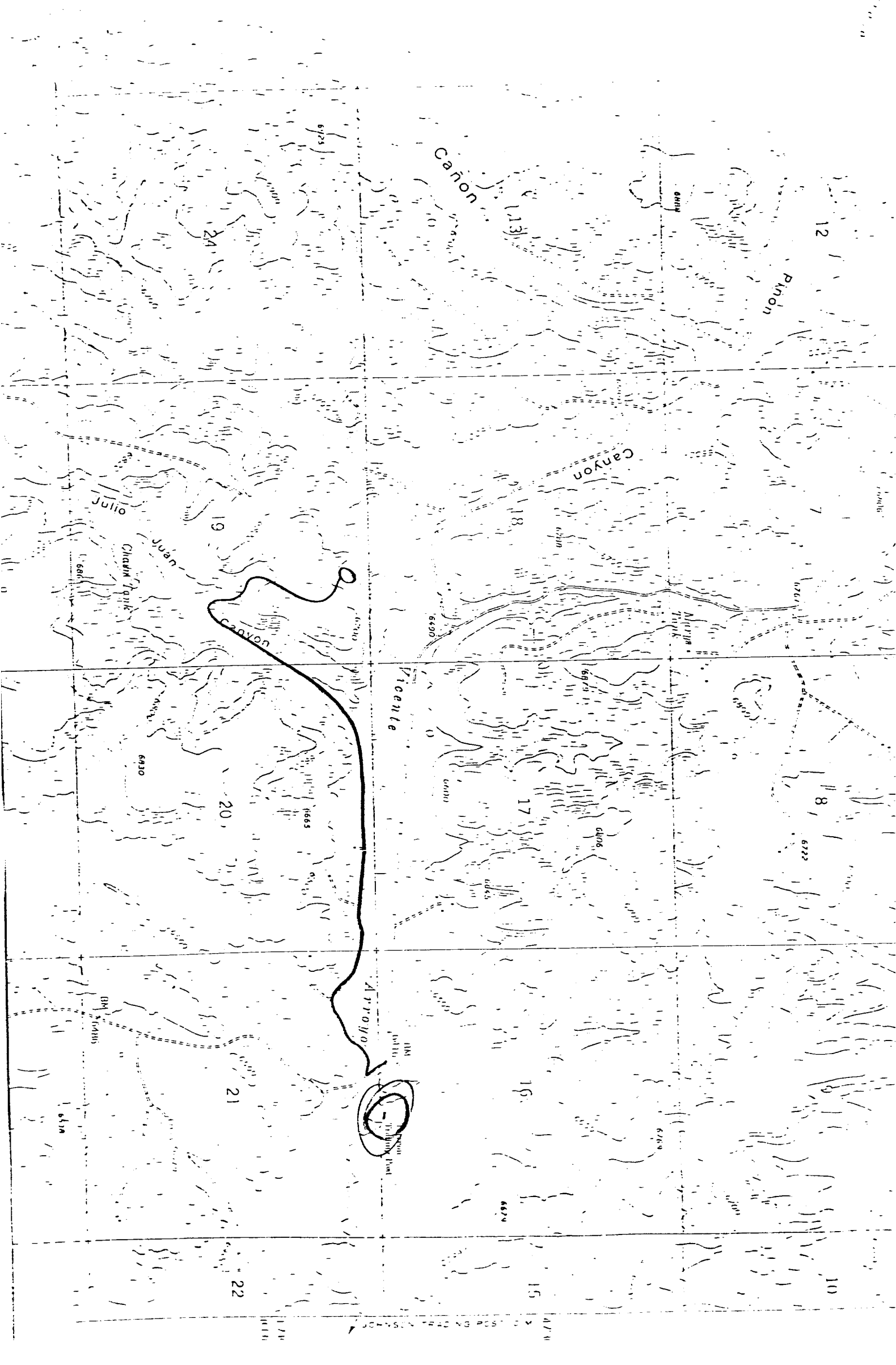


Vicinity Map for  
 BLACK OIL-COLORADO PLATEAU GEOLOGICAL SERVICES #2 MARLEBRU-FEDERAL  
 330' FNL 1650' FEL Sec. 19-T18N-R4W  
 SANDOVAL COUNTY, NEW MEXICO

VERTICAL DISTANCE TO FOOT CONTOURS  
 DATUM IS MEAN SEA LEVEL

NEW MEXICO

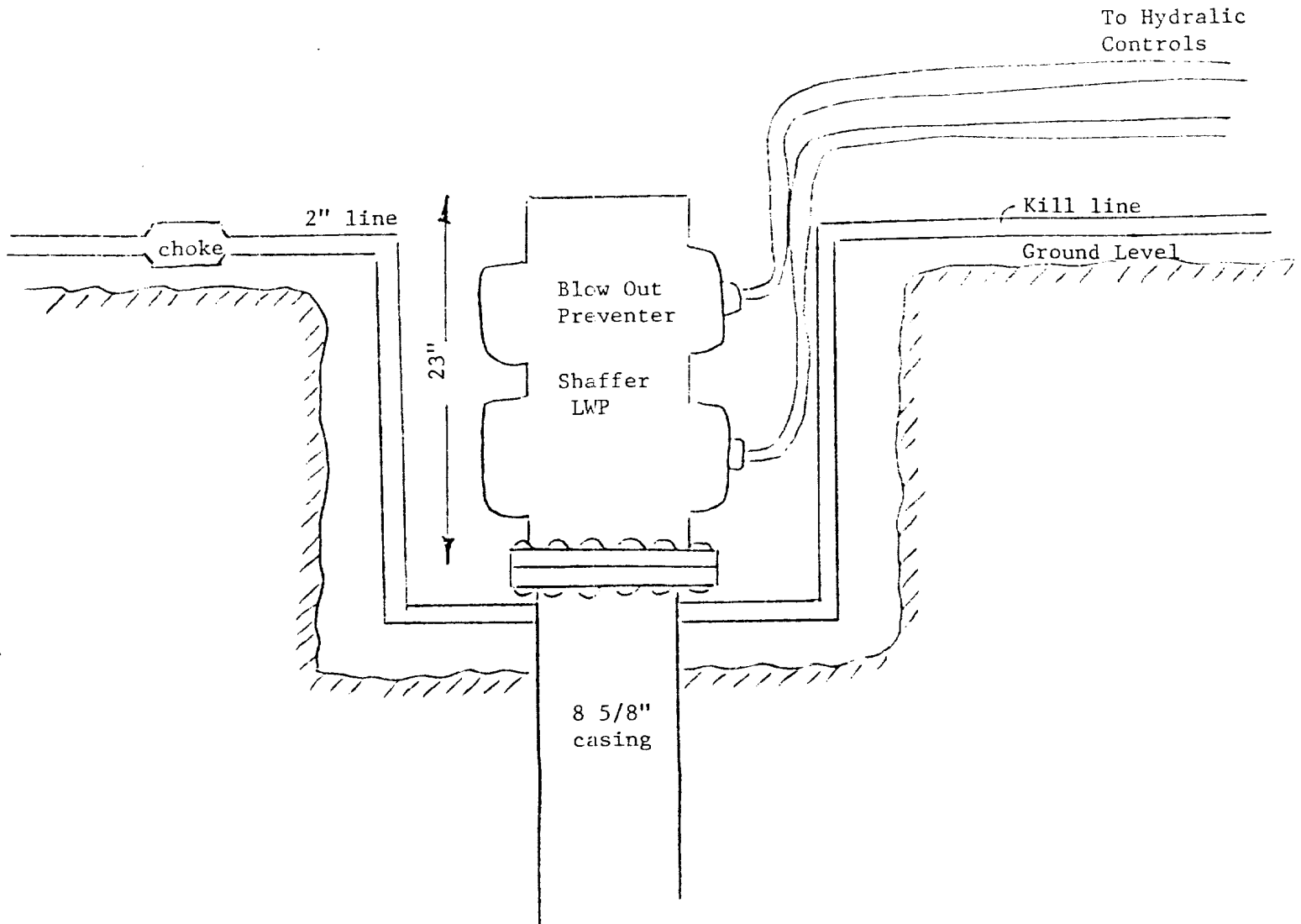
*Page 2*



SCHEMATIC DIAGRAM OF PRESSURE CONTROL EQUIPMENT

BLACK OIL - CPGS

Marlebru Federal No. 2  
Sec. 19, T.18N, R.4W



Blowout preventer will be a Shaffer LWP hydraulic with a 7-1/16" bore. Blowout preventer will be attached to casing with a 8 5/8" flange. The BOP will be coupled with a hydraulic closing unit and will be 23" from the top of the flange to the top of the B.O.P. Blowout prevention equipment will be in compliance with stipulation 5 of the general requirements for oil and gas operations on Federal Indian leases.