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NOV 17 2003
OCD-ARTESIA

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 100331
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Matador Operating Company Tom Brown Inc <i>SN approved 9/19/03</i>		7. If Unit or CA Agreement, Name and No.
3a. Address Dallas, TX 75231 8340 Meadow Road #150	3b. Phone No. (include area code) 214 987-7128	8. Lease Name and Well No. Karen "7" Federal #1
4. Location of Well (Report location clearly and in accordance with any State requirements.) <i>Dr B Hunt & SN dated 9/23/03</i> At surface 1250' 9-19' FNL & 1650' FWL (Sec. 7, T21S, R27E) At proposed prod. zone 1250' FNL & 1650' FWL (Sec. 7, T21S, R27E)		9. API Well No. 30-015-33101
14. Distance in miles and direction from nearest town or post office* 4 miles North of Carlsbad		10. Field and Pool, or Exploratory Burton Flat Morrow
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1250'		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 7, T21S, R27E
16. No. of Acres in lease 320		12. County or Parish Eddy
17. Spacing Unit dedicated to this well 320		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NA		19. Proposed Depth 11475'
20. BLM/BIA Bond No. on file 29403		21. Elevations (Show whether DF, KDB, RT, GL, etc.) GR: 3204'
22. Approximate date work will start* 8/15/03		23. Estimated duration 35
24. Attachments CARLSBAD CONTROLLED WATER BASIN		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Jim Kramer</i>	Name (Printed/Typed) Jim Kramer	Date 6/13/03
Title Sr. Drilling Engineer		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 14 NOV 2003
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify the 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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 as to any matter within its jurisdiction.

*(Instructions on reverse)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

5. Lease Serial No.	NM10033
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA/Agreement, Name and/or No.	
8. Well Name and No.	Karen 7 Federal #1
9. API Well No.	
10. Field and Pool, or Exploratory Area	Burton Flat Morrow
11. County or Parish, State	Eddy County, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator Tom Brown, Inc.	
3a. Address P O Box 2608 Midland, TX 79702	3b. Phone No. (include area code) 432-688-9773
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface: 1250' FNL & 2170' FWL Bottomhole: 1250 FNL & 1650 FWL Sec 7, T21S, R27E	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change Surface Location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Request to change surface location to: 1250' FNL and 2170' FWL. The bottom hole location will remain the same: 1250' FNL and 1650' FWL

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Diane Kuykendall

Title Operations Asst/Tech

Signature

Date

9/23/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Joe G. Lara

FIELD MANAGER

Title

Date 14 NOV 2003

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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 as to any matter within its jurisdiction.

(Instructions on reverse)

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

Form C-102

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 copies

Fee Lease - 3 copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 73280	³ Pool Name Burton Flat Morrow
⁴ Property Code	⁵ Property Name KAREN "7" FEDERAL	⁶ Well Number 1
⁷ OGRID No. 023230	⁸ Operator Name TOM BROWN, INC.	⁹ Elevation 3199'

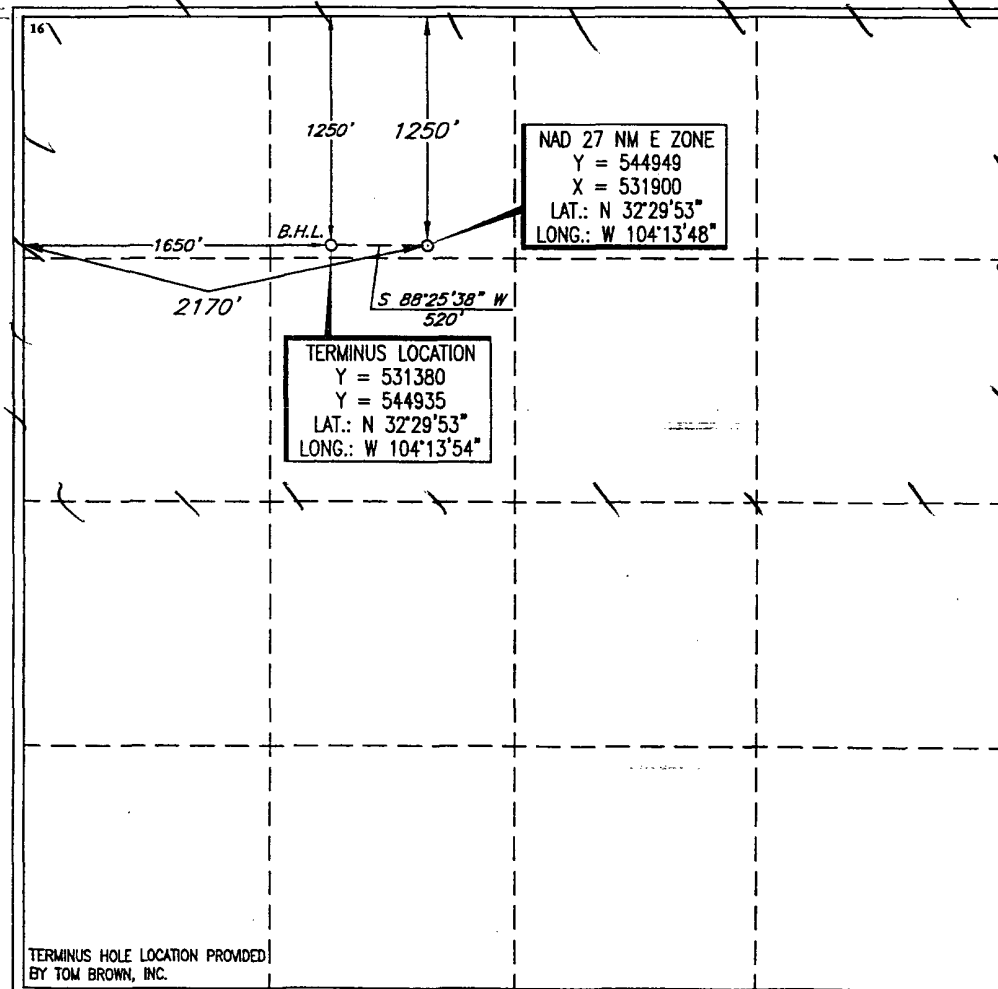
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	7	21 SOUTH	27 EAST, N.M.P.M.		1250'	NORTH	2170'	WEST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	7	21 SOUTH	27 EAST, N.M.P.M.		1250'	NORTH	1650'	WEST	EDDY
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



¹⁷ OPERATOR CERTIFICATION

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

[Signature]

Signature

Brian Franks

Printed Name

Drlg & Compl. Engineer

Title

9/23/2003

Date

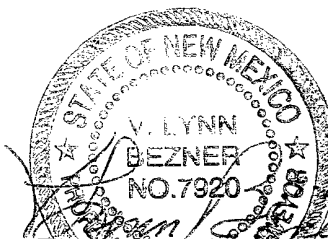
¹⁸ SURVEYOR CERTIFICATION

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.

SEPTEMBER 18, 2003

Date of Survey

Signature and Seal of Professional Surveyor



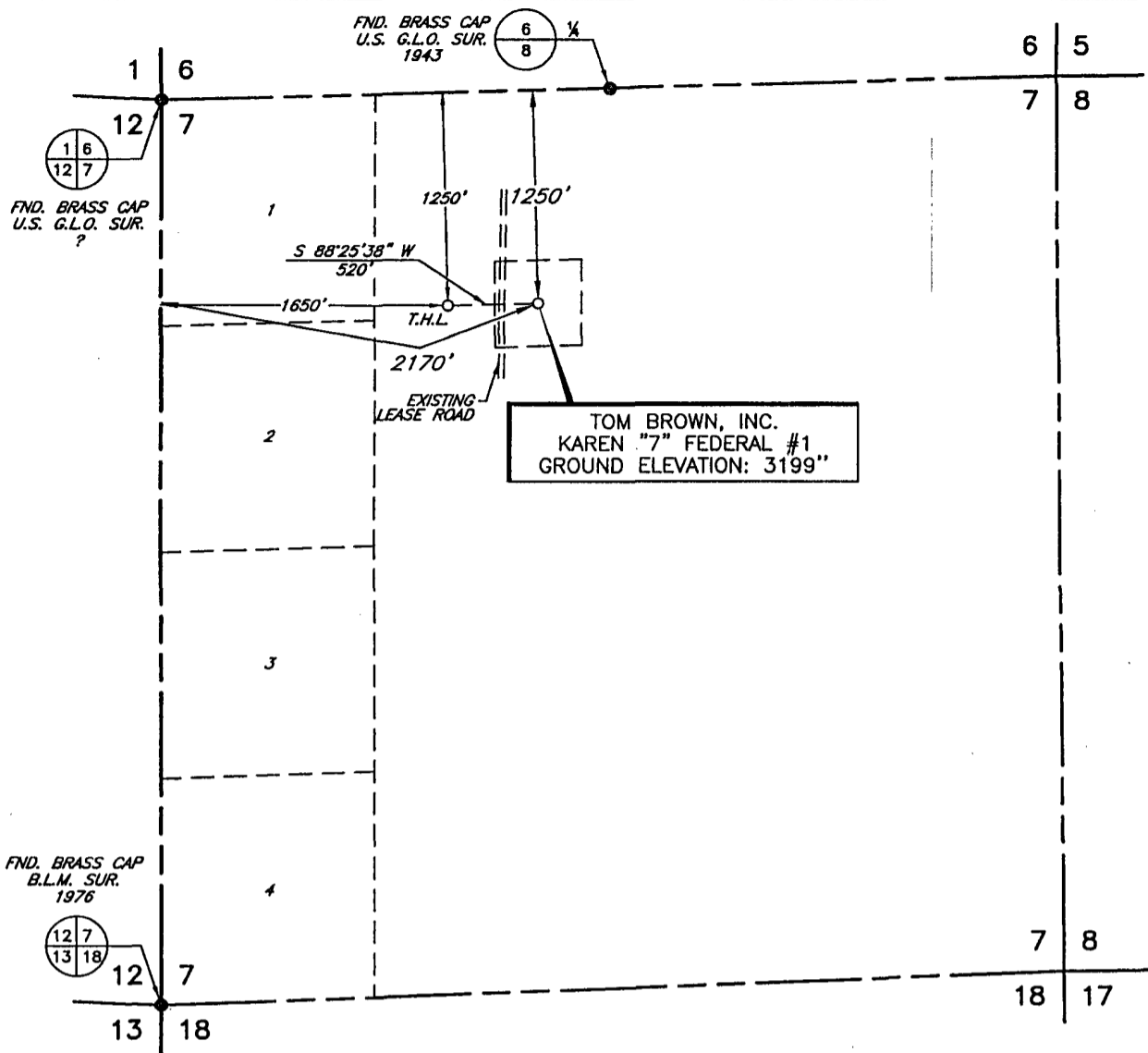
Certificate Number

V. L. BEZNER B.P.S. #7920

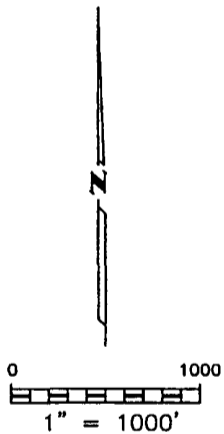
JOB # 90274 / 49 NW / J.C.P.

TERMINUS HOLE LOCATION PROVIDED
BY TOM BROWN, INC.

PLAT SHOWING PROPOSED
WELL LOCATION AND LEASE ROAD IN
SECTION 7, T-21-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



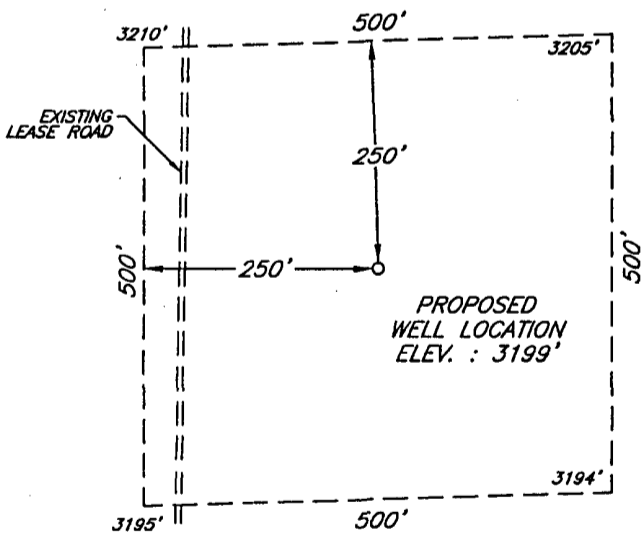
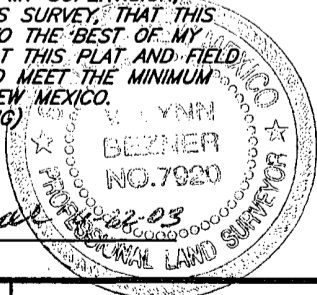
PLAN VIEW
1" = 1000'



DATE OF FIELD WORK: SEPTEMBER 18, 2003

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



DETAIL VIEW
1" = 200'

				TOM BROWN, INC.	SCALE: AS SHOWN
					DATE: SEPTEMBER 18, 2003
NO.	REVISION	DATE	BY.	SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS	JOB NO.: 90274-F
SURVEYED BY: W.J.K.					QUAD NO.: 49 NW
DRAWN BY: J.C.P.					
APPROVED BY: V.L.B.					
					SHEET : 1 OF 1

APPLICATION FOR PERMIT TO DRILL

MATADOR OPERATING COMPANY

Karen 7 Federal #1

Surface Location: 919' FNL & 1650' FWL

Sec 7, T21S, R27E

Bottomhole Location: 1250' FNL & 1650' FWL

Sec 7, T21S, R27E

Eddy 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:

	MD	TVD	Subsea TVD	
Yates SS	674'	674'	+2530'	
Capitan Reef	772'	772'	+2432'	
Delaware	2375'	2375'	+829'	
Bone Spring	4648'	4648'	-1444'	
1 st Bone Spring SS	6167'	6167'	-2963'	
2 nd Bone Spring SS	6920'	6920'	-3716'	
3 rd Bone Spring SS	8260'	8260'	-5056'	
Wolfcamp Lime	8712'	8712'	-5508'	
KOP (shown for reference)	9200'	9200'		
Strawn	9945'	9941'	-6737'	+
Atoka	10180'	10171'	-6967'	
Morrow Clastics	10940'	10922'	-7718'	*
Barnett Shale	11360'	11334'	-8130'	
PTD	11475'	11450'	-8246'	

* Primary Reservoir Target

+ Secondary Reservoir Target

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

	MD	TVD	
Upper Permian Sands	0-300'	0-300'	Fresh water*
Strawn	9945'	9941'	Gas **
Morrow	10940'	10922'	Gas

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

** Potentially productive horizons in the 8-3/4" 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(MD)	Casing OD	Description
26"	0'-40'	20"	Conductor, if necessary
17-1/2"	0'-600'	13-3/8"	48# H-40, STC New, R-3
12-1/4"	0'-2400'	9-5/8"	36# J-55, STC, New, R-3
8-3/4"	0'-10500'	5-1/2"	17# L-80, LTC, New, R-3
8-3/4"	10500'-11475'	5-1/2"	17# HCP-110, LTC, New, R-3

Proposed Cementing Program:

20" Conductor: Ready-mix poured to surface.

13-3/8" Surface Casing: Cement w/ 275 sx Class "C" Light (12.5 ppg, 2.06 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, 4 centralizers.

9-5/8" Intermediate Casing: Cement w/ 450 sx Interfill "C" (11.9 ppg, 2.41 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 shoe joint, 8 centralizers.

5-1/2" Production Casing: Cement w/650 sx Super "H" + .04% CFR-3 + 0.5% Halad-344 + 0.1% HR-7 + 1 pps salt (13.0 ppg, 1.65 ft³/sx). Estimate TOC @ 8500'.

NOTE: If hydrocarbon shows above 8500' are encountered, a DV tool will be installed @ ±8500' to allow a second cement stage to be pumped.

5. Pressure Control Equipment:

The blowout preventer equipment (BOPE) shown in Exhibit D will be utilized for the 12-1/4" and 8-3/4" hole sections as follows:

- 2000 psi WP rating for the 12-1/4" section
- 5000 psi WP rating for the 8-3/4" hole section

The 2M BOPE assembly will consist of a 13-5/8" annular preventer nipped up on the surface casing. The 5M BOPE assembly will consist of a 5000 psi WP double ram-type preventer (4-1/2" pipe and blind rams) and a 5000 psi WP annular preventer (API RP53 Fig. 2c.5), nipped up on the 9-5/8" intermediate casing and used continuously until setting the 5-1/2" casing at total depth of 11475'.

BOPE will be tested as follows:

- Prior to drilling out from surface casing- test all BOPE to 1000 psi using rig pump
- Prior to drilling out from 9-5/8" casing – test ram-type preventers and choke manifold to 5000 psi and annular to 50% of rated WP using independent tester and test plug.

A rotating head will be installed on top of the annular preventer after setting the 9-5/8" casing @ ±2400'.

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 schematic is shown in Exhibit E.

NOTE: Contractor choke manifold has 5000 psi rating. Hydraulic choke and remote choke line valve required for 8-3/4" hole section only.

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 (MD)	Type	Weight (ppg)	Viscosity (sec)	Fluid Loss (cc)
0-600'	Fresh Water	8.3-8.8	28-30	Not Critical
600'-2400'	Fresh Water	8.4-8.6	28-30	Not Critical
2400'-8700'	FW/Cut Brine	8.4-9.0	28-30	Not Critical
8700'-10150'	Brine	10.0-10.1	28-32	Not Critical
10150'-11475'	Brine/XCD	10.0-10.5	34-38	<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.

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 2400' to TD.
- PVT/FLO-sensor equipment will be rigged up and operating at 8500' TVD (prior to drilling into the Wolfcamp formation).

8. Drillstem Testing, Logging and Coring Programs:

- Drillstem tests: None planned
- Electric logs: CNL-LDL-DLL-MSFL-LSS: TD to 5000' (CNL-GR to surface).
- Coring: None planned

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

No abnormal pressures and/or temperatures are anticipated. Estimated BHP in the Morrow is 4800 psi. No hydrogen sulfide or other hazardous gases or fluids are expected on this location, but equipment will be rigged up as a precaution (see attached H2S operating plan).

10. Anticipated Starting Date and Duration of Operations:

The anticipated start date will be August 15, 2003. Once commenced, drilling operations should be completed in approximately 35 days. If the well is productive, another 20 days will be required for completion work and facility installation.

SURFACE USE PLAN
MATADOR OPERATING COMPANY
Karen 7 Federal #1
Surface Location: 919' FNL, 1650' FWL
Sec 7, T21S, R27E
Bottomhole Location: 1250' FNL & 1650' FWL
Sec 7, T21S, R27E
Eddy 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. Directions: From Carlsbad, go North 4.5 miles on Hwy 428, then 1.3 miles on Hwy 239. Turn on lease road and go 0.3 miles West, then 0.1 mile North to point $\pm 300'$ East of location.
2. PLANNED ACCESS ROADS – Existing lease roads with estimated 300' new road construction directly adjacent to 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.

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.
- D. 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 topography is of hilly terrain with vegetation consisting of sagebrush and native grasses. The soils are silty and very shallow.
- B. The surface owner is the BLM, Roswell District Office, 2909 West Second Street, Roswell, NM 88202. There is not a surface grazing lease.
- C. An archaeological study has been conducted for the location and road. Archeological 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: 432-553-3542

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

Sr. Drilling Engineer

Date: 6/13/03

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

MATADOR OPERATING COMPANY

Karen 7 Federal #1
919' FNL & 1650' FWL
SEC. 7, T21S, R27E
EDDY COUNTY, NM

I. Hydrogen Sulfide Training.

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques of first aid and rescue procedures.

In addition the supervisory personnel will be trained in the following areas:

1. The effect of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S Safety Equipment and Systems.

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetration the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment to include: annular preventer

2. Protective equipment for essential personnel:

- A. 5-minute escape units located in the dog house and 30-minute air units at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment.

- A. 3-portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.
- B. 1-portable SO2 monitor positioned near flare line during H2S flaring operations.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram.
- B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be a readable distance from the immediate location.

5. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight safe drilling practices and the use of H₂S scavengers when necessary will minimize hazards when penetrating H₂S bearings.

6. Metallurgy:

A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools kill lines, choke manifold and lines valves shall be suitable for H₂S service.

B. All elastomers used for packing and seals shall be H₂S trimmed.

7. Communications:

A. Radio communications will be available in company vehicles and rig dog house.

8. Well Testing:

A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing of any known formation that contains H₂S will be conducted during daylight hours.

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Office
2909 West Second Street
Roswell, New Mexico 88201

Statement Accepting Responsibility for Operations

Operator name: Matador Operating Company
Street or box: 8340 Meadow Road, #150
City, State: Dallas, TX
Zip code: 75231

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM 10033

Legal Description of Land: N/2 of Section 7, T21S, R27E

Formation(s) (if applicable):

Bond Coverage: (State if individually bonded or another's bond)
Statewide

BLM Bond File No.: 29403

Authorized Signature: _____



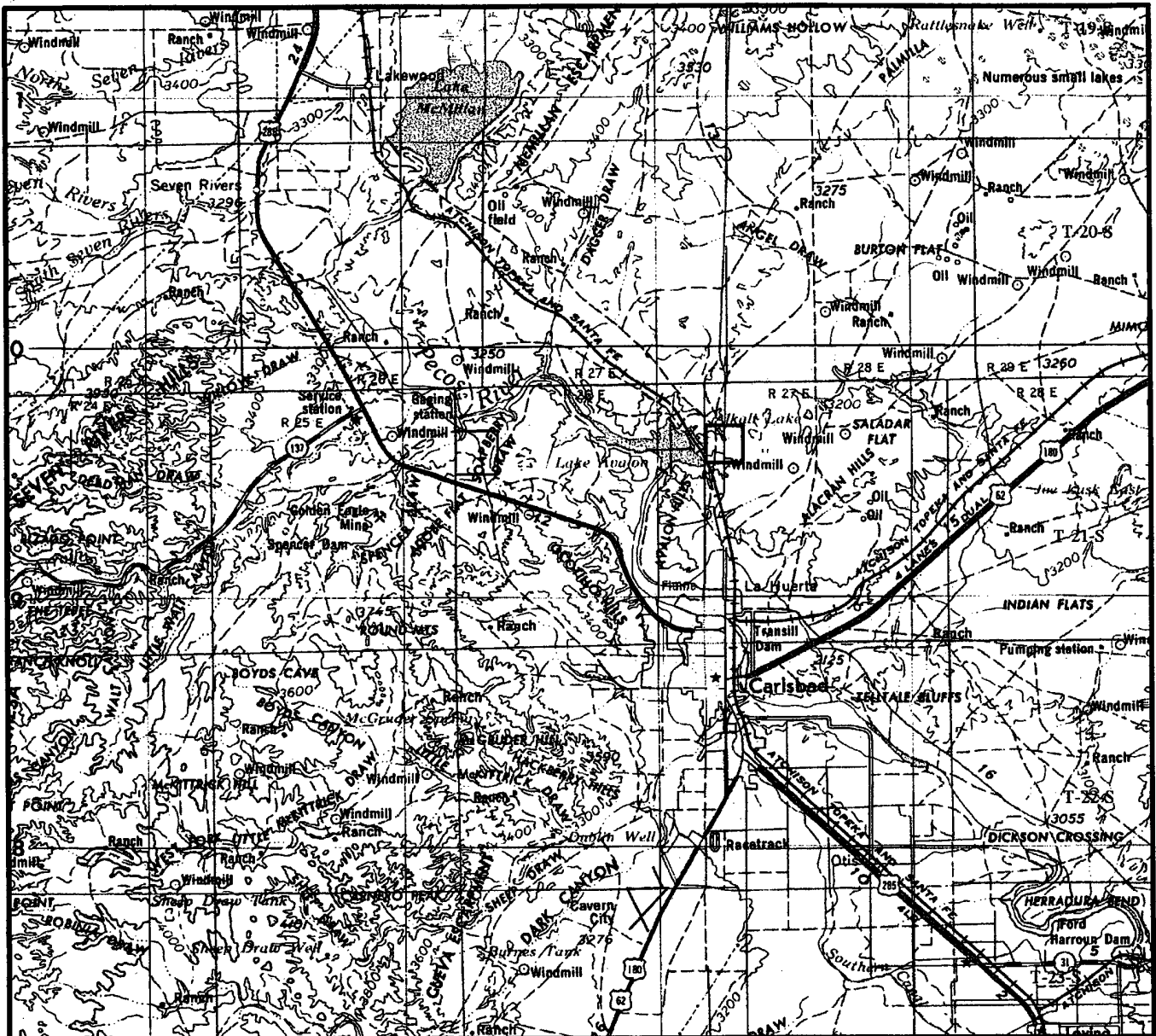
R. F. Burke

Title: Vice President

Date:

6/13/13

VICINITY MAP



SECTION 7 TWP 21-S RGE 27-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 919' FNL & 1650' FWL

OPERATOR MATADOR OPERATING COMPANY
 LEASE KAREN "7" FEDERAL #1

DISTANCE & DIRECTION FROM CARLSBAD GO NORTH 4.5 MILE
ON HWY. 428, THENCE 1.3 MILE ON HWY. 239, THENCE WEST
0.3 MILE ON LEASE ROAD, THENCE NORTH 0.1 MILE ON
LEASE ROAD TO A POINT ±300' EAST OF THE LOCATION.

MATADOR OPERATING COMPANY
KAREN 7 FEDERAL #1
EXHIBIT A



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

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 plat and notify us immediately of any possible discrepancy.

VD.
3116

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

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 copies

Fee Lease - 3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 73280	³ Pool Name Burton Flat Morrow
⁴ Property Code	⁵ Property Name KAREN "7" FEDERAL	⁶ Well Number 1
⁷ OGRID No. 14245	⁸ Operator Name MATADOR OPERATING COMPANY	⁹ Elevation 3204'

¹⁰ Surface Location

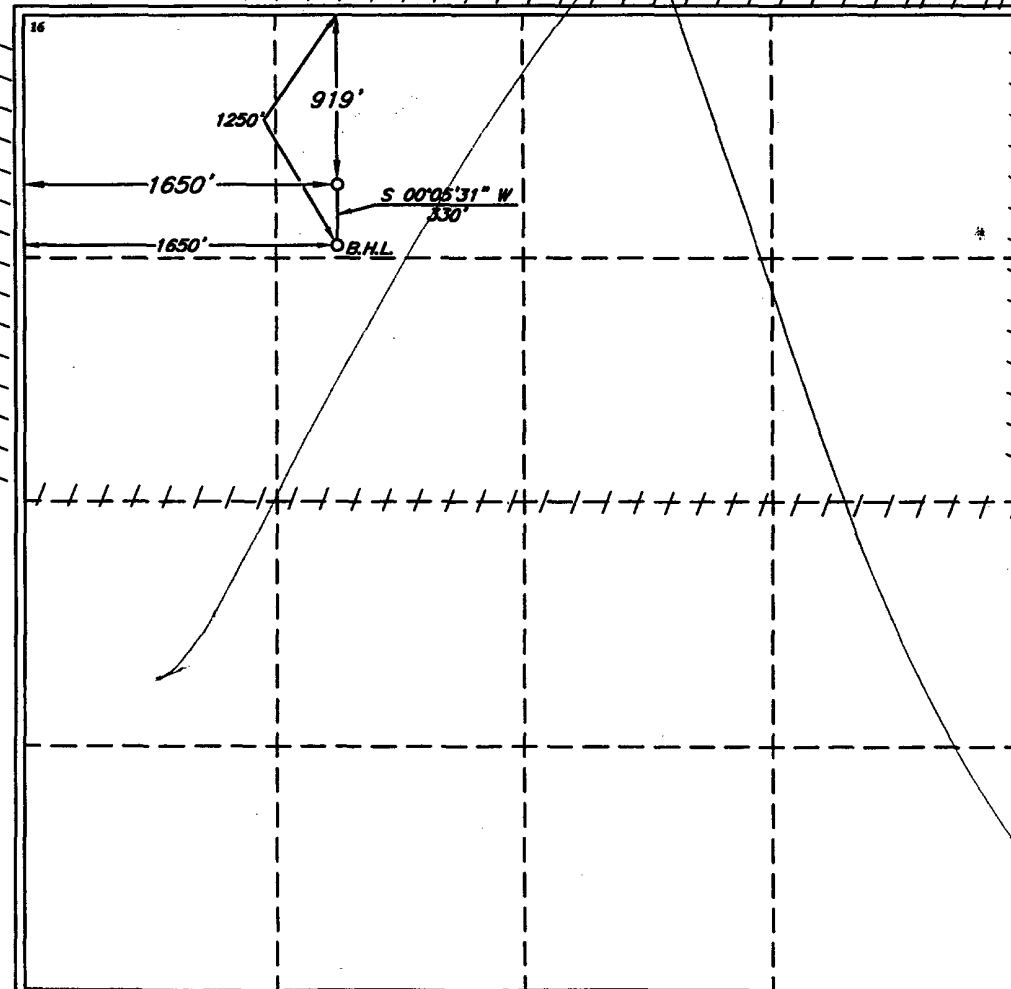
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	7	21 SOUTH	27 EAST, N.M.P.M.		919'	NORTH	1650'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	7	21 SOUTH	27 EAST, N.M.P.M.		1250'	NORTH	1650'	WEST	EDDY

¹² Dedicated Acres	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



¹⁷ OPERATOR CERTIFICATION

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

Signature
Jim Kramer

Printed Name
Sr. Drilling Engineer

Title
June 13, 2003

Date

¹⁸ 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.

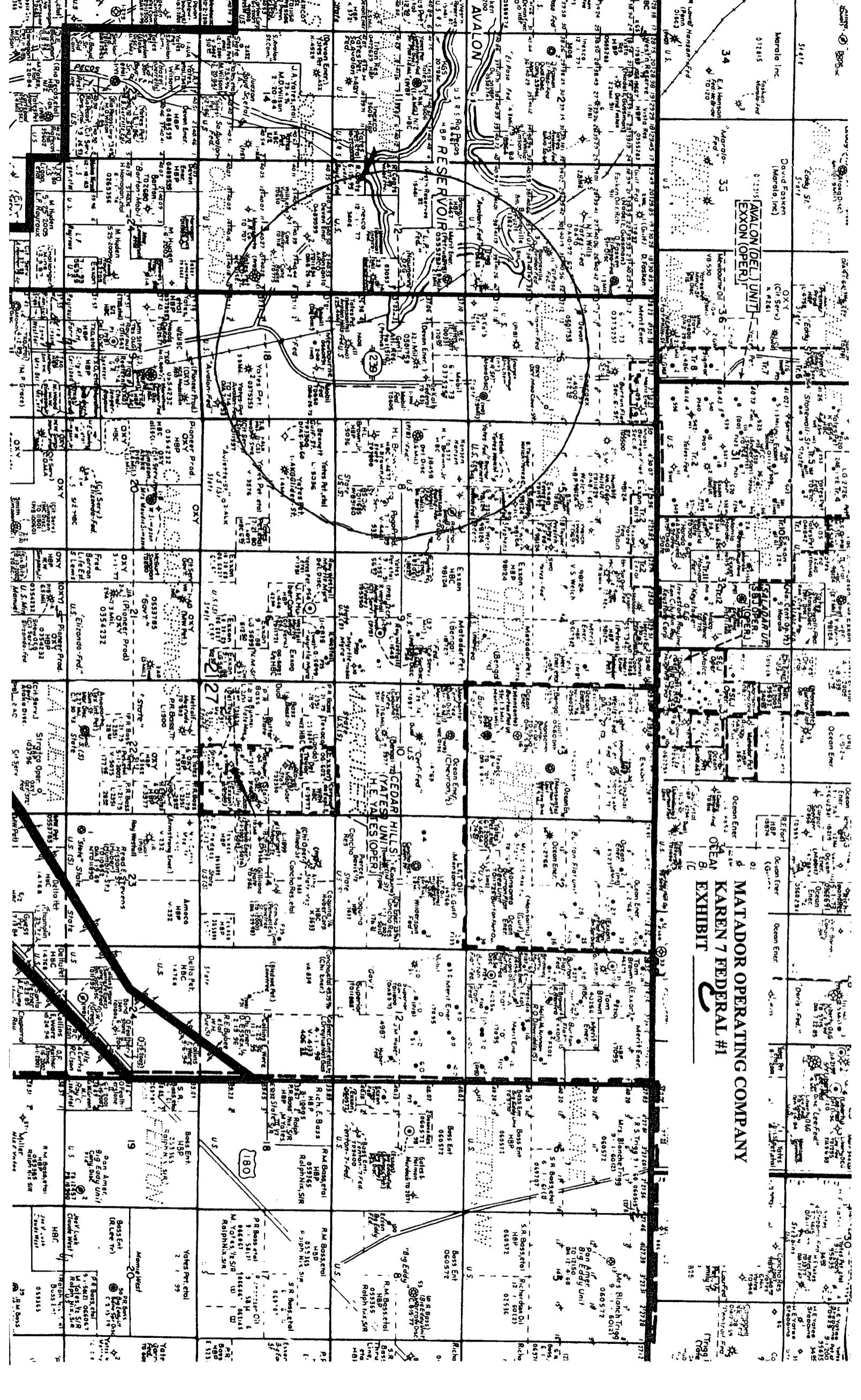
MAY 30, 2003

Date of Survey

Signature and Seal of Professional Surveyor

V. L. Bezner
Certificate Number
V. L. BEZNER R.P.S. #7920
JOB #88146 / 49 NW / E.U.O.

MATADOR OPERATING COMPANY
KAREN 7 FEDERAL #1
EXHIBIT



MATADOR OPERATING COMPANY
 KAREN 7 FEDERAL #1
 919' FNL & 1650' FWL
 SEC 7, T21S, R27E
 EDDY COUNTY, NM

EXHIBIT D
 BOP SCHEMATIC

(2M Rated Working Pressure)

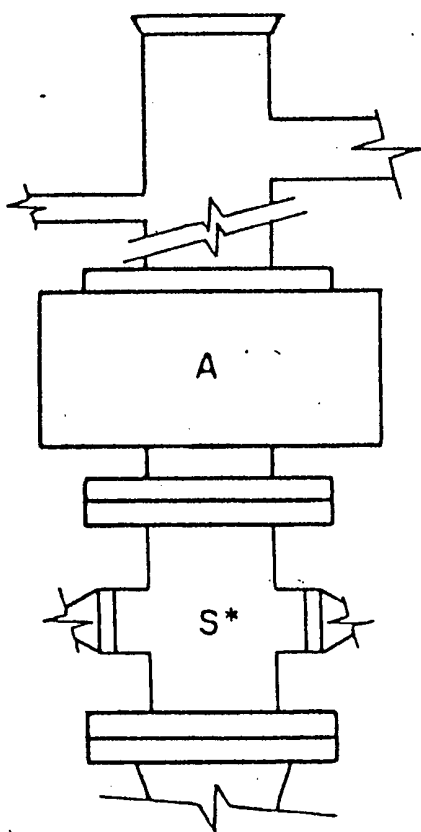


FIG. 2.C.1
 ARRANGEMENT S*A

(5M Rated Working Pressure)

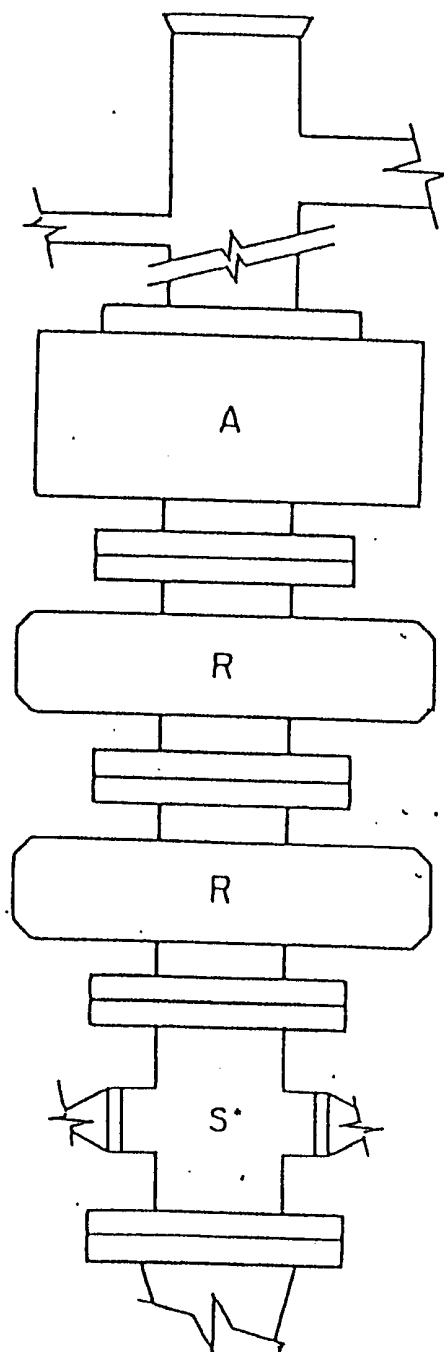
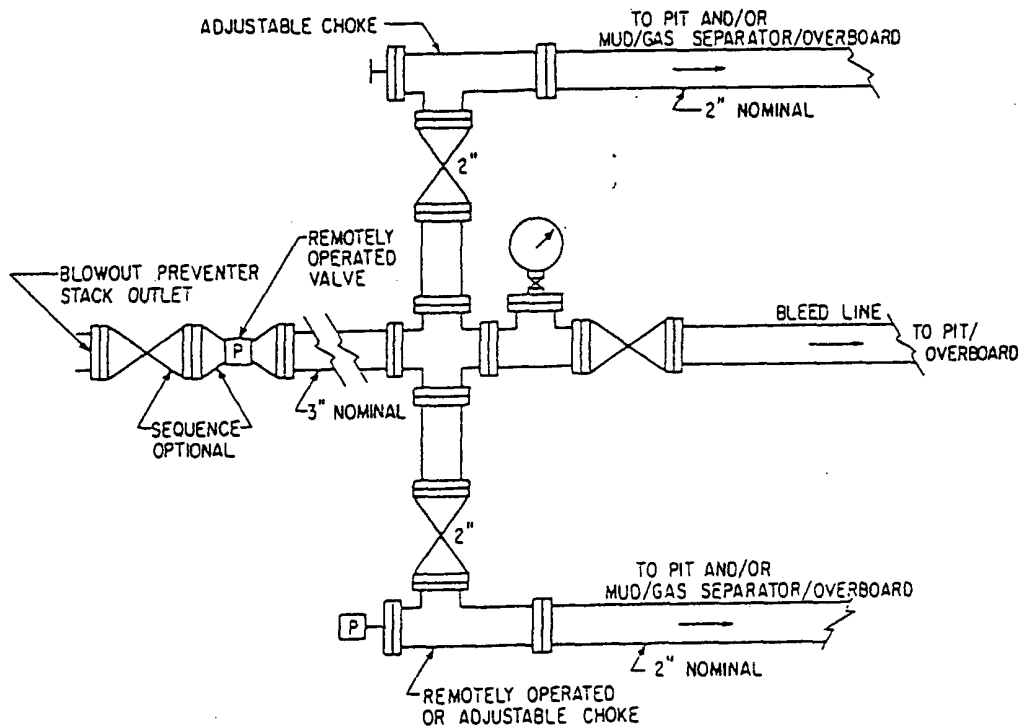


FIG. 2.C.5
 ARRANGEMENT S*RA
 Double Ram Type Preventers, R_d Options

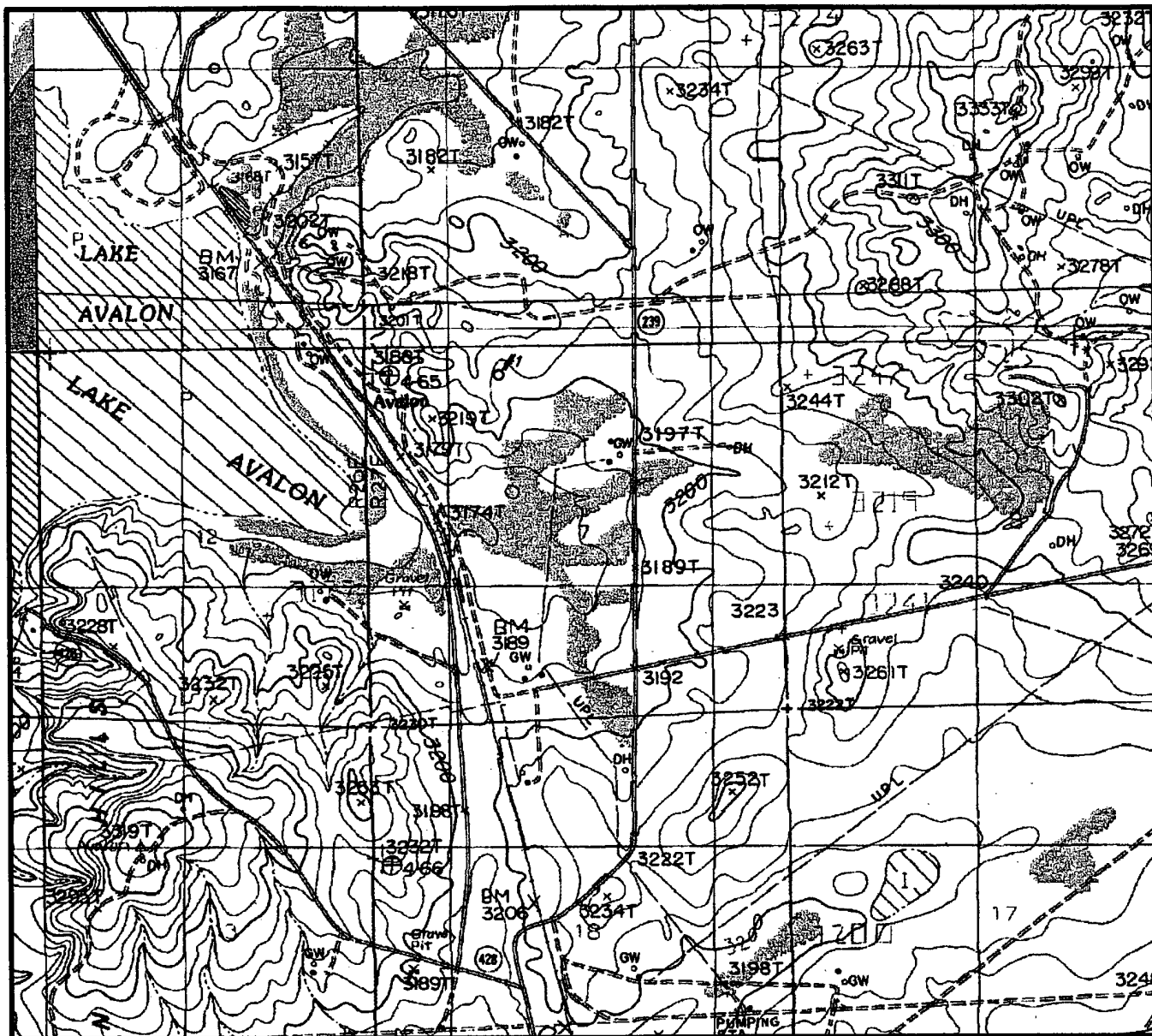
MATADOR OPERATING COMPANY
KAREN 7 FEDERAL #1
919' FNL & 1650' FWL
SEC 7, T21S, R27E
EDDY COUNTY, NM

EXHIBIT E
CHOKE MANIFOLD

(5M Rated Working Pressure)



LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000' CONTOUR INTERVAL 10 FEET

SECTION 7 TWP 21-S RGE 27-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 919' FNL & 1650' FWL

ELEVATION 3204'

OPERATOR MATADOR OPERATING COMPANY

LEASE KAREN "7" FEDERAL #1

U.S.G.S. TOPOGRAPHIC MAP

CARLSBAD, NEW MEXICO

LAT. N 32°29'56"

LONG. W 104°13'54"

MATADOR OPERATING COMPANY

KAREN 7 FEDERAL #1

EXHIBIT **F**



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

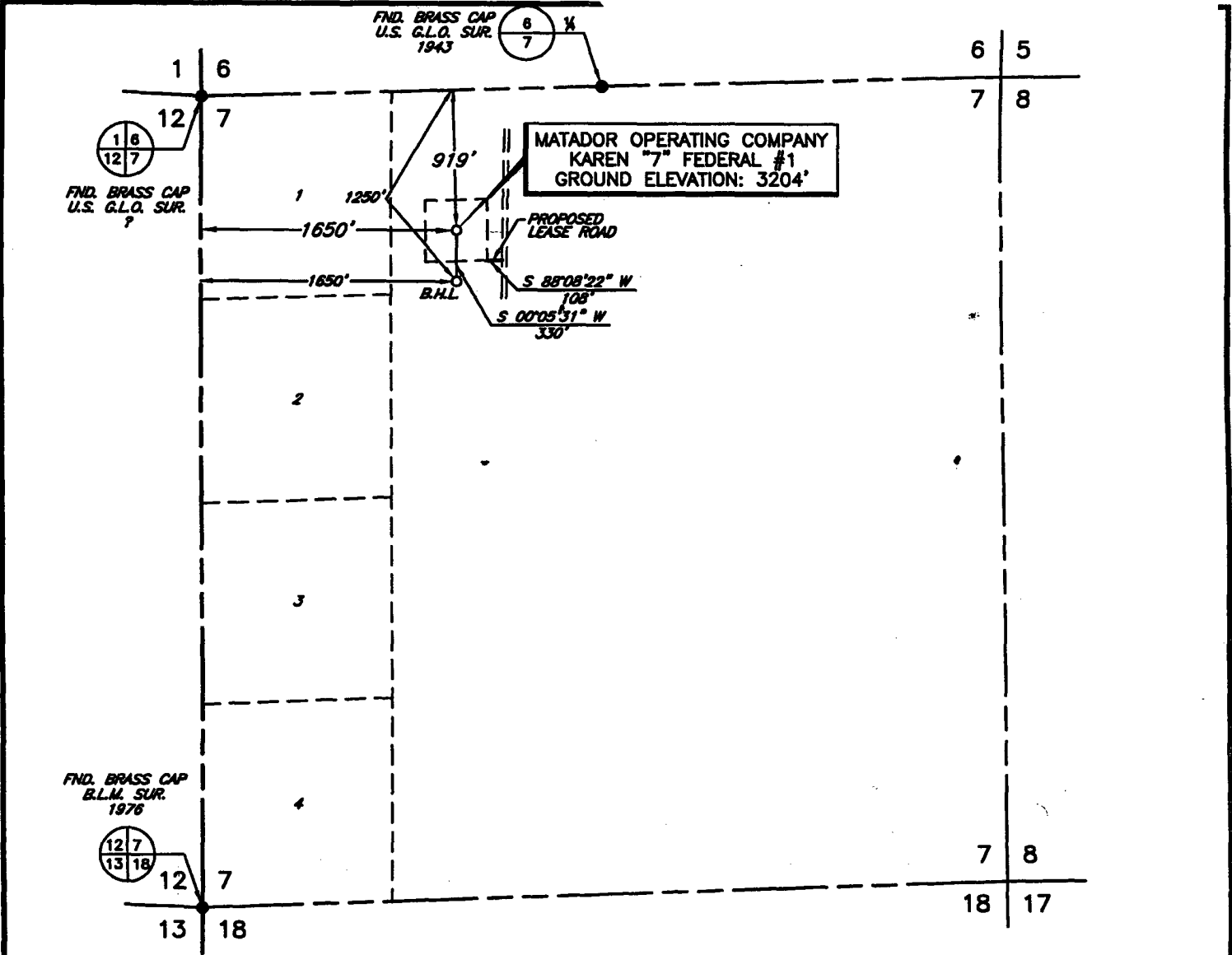
This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any possible discrepancy.

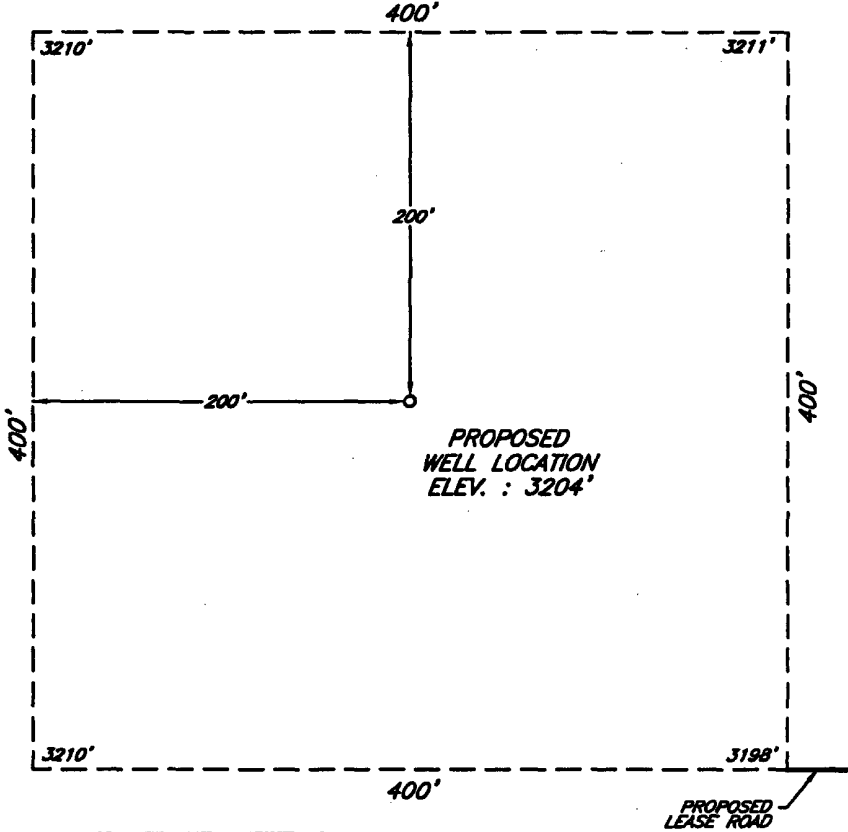
2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653

PLAT SHOWING PROPOSED
WELL LOCATION AND LEASE ROAD IN
SECTION 7, T-21-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

MATADOR OPERATING COMPANY
KAREN 7 FEDERAL #1
EXHIBIT



PLAN VIEW
1" = 1000'



DETAIL VIEW
1" = 100'

DATE OF FIELD WORK: MAY 30, 2003

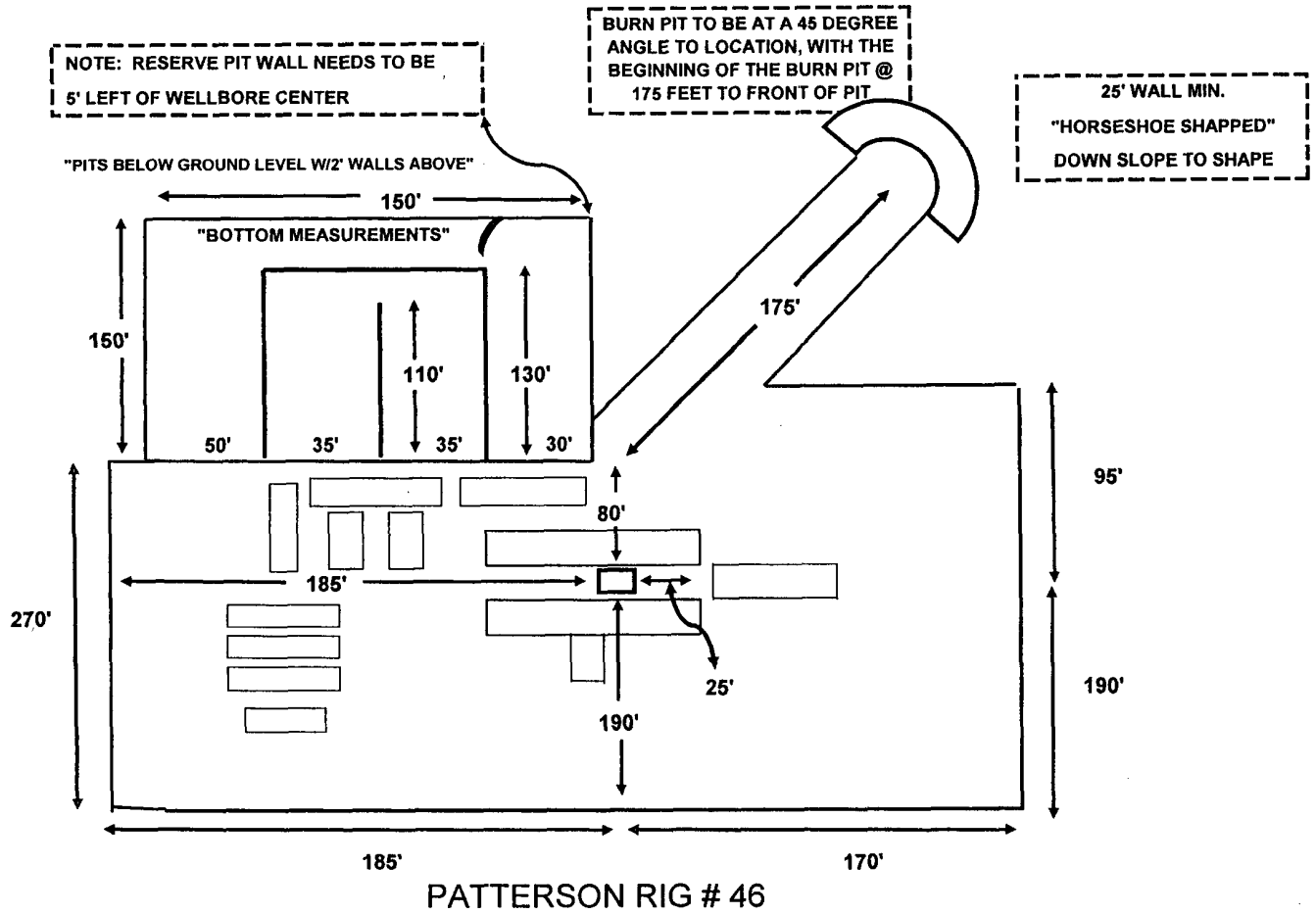
I, V. L. BEZNER, A PROFESSIONAL SURVEYOR IN THE
STATE OF NEW MEXICO AND AUTHORIZED AGENT OF
TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS
PLAT TO BE A TRUE REPRESENTATION OF A SURVEY
PERFORMED IN THE FIELD UNDER MY SUPERVISION,
THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS
SURVEY IS TRUE AND CORRECT 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
V. L. BEZNER, P.S. NO. 7920

				MATADOR OPERATING COMPANY	SCALE:	AS SHOWN
					DATE:	MAY 30, 2003
NO.	REVISION	DATE	BY		JOB NO.:	88146-F
SURVEYED BY: H.V.				SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS	QUAD NO.: 49 NW	
DRAWN BY: E.U.O						
APPROVED BY: W.J.K.					SHEET : 1 OF 1	

Karen 7 Federal #1

1250' FNL AND 2170' FWL
SEC. 7, T21S, R27E
EDDY COUNTY, NEW MEXICO
PROPOSED DEPTH = 11,475'



LOCATION:

- 6" COMPACTED CALICHE
- CELLAR - 8' x 8' x 8' "WITH BACKHOE"

ROAD:

- 14' WIDE - 6" COMPACTED CALICHE W/ TURNOUTS

NOTES:

J. C. WILSON, BEST RESOURCES
TOM BROWN, INC.

TRAILER: 432/ 638-0854, OR 432/ 638-1238, OR 432/ 238-7760
OFFICE: 432/ 563-2378; FAX: 432/ 563-2377