Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23419

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Bass Enterprises Production Co.

3. ADDRESS OF OPERATOR: Box 2131, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 330' FWL, 800' FNL Section 8, T-27-N, R-19-W
D
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: NOO-C-14-20-5311

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Navajo 8

9. WELL NO.: [redacted] No. 1

10. FIELD AND POOL, OR WILDCAT: Wildcat - Pennsylvanian

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 8-27N-19W

12. COUNTY OR PARISH: San Juan

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 20 miles southwest of Shiprock, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 800

16. NO. OF ACRES IN LEASE: 2537.61

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.: Ø

19. PROPOSED DEPTH: 7150

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5590 GL

22. APPROX. DATE WORK WILL START*: May 1, 1979

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	200	To surface
12-1/4	8-5/8	24	2100	To surface
7-7/8	5-1/2	14 & 15.5	7150	300 sx Class B

SEE ATTACHED TEN POINT PROGRAM

RECEIVED
MAR 22 1979
OIL CON. COM.
DIST. 3

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 [signature] TITLE Drilling Engineer DATE Feb. 26, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

dl3mh

*See Instructions On Reverse Side

NMOCC

NEW 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	Lease	Well No.
BASS ENTERPRISES PRODUCTION COMPANY	~~BASS~~-NAVAJO 8	1

Unit Letter	Section	Township	Range	County
D	8	27N	19W	SAN JUAN

Actual Footage Location of Well:
800 feet from the North line and 330 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5590	~~Barker Creek~~ Fruitland	Wildcat	40.0 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

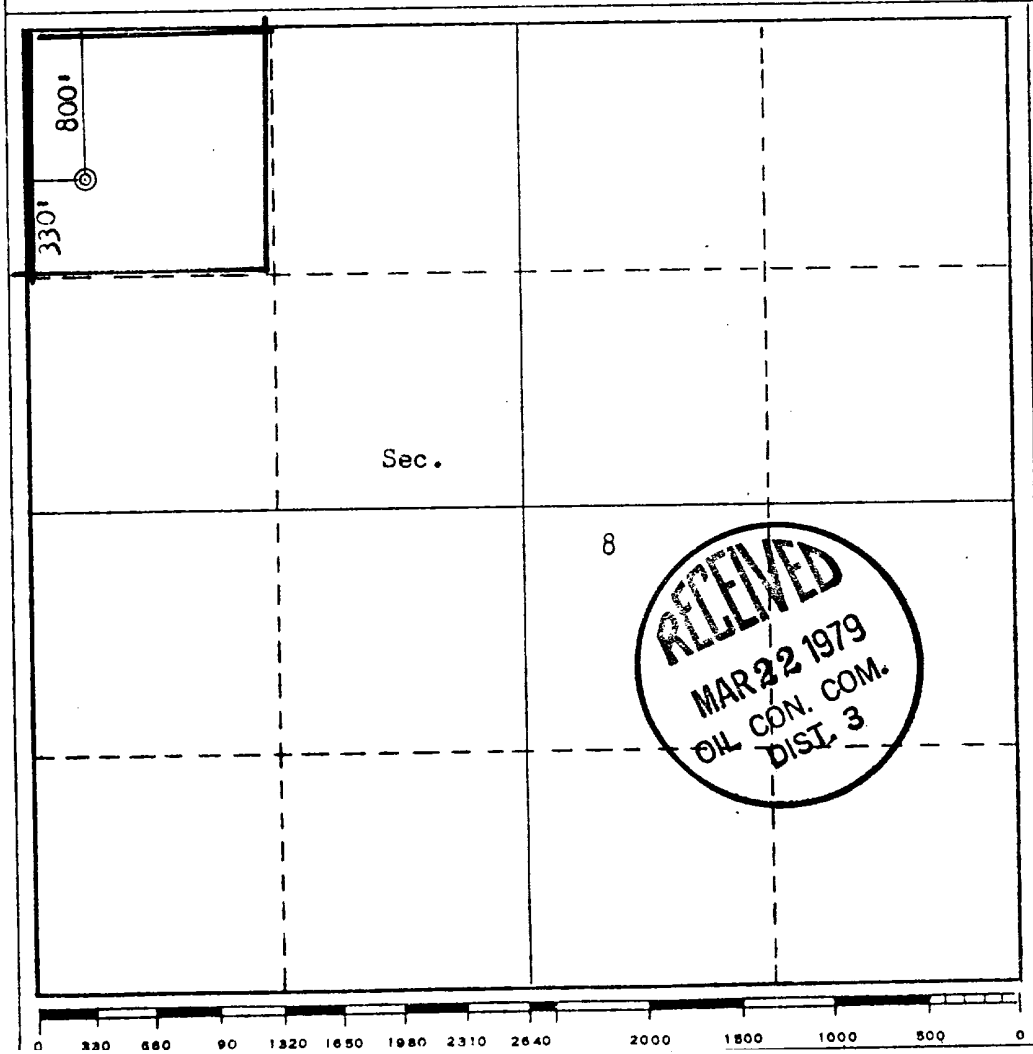
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.



RECEIVED
MAR 22 1979
OIL CON. COM.
DIST. 3

CERTIFICATION

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

Name: Gene L. Gaz

Position: Drilling Engineer

Company: Bass Ent. Prod. Co.

Date: March 17, 1979

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.

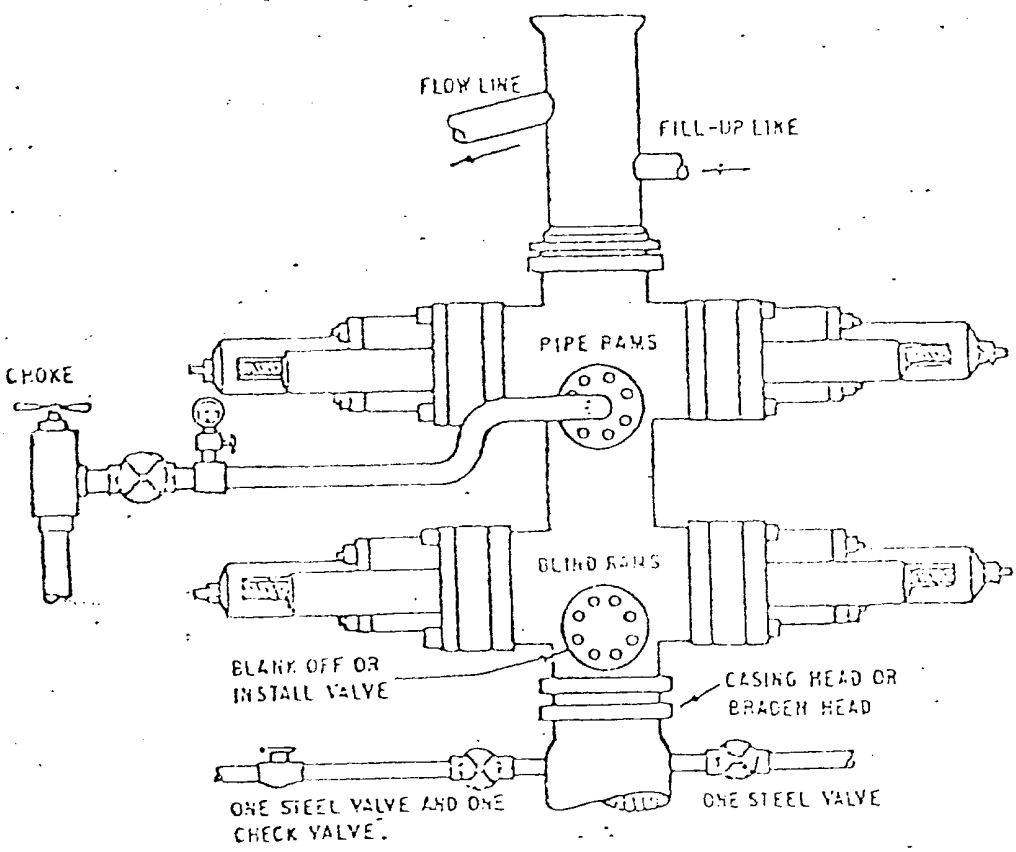
Date Surveyed: January 22, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED LAND SURVEYOR
FRED B. KERR, JR.



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREME

A. ONE DOUBLE GATE BLOWOUT PREVENTER WITH LOWER RAMS BLIND AND UPPER RAMS FOR PIPE, ALL HYDRAULICALLY CONTROLLED. OPENING ON PREVENTERS BETWEEN RAMS.

B. OPENING TO BE FLANGED, STUDDED OR CLAMPED AND AT LEAST TWO INCHES DIAMETER.

C. ALL CONNECTIONS FROM OPERATING MANIFOLD TO PREVENTERS TO BE ALL STEEL HOSE OR TUBE A MINIMUM OF ONE INCH IN DIAMETER.

D. THE AVAILABLE CLOSING PRESSURE SHALL BE AT LEAST 15% IN EXCESS OF THAT REQUIRED WITH SUFFICIENT VOLUME TO OPERATE THE PREVENTERS.

E. ALL CONNECTIONS TO AND FROM PREVENTERS TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE B.O.P's.

F. MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.

G. VALVE TO CONTROL FLOW THROUGH DRILL PIPE TO BE LOCATED ON RIG FLOOR.

H. CHOKE MAY BE EITHER POSITIVE OR ADJUSTABLE.

BEPCO II

ONE HYDRAULIC DUAL BLOWOUT PREVENTER

TEN POINT PROGRAM

NAVAJO 8 WELL NO. 1
800' FNL, 330' FWL
Section 8, T-27-N, R-19-W
San Juan County, New Mexico
Lease No.: N00-C-14-20-5311

1. The geologic objective is the Mississippian. The well will be spudded in the Mancos.

2&3. Estimated tops and mineral or oil and gas zones.

TOPS	DEPTH	TYPE OF ZONE
Dakota	810	Water (fresh)
Morrison	1005	
Todilto	2100	
Entrada	2115	
Chinle	2625	
DeChelly	3830	Fresh water
Organ Rock	4460	Nitrogen
Supai	4930	
Hermosa	5930	
Akah	6375	
M-3 Shale	6485	
M-2 Shale	6540	
1st Barker Crk	6585	Oil
2nd Barker Crk	6635	Oil
3rd Barker Crk	6705	Oil
Molas	6840	
Mississippian	6915	Oil
TD	7150	

4. Casing Program: See Attachment 1

HOLE SIZE	DEPTH	CASING
17-1/2"	150	13-3/8
12-1/4"	2100	8-5/8
7-7/8"	7200	5-1/2

5. The BOP will be a 10" Series 900 3000# double ram shaffer - see Attachment 2. The BOP will be tested to 1500# prior to drilling out cement, and operated daily.

6. The mud program will be as follows:

HOLE SIZE	INTERVAL	
17-1/2"	0- 150	water
12-1/4"	150-2100	water
7-7/8"	2100-3600	water
7-7/8"	3600-TD	9.6 to 10.0#/gal - maintain sufficient mud weight to maintain flow in DeChelly and properties to clean hole.

7. A full opening valve will be on the rig floor and a kelly cock will be used on kelly. No floats will be used. Monitoring will be visual.

8. Logging program is as follows:

   Surface casing at 1250 to TD DIL, FDC-CNL-GR
   One core and DST will be run in the Barker Creek.

9. There are no anticipated abnormal pressures, temperatures or other potential hazards including H_2S.

10. Anticipated starting date is October 15, 1979. Drilling time should be 30 days and completion 30 days.

1

BASS NAVAJO 20-1
SAN JUAN NEW MEXICO
BEAUTIFUL MOUNTAIN P

O P T I M U M C A S I N G D E S I G N

SEGMENT NO.	GRADE	JOINT	WEIGHT	TOP FT-----	BOTTOM FT-----	LENGTH FT-----	COST $-------
1	K55	S	15.5	5650.	7200.	1550.	7351.
2	K55	S	14.0	0.	5650.	5650.	24657.

TOTAL CASING COST = $ 32007.

SEGMENT NO.	MFG.	CUM. WEIGHT LB-----	DRIFT, INCHES	I.D. INCHES	COLLAPSE FACTOR	BURST FACTOR	TENSION FACTOR
1	SMITH	24025.	4.82	4.95	1.081	1.400	9.240
2	SMITH	103125.	4.89	5.01	1.001	1.320	1.933

MAXIMUM BIT SIZE CONSIDERING DRIFT = 4.82

CASING SIZE, IN.	5.50	CASING JOINT LENGTH, FT.	30.
MINIMUM SEGMENT LENGTH, FT.	40.	COLLAPSE DESIGN FACTOR	1.000
CASING DEPTH, FT.	7200.	BURST DESIGN FACTOR	1.000
MUD WEIGHT, LB/GAL. (EX)	10.00	TENSION DESIGN FACTOR	1.600
MUD WEIGHT, LB/GAL. (IN)	2.50	FORMATION PRESSURE, PSI	2025.

MULTI-POINT SURFACE USE PLAN

NAVAJO 8 WELL NO. 1
800' FNL & 330' FWL
Section 8, T-27-N, R-19-W
San Juan County, New Mexico
LEASE NO: NOO-C-14-20-5311

1. Existing Roads

The location of the proposed well site is shown on the attached topographic map and surveyor's plat, see FIGURES I & II. The proposed access to the well site is shown in red.

To reach the proposed well site from Shiprock, New Mexico, go south on Highway 666 for approximately 6.2 miles, turn west on Highway 13 (or Red Rock Highway) for 12.6 miles, turn south on graded dirt road for 1.2 miles. The graded road will be maintained by Bass Enterprises.

2. Planned Access Road

No reconstruction or changes in the existing road is contemplated during the drilling of the proposed well. If production is established the road will be improved in accordance with guidelines outlined in the Oil and Gas Surface Operating Standards published by the Bureau of Land Management.

3. Location of Existing Wells

The location of wells drilled in the vicinity of the proposed well are shown on FIGURE III. The status of these is as follows:

1.	NW Pipeline Barbara Kay #1	D & A
2.	Barbara Kay #2	D & A
3.	Barbara Kay #3	D & A
4.	El Paso Nat. Gas	D & A
5.	Texaco 1-AS	D & A
6.	Bass Enterprises Navajo 20 Well #1	Barker Creek producer

There are no water wells reported within one (1) mile of the proposed location.

4. Location of Existing and/or Proposed Facilities

There are no production facilities within one (1) mile of the proposed well site. If oil production is established a tank battery (FIGURE IV) will be placed on the drillsite as shown on FIGURE II. The area will be leveled and graveled to improve access to location in bad weather. If additional wells are found on lease, this battery will serve as the central gathering point. After the battery is completed, the area will be restored except for road, battery and pit areas. The mud pit will be fenced on three (3) sides while drilling and completely fenced after drilling to keep livestock out of pit.

5. Location and Type of Water Supply

Water for the drilling and completion of the well will be transported by truck from the Big Gap Reservoir located two (2) miles southeast of the proposed site.

6. Source of Construction Material

All construction material will be from the cuts made at the drill site except for gravel which will be transported to location by truck. The lease is on Federal and Indian land.

7. Methods for Handling Water Disposal

Cuttings and drilling fluids will be contained in an unlined reserve pit as shown on FIGURE V. A tank battery will be set on the location for any produced fluids.

Human waste will be disposed by drilling disposal holes (10 feet deep) and covered when operations are completed. Garbage and other waste material will be burned in burn pit. The pit will be covered with small mesh wire to prevent scattering, and upon completion the trash will be buried.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Well Site Layout

Attached is a copy of the well site layout (FIGURE V & VI). Soil material will be stockpiled on the edge of the location.

10. Plans for Restoration of Surface

Upon completion of operations, the surface will be re-contoured and rehabilitated according to Bureau of Land Management specifications. Any area needed for production operations will not be rehabilitated until final abandonment of the well. The pits will be filled in after the drilling mud and water has dryed out and evaporated. Until that time the pits will be fenced. Any permanent production facilities will be painted as per Bureau of Land Management and Bureau of Indian Affairs specifications. The surface will be re-seeded with seed mixtures recommended by BLM and BIA.

The proposed well is planned to start May 1, 1979 and should be completed within 90 days. Rehabilitation will start when the drilling equipment moves out.

11. Other Information

The location is on a low relief surface. The vegetation is mostly sagebrush and scattered clumps of grass. The location is situated with one house 1600' to the east and one 1600' to the west, with a field (crop) 500 feet to the north and an earthen dam 200' to the southwest. The location is situated not to harm or effect the surrounding area.

The surface rights are held by the following:

No. 0445
1. Benjamin Frazier
2. Jessie B. Frazier
3. David B. Johnson
4. Martha Clark (Trustee)
5. Tom Benally
6. Jones A. Lee
7. Roselyn Benally
8. Irene Tso

No. 0627
1. Ruth Charley
2. Lucy Benally
3. John Pete
4. Logan Pete
5. Lillian Atcitty
6. Bessie Butts

11. Other Information (continued)

People living in the houses
#527A -- Nellie George
#528A -- Mary George
#524A -- Tom Benally
Ben Frazier
Jones A. Lee

12. Operator's Representative

Gene L. Gaz
BASS ENTERPRISES PRODUCTION CO.
P. O. Box 2131
Denver, Colorado 80201

Telephone (303) 571-1314

13. Certification

Attached

CERTIFICATION
BY
OPERATOR'S FIELD REPRESENTATIVES

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 Bass Enterprises Production Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

Gene L. Gaz
Drilling Engineer

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-12
Effective 1-1-65

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

Operator	Lease	Well No.
BASS ENTERPRISES PRODUCTION COMPANY	BASS-NAVAJO 8	1

Unit Letter	Section	Township	Range	County
D	8	27N	19W	SAN JUAN

Actual Footage Location of Well:
800 feet from the North line and 330 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
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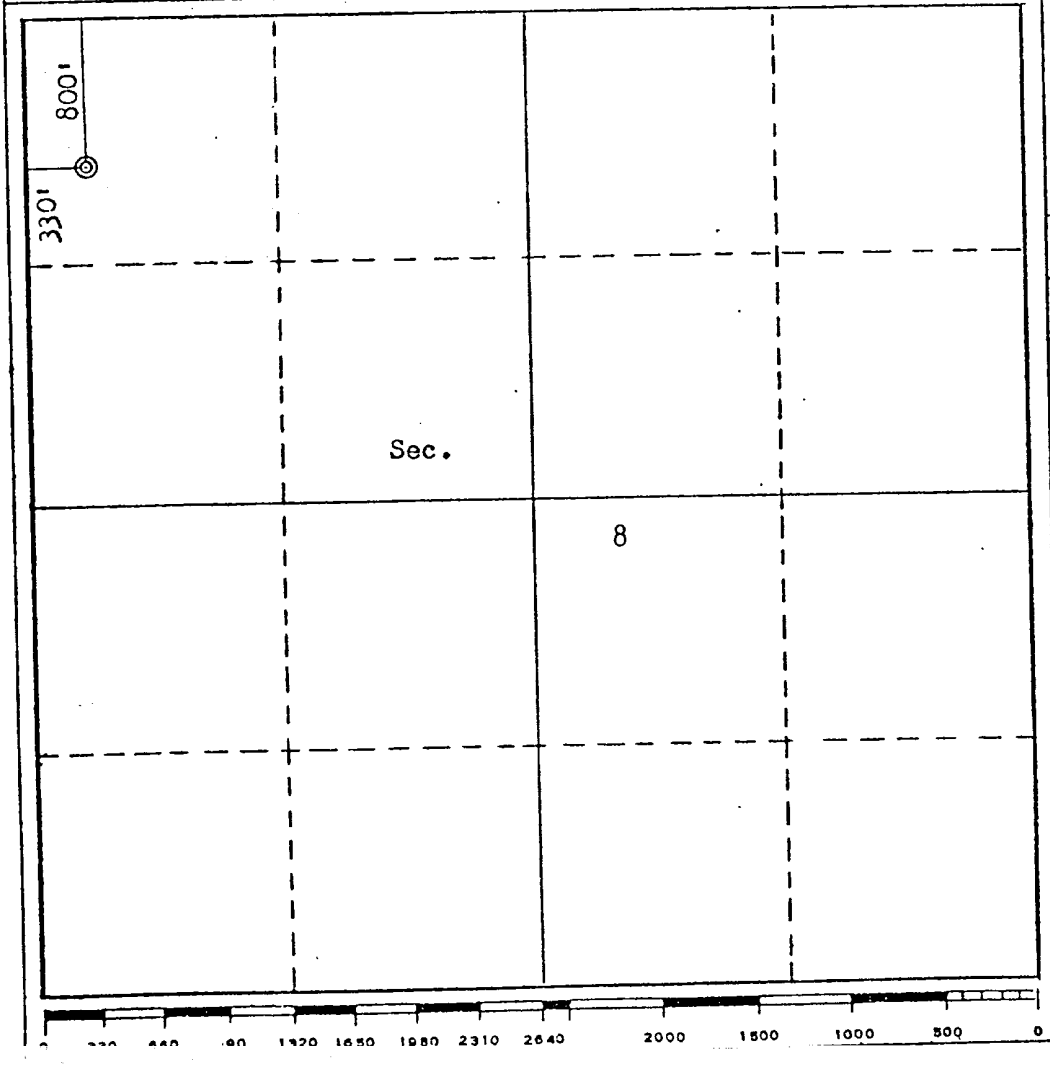


CERTIFICATION

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

Name: Gene L. Gaz

Position: Drilling Engineer

Company: Bass Ent. Prod. Co.

Date: March 17, 1979

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: January 23, 1979

Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr, Jr.

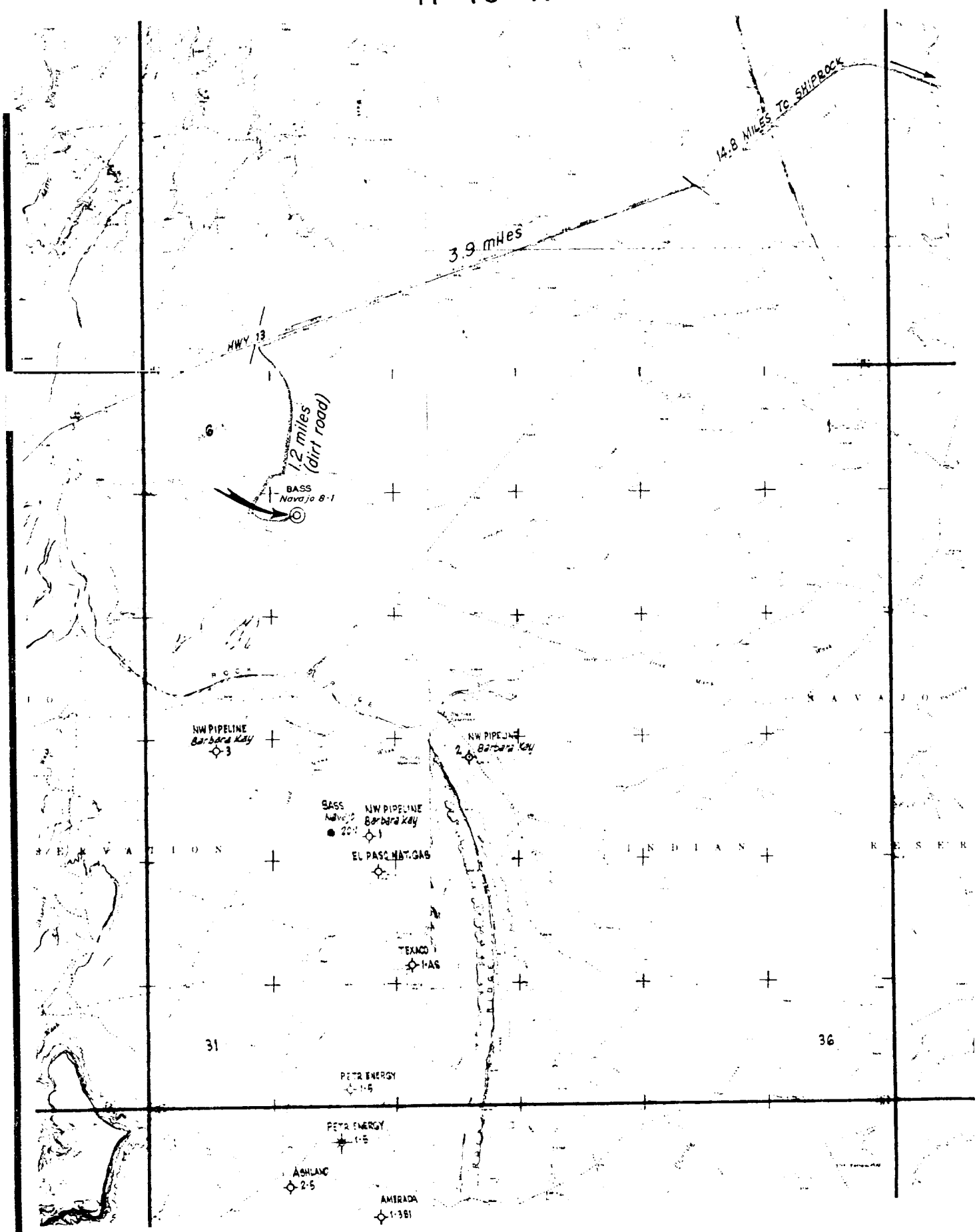
Certificate No. 3950

REGISTERED LAND SURVEYOR FRED B. KERR, JR.

R 19 W

T 28 N

T 27 N

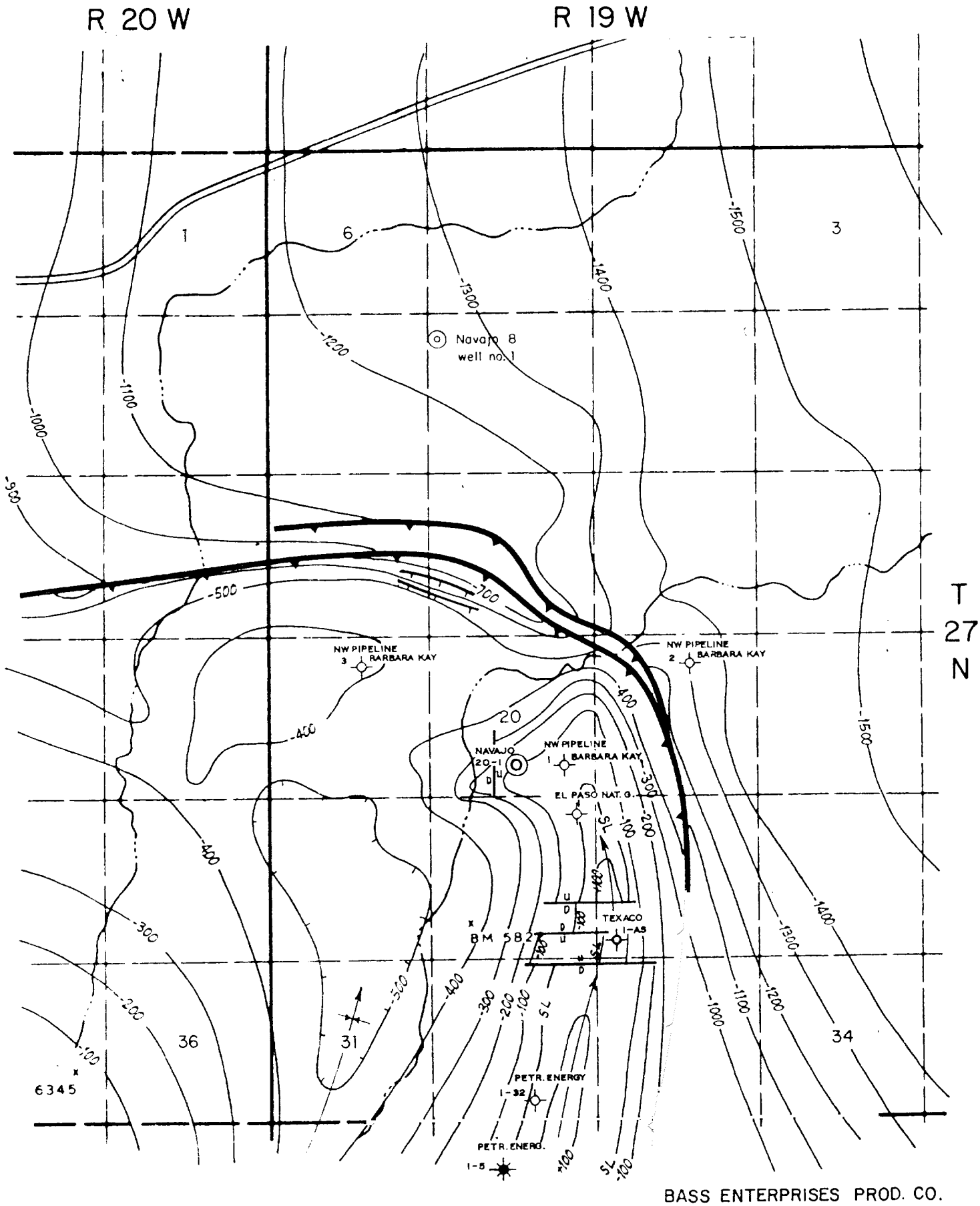


BASS ENT. PROD. CO.

SAN JUAN CO., NEW MEXICO

PLAT SHOWING WELL LOC. & ROADS

FIG. II 1" = 5,000'



BASS ENTERPRISES PROD. CO.

BEAUTIFUL MTN.

SAN JUAN CO., NEW MEX.

STRUCTURE TOP MISSISSIPPIAN

C.I. = 100'

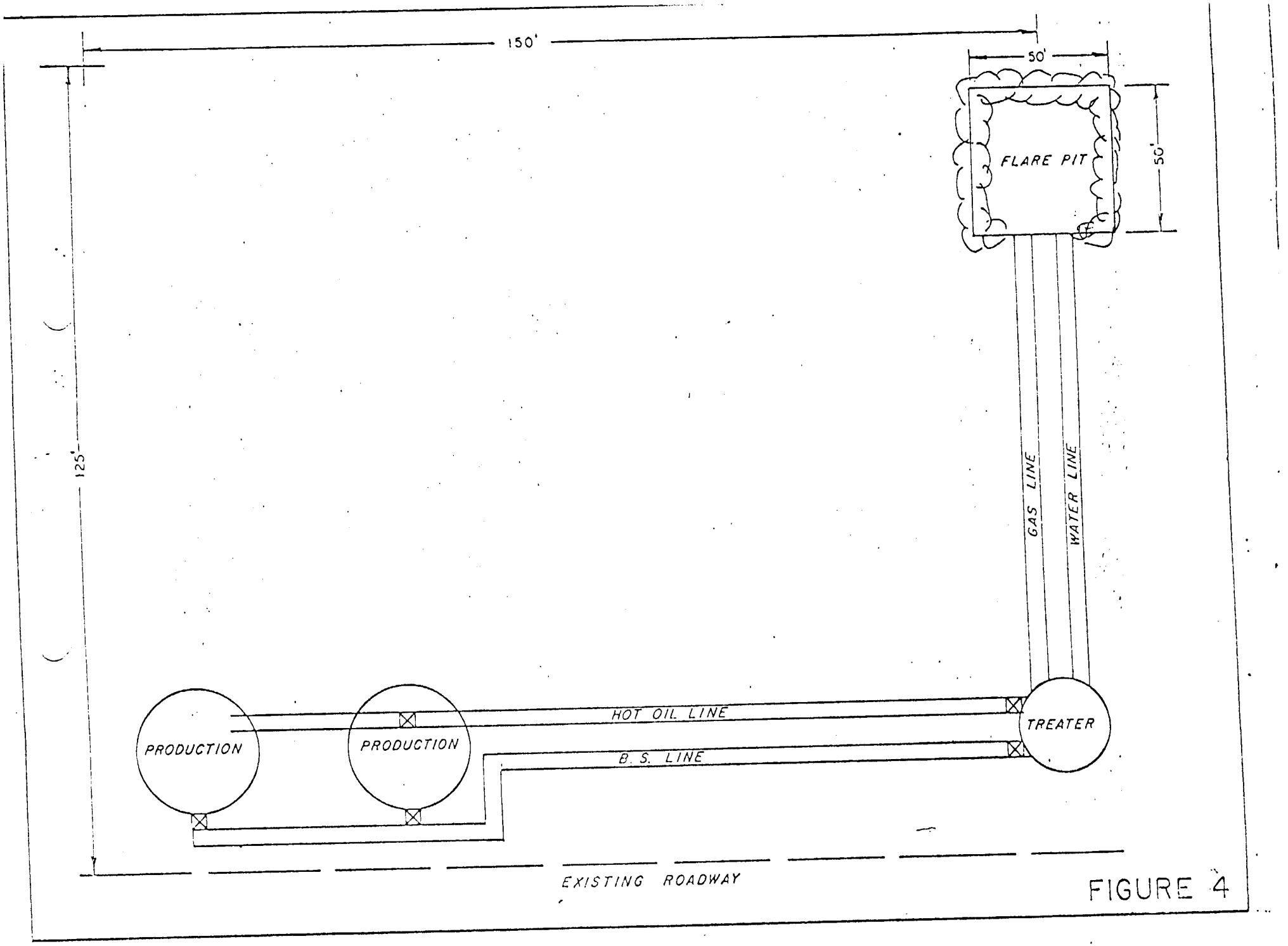
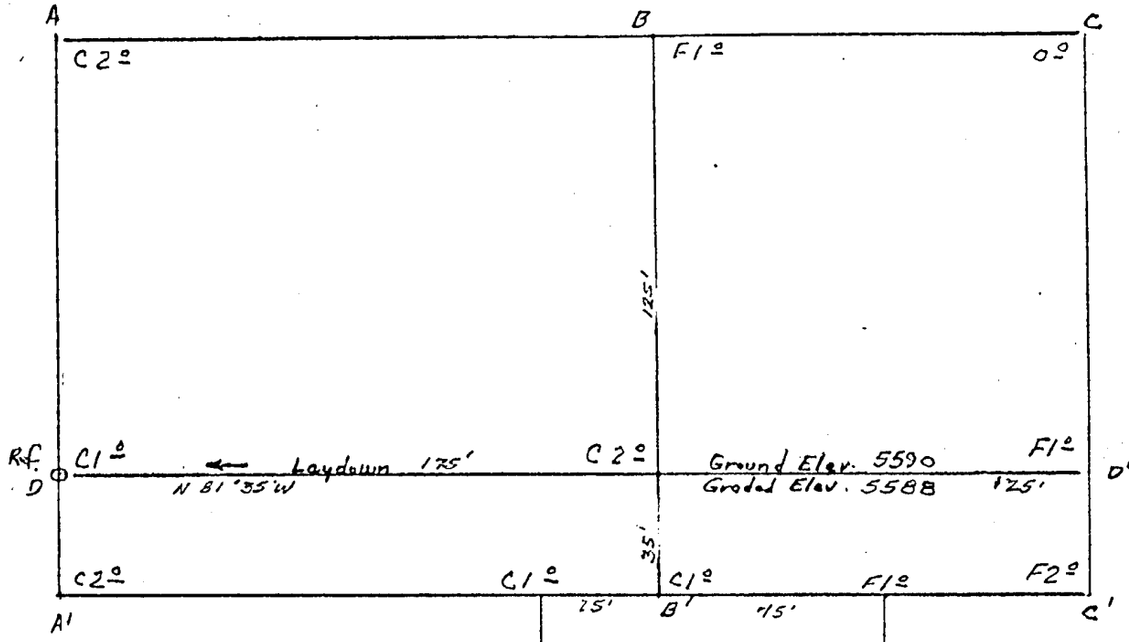
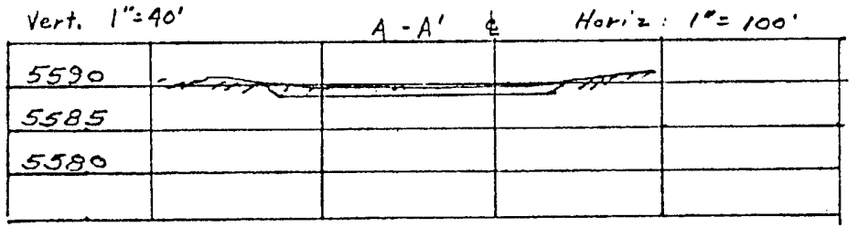
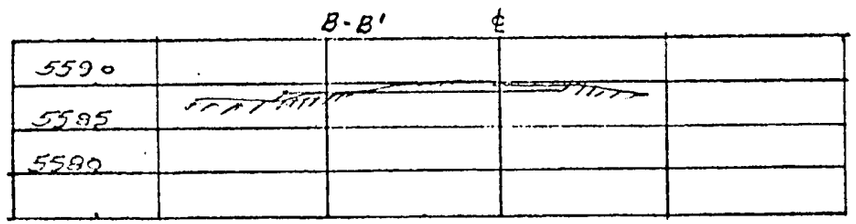
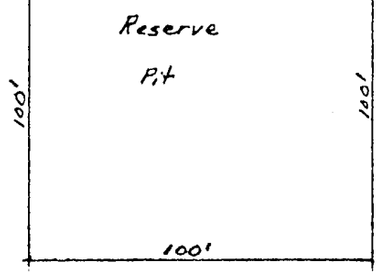

150'
50'
50'
FLARE PIT
125'
GAS LINE
WATER LINE
HOT OIL LINE
B. S. LINE
PRODUCTION
PRODUCTION
TREATER
EXISTING ROADWAY

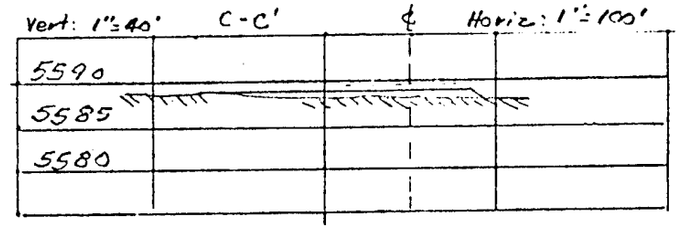
FIGURE 4

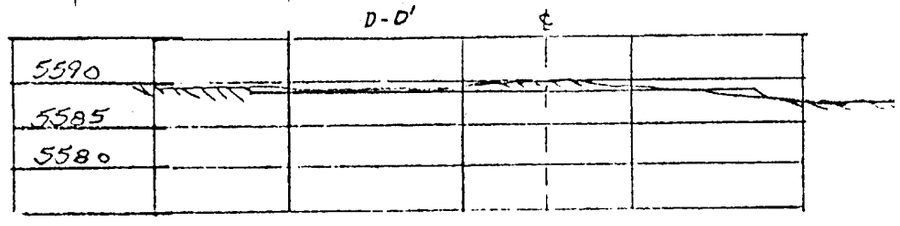






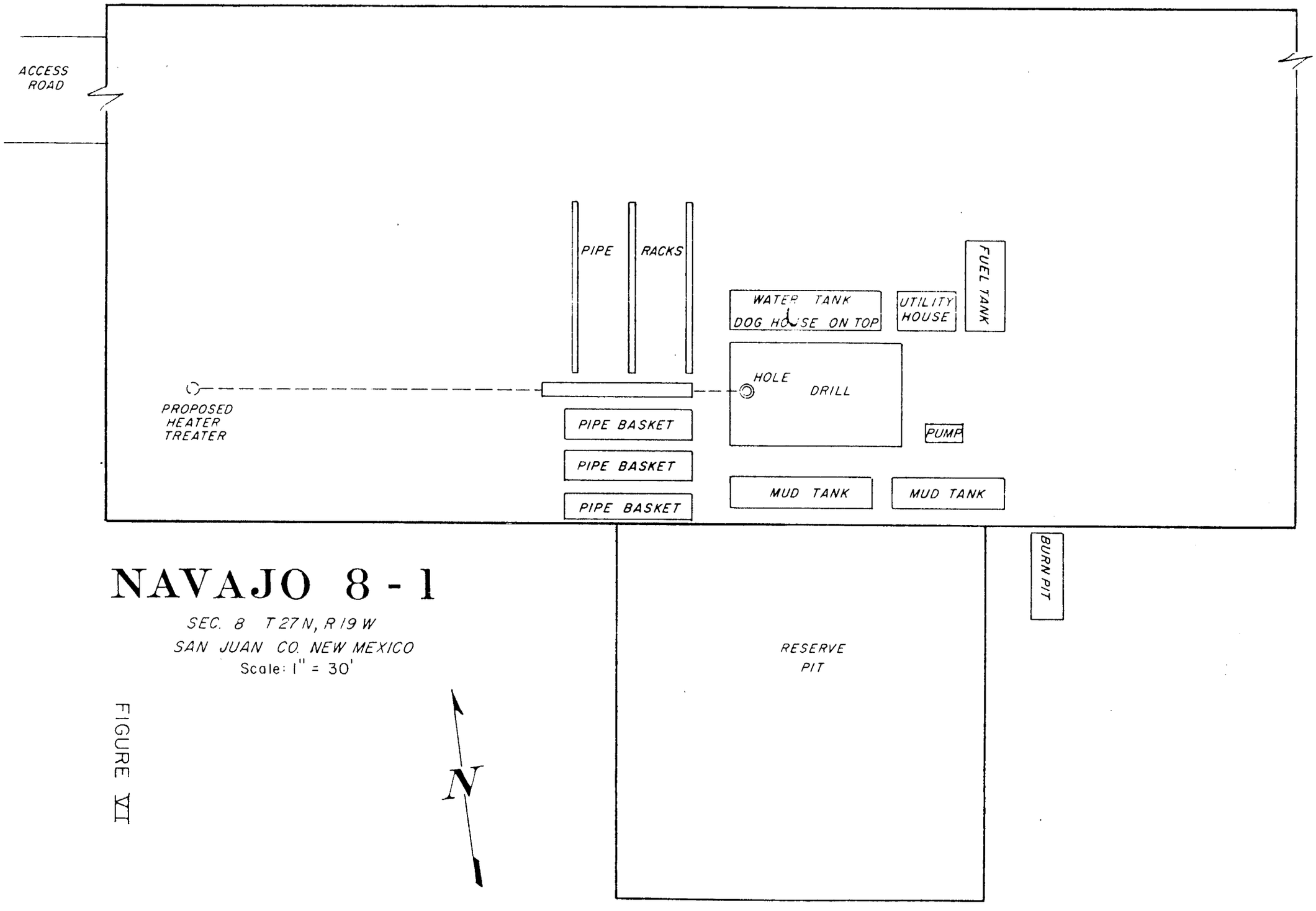






KERR LAND SURVEYING
Date: 1/25/79

Fred Kerr



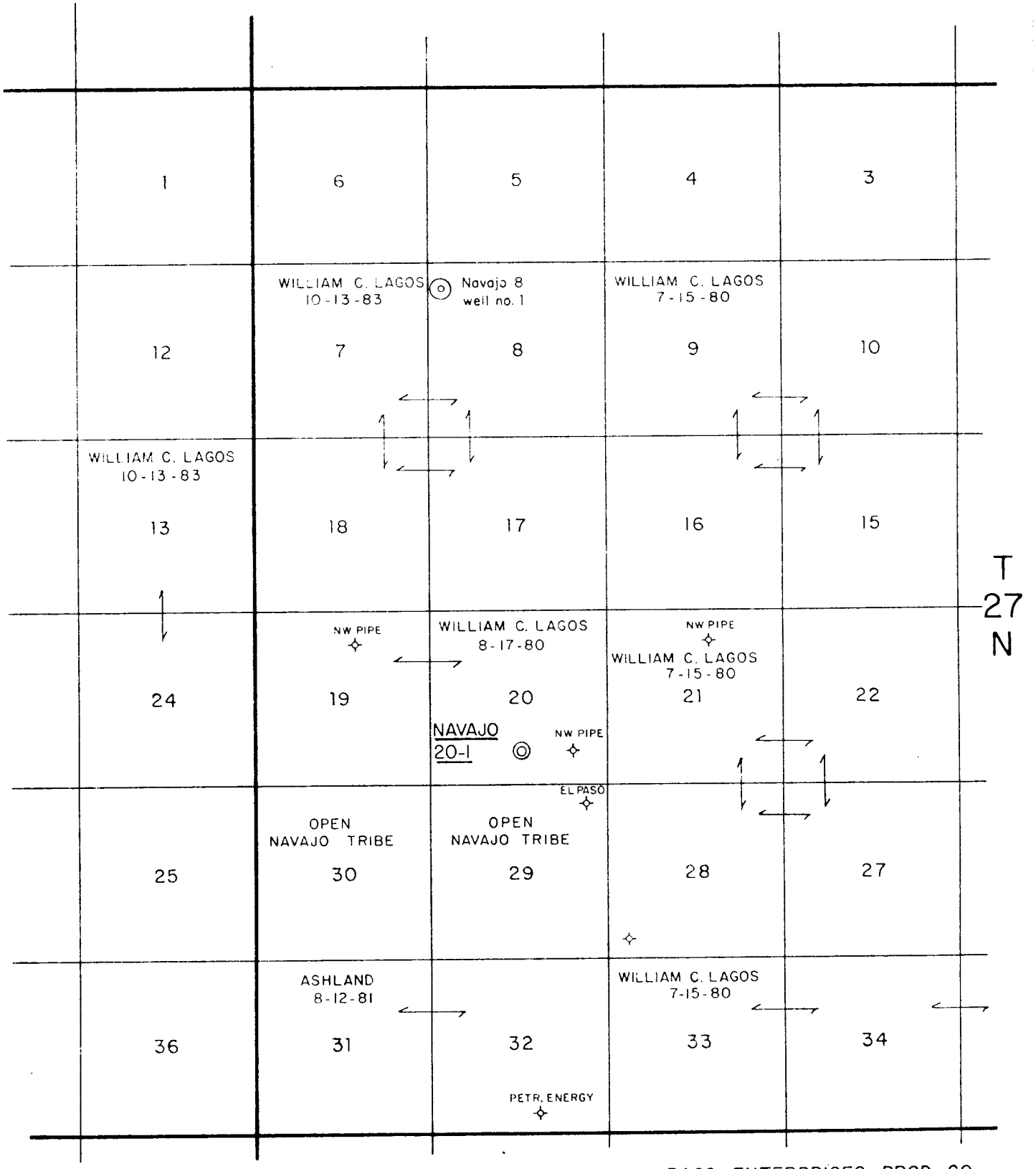
NAVAJO 8 - 1

SEC. 8 T 27 N, R 19 W

SAN JUAN CO. NEW MEXICO

Scale: 1" = 30'

FIGURE VI



BASS ENTERPRISES PROD. CO.

BEAUTIFUL MTN.

SAN JUAN CO., NEW MEX.

LAND MAP

Scale 1" = 4000'

ADVANCE PROOF
SUBJECT TO CORRECTION
SCALE 1:24 000

F

MITTEN ROCK QUADRANGLE
NEW MEXICO—SAN JUAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 SHIP ROCK 15' QUADRANGLE

4257 III NE
(SHIP ROCK)

R. 20 W. 55' R. 19 W. 1687 1688 1689 108°52'30"

36°37'30"