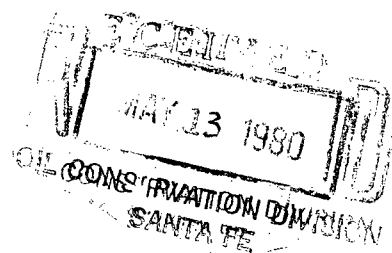


HENRY ENGINEERING  
*Petroleum Engineers*  
807 FIRST NATIONAL BANK BUILDING  
MIDLAND, TEXAS 79701

May 8, 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. 1-Y  
2030' FNL & 1085' FWL,  
Section 18, T-24-S, R-25-E  
Eddy County, New Mexico

NSL-1197  
Rule 104 F  
Pennsylvania  
formation  
June 2, 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 twin to this well, the Maralo State No. 1, was lost at 3000' due to collapsed 8-5/8" casing.

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

RHA:jcs  
Encls.

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



**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.

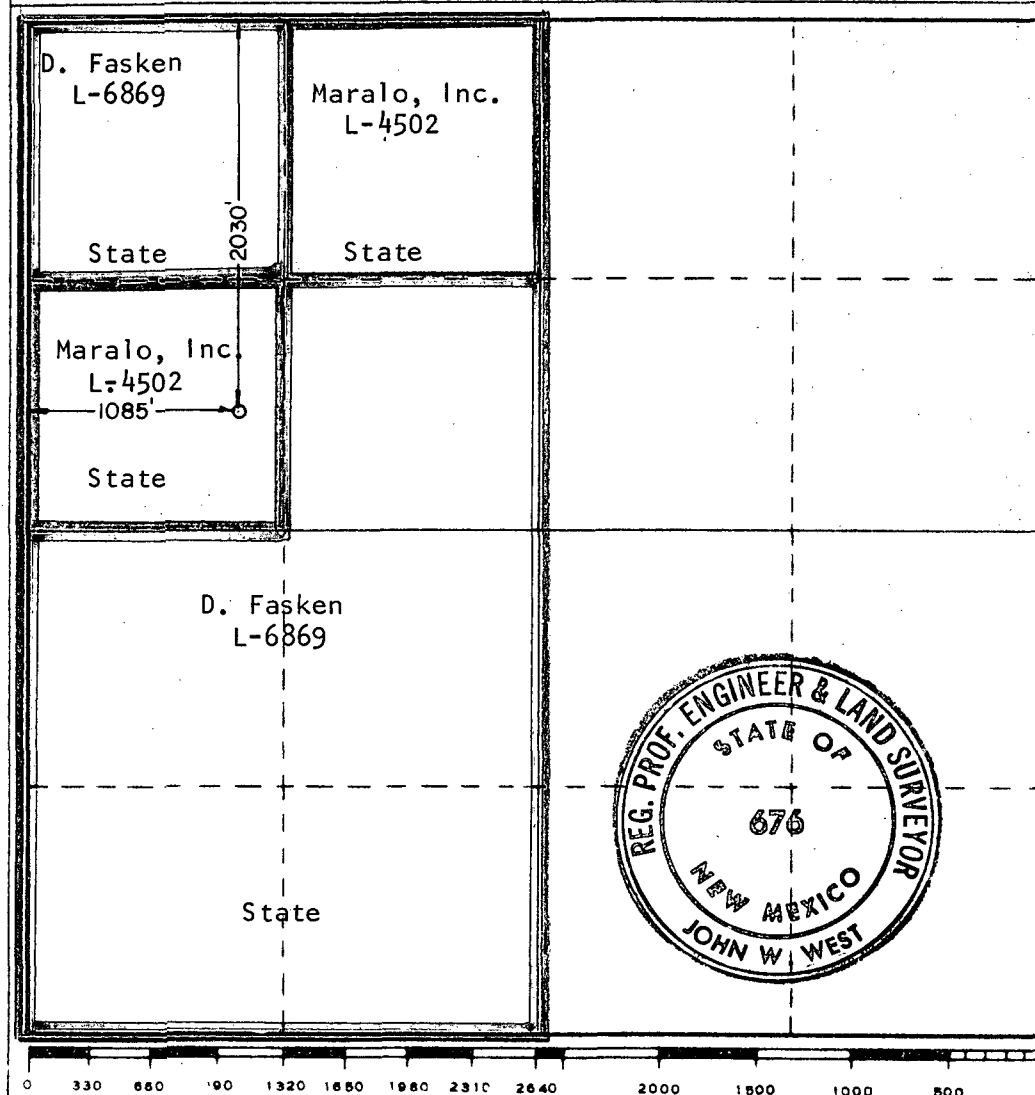
|                                                                                                                                |                                      |                                              |                                   |                                        |                       |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------|-----------------------------------|----------------------------------------|-----------------------|
| Operator<br><b>David Fasken</b>                                                                                                |                                      |                                              | Lease<br><b>Maralo State Com.</b> |                                        | Well No.<br><b>1Y</b> |
| Unit Letter<br><b>E</b>                                                                                                        | Section<br><b>18</b>                 | Township<br><b>24 South</b>                  | Range<br><b>25 East</b>           | County<br><b>Eddy</b>                  |                       |
| Actual Footage Location of Well:<br><b>2030</b> feet from the <b>North</b> line and <b>1085</b> feet from the <b>West</b> line |                                      |                                              |                                   |                                        |                       |
| Ground Level Elev.<br><b>4359.8</b>                                                                                            | Producing Formation<br><b>Morrow</b> | Pool<br><b>Undes. Baldrige Canyon Morrow</b> |                                   | Dedicated Acreage:<br><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.



**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

**5-9-80**

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  
**May 7, 1980**

Registered Professional Engineer  
and/or Land Surveyor

*John W. West*  
Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6663**  
**Ronald J. Eidson 3239**

## RECOMMENDED DRILLING & COMPLETION PROCEDURE

A.F.E. NO. 451

David Fasken ----- MARALO STATE NO. 1-Y ---- 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 11me.
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. 451  
David Fasken  
Maralo State No. 1-Y  
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.

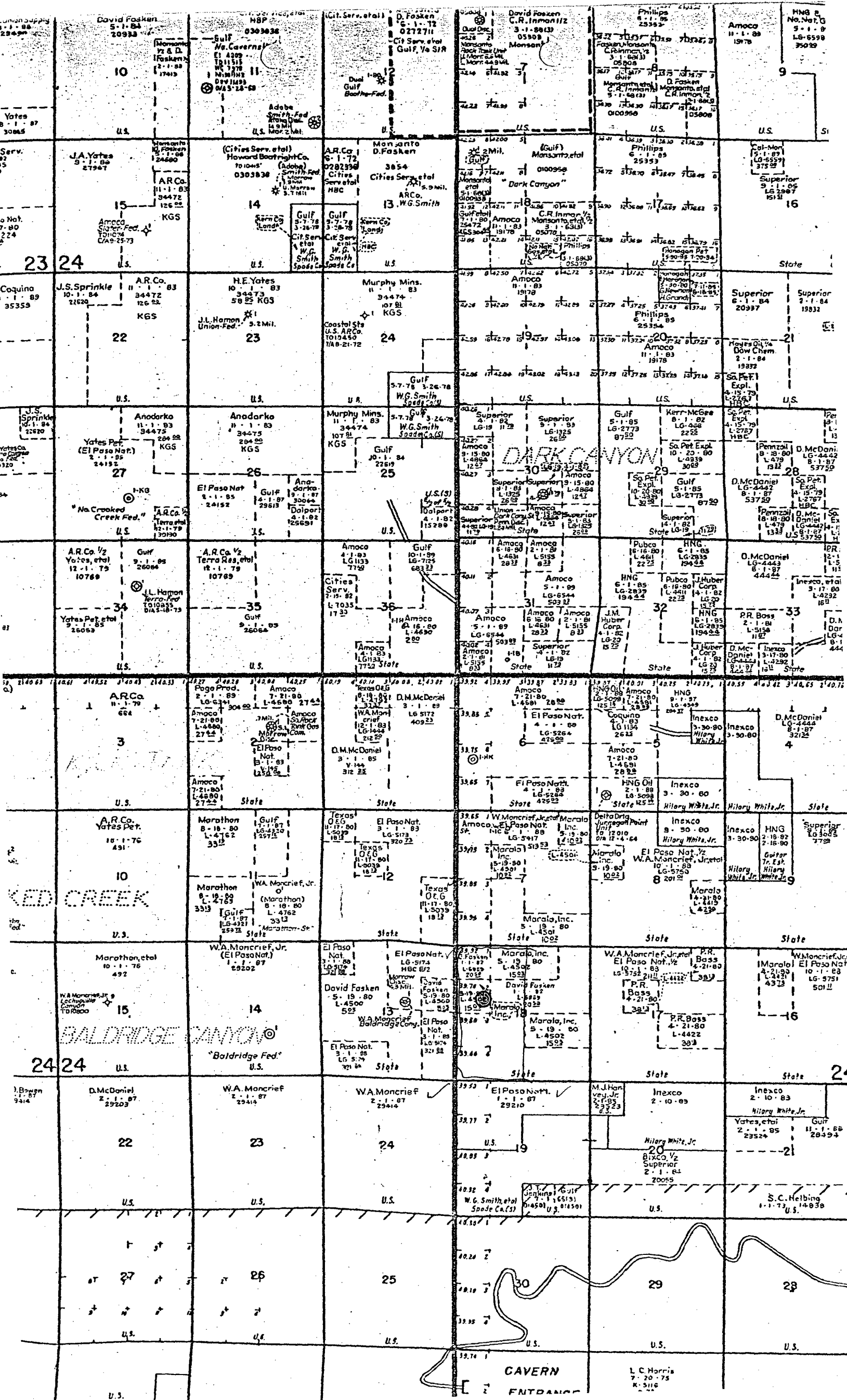
RECOMMENDED CASING PROGRAM

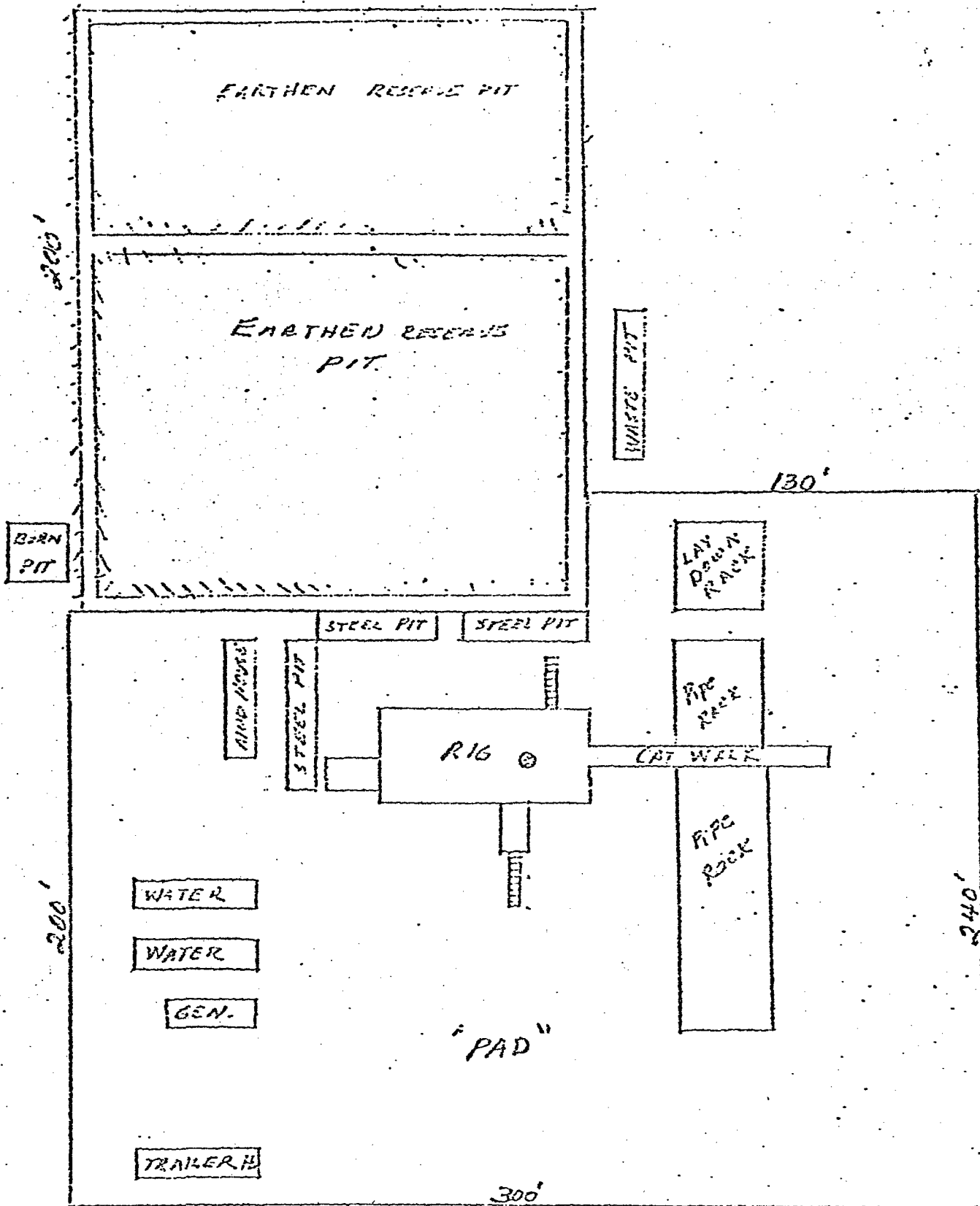
A.F.E. NO. 451

David Fasken ----- MARALO STATE NO. 1-Y ----- 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> |             |               |              |               |







HENRY ENGINEERING  
MIDLAND, TEXAS

RIG & WELL SITE PLAT

HENRY ENGINEERING

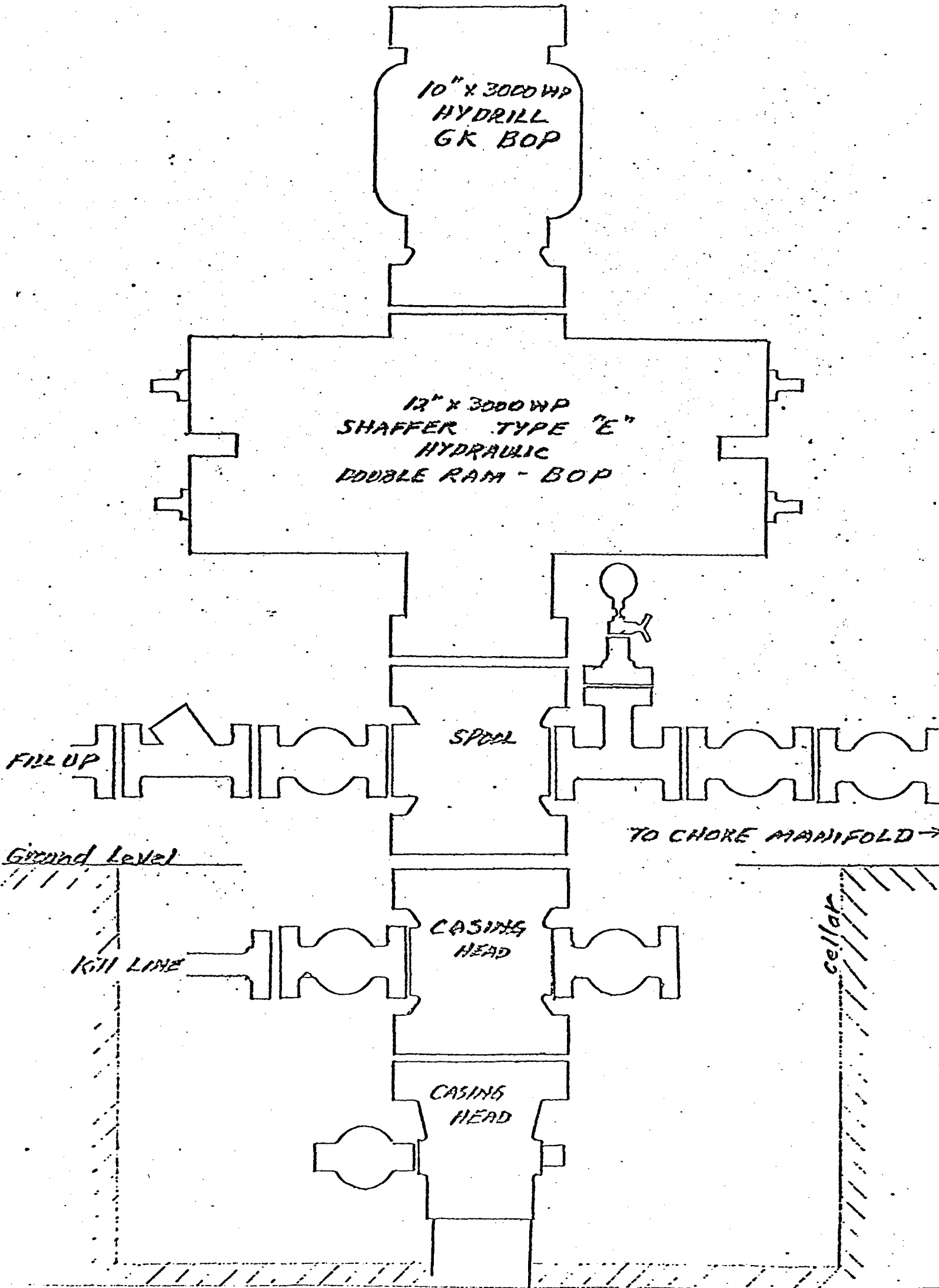
SUBJECT: BLOWOUT PREVENTER

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

STACK

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

ENGINEERING MEMORANDUM



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

May 8, 1980



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

Attention: Proration Department

Gentlemen:

Under date of May 9, 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. 1-Y, 2030' FNL and 1085' FWL of 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. Angévine*  
 Robert H. Angévine

|                                                                      |  |                            |  |
|----------------------------------------------------------------------|--|----------------------------|--|
| NO. 298610                                                           |  | RECEIPT FOR CERTIFIED MAIL |  |
| NO INSURANCE COVERAGE PROVIDED—<br>NOT FOR INTERNATIONAL MAIL        |  | ATTN: See Proration Dept.  |  |
| Amoco Production Co.                                                 |  | P. O. Box 3092             |  |
| Houston, TX 77001                                                    |  | OIL STATE AND ZIP CODE     |  |
| POSTAGE                                                              |  | \$ .41                     |  |
| CERTIFIED FEE                                                        |  | .80                        |  |
| SPECIAL DELIVERY                                                     |  | ¢                          |  |
| RESTRICTED DELIVERY                                                  |  | ¢                          |  |
| SHOW TO WHOM AND DATE DELIVERED                                      |  | .45                        |  |
| SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY                          |  | ¢                          |  |
| SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY             |  | ¢                          |  |
| SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY |  | ¢                          |  |
| TOTAL POSTAGE AND FEES                                               |  | \$ 1.66                    |  |
| POSTMARK OR DATE                                                     |  | May 8, 1980                |  |

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

May 8, 1980

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

Attention: Mr. A. J. Dudenhoeffer

Gentlemen:

Under date of May 9, 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. 1-Y, 2030' FNL and 1085' FWL of 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*

Robert H. Angevine

RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL

(See Reverse)  
 ATTN: A. J. Dudenhoeffer

|                                                                     |  |                         |  |
|---------------------------------------------------------------------|--|-------------------------|--|
| TO: El Paso Natural Gas Co.                                         |  | FROM: Henry Engineering |  |
| 1800 Wilco Building                                                 |  | Midland, Texas 79701    |  |
| STATE AND ZIP CODE                                                  |  | MIDLAND, TEXAS 79701    |  |
| STAGE                                                               |  | \$ .41                  |  |
| CERTIFIED FEE                                                       |  | .80                     |  |
| SPECIAL DELIVERY                                                    |  | ¢                       |  |
| RESTRICTED DELIVERY                                                 |  | ¢                       |  |
| SHOW TO WHOM AND DATE DELIVERED                                     |  | .45                     |  |
| SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY                         |  | ¢                       |  |
| SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY            |  | ¢                       |  |
| SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY |  | ¢                       |  |
| TOTAL POSTAGE AND FEES                                              |  | \$ 1.66                 |  |
| MARK OR DATE                                                        |  | May 8, 1980             |  |

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

May 8, 1980

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

Attention: Mr. Dewey E. Thornton

Gentlemen:

Under date of May 9, 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. 1-Y, 2030' FNL and 1085' FWL of 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*  
 Angevine

NO. 286611  
 RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL

|                                                                     |        |                     |  |
|---------------------------------------------------------------------|--------|---------------------|--|
| SENT TO<br>ATTN: Dewey Thornton                                     |        | W. A. Moncrief, Jr. |  |
| STREET AND NO.                                                      |        | 400 Metro Building  |  |
| P.O., STATE AND ZIP CODE                                            |        | Midland, TX 79701   |  |
| POSTAGE                                                             | \$ .41 |                     |  |
| CERTIFIED FEE                                                       | .80    |                     |  |
| SPECIAL DELIVERY                                                    | ¢      |                     |  |
| RESTRICTED DELIVERY                                                 | ¢      |                     |  |
| SHOW TO WHOM AND DATE DELIVERED                                     | .45    |                     |  |
| SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY                         | ¢      |                     |  |
| SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY            | ¢      |                     |  |
| SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY | ¢      |                     |  |
| TOTAL POSTAGE AND FEES                                              |        | \$ 1.66             |  |
| POSTMARK OR DATE                                                    |        | May 8, 1980         |  |

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

May 8, 1980

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

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

Gentlemen:

Under date of May 9, 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. 1-Y, 2030' FNL and 1085' FWL of 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*

Robert H. Angevine

SENT TO ATTN: Charles Canfield  
 Texas Oil & Gas Corp.  
 STREET AND NO.  
 900 Wilco Building  
 P.O. STATE AND ZIP CODE  
 Midland, TX 79701

(See Reverse)

|                        |  |                                             |  |                                                                      |  |
|------------------------|--|---------------------------------------------|--|----------------------------------------------------------------------|--|
| NO. 296508             |  | RECEIPT FOR CERTIFIED MAIL                  |  | NO INSURANCE COVERAGE PROVIDED—<br>NOT FOR INTERNATIONAL MAIL        |  |
| OPTIONAL SERVICES      |  | RETURN RECEIPT SERVICE                      |  | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY                          |  |
| CERTIFIED FEE          |  | SPECIAL DELIVERY                            |  | RESTRICTED DELIVERY                                                  |  |
| POSTAGE                |  | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY |  | SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY |  |
| \$ .41                 |  | ¢ .80                                       |  | ¢ .45                                                                |  |
| TOTAL POSTAGE AND FEES |  | ¢                                           |  | ¢                                                                    |  |
| \$ 1.66                |  | OSTMARK OR DATE                             |  | May 8, 1980                                                          |  |



J. R. Barnett  
Regional Engineering  
Manager



**Amoco Production Company**

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

May 16, 1980

File: JCA-986.51 NM-2394

Re: Unorthodox Location  
David Fasken Maralo State No. 1-Y  
Eddy County, New Mexico

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

Attention: Joe Ramey

Dear Mr. Ramey:

David Fasken has filed an application to drill the David Fasken Maralo state well No. 1-Y at an unorthodox location based upon terrain at the following location:

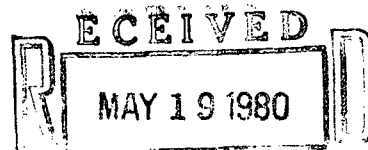
2030' FNL & 1085' FWL Sec. 18, T-24-S,  
R-25-E, Eddy County, New Mexico

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

Yours very truly,

*J. R. Barnett*  
*mlc*

MLC/clf  
5/9079



May 8, 1980 OIL CONSERVATION DIVISION  
SANTA FE

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. 1-Y  
Eddy County, New Mexico

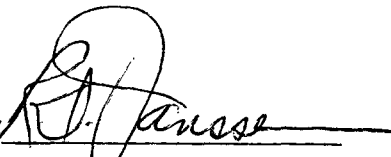
Gentlemen:

We have been advised of the necessity for the location of the subject well 2030' from the north line and 1085' from the west 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   
R. D. Janssen  
Regional Land Manager