

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 Rd., #158, Dallas, Tx 75231, 214-987-7144

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

At surface
660' FNL-660' FWL
At proposed prod. zone

OPER. GRID NO. 14245
PROPERTY NO. 23840
POOL CODE 83320
EXP. DATE 8-14-00
API NO. 30-025-35133

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST

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)

660'

320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

NA

19. PROPOSED DEPTH

13,750

20. ROTARY OR CABLE TOOLS

Rotary

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

3848' GR

CAPITAN CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*

June 23, 2000

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#	1625' 425'	315 sx
11"	8-5/8 J-55	32#	4000'	1400 sx
7-7/8"	5-1/2" L-80 & S-95	17#	13,750'	540 sx

Drill 13,750' Morrow/Bone Spring test. Drill 17-1/2" hole to $\pm 425'$. Run and cement 13-3/8" casing to surface. Nu BOP stack and drill 11" hole to $\pm 4,000'$. Run and cement 8-5/8" casing to surface. NU 5M BOP assembly and test. Drill 7-7/8" hole to $\pm 13,750'$ and evaluate.

Well Location and Acreage Dedication Plat

Application for Permit to Drill (Drilling Program)

Surface Use Plan

Exhibit A, Area Map

Exhibit B, Wellsite Plan

Exhibit C, Production Map

Exhibit D, Blowout preventer requirements

Exhibit E, BOP schematic

Exhibit F, Choke manifold

Well Plan Outline

Topo Map

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

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 J. L. Bell

TITLE Drilling Manager

DATE 6-8-00

(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 which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Assistant Field Manager,
Lands And Minerals

AUG 11 2000

APPROVED BY

/S/LARRY D. BRAY

TITLE

DATE

*See Instructions On Reverse Side

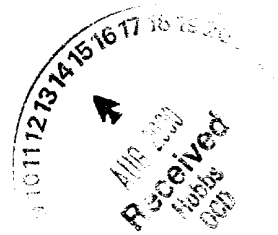
APPROVED FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations or to any matter within its jurisdiction.

20 JUN 1960
RECEIVED

2000 JUN -9 A 11: 19

RECEIVED



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 30-025-35133	2 Pool Code 83320	3 Pool Name Quail Ridge N Morrow Gas
4 Property Code 23840	5 Property Name PIPELINE DEEP FEDERAL '5'	6 Well Number 2
7 OGRID No. 014245	8 Operator Name MATADOR OPERATING COMPANY	9 Elevation 3848'

10 SURFACE LOCATION

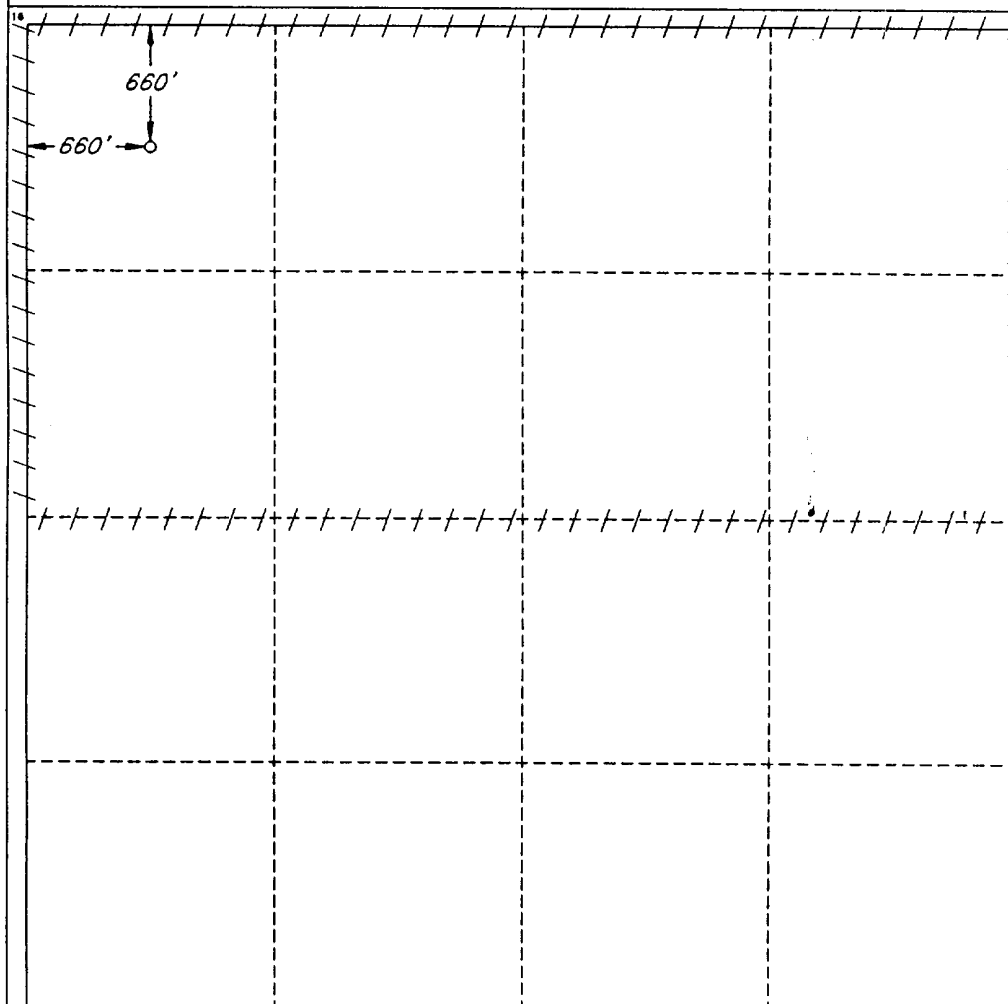
UL or lot no. LOT 4	Section 5	Township 19 SOUTH	Range 34 EAST, N.M.P.M.	Lot 1da	Feet from the 660'	North/South line NORTH	Feet from the 660'	East/West line WEST	County LEA
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"BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

UL or lot no.	Section	Township	Range	Lot 1da	Feet from the	North/South line	Feet from the	East/West line	County
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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 hereby certify that the information
contained herein is true and complete
to the best of my knowledge and belief.

Signature
John W. Bell

Printed Name
John W. Bell

Title
Drilling Manager

Date

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 belief.

Date of Survey
MAY 11, 2000

Signature and Seal of
Professional Surveyor

V. L. Bezner
Certificate No.
V. L. BEZNER R.P.S. #7920

JOB # 69197 / 72 NE / V.H.B.



APPLICATION FOR PERMIT TO DRILL

MATADOR OPERATING CORPORATION

PIPELINE DEEP FEDERAL "5" #2

660' FNL & 660' FWL

Sec 5, T19S, R34E

New 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:

Upper Permian Yates	3341'	+530'	
Upper Permian Seven Rivers	3761'	+110'	
Lower Permian Delaware	5721'	-1850'	+
Lower Permian Bone Spring	7781'	-3910'	
1 st Bone Spring SS Mbr	9436'	-5565'	+
2 nd Bone Spring SS Mbr	9636'	-5765'	+
3 rd Bone Spring SS Mbr	10501'	-6630'	
Lower Permian Wolfcamp SH	10666'	-6795'	
Lower Permian Wolfcamp "Chert"	10716'	-6845'	
Upper Penn Cisco	11796'	-7925'	
Upper Penn Canyon	12131'	-8260'	
Upper Penn Strawn	12226'	-8355'	
Lower Penn Atoka	12486'	-8615'	
Lower Penn Atoka LS	12811'	-8940'	
Lower Penn Morrow	12996'	-9125'	
Middle Morrow Clastics	13191'	-9320'	*
Lower Morrow	13481'	-9610'	*
PTD	13750'	-9879'	

* = Primary Reservoir Targets

+ = Secondary Reservoir Targets

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

Upper Permian Sands	0-300'	Fresh water
Delaware	5721'	oil
1 st Bone Spring SS Mbr	9436'	oil
Middle Morrow Clastics	13,191'	gas
Lower Morrow	13,481'	gas

The ground water will be protected by setting 13-3/8" surface casing at 425' and circulating cement back to surface. The productive Morrow horizons will be protected by setting 5-1/2" production casing at TD with cement tied back to approximately 9000', if Bone Spring is productive or 500' above upper most productive zone.

3. Proposed Casing Program:

Hole Size	Interval	Casing OD	Description
25"	0-40'	20"	Conductor, if necessary
17-1/2"	0-425' / 0-450'	13-3/8"	48#, H-40, ST&C New, R-3
11"	0-4000'	8-5/8"	32#, J-55, LT&C, New, R-3
7-7/8"	0-10,200'	5-1/2"	17#, L-80, LT&C, New, R-3
7-7/8"	10,200-13,800'	5-1/2"	17#, S-95, LT&C, New, R-3

Proposed Cement Program:

20" Conductor: Ready-mix poured to surface.

13-3/8" Surface Casing: Cemented to surface with 115 sx Permian Basin Filler Cement & 200 sx Class "C" + 2% CaCl₂ tail. Float equipment: Texas Pattern shoe with an insert float valve above the shoe joint and 2 centralizers. The shoe and first collar will be welded. One plug will be used to displace cement.

8-5/8" Intermediate Casing: Cemented to surface with 1300 sx Interfill "C" & 200 sx Class "C" + 2% CaCl₂ tail. Float equipment: Float shoe with a float collar 1 joint above the shoe joint and 12 centralizers. The shoe and float collar will be welded. One plug will be used to displace cement.

5-1/2" Production Casing: Cement 1st Stage: 550 sx Super Modified H w/ 0.4% CFR-3, 0.5% Halad 344, 1# salt & 5# Gilsonite.
Cement 2nd State (if necessary) ±700 sx Interfill "H" w/ 5# Gilsonite followed by 100 sx "H" neat.

4. Pressure Control Equipment:

The blowout preventer equipment (BOP) shown in Exhibits D & E will consist of a double ram-type (5000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be nipped up on the 13-3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000 psi and the hydril to 70% of rated working pressure (2100 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and a choke manifold arc 4000 psi WP rating which is shown in Exhibit F.

5. 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'	Cut Brine	8.5-9.0	28-30	Not Critical	9-10
12,900-13,800'	Polymer/Gel	9.0-9.8	30-32	<10	9-10

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.

6. 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 5200' to TD.

7. Drillstem Testing, Logging and Coring Programs:

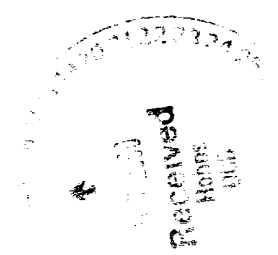
- Drillstem tests will be run based on shows encountered while drilling.
- No logs are planned for the 11" hole section. The electric logging program for the 7-7/8" hole sections will consist of GR-Dual Laterolog MLL-BHC Sonic and GR Compensated Neutron—LithoDensity from TD to intermediate casing. Selected sidewall cores and RFT's may be taken in zones of interest.
- No conventional coring is anticipated.

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

No abnormal pressures and/or temperatures are anticipated. No hydrogen sulfide or other hazardous gases or fluids are known to exist in this area. No major loss circulation zones are expected.

9. Anticipated Starting Date and Duration of Operations:

The anticipated start date will be June 23, 2000. Once commenced, drilling operations should be completed in approximately 45 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 "5" #2
660' FNL, 660' FWL
Sec 5, 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 minutes 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 the start of construction.
 - A. Exhibit "A" shows the proposed exploratory well site as staked.
 - B. Direction: From Hobbs go West on US62 to the junction with Hwy 180 for 24.8 miles, go North 2.9 miles on lease road, then SE 1.7 miles, then N 3.3 miles, then NE 0.7 miles on trail road to a point $\pm 660'$ W of location.
2. PLANNED ACCESS ROADS – Existing lease roads with an extension of approximately 2500' of new road from existing 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".

6. 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.

7. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

8. 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 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.

9. 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.

10. 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 & various grasses.
- B. The surface use is grazing and the lessee is Ken Smith, Inc., P. O. Box 764, Carlsbad, NM 88221.
- C. An archaeological study has been conducted for the location and road. The report will be submitted under separate cover.
- D. There are no building in the area.

11. OPERATOR'S REPRESENTATIVE

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

Before, during, and after construction:

John W. Bell

8340 Meadow Road #158

Dallas, TX 75231

Office: 214-987-7144

Res: 972-818-8778

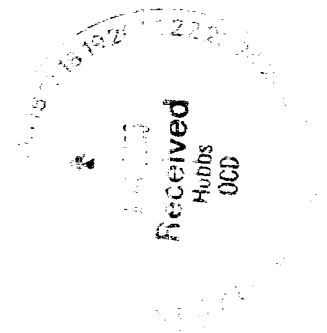
Mobile: 214-507-0985

13. CERTIFICATION

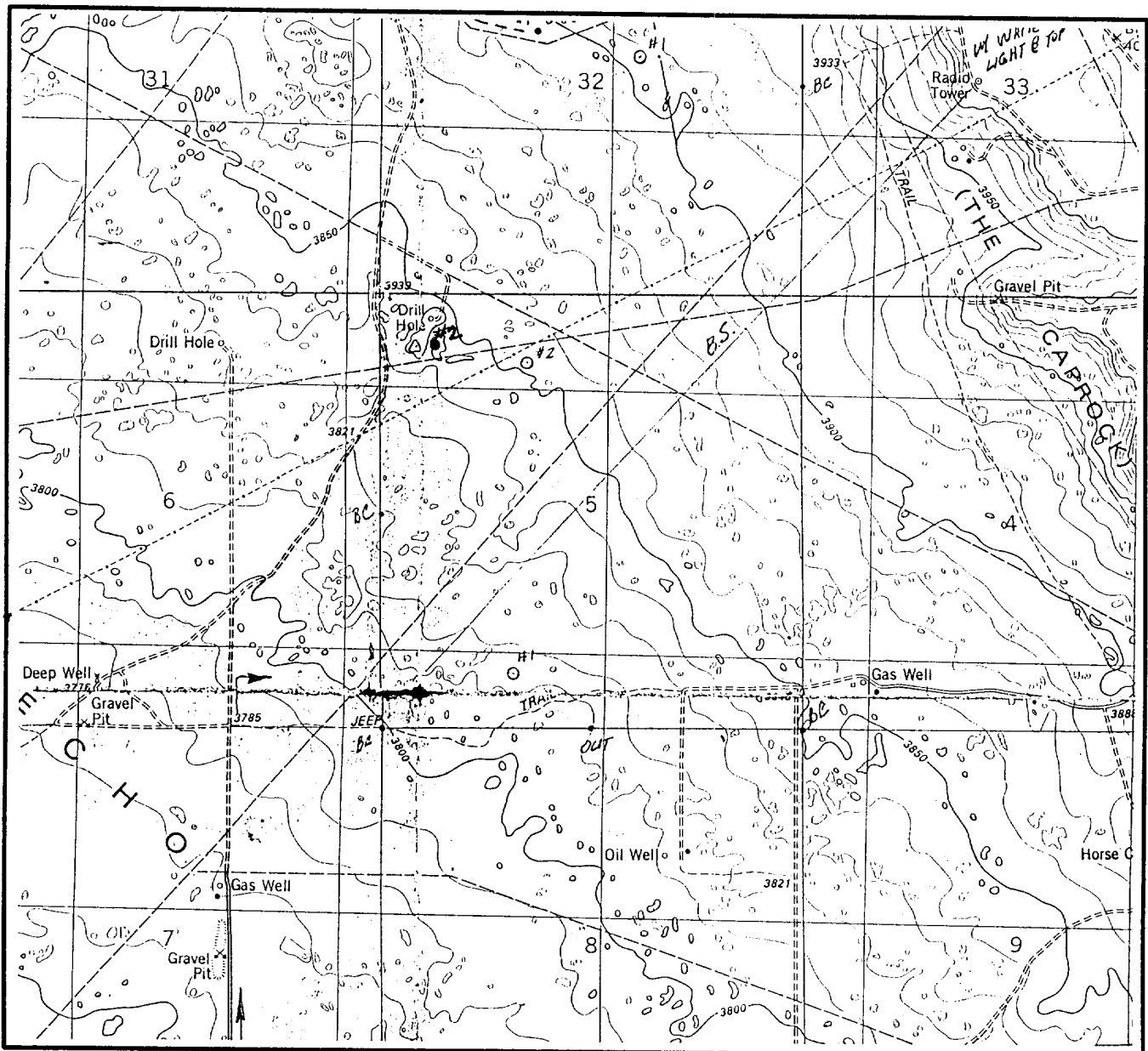
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated 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: John W. Bell
John W. Bell
Drilling Manager

Date: _____



LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10 FEET

SECTION 5 TWP T-19-S RGE R-34-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY _____ LEA _____ STATE _____ NM _____

DESCRIPTION 660' FNL & 660' FWL

ELEVATION 3848'

OPERATOR MATADOR OPERATING COMPANY

LEASE PIPELINE DEEP FEDERAL 5 #2

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

LAT. 32°41'42"

LONG. 103°35'18"

Exhibit "A"
Area Map



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

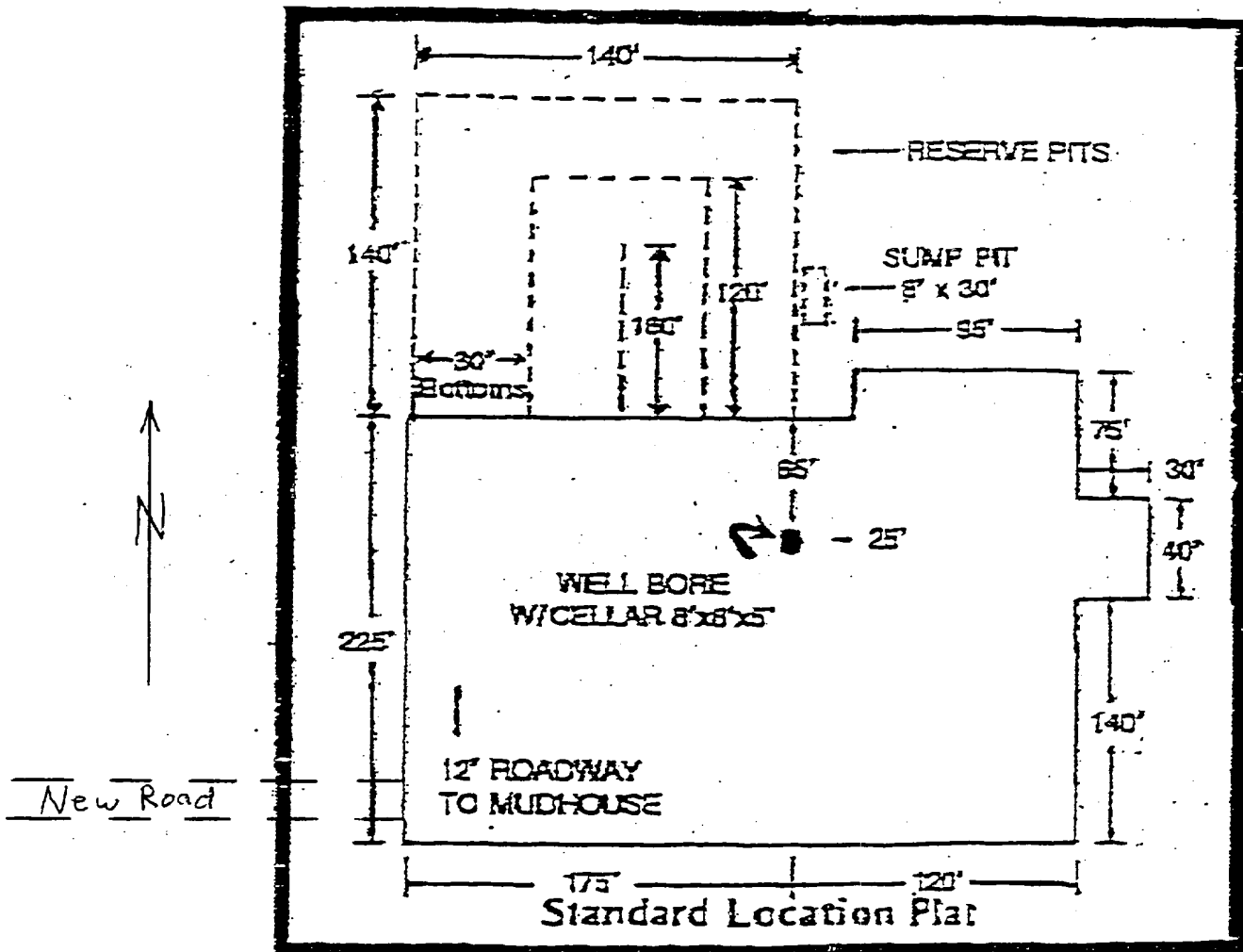
1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

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

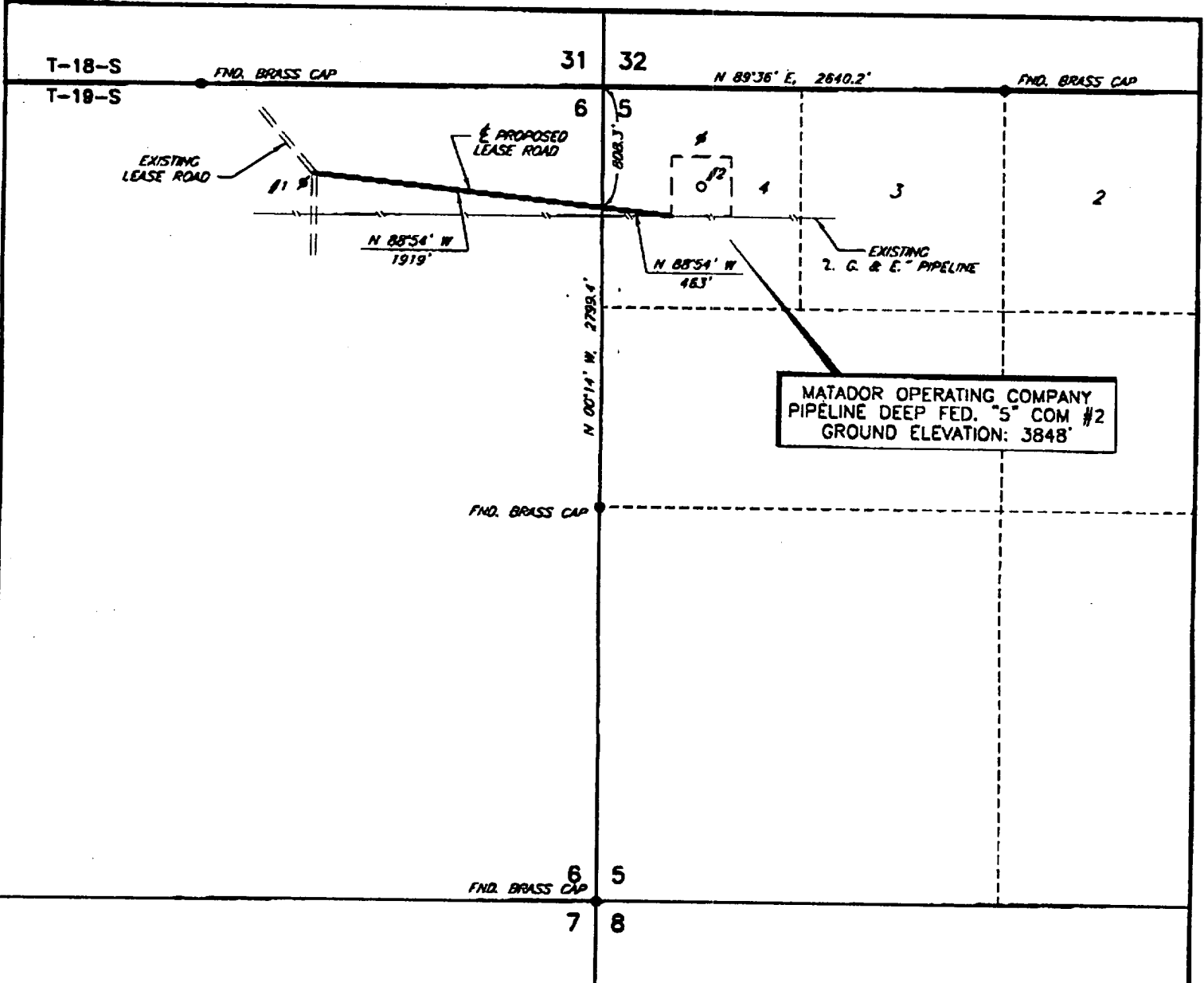
2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653



PIPELINE DEEP FEDERAL 5 #2
660' FNL, 660' FWL
Section 5, T-19-S, R-34-E
Lea County, New Mexico
AMENDED EXHIBIT "B"
Wellsite Plan



PLAT OF A PROPOSED LEASE ROAD IN
SECTIONS 5 & 6, T-19-S, R-34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



DATE OF FIELD WORK: JUNE 28, 2000

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



SCALE: 1" = 1000'
0' 500' 1000'

NO.	REVISION	DATE	BY
SURVEYED BY:	R.J.O.		
DRAWN BY:	V.H.R.		

MATADOR PETROLEUM CORPORATION

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS

SCALE: AS SHOWN
DATE: JUNE 28, 2000
JOB NO.: 70156

72 NE

