

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIP LITE*
(Other instructions on reverse side)

Form approved.
Budge: Bureau No. 1004-0136
Expires: December 31, 1991

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

Matador Operating Company

3. ADDRESS AND TELEPHONE NO.

8340 Meadow Road #150, Dallas, TX 75231 214-987-7128

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

At surface

1980' FSL & 990' FEL
At proposed prod. zone

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

25 miles west of Hobbs

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

990'

16. NO. OF ACRES IN LEASE
320

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.

NA

19. PROPOSED DEPTH
13700'

20. ROTARY OR CABLE TOOLS
Rotary

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

3806' GR

Capitan Controlled Water Basin

22. APPROX. DATE WORK WILL START*

February 1, 2002

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8 H-40	48#	425'	360 SX
11"	8-5/8 J-55	32#	4000'	850 SX
7-7/8"	5-1/2 L-80 & HCP-110	17#	13700'	700 SX

Drill 13,700' Morrow test. Drill 17-1/2" hole to 425'. Run and cement 13-3/8" casing to surface. NU BOP stack and drill 11" hole to $\pm 4000'$. Run and cement 8-5/8" casing to surface. NU BOP assembly and test. Drill 7-7/8" hole to $\pm 13,700'$ and evaluate.

Well location and Acreage Dedication Plat

Application for Permit to Drill

Surface Use Plan

Exhibit A, Area Map

Exhibit B, Wellsite Plan

Exhibit C, Production Map

Exhibit D, BOP Schematic

Exhibit E, Choke Manifold

Well Plan Outline

Topo Map

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

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 Sr. Drilling Engineer

DATE 12/10/01

(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 those rights in the subject lease

CONDITIONS OF APPROVAL, IF ANY:

OPER. OGRID NO. 14245

PROPERTY NO. 29241

POOL CODE 83320

EFF. DATE 1-30-02

API NO. 30-025-35826

APPROVED BY

/S/ JOE G. LARA

TITLE

FIELD MANAGER

DATE JAN 29 2002

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

DISTRICT I
P. O. Box 1980
Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals, and Natural Resources Department

Form C-102
Revised 02-10-94
Instructions on back

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

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

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

☐ AMENDED REPORT

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-35826		2 Pool Code 83320		3 Pool Name Quart Ridge; Morrow, north			
4 Property Code 29241		5 Property Name PIPELINE DEEP FEDERAL '6'				6 Well Number 1	
7 OGRID No. 014245		8 Operator Name MATADOR PETROLEUM CORPORATION				9 Elevation 3808'	

10 SURFACE LOCATION

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	6	19 SOUTH	34 EAST, N.M.P.M.		1980'	SOUTH	990'	EAST	LEA

11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>
	Signature
	Printed Name Jim Kramer
	Title Sr. Drilling Engineer
	Date 12/10/01
	SURVEYOR CERTIFICATION <i>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 belief.</i>
	Date of Survey MARCH 19, 2001
	Signature and Seal of Professional Surveyor
	Certificate No. V. L. BEZNER R.P.S. #7920
	JOB #75285-72 NE / V.H.B.

APPLICATION FOR PERMIT TO DRILL

MATADOR OPERATING COMPANY

Pipeline Deep Federal "6" #1

1980' FSL; 990' FEL

Sec 6, T19S, R34E

Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Matador Operating Company submits the following items of pertinent information in accordance with Onshore Oil and Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. Geological Name of Surface Formation: Permian
2. Estimated Tops of Important Geological Markers:

	Measured Depth	Subsea	
Upper Permian Yates	3205'	+621'	
Upper Permian Seven Rivers	3650'	+176'	
Lower Permian Delaware	5695'	-1869'	+
Lower Permian Bone Spring	7790'	-3964'	
1 st Bone Spring SS Mbr	9055'	-5229'	+
2 nd Bone Spring SS Mbr	9600'	-5774'	+
3 rd Bone Spring SS Mbr	10525'	-6699'	
Lower Permian Wolfcamp SH	10675'	-6849'	
Lower Permian Wolfcamp "Chert"	10740'	-6914'	
Upper Penn Cisco	11815'	-7989'	
Upper Penn Canyon	12015'	-8189'	
Upper Penn Strawn	12115'	-8289'	
Lower Penn Atoka	12375'	-8549'	
Lower Penn Atoka LS	12730'	-8904'	
Lower Penn Morrow	12900'	-9074'	
Middle Morrow Clastics	13050'	-9224'	*
Lower Morrow	13380'	-9570'	*
PTD	13700'	-9874'	

* Primary Reservoir Target

+ Secondary Reservoir Target

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	0-300'	Fresh Water	*
Delaware	5695'	oil	
1 st Bone Spring SS Mbr	9055'	oil	**
Middle Morrow Clastics	13050'	gas	
Lower Morrow	13380'	gas	

* Ground water will be protected by 13-3/8" surface casing with cement circulated to surface.

** Potentially productive horizons in the 7-7/8" hole section to be protected by the 5-1/2" casing with cement at least 500' above upper most zone.

4. Proposed Casing Program:

Hole Size	Interval	Casing OD	Description
26"	0-40'	20"	Conductor, if necessary
17-1/2"	0-425' <i>⊕</i>	13-3/8"	48# H-40, ST&C New, R-3
11"	0-4000'	8-5/8"	32# J-55, ST&C, New, R-3
7-7/8"	0-10000'	5-1/2"	17# L-80, LT&C, New, R-3
7-7/8"	10000'-13700'	5-1/2"	17# HCP-110, LT&C, New, R-3

Proposed Cementing Program:

20" Conductor: Ready-mix poured to surface.

13-3/8" Surface Casing: Cement w/ 160 sx Class "C" Light (12.5 ppg, 1.99 ft³/sx). Tail w/ 200 sx Class "C" + 2% CaCl₂ (14.8 ppg, 1.32 ft³/sx).
Float Equipment: Texas pattern shoe w/ insert float valve above shoe joint, 3 centralizers.

8-5/8" Intermediate Casing: Cement w/ 650 sx Interfill "C" (11.5 ppg, 2.75 ft³/sx). Tail w/ 200 sx Class "C" + 1% CaCl₂ (14.8 ppg, 1.32 ft³/sx).
Float Equipment: Float shoe w/ float collar above the shoe joint, 10 centralizers.

⊕ See strips on alternative casing conditions of approval.

5-1/2" Production Casing: Cement w/ 700 sx Super "H" Modified + 0.4% CFR-3 + 0.4% Halad-344 + 0.1% HR-7 (13.0 ppg, 1.65 ft³/sx).

5. Pressure Control Equipment:

The blowout preventer equipment (BOPE) shown in Exhibit D will be utilized for the 11" and 7-7/8" hole sections. The assembly will consist of a 5000 psi WP double ram-type preventer (4-1/2" pipe and blind rams) and a 3000 psi WP annular preventer (API RP53 Fig 2.c.5). This BOPE assembly will be nipped up on the surface casing and used continuously until setting the 5-1/2" casing at total depth of ±13,700'. All BOPE will be tested as follows:

- Prior to drilling out from surface casing – test all BOPE to 500 psi using rig pump.
- Prior to drilling out from 8-5/8" casing – test ram-type preventers and choke manifold to 5000 psi and annular preventer to 70% of rated WP using independent tester and test plug.

A rotating head will be installed on top of the annular preventer after setting the 8-5/8" casing at +/- 4000'.

All BOP's will be hydraulically operated. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of hole. The kill line will be 2" minimum and will include a remote connection. The choke line will be 3" minimum. A complete choke manifold schematics is shown in Exhibit E.

6. Proposed Mud System:

The proposed mud system will be a combination of fresh water, brine, cut brine, and polymer gel. The depth and mud properties of the mud system are listed below.

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)	ph
0-425'	Fresh Water	8.3-8.8	28-30	Not Critical	9-10
425'-4000'	Brine Water	8.8-10.2	28-30	Not Critical	9-10
4000-12,900'	FW/Cut Brine	8.5-9.0	28-30	Not Critical	9-10
12900-13,700'	Polymer/Gel	9.0-9.8	30-32	<10	9-0

Sufficient mud materials to maintain the above mentioned mud properties and meet minimum lost circulation and weight increase requirements will be kept at the location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be kept in the drill string at all times.
- A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- A mud logging unit complete with H2S detector will be monitoring drilling penetration rate and hydrocarbon shows from 4000' to TD.
- PVT/Flo-sensor equipment will be rigged up and operating at 10,000' (prior to drilling into the Wolfcamp formation).

8. Drillstem Testing, Logging and Coring Programs:

- Drillstem tests: Possible test in Morrow Sands to be based on shows encountered while drilling.
- Electric logs: DSN-SDT-DLL-MCGD-LSS: TD to 4000' (DSN-GR to surface). SFT/Sidewall Cores: Zones of Interest
- Coring: None planned

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures and/or temperatures are anticipated. Estimated BHP in the Morrow is 6500 psi. No hydrogen sulfide or other hazardous gases or fluids are known to exist in this area.

10. Anticipated Starting Date and Duration of Operations:

The anticipated start date will be February 1, 2002. Once commenced, drilling operations should be completed in approximately 40 days. If the well is productive, another 30 days will be required for completion work and facility installation.

SURFACE USE PLAN
MATADOR OPERATING COMPANY
Pipeline Deep Federal "6" #1
1980' FSL, 990' FEL
Sec 6, T19S, R34E
Lea County, New Mexico

1. EXISTING ROADS – Area map, Exhibit "A", is a reproduction of the appropriate part of the U.S.G.S. New Mexico 7-1/2 minute quadrangle. Existing roads are shown on the exhibit and the road to be used on the referenced well is marked. All roads shall be maintained in a condition equal to that which existed prior to start of construction.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. Direction: From Hobbs go West on US62 to the junction with Hwy 180 for 25 miles. Turn North off Highway onto lease road and go 2.9 miles. Turn right and go Northeast 2.0 miles, then North 3.2 miles. Go East on new road $\pm$ 0.25 miles to location.
2. PLANNED ACCESS ROADS – Existing lease roads with an extension of approximately 600' of new road to the location.
3. LOCATION OF EXISTING WELLS ON A ONE-MILE RADIUS
 - A. Water wells - NA.
 - B. Disposal wells - NA.
 - C. Drilling wells - NA.
 - D. Producing wells – As shown on Exhibit "C".
 - E. Abandoned wells-As shown on Exhibit "C".
4. If upon completion, the well is a producer, Matador Operating Company will furnish maps or plats showing On Well Pad Facilities and Off Well Pad Facilities (if needed) on a Sundry Notice before construction of these facilities starts.
5. LOCATION AND TYPE OF WATER SUPPLY
Water will be purchased locally from a private source and trucked over the access road or piped in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill site's excavations, or from a local source. These materials will be transported over the access route as shown in Exhibit "A".

7. METHODS FOR HANDLING WASTE DISPOSAL.

- A.
 - 1. Drill cuttings will be disposed of in the reserve pit.
 - 2. Trash, waste paper, and garbage will be contained in a fenced trash trailer to prevent wind-scattering during storage. When the rig moves out, all trash and debris will be hauled to an approved land-fill site.
 - 3. Salts remaining after completion of the well will be picked up by the supplier, including broken sacks.
 - 4. Sewage from trailer houses will drain into holes with minimum depth of 10'00". These holes will be covered during drilling and back-filled upon completion. A "porta-john" will be provided for the rig crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
 - 5. Chemicals remaining after completion of the well will be stored in the manufacturer's containers and picked up by the supplier.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for back-filling. In the event drilling fluids will not be evaporated in a reasonable period of time, they will be transported by a tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

9. WELL SITE LAYOUT

- A. Exhibit "B" shows the proposed well site layout.
- B. This exhibit indicates proposed location of the reserve pits and trash trailer.

- C. Mud pits in the active circulating system will be steel pits will be steel pits and the reserve pit is proposed to be unlined, unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with a poly-ethylene liner. The pit liner will be a minimum of 6 mils thick. The pit liner will extend a minimum of 2'00" over the reserve pit dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or dry hole.

In either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area as closely as is possible. Drainage system, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstance to prevent inundation of the location pad and surface facilities. After the area had been shaped and contoured, topsoil from the soil pits will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

11. OTHER INFORMATION

- a. The area around the wellsite has moderate to high dunes with deflation basins 1-2 meters deep, shin oak, yucca, sage brush, mesquite, broom weed and various grasses.
- b. Surface use is grazing and the lessee is Kenneth Smith, Inc., P. O. Box 764, Carlsbad, NM 88220.

- c. An archaeological study has been conducted for the location and road. Archaeological survey submitted under separate cover.
- d. There are no buildings in the area.

12. OPERATOR'S REPRESENTATIVE

Matador Operating Company's field representative for contact regarding compliance with the Surface Use Plan is:

Before, during, and after construction:

Jim Kramer

8340 Meadow Road #150

Dallas, TX 75231

Office: 214-987-7128

Mobile: 915-553-3542

Res: 972-377-3281

13. CERTIFICATION

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 currently 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 Matador Operating Company and its contractors/ subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

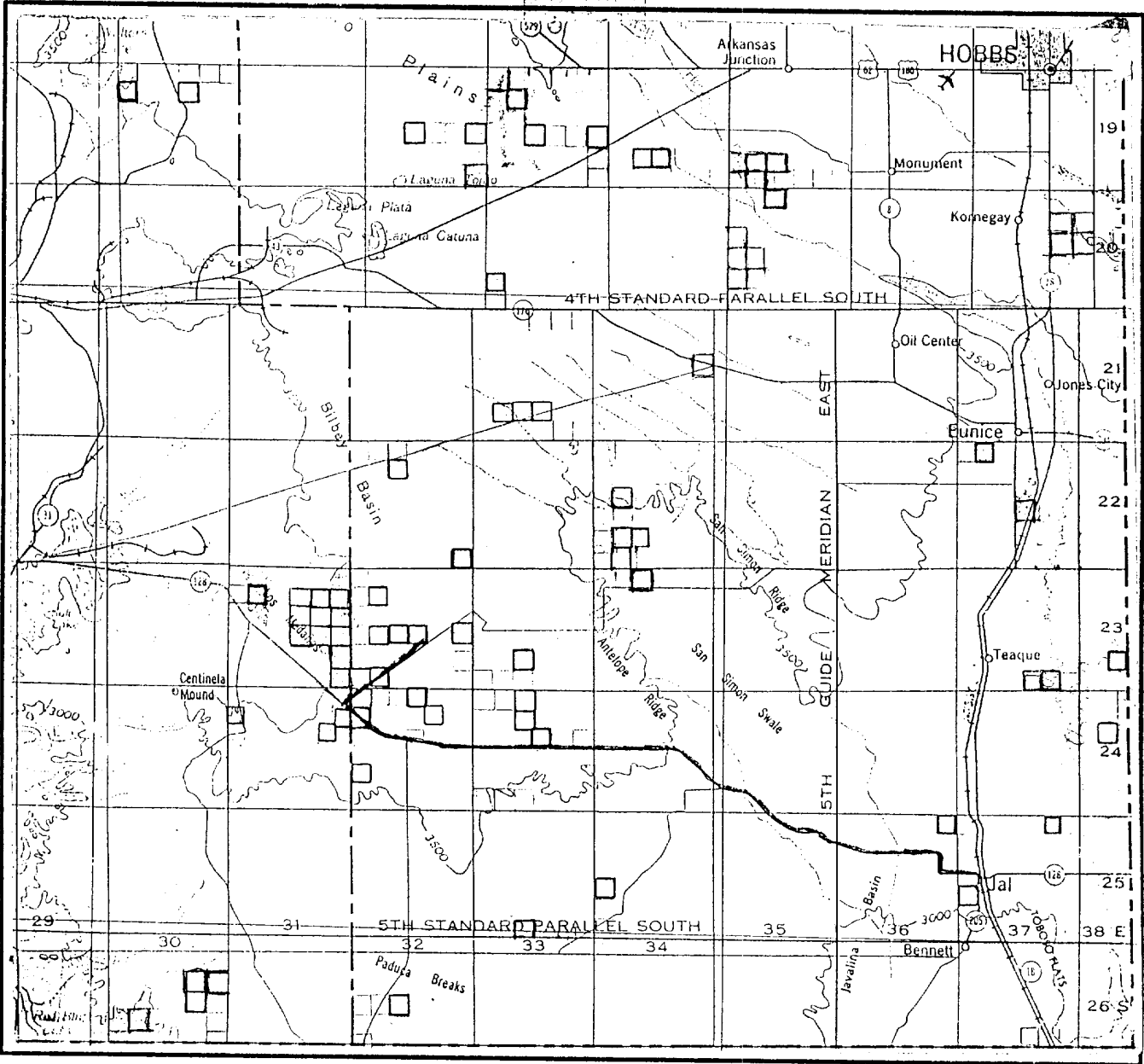
Name: Jim Kramer

Jim Kramer

Sr. Drilling Engineer

Date: 12/10/01

VICINITY MAP



SECTION 6 TWP 19-S RGE 34-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY LEA STATE NM
 DESCRIPTION 1980' FSL & 990' FEL

OPERATOR MATADOR PETROLEUM CORPORATION
 LEASE PIPELINE DEEP FEDERAL "6" #1

DISTANCE & DIRECTION FROM HOBBS GO WEST ON HWY.
62/180 ±25 MILES, THENCE NORTH THUR CATTLE GUARD
ON LEASE ROAD 2.9 MILES, THENCE SOUTHWEST ON LEASE
ROAD 1.7 MILES, THENCE NORTH 3.3 MILES ON LEASE
ROAD, THENCE NORTHEAST ON TRAIL ROAD 0.2 MILE TO
A POINT ±300' WEST OF THE LOCATION.

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.
 Review this plot and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

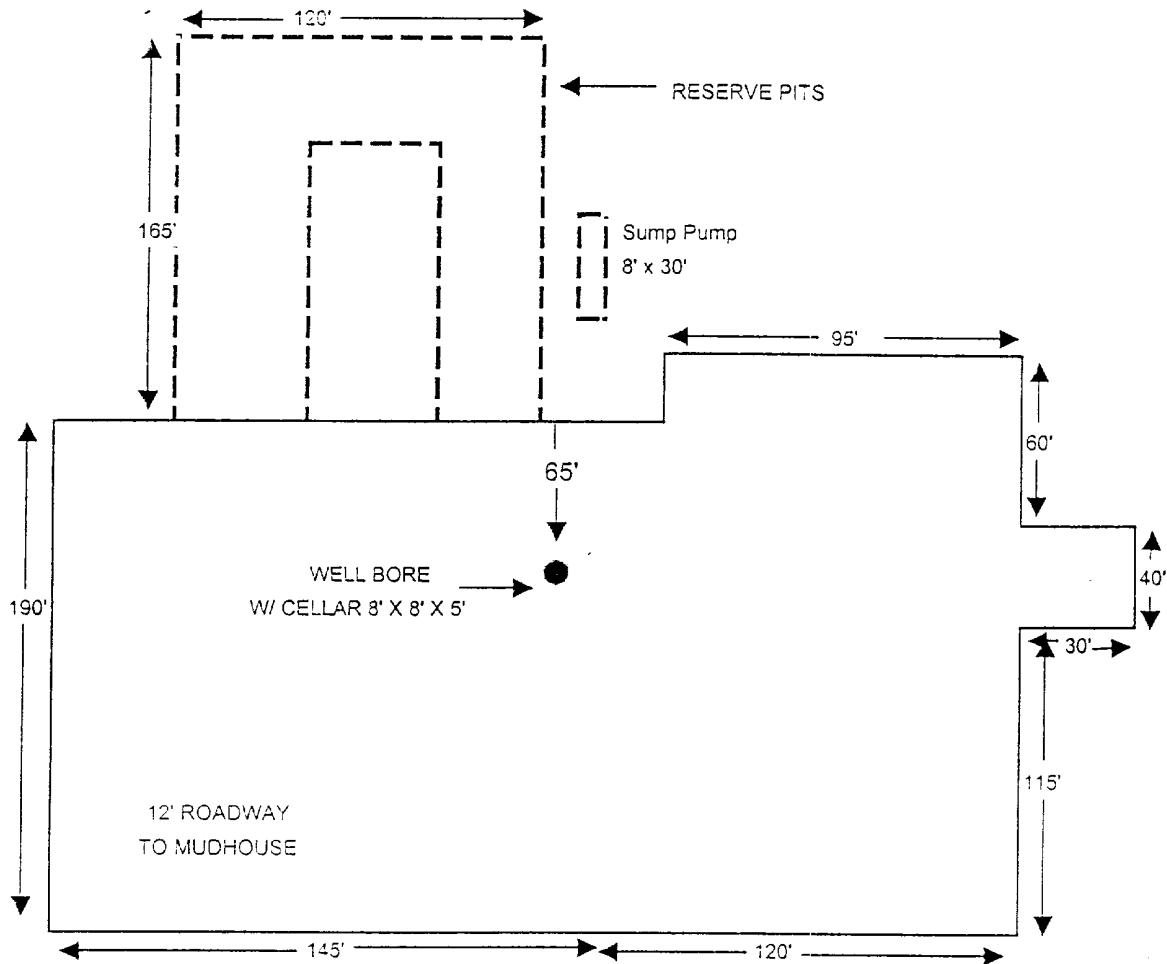
1307 N. HOBART
 PAMPA, TX. 79065
 (800) 658-6382

6709 N. CLASSEN BLVD.
 OKLAHOMA CITY, OK. 73116
 (800) 654-3219

2903 N. BIG SPRING
 MIDLAND, TX. 79705
 (800) 767-1653

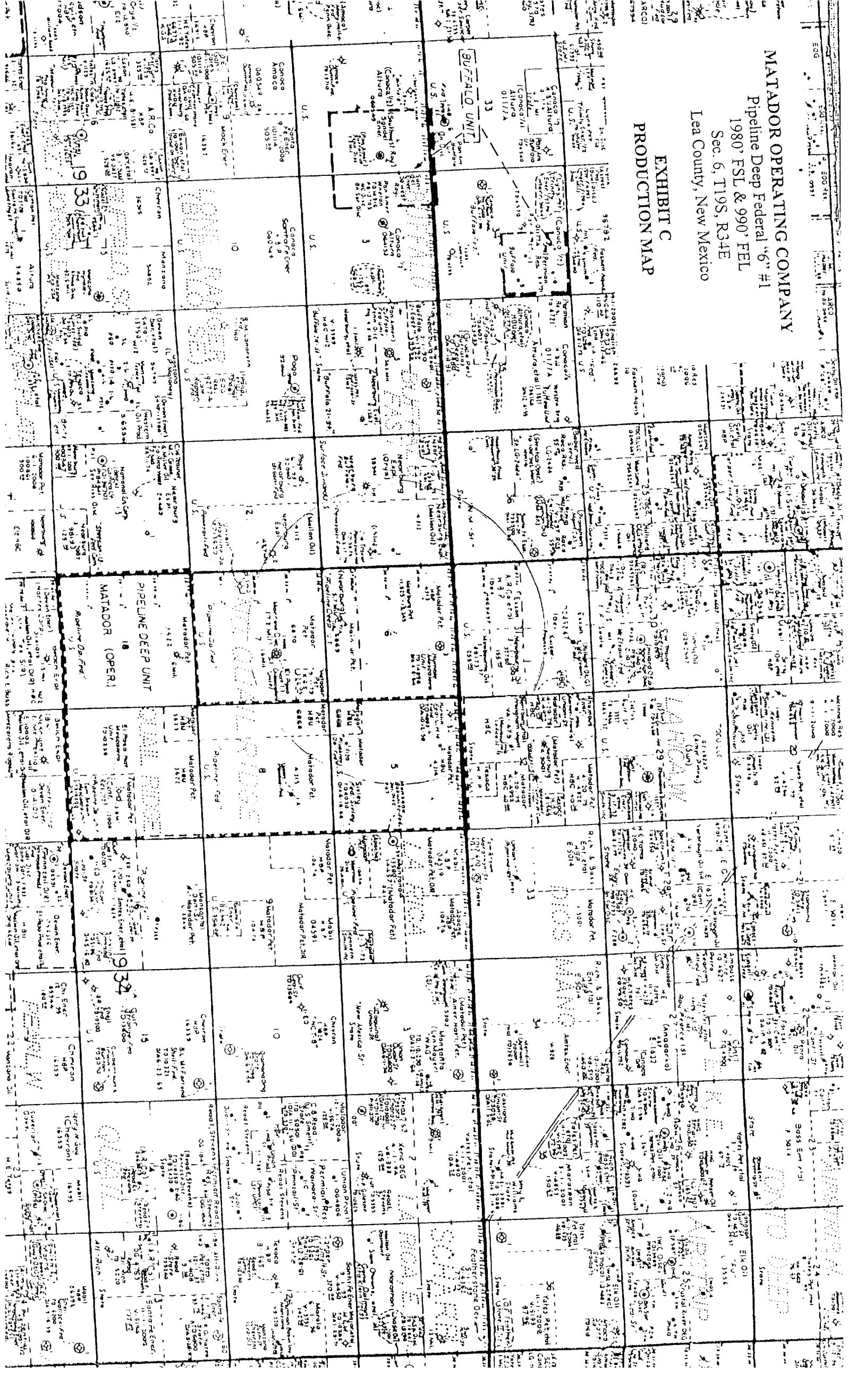
MATADOR OPERATING COMPANY
PIPELINE DEEP FEDERAL "6" #1
1980' FSL & 990' FEL
Sec. 6, T19S, R34E
Lea County, New Mexico

WELL SITE PLAN



MATADOR OPERATING COMPANY
Pipeline Deep Federal "6" #1
1980' FSL & 990' FEL
Sec. 6, T19S, R34E
Lea County, New Mexico

EXHIBIT C
PRODUCTION MAP



MATADOR OPERATING COMPANY

Pipeline Deep Federal "6" #1

1980' FSL & 990' FEL

Sec. 6, T19S, R34E

Lea County, New Mexico

**EXHIBIT D
BOP SCHEMATIC**

(5m Rated Working Pressure)

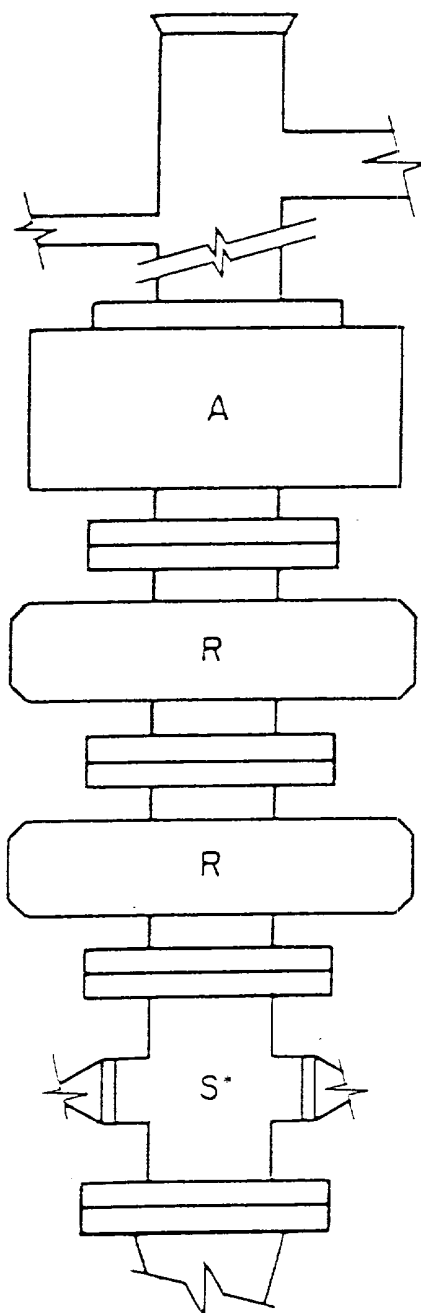


FIG. 2.C.5
ARRANGEMENT S*RA
Double Ram Type Preventers, R_d, Optional.

MATADOR OPERATING COMPANY

Pipeline Deep Federal "6" #1

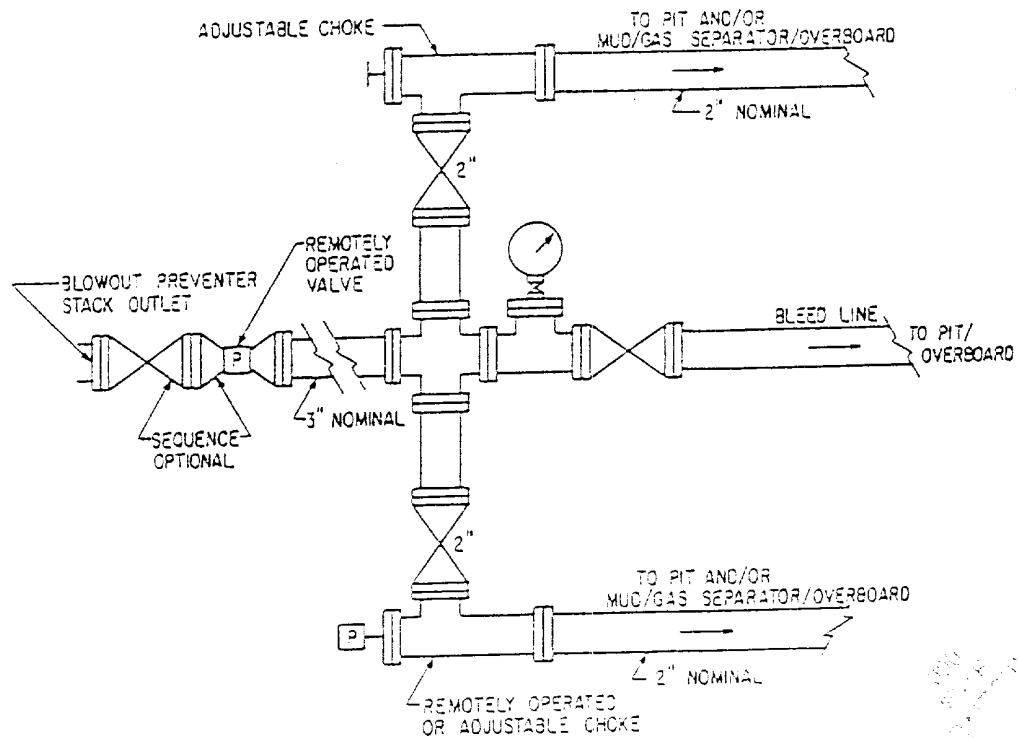
1980' FSL & 990' FEL

Sec. 6, T19S, R34E

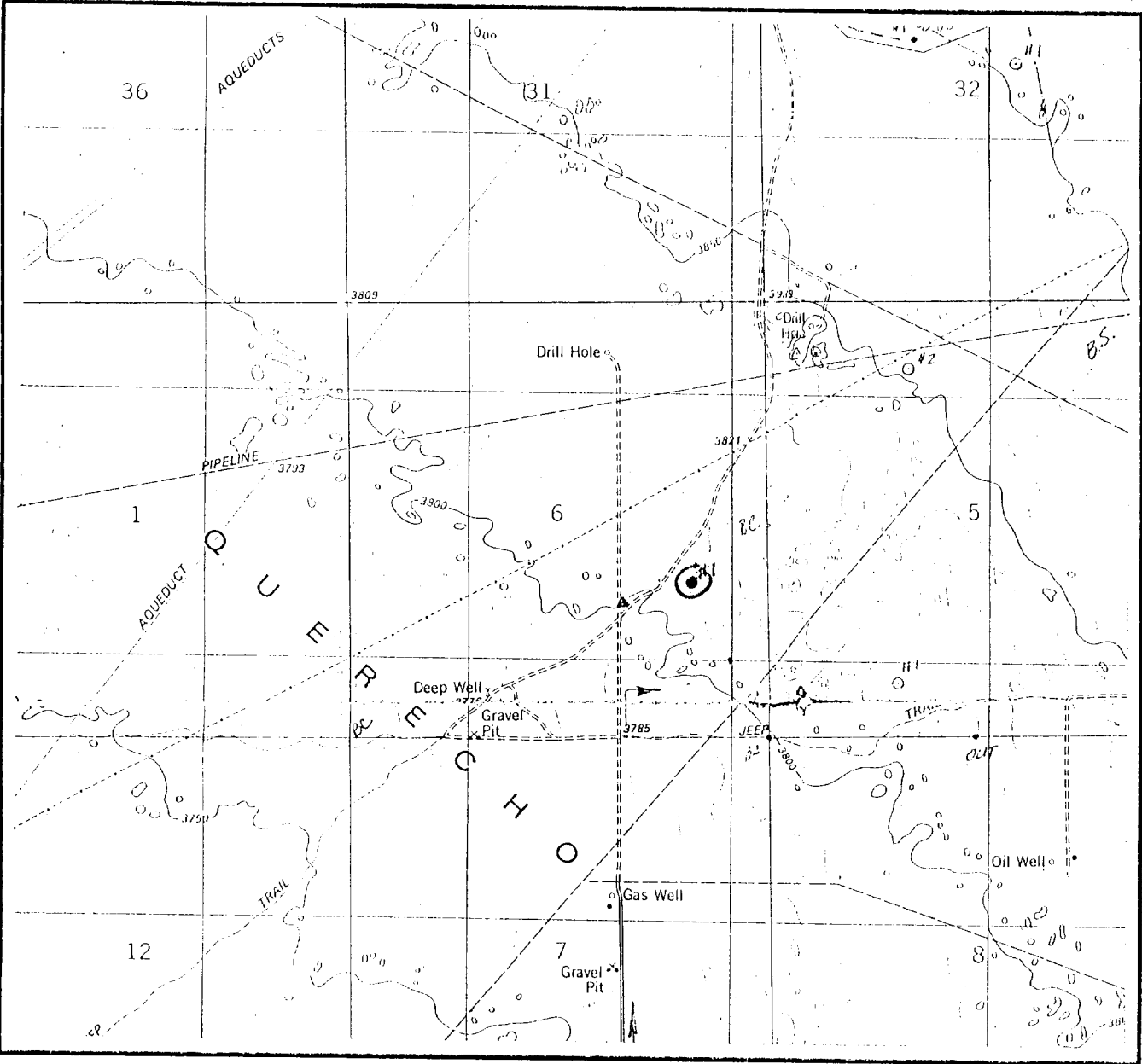
Lea County, New Mexico

EXHIBIT E CHOKE MANIFOLD

(5m Rated Working Pressure)



LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 6 TWP 19-S RGE 34-E
SURVEY NEW MEXICO PRINCIPAL MERIDIAN
COUNTY LEA STATE NM
DESCRIPTION 1980' FSL & 990' FEL
ELEVATION 3806'

OPERATOR MATADOR PETROLEUM CORPORATION
LEASE PIPELINE DEEP FEDERAL "6" #1

U.S.G.S. TOPOGRAPHIC MAP
IRONHOUSE WELL, NEW MEXICO

LAT. N 32°40'09"
LONG. W 103°34'32"



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.
Review this plot and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

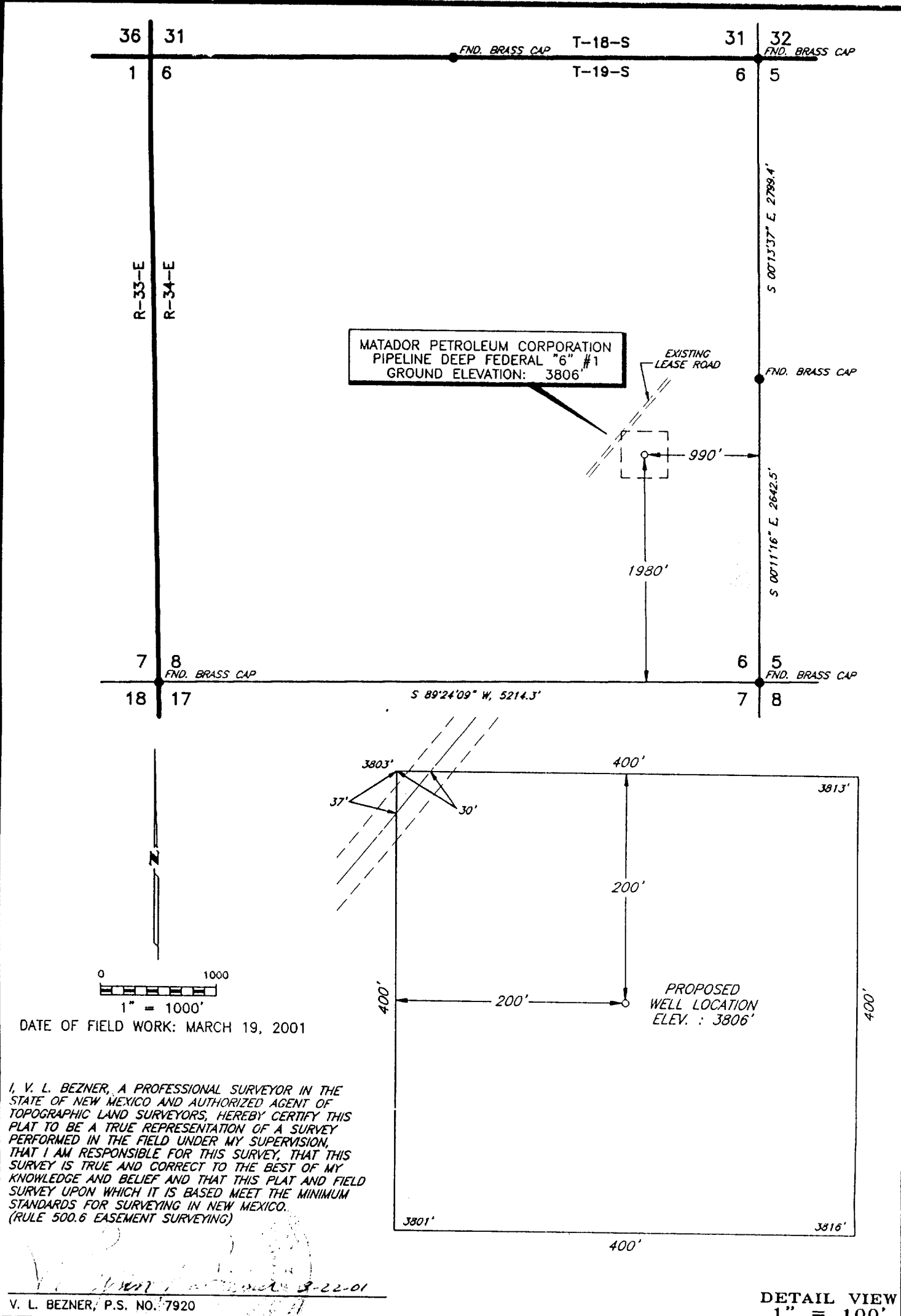
Surveying & Mapping for the Oil & Gas Industry

1307 N. HOBART
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OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

PLAT SHOWING PROPOSED
WELL LOCATION AND LEASE ROAD IN
SECTION 6, T-19-S, R-34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



I, V. L. BEZNER, A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO AND AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS PLAT TO BE A TRUE REPRESENTATION OF A SURVEY PERFORMED IN THE FIELD UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS PLAT AND FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. (RULE 500.6 EASEMENT SURVEYING)

V. L. BEZNER, P.S. NO. 7920

DETAIL VIEW
1" = 100'

				MATADOR PETROLEUM CORPORATION				SCALE: AS SHOWN	
								DATE: MARCH 19, 2001	
NO.	REVISION	DATE	BY	SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS				JOB NO.: 75285-F	
SURVEYED BY: H.V.								QUAD NO.: 72 NE	
DRAWN BY: V.H.B.									
APPROVED BY: V.L.B.									
								SHEET : 1 OF 1	