

**HENRY ENGINEERING**  
*Petroleum Engineers*  
 807 FIRST NATIONAL BANK BUILDING  
 MIDLAND, TEXAS 79701

May 15, 1980

State of New Mexico  
 Energy and Minerals Department  
 Oil Conservation Division  
 P. O. Box 2088  
 Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Application to Drill  
 Unorthodox Location  
 David Fasken  
 Maralo State No. 2  
1600' FNL & 1780' FEL  
Section 18, T-24-S, R-25-E  
Eddy County, New Mexico

*NSL - 1201  
 Rule 104 F  
 Pennsylvanian Formation  
 June 9, 1980*

Gentlemen:

On behalf of our client, David Fasken, enclosed is application to drill the subject well with a request for administrative approval of an unorthodox location based upon terrain.

The proposed location is a suitable drill site barely large enough to accomodate the drilling operation. Please refer to a part of U.S.G.S. quadrangle map - Carlsbad Caverns East.

We are notifying the offset operators - Amoco Production Co., El Paso Natural Gas Co., Texas Oil and Gas Corp. and W. A. Moncrief, Jr. - by CERTIFIED MAIL of our client's intention to drill the subject well, and requesting that they forward to you a waiver of any objection to the proposed location.

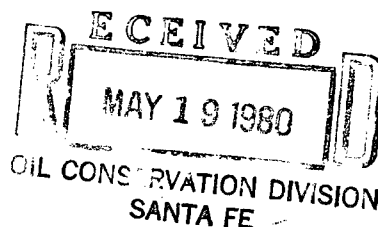
Yours very truly,

HENRY ENGINEERING

*Robert H. Angevine*  
 Robert H. Angevine

RHA:jcs  
 Encls.

cc: N.M.O.C.C.- Artesia  
 Offset Operators



*Held for copy of notice  
 to M J Henry. Called  
 Jim Henry 5-20-80  
 BHL*

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease  
STATE ☒ FEE ☐

5. State Oil & Gas Lease No.

L- 6869

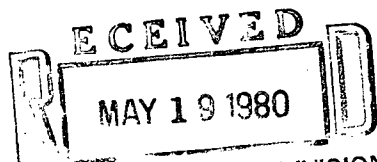
## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement Name	
2. Name of Operator DAVID FASKEN		3. Address of Operator 608 First National Bank Building, Midland, Texas 79701		8. Farm or Lease Name Maralo State	
4. Location of Well UNIT LETTER <u>G</u> LOCATED <u>1600</u> FEET FROM THE <u>North</u> LINE AND <u>1780</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>18</u> TWP. <u>24-S</u> RGE. <u>25-E</u> NMPM		10. Field and Pool, or Wildcat Undes. Baldrige Canyon		9. Well No. 2	
12. County Eddy		19. Proposed Depth 11,300'		19A. Formation Morrow	
21. Elevations (Show whether DF, RT, etc.) 4318.4' GR		21A. Kind & Status Plug. Bond Statewide		20. Rotary or C.T. Rotary	
21B. Drilling Contractor Warton Drilling Co.		22. Approx. Date Work will start June 20, 1980			

## 23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	48	300'	350	Circulate
12-1/4"	8-5/8"	24 & 32	3,000'	1,100	Circulate
7-7/8"	4-1/2"	11.60# 13.50	11,300'	800	8000'

1. Please refer to attached Drilling & Completion Procedure.
2. Gas is not dedicated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM.

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

Signed Robert H. Angevine Title Robert H. Angevine, Agent Date 5-9-80  
(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

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

Operator <b>David Fasken</b>			Lease <b>Maralo State</b>			Well No. <b>2</b>		
Unit Letter <b>G</b>	Section <b>18</b>	Township <b>24 South</b>	Range <b>25 East</b>	County <b>Eddy</b>				
Actual Footage Location of Well: <b>1600</b> feet from the <b>North</b> line and <b>1780</b> feet from the <b>East</b> line								
Ground Level Elev. <b>4318.4</b>	Producing Formation <b>Morrow</b>		Pool <b>Undes. Baldrige Canyon</b>			Dedicated Acreage: <b>320+</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? Working Interest Unit w/D. Fasken as operator

☒ Yes    ☐ No    If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

		Maralo, Inc. L-4502	D. Fasken L-6869
		D. Fasken L-6869	D. Fasken L-6869
		Maralo, Inc. L-4502	Maralo, Inc. L-4502
		D. Fasken L-6869	D. Fasken L-6869

**RECEIVED**  
**MAY 19 1980**  
OIL CONSERVATION DIVISION  
SANTA FE

**REG. PROF. ENGINEER & LAND SURVEYOR**  
**STATE OF NEW MEXICO**  
**JOHN W. WEST**  
**676**

**CERTIFICATION**

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

*Robert H. Angevine*  
Name

Robert H. Angevine

Position

Agent

Company

DAVID FASKEN

Date

5-7-80

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

**April 28, 1980**

Registered Professional Engineer and/or Land Surveyor

*John W. West*  
Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 8668**  
**Ronald J. Eidson 3239**

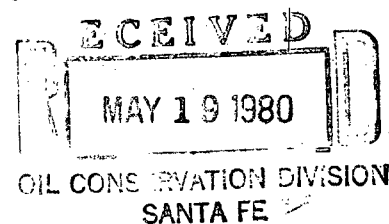
0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

RECOMMENDED DRILLING & COMPLETION PROCEDURE

A.F.E. NO. 453

David Fasken ----- MARALO STATE NO. 2 ----- Eddy County, New Mexico

1. Drill 17-1/2" hole to 300' with spud mud.
2. Set 13-3/8" casing at 300', cement to surface and install 12" x 3000 psi W.P. casinghead and B.O.P. stack. (Estimate 250 sxs Halliburton Lite w/1/4# Flocele per sack and 2% CaCl plus 100 sxs Class "C" with 2% CaCl.)
3. Drill 12-1/4" hole to 3000' with fresh water, control seepage with paper. Dry drill if complete loss of returns is encountered.
4. A - Set and cement 8-5/8" casing at 3000' with sufficient cement to circulate. (Estimate 900 sxs Halliburton Lite with 1/4# Flocele per sack, slurry weight 12.8#/gal. plus 200 sxs Class "C" with 2% CaCl, slurry weight 14.8#/gal.) W.O.C. 18 hours. If cement does not circulate, run temperature survey and stage cement outside pumped through 1" tubing and/or fill up with ready mix concrete - 6 sxs mix with pea gravel aggregate. Install 12" - 3000# W.P. x 10" - 3000# W.P. spool with secondary seal, bit guide, B.O.P.'s, Hydril and choke manifold.  
B - It may be necessary to two-stage cement the 8-5/8" casing. This will depend upon the depth loss of circulation is encountered and the static fluid level. Cement volumes will be determined from the conditions observed while drilling the 12-1/4" hole.
5. On or before 7500' test 8-5/8" casing to 2200 psig and test B.O.P.'s, choke manifold and all wellhead valves to 3000 psig and Hydril to 1500 psig.
6. Install PVT, flow line sensor, and rotating head on or before 7500', and connect mud-gas separator.
7. Drill 7-7/8" hole to estimated T.D. of 11,300' with fresh water to 7500'. Control seepage with paper and  $P_h$  at 11.0 with lime.
8. At 7500' add potash to 4% KCl concentration, increase viscosity with salt water gel as required to maintain good hole conditions. Decrease water loss as necessary with salt water C.M.C. and starch. At top of Morrow reduce water loss to 10 cc and maintain to T.D.
9. Drill stem test all shows (test each Morrow Sand separately).
10. Run logs (combination CNL-FDC w/Gamma Ray, DLL and Dip Meter).
11. Set and cement 4-1/2" production casing (resin coated and centralized through pay zones) with 800 sxs Class "H" cement with 3.0# KCl per sx and 0.8% Halad-22 plus 0.4% CFR-2.
12. Install 10" - 3000 psi W.P. x 6" - 3000 psi W.P. tubinghead and Christmas tree.
13. Run temperature survey to locate cement top.
14. Rig down and move out rotary tools.
15. Set mast anchors and move in pulling unit.



Recommended Drilling & Completion Procedure  
A.F.E. No. 453  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

16. Pressure test casing and Christmas tree to 3000 psig.
17. Run 2-3/8" tubing N-80, EUE 8RD c/w AB Modified couplings, and packer.
18. Displace fluid in well with 3% KCl water containing oxygen scavenger and corrosion inhibitor.
19. Set packer and install Christmas tree.
20. Swab fluid level to 9500' in tubing.
21. Run Gamma Ray correlation log and perforate Morrow for production.
22. Test well.
23. Stimulate as needed - acid and/or frac.
24. Clean up "load fluid" and test.
25. Run C.A.O.F.P. and pressure build up.
26. Install surface equipment.

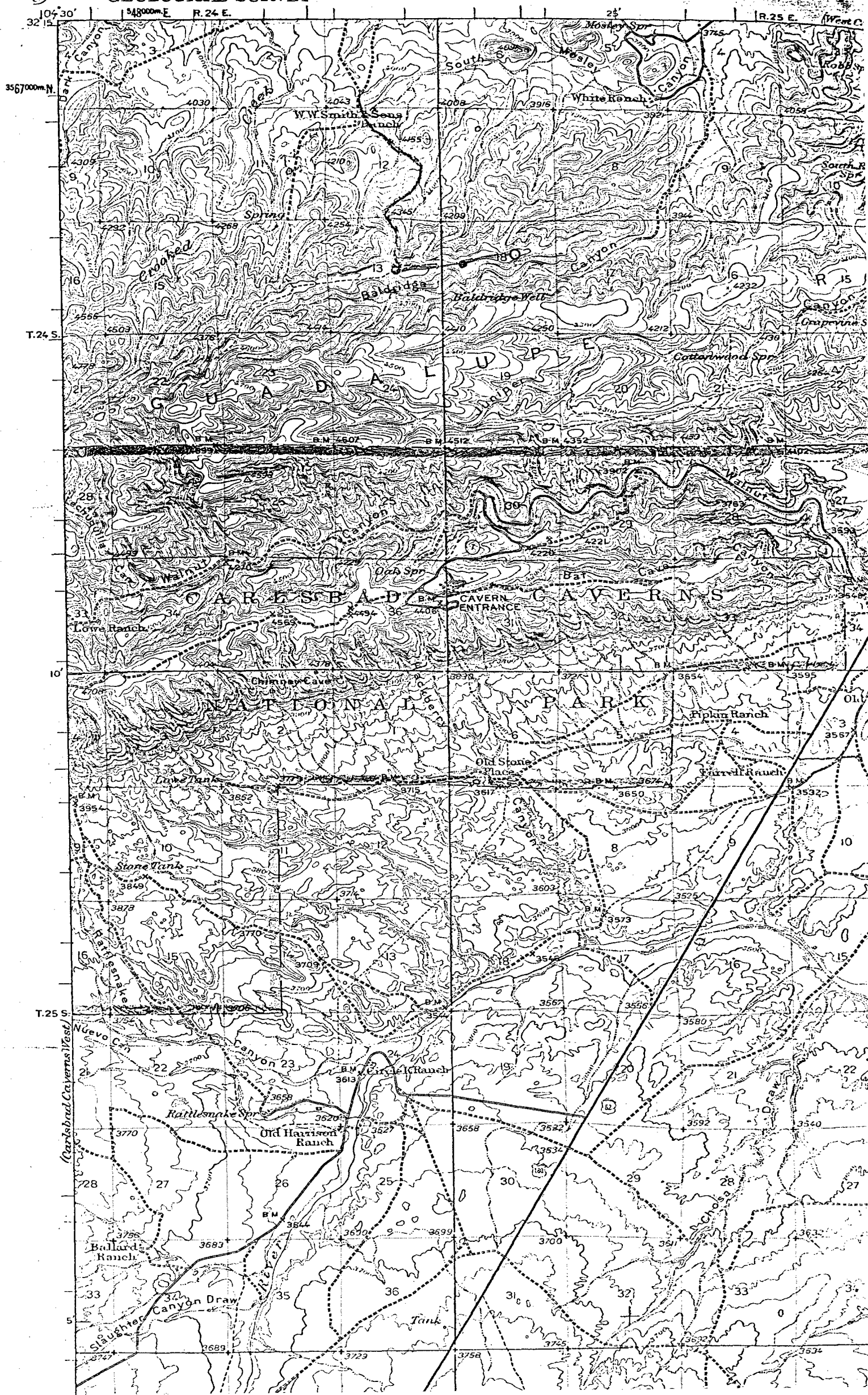
RECOMMENDED CASING PROGRAM

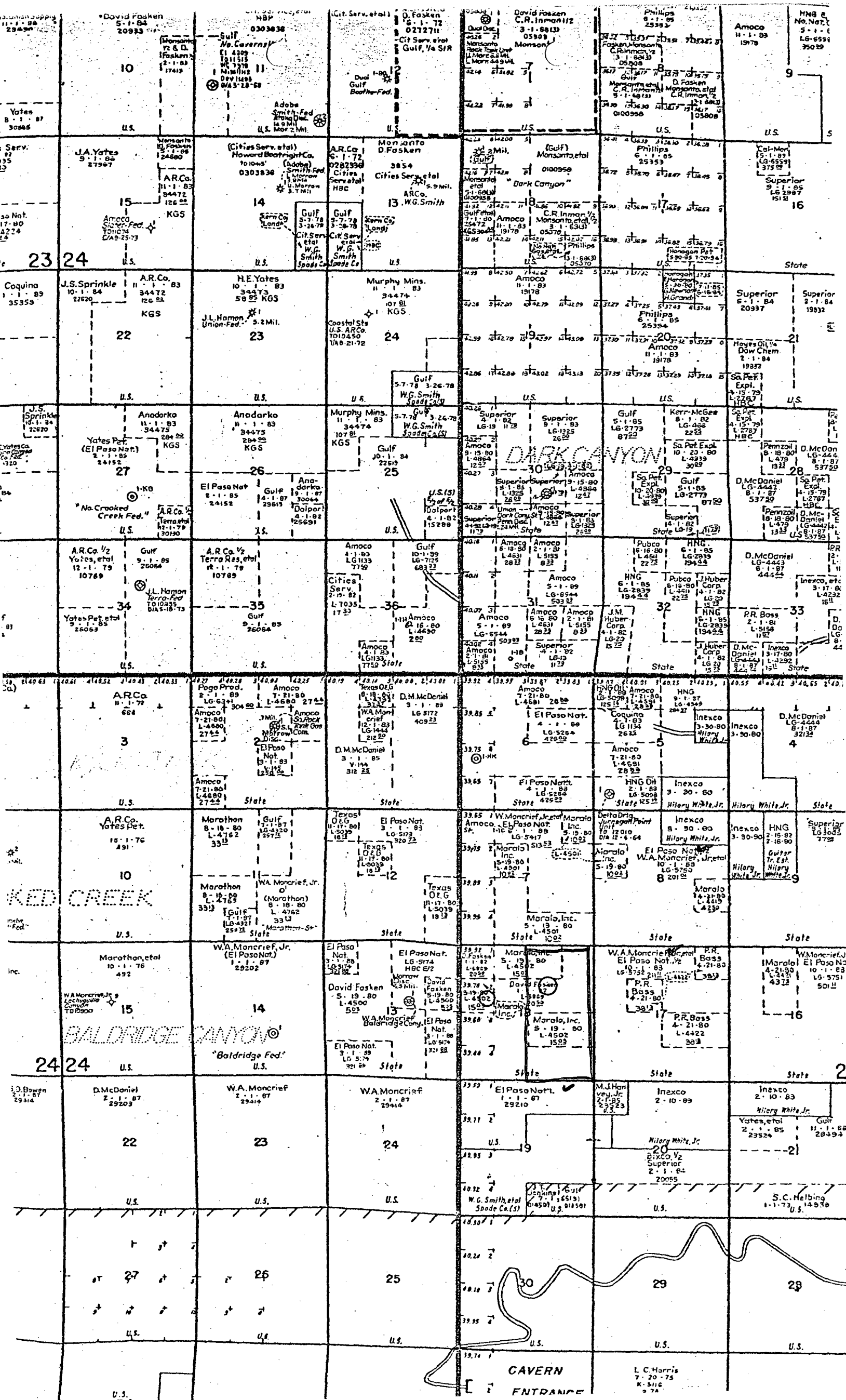
A.F.E. NO. 453

David Fasken ----- MARALO STATE NO. 2 ----- Eddy County, New Mexico

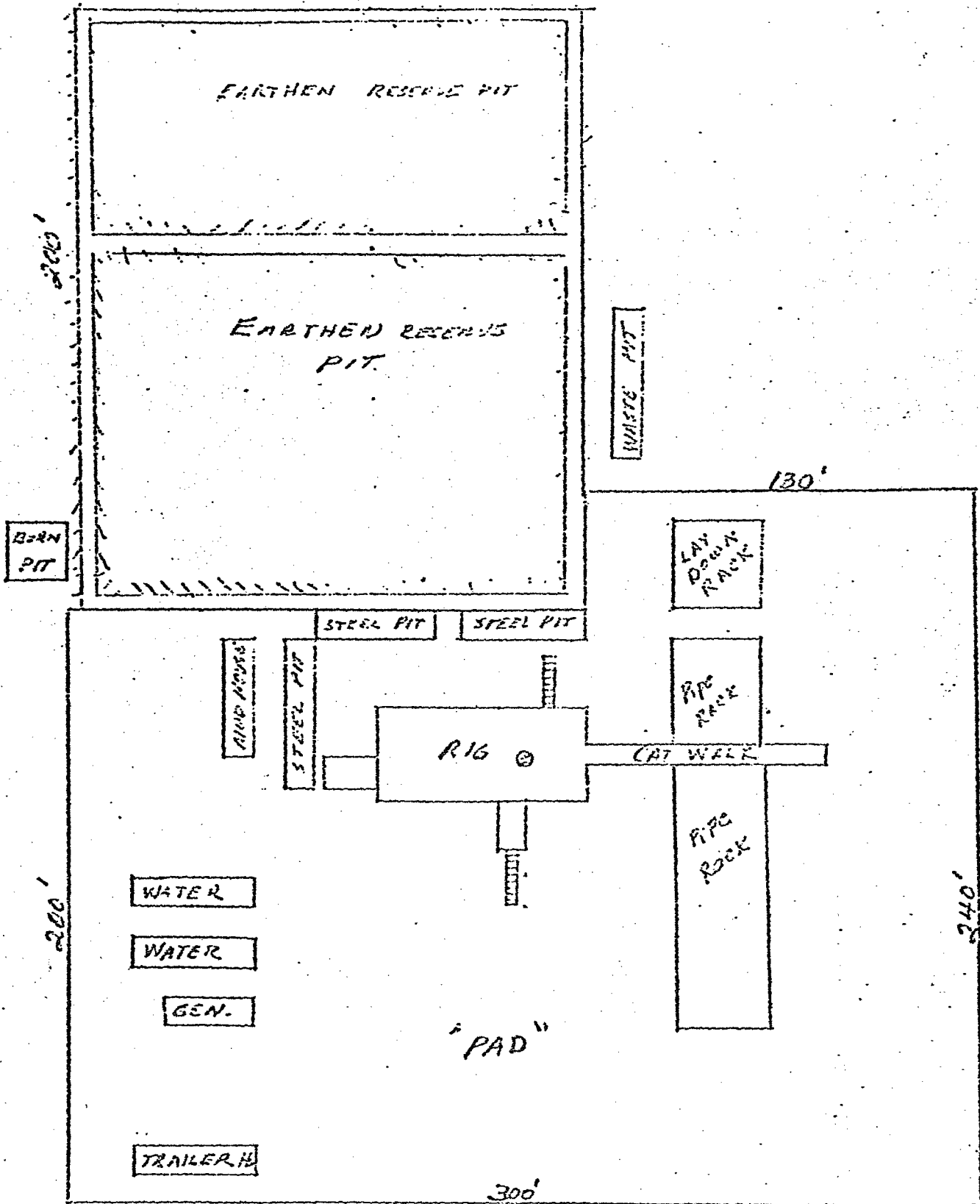
	<u>Footage</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
Surface Casing	300'	13-3/8"	48.00#/Ft.	H-40	ST&C
Intermediate Casing	2,500'	8-5/8"	24#/Ft.	J-55	ST&C
	500'	8-5/8"	32#/Ft.	J-55	ST&C
	<u>3,000'</u>				
Oil String Casing	1,900'	4-1/2"	11.60#/Ft.	N-80	Buttress
	8,400'	4-1/2"	11.60#/Ft.	N-80	LT&C
	1,000'	4-1/2"	13.50#/Ft.	N-80	LT&C
	<u>11,300'</u>				

(Barindana Point)









HENRY ENGINEERING  
MIDLAND, TEXAS

RIG & WELL SITE PLAT

HENRY ENGINEERING

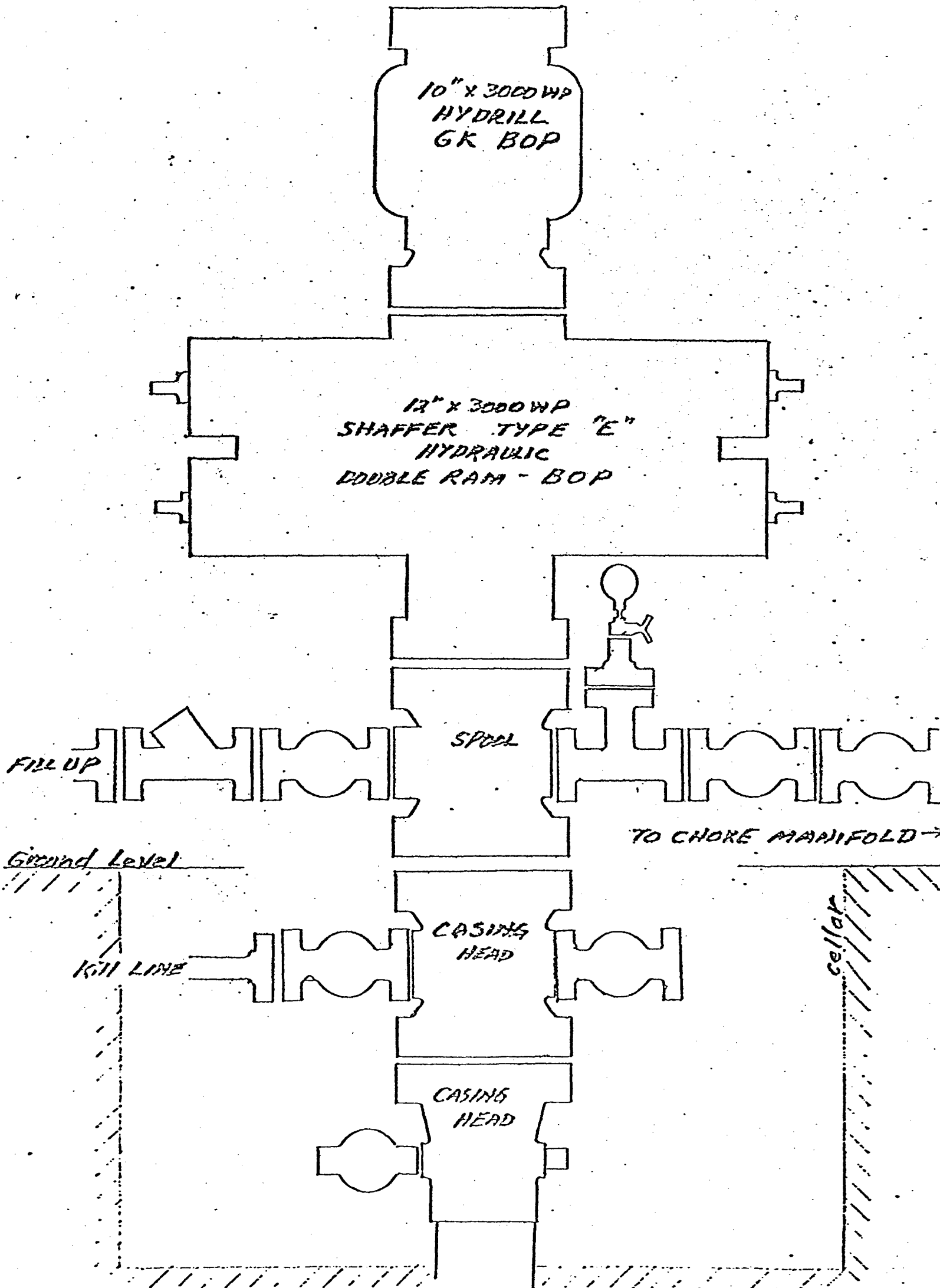
SUBJECT: BLOWOUT PREVENTER

FILE: \_\_\_\_\_

STACK

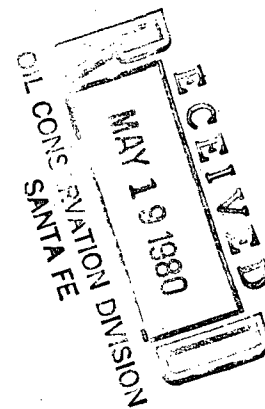
DATE: \_\_\_\_\_

ENGINEERING MEMORANDUM



HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

May 14, 1980



Texas Oil and Gas Corporation  
900 Wilco Building  
Midland, Texas 79701

Attention: Mr. Charles Canfield,  
Vice President and District Manager

Gentlemen:

Under date of May 15, 1980 we are filing for administrative approval by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, of an unorthodox location for the David Fasken Maralo State No. 2, 1600' FNL and 1780' FEL, Section 18, T-24-S, R-25-E, Eddy County, New Mexico.


In your capacity as an offset operator, we are asking that you submit a waiver to the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, Attention: Mr. Joe Ramey, P. O. Box 2088, Santa Fe, New Mexico 87501.

This unorthodox location is necessitated by the topography in this drilling and spacing unit as you can realize from a brief look at a portion of Carlsbad Caverns, East, U.S.G. topographic map.

We are enclosing a prepared waiver and request that you sign and forward it, or one of your own composition, to Mr. Ramey.

Yours very truly,

HENRY ENGINEERING

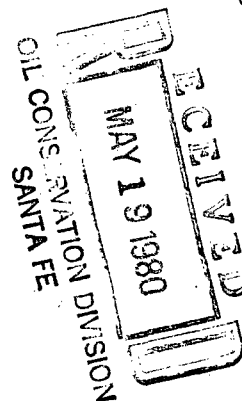
  
Robert H. Angevine

RHA:jcs  
Encls.

VIA CERTIFIED MAIL No. 296515

HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

May 14, 1980



W. A. Moncrief, Jr.  
400 Metro Building  
Midland, Texas 79701

Attention: Mr. Dewey E. Thornton

Gentlemen:

Under date of May 15, 1980 we are filing for administrative approval by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, of an unorthodox location for the David Fasken Maralo State No. 2, 1600' FNL and 1780' FEL, Section 18, T-24-S, R-25-E, Eddy County, New Mexico.

In your capacity as an offset operator, we are asking that you submit a waiver to the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, Attention: Mr. Joe Ramey, P. O. Box 2088, Santa Fe, New Mexico 87501.

This unorthodox location is necessitated by the topography in this drilling and spacing unit as you can realize from a brief look at a portion of Carlsbad Caverns, East, U.S.G. topographic map.

We are enclosing a preapred waiver and request that you sign and forward it, or one of your own composition, to Mr. Ramey.

Yours very truly,

HENRY ENGINEERING

Robert H. Angevine

RHA:jcs  
Encls.

VIA CERTIFIED MAIL No. 296514

HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

May 14, 1980



El Paso Natural Gas Co.  
1800 Wilco Building  
Midland, Texas 79701

Attention: Mr. A. J. Dudenhoeffer

Gentlemen:

Under date of May 15, 1980 we are filing for administrative approval by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, of an unorthodox location for the David Fasken Maralo State No. 2, 1600' FNL and 1780' FEL, Section 18, T-24-S, R-25-E, Eddy County, New Mexico.

In your capacity as an offset operator, we are asking that you submit a waiver to the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, Attention: Mr. Joe Ramey, P. O. Box 2088, Santa Fe, New Mexico 87501.

This unorthodox location is necessitated by the topography in this drilling and spacing unit as you can realize from a brief look at a portion of Carlsbad Caverns, East, U.S.G. topographic map.

We are enclosing a prepared waiver and request that you sign and forward it, or one of your own composition, to Mr. Ramey.

Yours very truly,

HENRY ENGINEERING

A handwritten signature in cursive script that reads "Robert H. Angevine".

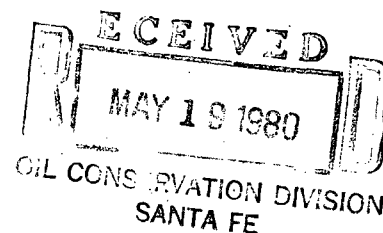
Robert H. Angevine

RHA:jcs  
Encls.

VIA CERTIFIED MAIL No. 296513

HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

May 14, 1980



Amoco Production Co.  
P. O. Box 3092  
Houston, Texas 77001

Attention: Proration Department

Gentlemen:

Under date of May 15, 1980 we are filing for administrative approval by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, of an unorthodox location for the David Fasken Maralo State No. 2, 1600' FNL and 1780' FEL, Section 18, T-24-S, R-25-E, Eddy County, New Mexico.

In your capacity as an offset operator, we are asking that you submit a waiver to the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, Attention: Mr. Joe Ramey, P. O. Box 2088, Santa Fe, New Mexico 87501.

This unorthodox location is necessitated by the topography in this drilling and spacing unit as you can realize from a brief look at a portion of Carlsbad Caverns, East, U.S.G. topographic map.

We are enclosing a prepared waiver and request that you sign and forward it, or one of your own composition, to Mr. Ramey.

Yours very truly,

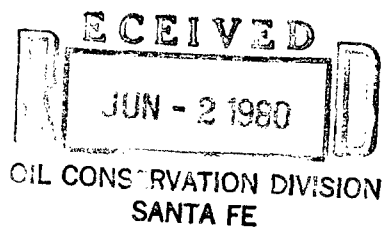
HENRY ENGINEERING

A handwritten signature in cursive script that reads "Robert H. Angevine".

Robert H. Angevine

RHA:jcs  
Encls.

VIA CERTIFIED MAIL No. 296512



May 20, 1980

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Waiver for  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

Gentlemen:

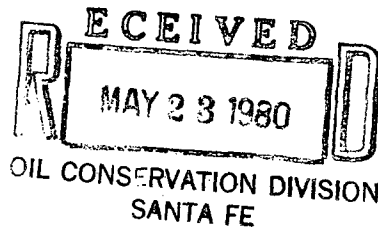
I have been advised of the necessity for the location of the subject well 1600' from the north line and 1780' from the east line of Section 18, T-24-S, R-25-E, Eddy County, New Mexico, due to terrain to obtain a suitable drill site.

I have no objection to the drilling of this well at this location.

Yours very truly,

A handwritten signature in cursive script, appearing to read "M. J. Harvey, Jr.", followed by a horizontal line.

M. J. HARVEY, JR.



**Amoco Production Company**

Houston Region  
500 Jefferson Building  
Post Office Box 3092  
Houston, Texas 77001

J. R. Barnett  
Regional Engineering  
Manager

May 21, 1980

File: JCA-986.51NM-2422

Re: Unorthodox Location  
David Fasken Maralo State No. 2  
Eddy County, New Mexico

State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87501

Attention: Joe Ramey

Gentlemen:

David Fasken has filed an application to drill the David Fasken Maralo State No. 2 at an unorthodox location based upon terrain at the following location:

1600' FNL & 1780' FEL  
Sec. 18, T-24-S, R-25-E  
Eddy County, New Mexico

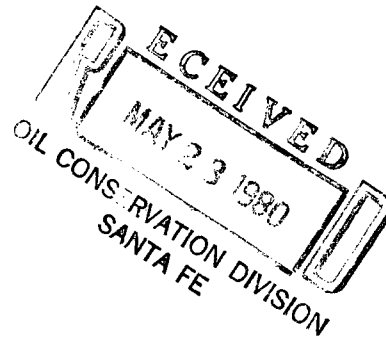
Amoco Production Company has no objection to the drilling of the subject well at the location.

Yours very truly,

*J.R. Barnett*  
*mlc*  
MLC/rw



May 14, 1980



State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Waiver for  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

Gentlemen:

We have been advised of the necessity for the location of the subject well 1600' from the north line and 1780' from the east line of Section 18, T-24-S, R-25-E, Eddy County, New Mexico, due to terrain to obtain a suitable drill site.

We have no objection to the drilling of this well at this location.

Yours very truly,

TEXAS OIL & GAS CORP.

By L. L. Hester

RECEIVED  
MAY 21 1980  
OIL CONSERVATION DIVISION  
SANTA FE  
May 14, 1980

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Waiver for  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

Gentlemen:

We have been advised of the necessity for the location of the subject well 1600' from the north line and 1780' from the east line of Section 18, T-24-S, R-25-E, Eddy County, New Mexico, due to terrain to obtain a suitable drill site.

We have no objection to the drilling of this well at this location.

Yours very truly,

W. A. MONCRIEF, JR.

By Henry E. Tharnton

May 14, 1980



State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Waiver for  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

Gentlemen:

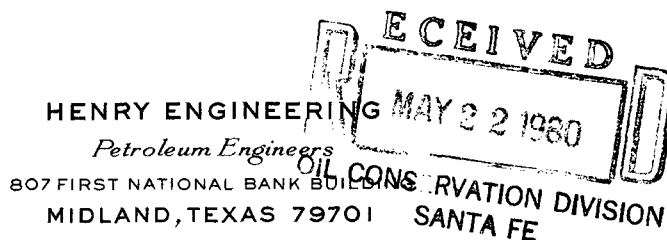
We have been advised of the necessity for the location of the subject well 1600' from the north line and 1780' from the east line of Section 18, T-24-S, R-25-E, Eddy County, New Mexico, due to terrain to obtain a suitable drill site.

We have no objection to the drilling of this well at this location.

Yours very truly,

EL PASO NATURAL GAS CO.

By 



May 20, 1980

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

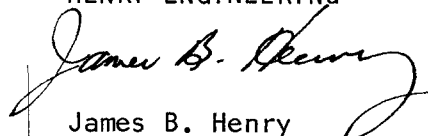
Re: Application to Drill  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
1600' FNL & 1780' FEL  
Section 18, T-24-S, R-25-E  
Eddy County, New Mexico

Gentlemen:

Pursuant to the undersigned's telephone conversation today with Mr. Stametz, we have notified offset operator M. J. Harvey, Jr. by CERTIFIED MAIL of our client's intention to drill the subject well with the request that he forward to you a waiver of any objection to the proposed location. A copy of our notification to Mr. Harvey is attached.

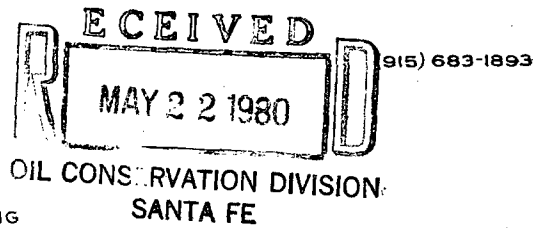
Yours very truly,

HENRY ENGINEERING

  
James B. Henry

JBH:vcz  
Attmt.

HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701



May 20, 1980

Mr. M. J. Harvey, Jr.  
P. O. Box 12705  
Dallas, Texas 75225

Dear Mr. Harvey:

Under date of May 15, 1980 we filed for administrative approval by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, of an unorthodox location for the David Fasken Maralo State No. 2, 1600' FNL and 1780' FEL, Section 18, T-24-S, R-25-E, Eddy County, New Mexico.

In your capacity as an offset operator, we are asking that you submit a waiver to the State of New Mexico, Energy and Minerals Department, Oil Conservation Division, Attention: Mr. Joe Ramey, P. O. Box 2088, Santa Fe, New Mexico 87501.

This unorthodox location is necessitated by the topography in this drilling and spacing unit as you can realize from a brief look at a portion of Carlsbad Caverns, East, U.S.G.S. topographic map.

We are enclosing a prepared waiver and request that you sign and forward it, or one of your own composition, to Mr. Ramey. A stamped envelope is enclosed for your convenience.

Yours very truly,

HENRY ENGINEERING

A handwritten signature in cursive script that reads "James B. Henry".

James B. Henry

JBH:vcz  
Encls.

VIA CERTIFIED MAIL No. 296545

May 20, 1980

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

Re: Waiver for  
Unorthodox Location  
David Fasken  
Maralo State No. 2  
Eddy County, New Mexico

Gentlemen:

I have been advised of the necessity for the location of the subject well 1600' from the north line and 1780' from the east line of Section 18, T-24-S, R-25-E, Eddy County, New Mexico, due to terrain to obtain a suitable drill site.

I have no objection to the drilling of this well at this location.

Yours very truly,

M. J. HARVEY, JR.

