

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

30-043-20860

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

VETERAN EXPLORATION, INC.

3. ADDRESS AND TELEPHONE NO.

7535 E. HAMPDEN AVENUE, STE. #506, DENVER, CO 80231

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

At surface

460' FNL - 1980' FWL (NE/NW)

At proposed prod. zone

1852' FNL - 1980' FWL (SE/NW at TD - 7450', SEC. 6)

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

APPROXIMATELY 10 MILES WEST OF CUBA, NEW MEXICO

15. DISTANCE FROM PROPOSED\*

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

1980'

16. NO. OF ACRES IN LEASE

1920

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

3100'

19. PROPOSED DEPTH

7450'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

640

20. ROTARY OR CABLE TOOL

ROTARY

22. APPROX. DATE WORK WILL START\*

7/1/91

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 3/4	9 5/8	40#-J55	0-120'	40 sx. Class "G"
8 3/4	7	23#-J55	0-3600'	517 sx. Halliburton Lite*
6 1/4	4 1/2	11.6#-K55	3500-7450'	100 sx. Class "G"
				N/A Open Hole

\* CEMENT TO BE CIRCULATED TO SURFACE, ACTUAL CEMENT VOLUME TO BE DETERMINED FROM CALIPER LOG.

OPERATOR HEREBY PROPOSES TO DRILL A HORIZONTAL WELL, KICKOFF @ APPROXIMATELY 3600' AT WHICH TIME ANGLE WILL BE BUILT AT A RATE OF 12-14° PER 100 FT. IT IS DESIRED TO BE HORIZONTAL BY A TVD OF +/-4279' AND DRILL APPROXIMATELY 3500' OF LATERAL HOLE IN A DIRECTION N-10E OF THE SURFACE LOCATION.

CONFIDENTIAL

RECEIVED

AUG 09 1991.

OIL CON. DIV.

Dist. 3

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.

24.

SIGNED

TITLE VICE PRESIDENT OPERATIONS DATE 7/8/91

(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 the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

NMOCD

TITLE

Area Manager

DATE

8/1/91

\*See Instructions On Reverse Side

SEP 09 '91 08:48 OCD AZTEC NM

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

P.2  
Form C-102  
Revised 1-1-89

**OIL CONSERVATION DIVISION**

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Veteran Exploration, Inc.			Lease Johnson 7		Well No. 3
Unit Letter C	Section 7	Township 20N	Range 2W	County Sandoval	
Actual Footage Location of Well: 460 feet from the North line and 1980 feet from the West line					
Ground level Elev. 7026	Producing Formation Mancos		Pool Rio Puerco	Dedicated Acreage: 640 617.79 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 interest of all owners been consolidated by communization, 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

original attached

**OPERATOR CERTIFICATION**

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

Signature

Phillip F. Grey

Printed Name

Position

VP1. Operations

Company

Veteran Exploration, Inc.

Date

9/10/91

**SURVEYOR CERTIFICATION**

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

Signature & Seal of  
Professional Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 3-1-89

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1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>VETERAN EXPLORATIONS, INC.</b>			Lease <b>JOHNSON 7</b>		Well No. <b>4-3</b>
Unit Letter <b>C</b>	Section <b>7</b>	Township <b>20 N</b>	Range <b>2 W</b>	County <b>Sandoval</b>	
Actual Footage Location of Well: <b>460</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground level Elev. <b>7026</b>	Producing Formation <b>Mancos</b>		Pool <b>Rio Puerco</b>	Dedicated Acreage <b>648.677-79</b> <b>648.677 Acres</b>	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900 10230 10560 10890 11220 11550 11880 12210 12540 12870 13200 13530 13860 14190 14520 14850 15180 15510 15840 16170 16500 16830 17160 17490 17820 18150 18480 18810 19140 19470 19800 20130 20460 20790 21120 21450 21780 22110 22440 22770 23100 23430 23760 24090 24420 24750 25080 25410 25740 26070 26400 26730 27060 27390 27720 28050 28380 28710 29040 29370 29700 30030 30360 30690 31020 31350 31680 32010 32340 32670 33000 33330 33660 33990 34320 34650 34980 35310 35640 35970 36300 36630 36960 37290 37620 37950 38280 38610 38940 39270 39600 39930 40260 40590 40920 41250 41580 41910 42240 42570 42900 43230 43560 43890 44220 44550 44880 45210 45540 45870 46200 46530 46860 47190 47520 47850 48180 48510 48840 49170 49500 49830 50160 50490 50820 51150 51480 51810 52140 52470 52800 53130 53460 53790 54120 54450 54780 55110 55440 55770 56100 56430 56760 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VETERAN EXPLORATIONS, INC.  
#7-3 JOHNSON  
460' FNL & 1980' FWL  
Sec. 7, T20N, R2W  
Sandoval Co., N.M.

NGA-55E  
80-25

NGA-53E  
80-24

Paved Road

20

21

**VETERAN'S EXPLORATION, INC.**

Johnson 7-3  
Lease #NM-44453  
Section 7-T20N-R2W  
Sandoval County, NM

**DRILLING PROGNOSIS**

**I. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS (Assumes KB Elevation of 7030)**

<u>FORMATION</u>	<u>TVD</u>	<u>SUBSEA</u>
Ojo Alamo	558'	+6472'
Fruitland	770'	+6260'
Pictured Cliffs	910'	+6120'
Lewis	1088'	+5942'
Chacra	1345'	+5685'
Cliff House	1740'	+5290'
Menefee	2385'	+4645'
Point Lookout	3036'	+3994'
Mancos	3200'	+3830'
Mancos "A"	3940'	+3090'
Mancos "B"	4115'	+2915'
Mancos "C"	4272'	+2758'
Mancos "D"	4397'	+2633'

**II. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS, OR MINERAL FORMATIONS**

<u>FORMATION</u>	<u>INTERVAL(TVD)</u>	<u>SUBSEA</u>
Pictured Cliffs	910-1087'	Water
Menefee	2305-3475'	Oil/Gas/Water
Point Lookout	3036-3176'	Water
Mancos "A" - "D"	3940' -TD	Oil/Gas

**III. PRESSURE CONTROL EQUIPMENT**

TYPE 11' - Double Gate hydraulic with 11" annular BOP and 500 psi wellhead pressure, rotating BOP/stripper, equipped with choke manifold and 9-5/8" x 11" casing head. Upper and lower Kelly cocks as well as inside BOP will also be available.

Pressure Rating - All components to be rated to 3000 psi working pressure.

Testing Procedure - BOP and choke manifold will be installed and pressure tested utilizing test plug after, plug back and before starting kickoff of horizontal drilling operation, then checked daily for mechanical operating condition. Ram-type preventers and related pressure tested to the pressure of the stack assembly, or 70% of the internal yield of the surface casing, whichever is less. Annular preventer will be pressure tested to the pressure of the stack assembly, or 70% of the internal yield of the surface casing, whichever is less. Annular preventer will be pressure tested to 50% of rated working pressure upon installation. BOP and choke manifold pressure rating will exceed the maximum anticipated surface pressure. The choke manifold and BOP extension rods with handwheels will be located outside of the sub-structure. The hydraulic BOP closing unit will be located at least 25 feet from the wellhead. Exact locations and configurations will depend upon the particular rig contracted to drill this well.

#### IV. CASING AND CEMENTING PROGRAM

##### A) Casing Program (All New)

<u>Hole Size</u>	<u>Casing Descrip.</u>	<u>Interval</u>	<u>Length</u>	<u>SF</u> <u>T</u>	<u>SF</u> <u>C</u>	<u>SF</u> <u>B</u>
12-3/4"	9-5/8" Conductor	0-120' KB	120'	--	--	--
8-3/4"	7" 23#, J-55, STC	0-3600'	3600'	3.76	1.78	2.00
6-1/4"	4-1/2" 11.6#, K-55, LTC	3500-7450'	7450'	3.52	3.81	2.88

##### B) Cementing Program

<u>CASING/HOLE SIZE</u>	<u>CEMENT SLURRY</u>	<u>SX</u>	<u>PPG</u>	<u>YIELD</u>
9-5/8"/12-3/4"	Preset with 40sx Class "G"	--	--	--
7"/8-3/4"	Lead: Halliburton Lite Containing 1/4#/sx cellophane flake +2% CaCL	517	12.7	1.84
	Tail: Class "G" +1/4#/Sx cellophane flake +2% CaCL	100	15.4	1.15
4-1/2"/6-1/4"	N/A			

NOTE: Precede cement with 20 bbls. water, drop wiper plug, first stage cements (lead and tail slurries), drop first stage shutoff plug, displace with water. Bump plug to 500 psi over circulating pressure. (Cement slurry design will depend on hole conditions at TD). Drop DV opening plug. Pressure up and open the DV. Condition mud, WOC for first stage. Pump 10 bbl. water, second stage cements (lead and tail slurries), drop closing plug, displace and close DV with water.

#### V. DRILLING FLUIDS PROGRAM

<u>INTERVAL</u>	<u>TYPE</u>	<u>WEIGHT (PPG)</u>	<u>VISCOSITY (SEC)</u>	<u>FLUID LOSS (CCS)</u>
0-3600'	POLYMER	8.3-9.6	32-40	N/A
3600-7450'	FOAM	70 QUALITY FOAM	N/A	14

Drilling mud inventory (including weight and lost circulation materials) will be stockpiled on location. Supplemental materials will be transported from local warehouses.

#### VI. EVALUATION PROGRAM

Logs: DIL-SFL-SP, LDT-CNL-CAL, BHC Sonic GR CAL and Dipmeter from surface to 3600'. The horizontal portion of the hole may or may not be logged, depending on hole conditions.

DST'S: None anticipated

Coring: None Anticipated

Geologist/Mud Logger: A wellsite geologist will be present from a depth of 1000' to TD. A two-man mud logging unit, complete with hot-wire and chromatograph will be operation from 1000' to TD.

Evaluation program may change at the discretion of the wellsite geologist.

Stimulation: No stimulation has been formulated for this well at this time. The drillsite, as applied for, will be sufficient size to accommodate any activity.

Whether the well is completed as a dry hole or a producer, Well Completion and Recompletion Report and Log (Form 3160-K) will be submitted to the BLM District Office not later than

## GENERAL WELL INFORMATION

This will be a new well

8-3/4" hole to total depth

Mancos "A" at 3,940 feet T.V.D.

Mancos "B" at 4,115 feet T.V.D.

Mancos "C" at 4,272 feet T.V.D.

Mancos "D" at 4,397 feet T.V.D.

BHL  $\pm$  4,000 feet total displacement

Direction - North 10.00 degrees East



GREAT LAND DIRECTIONAL DRILLING, INC.  
 ROCKY MOUNTAIN REGION  
 P.O. BOX 9619  
 CASPER, WY 82609  
 (307) 472-3113 Fax 265-9006

DIRECTIONAL WELL PLAN for VETERAN EXPLORATION

11.....: JOHNSON #7-3  
 eld.....: RIO PUERCO

Prepared.: 06/11/91

ction at...: N,10.00,E  
 elevation.: 7015.00

mputation...: RADIUS OF CURVATURE  
 se ID.....: 73

WELL PROFILE

STATION IDENTIFICATION	MEAS DEPTH	INCLN ANGLE	VERT-DEPTHS BKB SUB-S	SECT DIST	DIRECTION BEARING	REL-COORDINATES FROM-WELLHEAD	DL/ 100
KB	0	0.00	0 -7015	0	N 10.00 E	0 N 0 E	0.0
KOP BUILD 14.00/100	3874	0.00	3874 -3141	0	N 10.00 E	0 N 0 E	0.0
MANCOS "A"	3940	9.24	3940 -3075	5	N 10.00 E	5 N 1 E	14.0
MANCOS "B"	4132	36.03	4115 -2900	78	N 10.00 E	77 N 14 E	14.0
MANCOS "C"	4420	76.36	4272 -2743	313	N 10.00 E	308 N 54 E	14.0
END OF 14.00 BUILD	4482	85.03	4282 -2733	374	N 10.00 E	368 N 65 E	14.0
MANCOS "D"	5809	85.03	4397 -2618	1696	N 10.00 E	1670 N 295 E	0.0
TD	8122	85.03	4597 -2418	4000	N 10.00 E	3940 N 695 E	0.0

Great Land Directional Drilling, Inc.

VERTICAL SECTION VIEW

VETERAN EXPLORATION

JOHNSON #7-3

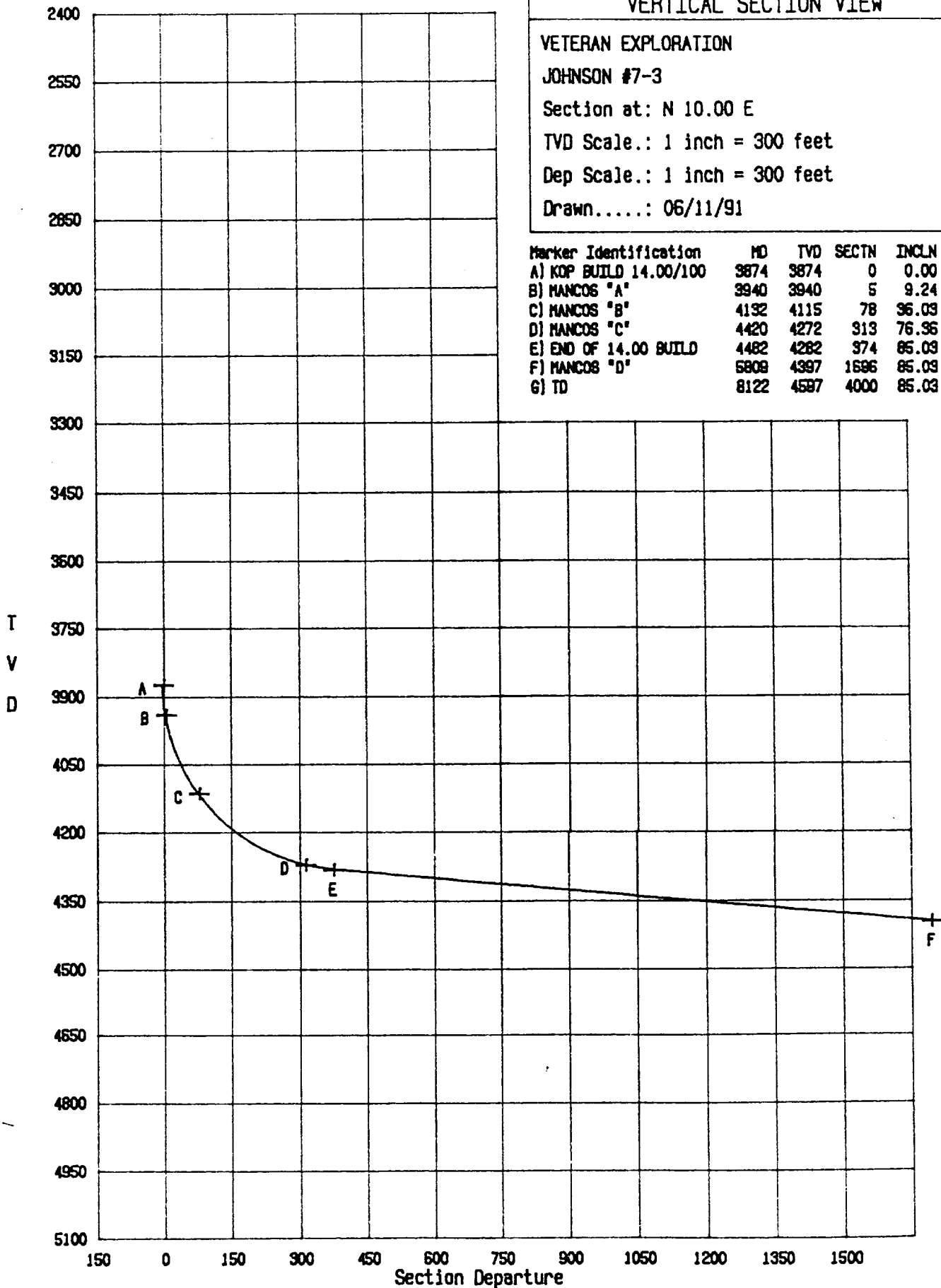
Section at: N 10.00 E

TVD Scale.: 1 inch = 300 feet

Dep Scale.: 1 inch = 300 feet

Drawn.....: 06/11/91

Marker Identification	MD	TVD	SECTN	INCLN
A) KOP BUILD 14.00/100	3874	3874	0	0.00
B) MANCOS "A"	3940	3940	5	9.24
C) MANCOS "B"	4132	4115	78	36.03
D) MANCOS "C"	4420	4272	313	76.36
E) END OF 14.00 BUILD	4482	4282	374	85.03
F) MANCOS "D"	5809	4397	1596	85.03
G) TD	8122	4587	4000	85.03



Great Land Directional Drilling, Inc.

Marker Identification	MD	N/S	E/W
A) KB	0	0 N	0 E
B) KOP BUILD 14.00/100	3874	0 N	0 E
C) MANCOS "A"	3940	5 N	1 E
D) MANCOS "B"	4132	77 N	14 E
E) MANCOS "C"	4420	308 N	54 E
F) END OF 14.00 BUILD	4482	368 N	65 E
G) MANCOS "D"	5809	1670 N	295 E
H) TD	8122	3940 N	695 E

PLAN VIEW

VETERAN EXPLORATION

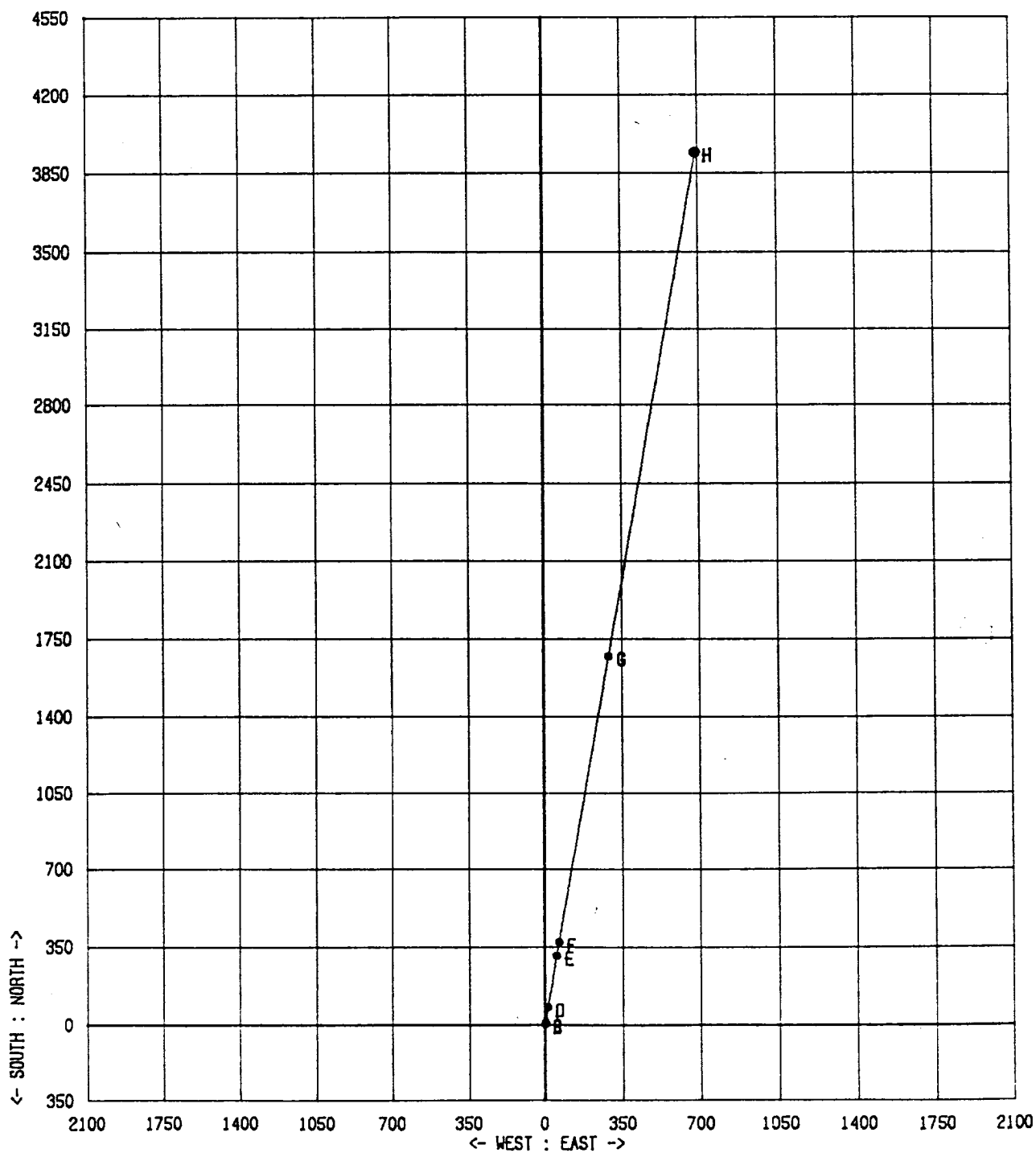
JOHNSON #7-3

CLOSURE.....: 4000 ft N 10.00 E

DECLINATION.: 12.00 E

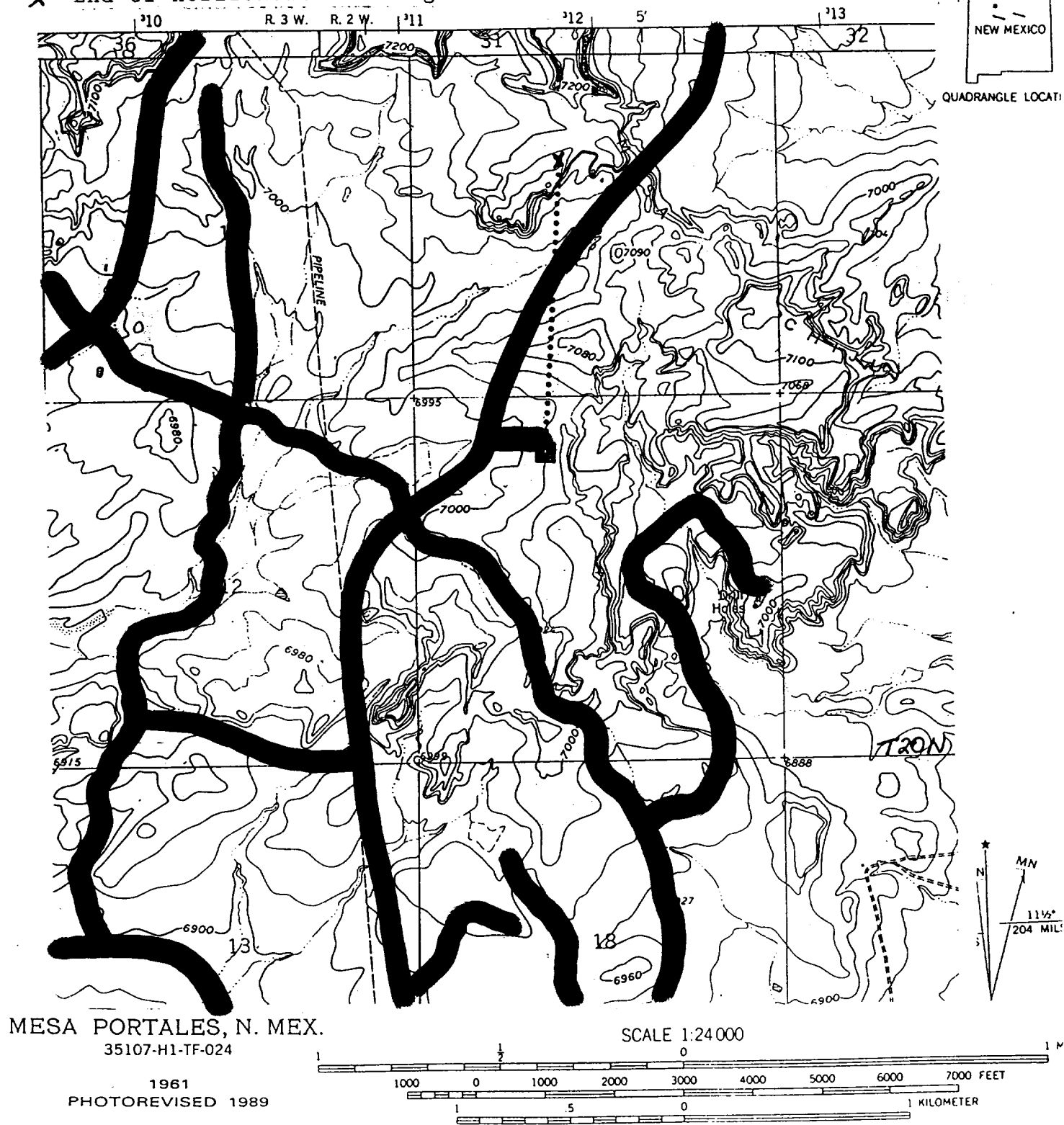
SCALE.....: 1 inch = 700 feet

DRAWN.....: 06/11/91



## 2

X End of horizontal drilling



MAP "A" SHOWING THE LOCATION OF THE PROJECT AREA

# LEGEND

2

■ — Proposed well with access road

..... Direction of horizontal drilling

× End of horizontal drilling

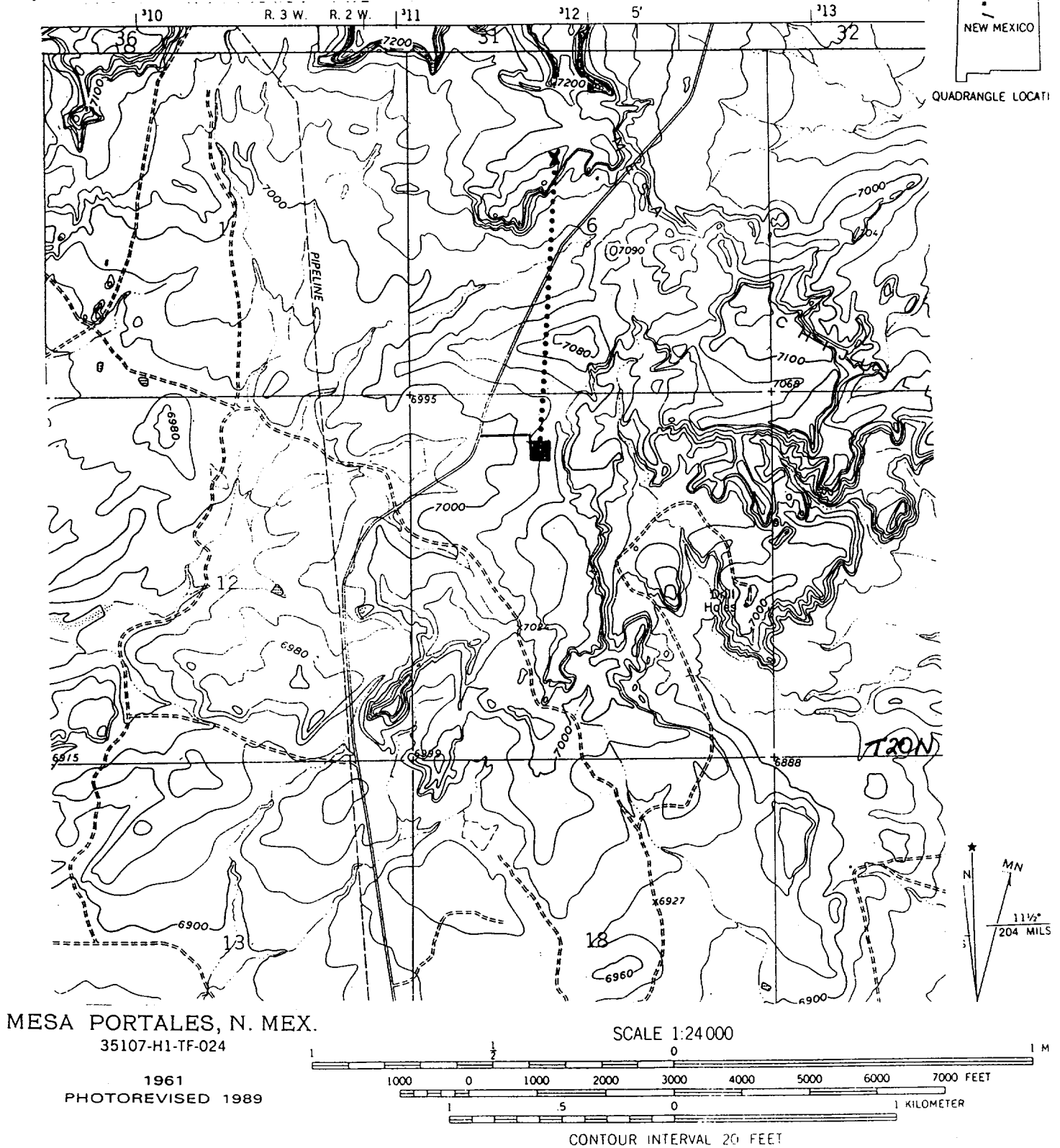


Figure 1. Map showing the location of the project area.