



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number: pDD00000132002**

**DD - 13**

**MANANA GAS INC**

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



GARREY CARRUTHERS  
GOVERNOR

April 6, 1987

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

Manana Gas, Inc.  
P. O. Box 36990  
Albuquerque, New Mexico 87176

Attention: Ed Hartman

ADMINISTRATIVE ORDER DD-13

Gentlemen:

Under the provisions of Rule 111 (C) and (D), Manana Gas, Inc. made application to the New Mexico Oil Conservation Division on February 24, 1987, for permission to directionally drill and complete for Basin Dakota Pool production in the W/2 of Section 22, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico.

The Division Director Finds That:

(1) The application has been duly filed under the provisions of Rule 111 of the Division General Rules and Regulations;

(2) Satisfactory information has been provided that all offset operators have been duly notified;

(3) The applicant, Manana Gas, Inc., proposes to directional drill their Cook Well No. 1-E, the surface location to be 235 feet from the North line and 368 feet from the West line of Section 22, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico.

(4) The applicant seeks to directionally drill said well in such a manner as to penetrate at a standard gas well location for said pool in the NW/4 NW/4 of said Section 22.

(5) The subject well is an infill well to the applicant's Cook Well No. 1 located in the SE/4 SW/4 of said Section 22.

(6) The W/2 of Section 22 should therefore be dedicated to both wells.

(7) The applicant should be required to determine the subsurface location of the bottom of the hole by means of a continuous multi-shot directional survey conducted subsequent to said directional drilling, if said well is to be completed as a producing well.

(8) Approval of the subject application will prevent the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Manana Gas, Inc., is hereby authorized to directionally drill its Cook Well No. 1-E from a surface location 235 feet from the North line and 368 feet from the West line of Section 22, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico, in such a manner as to penetrate at a standard gas well location for said pool in the NW/4 NW/4 of said Section 22.

PROVIDED HOWEVER, that prior to the above-described directional drilling, the applicant shall establish the location of the kick-off point by conducting a continuous multi-shot directional survey of the well.

PROVIDED FURTHER, that subsequent to the above-described directional drilling, should said well be a producer, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the kick-off point with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Division, P. O. Box 2088, Santa Fe, New Mexico 87504, and the operator shall notify the Division's Aztec District Office of the date and time said survey is to be commenced.

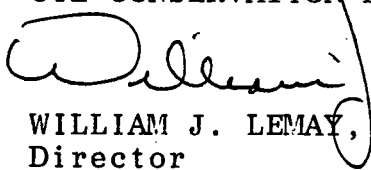
(2) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(3) The W/2 of said Section 22 shall be dedicated to the subject well and to the applicant's Cook Well No. 1 located in the SE/4 SW/4 of said Section 22.

(4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year  
hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY,  
Director

S E A L

cc: OCD - Aztec

Manana Gas, Inc.

P.O. BOX 36990

ED HARTMAN, PRES.

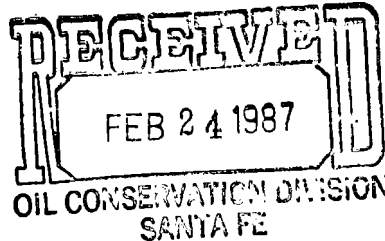
ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863

(505) 884-0814

February 23, 1987

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



Re: Application to directionally drill the Manana Gas, Inc. - Cook #1-E Dakota Well with surface hole at 235' FNL and 368' FWL and bottom hole at standard location of 790' FNL and 790' FWL  
D-22-29N-11W, San Juan County, New Mexico

Gentlemen:

Application is hereby made for administrative approval to directionally drill our proposed Cook #1-E for completion in the Dakota formation. The proposed hole will be 235' FNL and 368' FWL of Section 22-29N-11W at the surface but by directional drilling methods will penetrate the Dakota formation at a standard location of 790' FNL and 790' FWL. Our contract with the drilling contractor will provide that the proposed producing intervals will be within the standard location window in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of this section.

Any standard location in the North half of the Northwest quarter section would be too close to residential housing and would violate the City of Bloomfield ordinance which requires that no well can be drilled within 300 feet of a residence. The City of Bloomfield has grown so much recently that only a narrow strip approximately 160 feet wide and 800 feet long could meet that requirement. The proposed surface location is within that narrow strip.

Copies of this application are being sent by certified mail to all offset operators of wells which are completed in the Dakota formation. The names and addresses of all these operators are shown on an attached sheet.

Also enclosed are well location plats showing the surface and the bottom hole locations, a copy of a new C-103 requesting this change in plans from the original application and an offset ownership plat.

If further information is needed, please contact us.

Yours very truly,

*Ed Hartman*

Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosures as stated

Manana Gas, Inc.

P. O. BOX 36990

ED HARTMAN, PRES.

ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863

(505) 884-0814

February 23, 1987

Re: Proposed Directional Drilling  
Manana Gas, Inc.  
Cook #1-E  
D-22-29N-11W

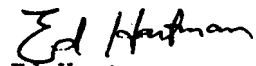
Gentlemen:

Enclosed is an application for directional drilling for subject well. We propose to drill the surface at 235' FNL and 368' FWL but by directional drilling methods penetrate the Dakota formation within a standard location at least 790' FNL and 790' FWL of Section 22-29N-11W.

If you have no objection to this application please execute one copy of this waiver and send it to the New Mexico Oil Conservation Division.

Your cooperation in this matter would be appreciated.

Very truly yours,



Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosure

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

We, as an offset operator, do hereby waive objection to the above application.

Operator \_\_\_\_\_  
By \_\_\_\_\_  
Title \_\_\_\_\_  
Date \_\_\_\_\_

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FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-85

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	

## SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator Manana Gas, Inc.		8. Farm or Lease Name Cook
3. Address of Operator P. O. Box 36990, Albuquerque, N.M. 87176		9. Well No. 1-E
4. Location of Well UNIT LETTER <u>D</u> <u>235</u> FEET FROM THE <u>North</u> LINE AND <u>368</u> FEET FROM <u>790 (bottom hole)</u> THE <u>West</u> LINE, SECTION <u>22</u> TOWNSHIP <u>29N</u> RANGE <u>11W</u> NMPM.		10. Field and Pool, or Wildcat Basin Dakota
15. Elevation (Show whether DF, RT, GR, etc.) 5489 GL		12. County San Juan

## Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐  
TEMPORARILY ABANDON ☐  
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐  
CHANGE PLANS ☒

OTHER ☐

## SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐  
COMMENCE DRILLING OPNS. ☐  
CASING TEST AND CEMENT JOBS ☐

ALTERING CASING ☐  
PLUG AND ABANDONMENT ☐

OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

Due to objections raised by an offset operator this well will be drilled with a sub-surface deviation to the southeast so that the bottom of the hole will be at a standard location of 790 FNL and 790 FWL of Section 22-29N-11W.

All offset operators will be notified of this change in bottom hole location.

Deviation plat attached.

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

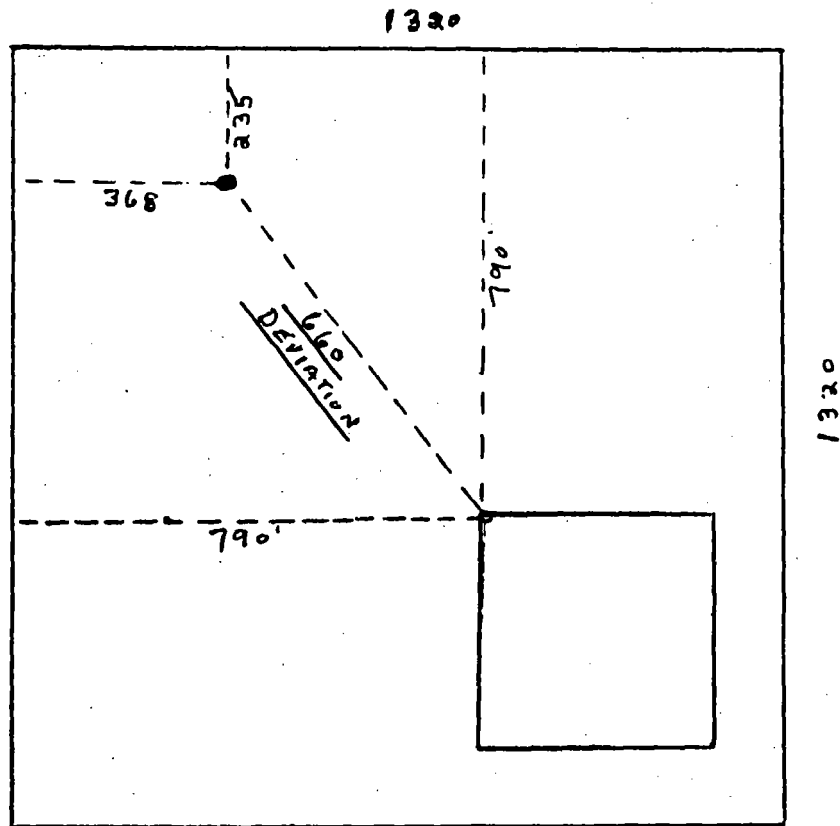
SIGNED Ed Hartman TITLE President DATE 2/18/87

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

CONDITIONS OF APPROVAL, IF ANY:

Manana is, Inc. - Cook # 1-E

Deviation Needed to Drill to an Orthodox Location



$$\frac{660}{6500} = 10.15\% \text{ DEVIATION}$$

SAY 700' DEVIATION



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J.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease
STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

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

1. Type of Work		7. Unit Agreement Name	
2. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		8. Farm or Lease Name Cook	
Name of Operator Manana Gas, Inc.		9. Well No. 1-E	
Address of Operator P.O. Box 36990, Albuquerque, N.M. 87176		10. Field and Pool, or Wildcat Basin Dakota	
Location of Well UNIT LETTER <u>D</u> LOCATED <u>235(a)</u> FEET FROM THE <u>North</u> LINE <u>368(a)</u> West <u>22</u> <u>29N</u> <u>11W</u>		12. County San Juan	
19. Proposed Depth 6500		19A. Formation Dakota	
20. Rotary or C.T. Rotary		22. Approx. Date Work will start 1/15/87	
Elevations (Show whether DF, RT, etc.) GL		21A. Kind & Status Plug. Bond Blanket	
21B. Drilling Contractor			

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	200	200	Surface
7 7/8"	4 1/2"	10.5#	6500	2000	Surface

Manana Gas, Inc. will drill a 6500 ft. Dakota test with rotary tools. Mechanical logs will be run at TD. The Dakota formation will be selectively perforated and hydro-fraced. A 10" 3000 psi BOP with blind and pipe rams will be operational at all times while drilling. A 6" 3000 psi double gate manual BOP will be utilized for completion.

This is an infill Dakota well and the gas is dedicated under the original gas contract with El Paso Natural Gas Company.

IV cementing tools will be set at the base of the Point Lookout sandstone and at the base of the Pictured Cliffs sandstone for a 2 stage cement job as follows  
1st stage 1000 SAX 2nd stage 1000 SAX  
(a) This well is to be drilled with a directional deviation so that the bottom of the hole will be 790 FNL and 790 FWL, a standard location.

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

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

Signed Ed Hartman Title President Date 12/8/86  
(This space for State Use)

PROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

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

Form C-103  
Supersedes C-73  
Effective 1-1-63

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

Owner <b>MANANA GAS, INC.</b>			Lease <b>COOK</b>		Well No. <b>1-E</b>
Well Letter <b>D</b>	Section <b>22</b>	Township <b>29 NORTH</b>	Range <b>11 WEST</b>	County <b>SAN JUAN</b>	

Actual Footage Location of Well:

235 (a) feet from the **NORTH** line and 368 (a) feet from the **WEST** line

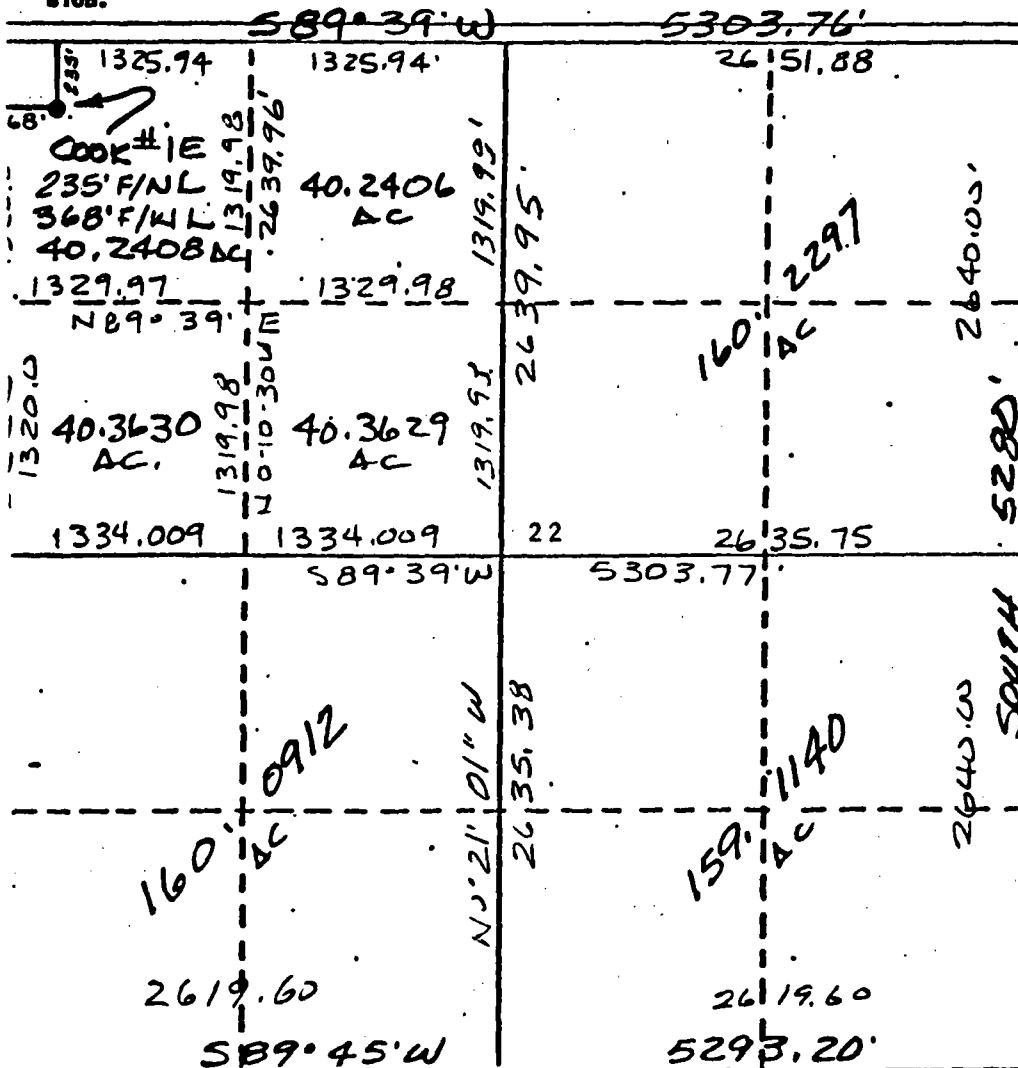
Ground Level Elev. <b>5489</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage <b>321.29</b> Acres
-----------------------------------	--------------------------------------	-----------------------------	------------------------------------------

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. Bottom of hole will be at standard location of 790 FNL and 790 FWL.
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?

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

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.

*Ed Hartman*

Name **Ed Hartman**  
Position **President**  
Company **Manana Gas, Inc.**  
Date **12/8/86**

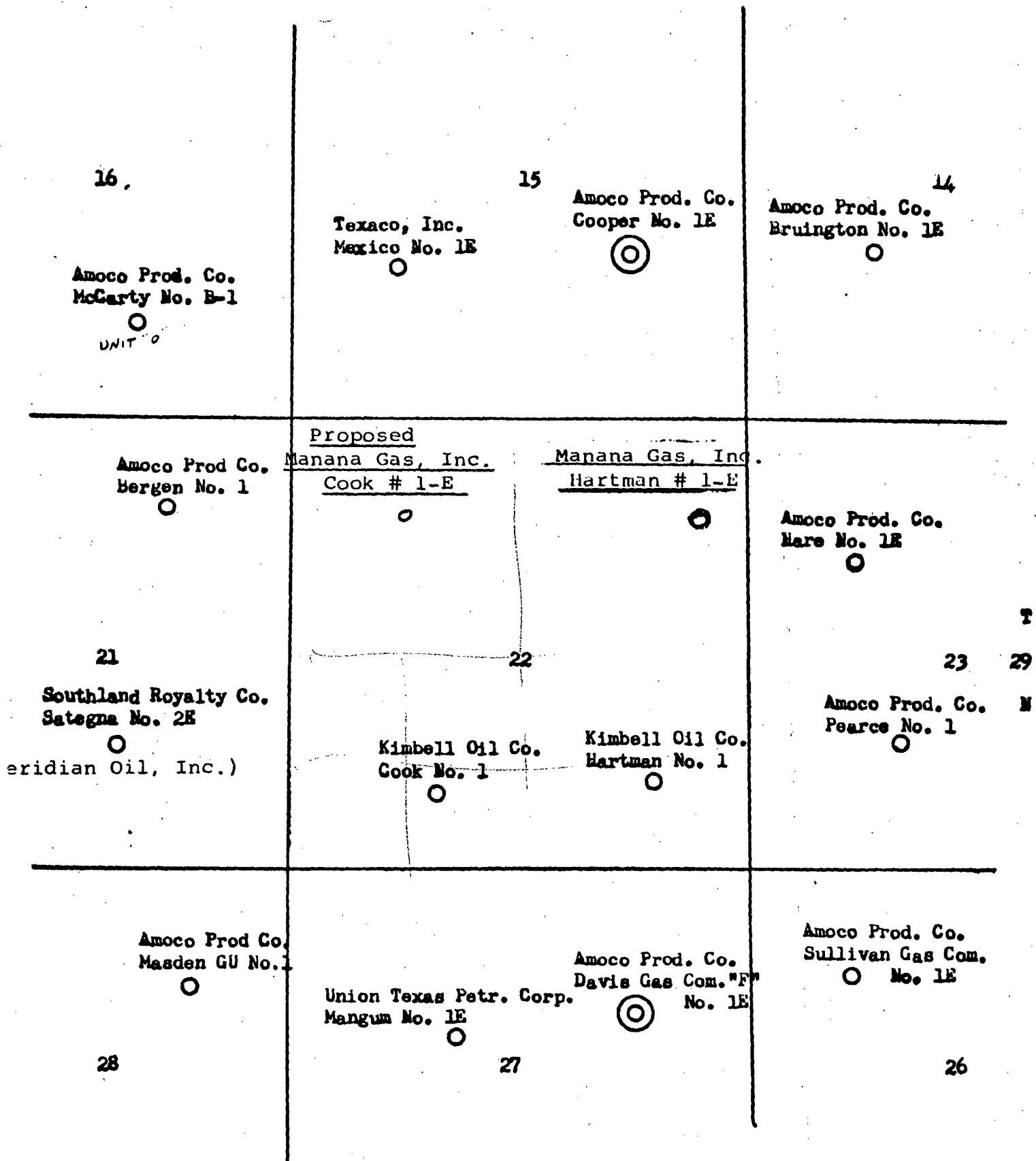
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge.

**GEORGE R. TOMPKINS**  
DECEMBER 4, 1986

Date Surveyed **7259**  
Registered Professional Engineer and/or Land Surveyor

**George R. Tompkins**

Certificate No. **7259**



LOCATION MAP OF DAKOTA FORMATION WELLS

- Dakota Well
- ⊙ Dakota-Chacra Dual Well

OPERATORS OF WELLS COMPLETED IN THE DAKOTA FORMATION

Amoco Production Company  
Western Division  
Amoco Building  
1670 Broadway  
Denver, Colorado 80202

Kimbell Oil Company of Texas  
P.O. Box 1097  
Farmington, New Mexico 87499

Union Texas Petroleum Corporation  
375 U.S. Highway 64  
Farmington, New Mexico 87401

Meridian Oil Inc.  
3535 East 30th St., P.O. Box 4289  
Farmington, New Mexico 87499  
Attn: Van L. Goebel, Landman

Texaco USA  
P.O. Box 2100  
Denver, Colorado 80201  
Attn: J.A. Schell  
Attorney in Fact for Texaco, Inc.

Manana Gas, Inc.  
Dir. Pub. Aff.

Rec.  
2/20/87  
m.s.

RULE 111. DEVIATION TESTS AND DIRECTIONAL DRILLING

(a) Any well which is drilled or deepened with rotary tools shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole and the Division Director may require that a directional survey be run to establish the location of the producing interval(s).

The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. Said directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000.00 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company, and said survey shall be witnessed by the Division.

(b) Except as provided in Paragraph (c) below, no well shall be intentionally deviated without special permission from the Division. Permission to deviate toward the vertical to straighten a crooked hole, to deviate toward the vertical or in an indeterminate direction to sidetrack junk in the hole, or to drill a relief well to control a blow-out shall be obtained from the appropriate District Office of the Division on Division Form C-103 with copies of said Form C-103 being furnished to all offset operators. Upon receipt from the Division Director, any well which was deviated in an indeterminate direction or toward the vertical shall be directionally surveyed. In addition, a directional survey of the entire well bore must be made on any well which was deviated in a predetermined direction, except toward the vertical. The District Office of the Division shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well which was intentionally deviated in any manner for any reason must be filed with the Division upon completion of the well. The Division will not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.

(c) The Division Director shall have the authority to grant administrative approval to intentionally deviate a well from vertical when: (1) the surface location is not a satisfactory drillsite due to topographic conditions or other surface obstructions, and, (2) the bottomhole location is orthodox or an unorthodox location previously approved.

(d) Applications for administrative approval shall be filed in triplicate and shall be accompanied by plats showing both the surface location and targeted bottomhole location. The application shall state the reason(s) for deviating the subject well and include a site map and/or topography map illustrating the surface obstruction. The bottomhole location obtained will be considered reasonable and satisfactory if the actual location at total depth is orthodox or is no more than 50 feet from the approved bottomhole location.

(e) All operators of proration or spacing units offsetting the unit for which the permit to deviate is sought shall be notified of the application by certified or registered mail, and the application shall state that such notification has been given. The Division Director may approve the application upon receipt of waivers from all offset operators or if no offset operator has entered an objection within 20 days after the Director has received the application.

(f) The Division Director may, at his discretion, set any application for administrative approval for directional drilling for public hearing.

(g) Permission to deviate a well in any manner or for any other reason not provided for in these rules will be granted only after notice and hearing.

#### RULE 112-A MULTIPLE COMPLETIONS

I. The multiple completion of any well may be permitted only as hereinafter provided. Multiple completion of any well without prior approval by the Division shall be solely at the operator's risk and shall in no way commit the Division to subsequent approval thereof.

#### II. District Approval

The Supervisor of the appropriate Division district may authorize the multiple completion (qualifying conventional, tubingless, or combination) whenever the zones to be completed are to be produced through tubing or through casing where such casing has an outside diameter of 2.875 inches or less. The supervisor may authorize one gas zone to be produced through a casing-tubing annulus if such zone produces no more than one barrel of liquids per day.

To obtain approval for multiple completion the operator shall file four copies of Division Form C-107 (Application for Multiple Completion) with the appropriate district office. Form C-107 shall be accompanied by a diagrammatic sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location of packers, side door chokes, and such other information as may be pertinent.

The district supervisor may forward any application to the Director of the Division for approval.

#### III. Administrative Approval (Division Director)

The Division Director may authorize the multiple completion (qualifying conventional, tubingless, or combination) not qualifying for District approval or referred to him by the District Supervisor.

When any gas zone of a proposed multiple completion is to be produced through a casing-tubing annulus and such zone produces more than one barrel per day of liquids, the applicant shall furnish proof that such liquids may be efficiently produced without undue use of reservoir energy for the expected producing life of the well.

Application for administrative approval of a multiple completion shall be made in QUADRUPLICATE, with two copies of the application to be mailed to the Division's Santa Fe Office, and two copies to the District Office for the area in which the well is located. Application shall be made on the Division Form C-107 (Application for Multiple Completion) and shall be accompanied by the following:

(a) Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location of packers, side door chokes, and such other information as may be pertinent.

(b) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as hereinafter provided.)

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LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-85

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	

## SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT..." (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator Manana Gas, Inc.		8. Farm or Lease Name Cook
3. Address of Operator P. O. Box 36990, Albuquerque, N.M. 87176		9. Well No. 1-E
4. Location of Well UNIT LETTER <u>D</u> <u>790</u> (bottom hole) <u>790</u> (bottom hole) FEET FROM THE <u>North</u> LINE AND <u>368</u> FEET FROM THE <u>West</u> LINE, SECTION <u>22</u> TOWNSHIP <u>29N</u> RANGE <u>11W</u> NMPM.		10. Field and Pool, or Wildcat Basin Dakota
15. Elevation (Show whether DF, RT, GR, etc.) 5489 GL		12. County San Juan

## Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

### NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>

### SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Due to objections raised by an offset operator this well will be drilled with a sub-surface deviation to the southeast so that the bottom of the hole will be at a standard location of 790 FNL and 790 FWL of Section 22-29N-11W.

All offset operators will be notified of this change in bottom hole location.

Deviation plat attached.

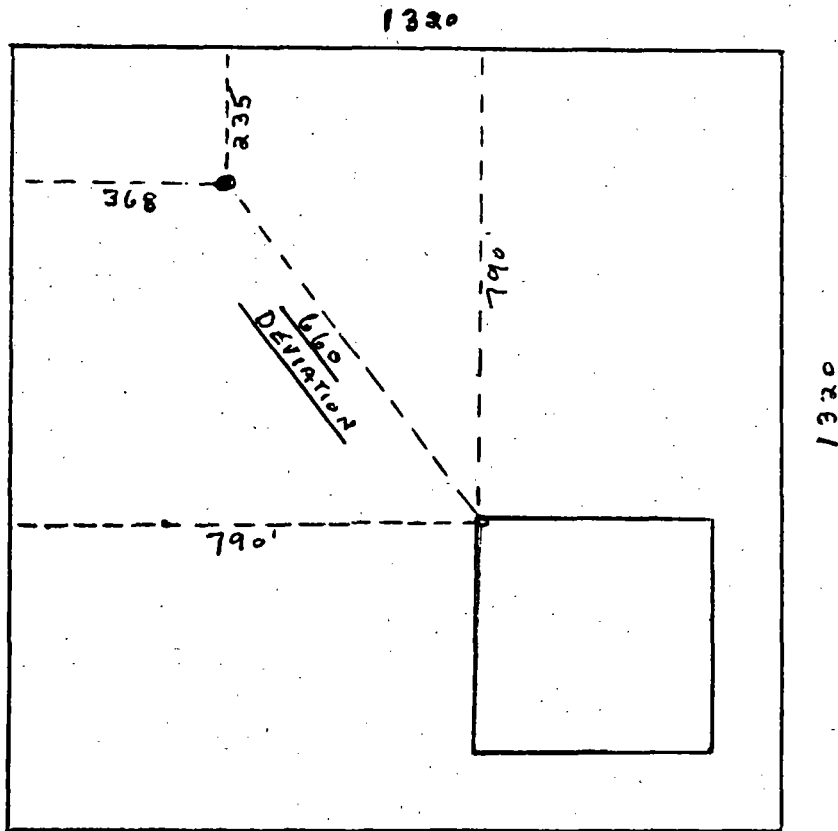
18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Ed Hartman TITLE President DATE 2/18/87

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

CONDITIONS OF APPROVAL, IF ANY:

Deviation Needed to Drill to an Orthodox Location



$$\frac{660}{6500} = 10.15\% \text{ DEVIATION}$$

5A7 700' DEVIATION



Manana Gas, Inc.

P. O. BOX 36990

ED HARTMAN, PRES.

ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863

(505) 884-0814

December 10, 1986

Re: Proposed Nonstandard Location  
Manana Gas, Inc.  
Cook #1-E  
D-22-29N-11W

Gentlemen:

Enclosed is an application for nonstandard location for the subject well to be located 235 FNL and 368 FWL of Section 22, T-29N-R11W, San Juan County, New Mexico.

Please execute one copy of the waiver below and forward it to the New Mexico Oil Conservation Division if you have no objection to this application.

If you desire further information, please contact us.

Yours very truly,



Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosure

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

We, as an offset operator, do hereby waive objection to the above application.

Operator \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Manana Gas, Inc.

P. O. BOX 36990

ED HARTMAN, PRES.

ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863  
(505) 884-0814

December 10, 1986

Oil Conservation Commission  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Application for Nonstandard Location  
Manana Gas, Inc.  
Cook #1-E, 235 FNL, 368 FWL  
D-22-29N-11W, San Juan County  
Basin Dakota

Gentlemen:

We hereby request a nonstandard location for a well to be drilled 235 feet from the North line and 368 feet from the West line of Section 22, T-29N-R11W, San Juan County, due to topographical conditions.


Any standard location in the North half of the Northwest quarter section would be too close to residential housing and would violate the City of Bloomfield ordinance which required that no well can be drilled within 300 feet of a residence. The City of Bloomfield has grown so much recently that only a narrow strip approximately 160 feet wide and 800 feet long could meet that requirement. The proposed location is within that narrow strip.

Copies of this application are being sent by certified mail to all offset operators of wells which are completed in the Dakota formation. The names and addresses of all these operators are shown on an attached sheet.

Also enclosed are the well location plat and an offset ownership plat.

If further information is needed, please contact us.

Yours very truly,



Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosures as stated

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SANTA FE		
FILE		
J.S.G.S.		
LAND OFFICE		
OPERATOR		

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK			
1. Type of Work		5A. Indicate Type of Lease STATE <input type="checkbox"/> REC <input checked="" type="checkbox"/>	
2. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. State Oil & Gas Lease No.	
3. Name of Operator Manana Gas, Inc.		7. Unit Agreement Name	
4. Address of Operator P.O. Box 36990, Albuquerque, N.M. 87176		8. Farm or Lease Name Cook	
Location of Well UNIT LETTER <u>D</u> LOCATED <u>235(a)</u> FEET FROM THE <u>North</u> LINE <u>368 (a)</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>22</u> TWP. <u>29N</u> RGE. <u>11W</u> NMPM		9. Well No. 1-E	
		10. Field and Pool, or Wildcat Basin Dakota	
		12. County San Juan	
		19. Proposed Depth 6500	
		19A. Formation Dakota	
		20. Rotary or C.T. Rotary	
1. Elevations (Show whether DF, RT, etc.) GL		21A. Kind & Status Plug. Bond Blanket	
		21B. Drilling Contractor	
		22. Approx. Date Work will start 1/15/87	

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	200	200	Surface
7 7/8"	4 1/2"	10.5#	6500	2000	Surface

Manana Gas, Inc. will drill a 6500 ft. Dakota test with rotary tools. Mechanical logs will be run at TD. The Dakota formation will be selectively perforated and hydro-fraced. A 10" 3000 psi BOP with blind and pipe rams will be operational at all times while drilling. A 6" 3000 psi double gate manual BOP will be utilized for completion.

This is an infill Dakota well and the gas is dedicated under the original gas contract with El Paso Natural Gas Company.

IV cementing tools will be set at the base of the Point Lookout sandstone and at the base of the Pictured Cliffs sandstone for a 2 stage cement job as follows:  
1st stage 1000 SAX 2nd stage 1000 SAX

(a) This well is to be drilled with a directional deviation so that the bottom of the hole will be 790 FNL and 790 FWL, a standard location.

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, IF ANY.

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

Signed Ed Hartman Title President Date 12/8/86  
(This space for State Use)

PROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

Form C-102  
Supersedes C-12  
Effective 1-1-63

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

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.  
a) Bottom of hole will be at standard location of 790 FNL and 790 FWL.

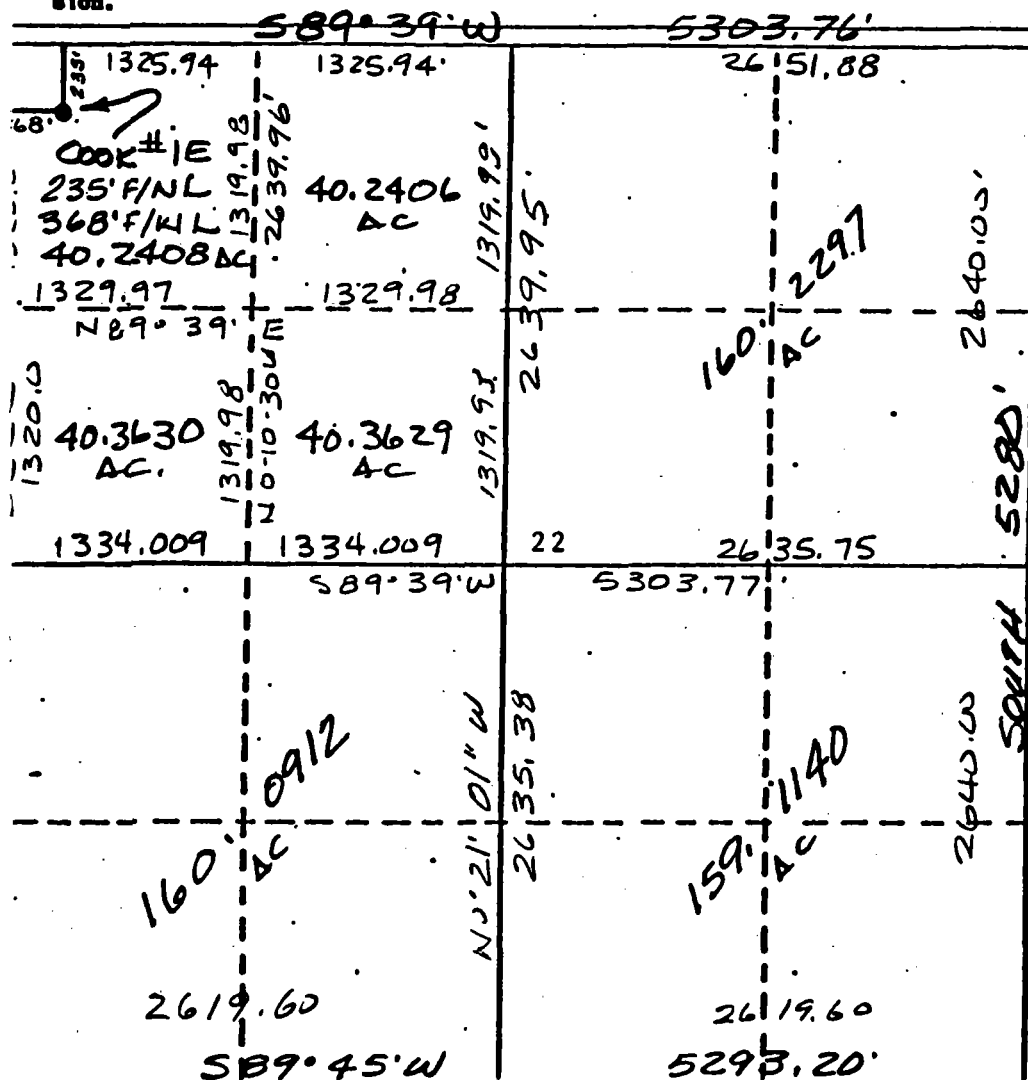
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

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

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.



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

Ed Hartman

Name \_\_\_\_\_

Ed Hartman

**Position**

President

**Company**

Manana Gas, Inc.

Date \_\_\_\_\_

12/8/86

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.

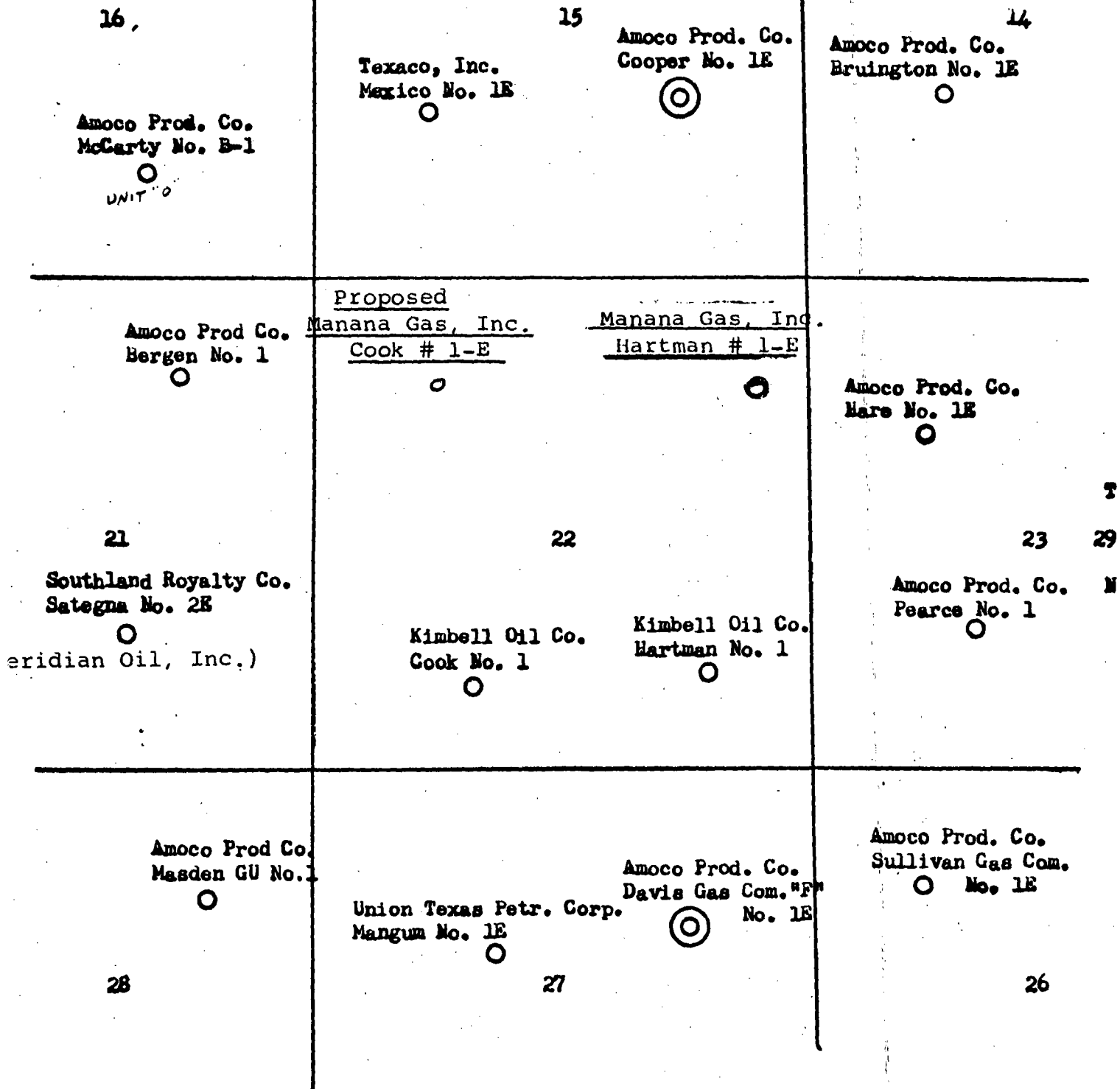
DECEMBER 4, 1982

Date Surveyed 7259

Registered Professional Engineer  
and/or Land Surveyor

George R. Tompkins

**Certificate No.**  
**7259**



LOCATION MAP OF DAKOTA FORMATION WELLS

- Dakota Well
- ⊙ Dakota-Chacra Dual Well

OPERATORS OF WELLS COMPLETED IN THE DAKOTA FORMATION

Amoco Production Company  
Western Division  
Amoco Building  
1670 Broadway  
Denver, Colorado 80202

Kimbell Oil Company of Texas  
P.O. Box 1097  
Farmington, N.M. 87499

Union Texas Petroleum Corporation  
1122 Lincoln Tower Bldg. 375 U.S. Highway 64  
Denver, Colorado 80295 Farmington, New Mexico 87401

Southland Royalty Co.  
2200 Bloomfield Highway  
Farmington, N.M. 87401

Meridian Oil Inc.  
3535 East 30th St., P.O. Box 4289  
Farmington, New Mexico 87499  
Attn: Van L. Goebel, Landman  
Texaco USA

Texaco, Inc. (Getty)  
P.O. Box 3360  
Casper, Wyoming 82602

P. O. Box 2100  
Denver, Colorado 80201  
Attn: J. A. Schell  
Attorney in Fact for Texaco, Inc.

Manana Gas, Inc.

P. O. BOX 36990

ED HARTMAN, PRES.

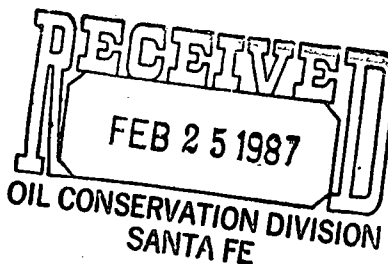
ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863

(505) 884-0814

February 23, 1987

Kimbell Oil Company of Texas  
P.O. Box 1097  
Farmington, New Mexico 87499



Re: Proposed Directional Drilling  
Manana Gas, Inc.  
Cook #1-E  
D-22-29N-11W

Gentlemen:

Enclosed is an application for directional drilling for subject well. We propose to drill the surface at 235' FNL and 368' FWL but by directional drilling methods penetrate the Dakota formation within a standard location at least 790' FNL and 790' FWL of Section 22-29N-11W.

If you have no objection to this application please execute one copy of this waiver and send it to the New Mexico Oil Conservation Division.

Your cooperation in this matter would be appreciated.

Very truly yours,

A handwritten signature in cursive script that reads "Ed Hartman".

Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosure

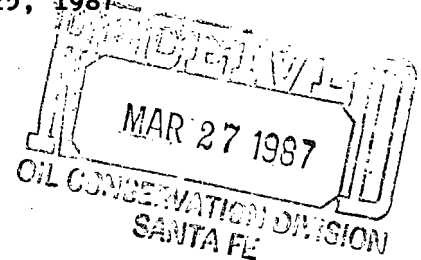
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

We, as an offset operator, do hereby waive objection to the above application.

Operator	Kimbell Oil Company of Texas
By	A handwritten signature in cursive script that reads "E. A. Clement".
Title	E. A. Clement, Prod. Supt.
Date	2/24/87

# MERIDIAN OIL

March 25, 1987



New Mexico Oil Conservation Division  
Attention: Mr. Gilbert Quintana  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Proposed Directional Drilling  
Manana Gas, Inc.  
Cook #1 E  
D - Sec. 22, T-29-N, R-11-W  
San Juan County, New Mexico

Gentlemen:

Meridian Oil Inc., as an offset Operator, has received a request to review the proposed directional drilling for the referenced well.

Meridian Oil has no objections to this proposed location. An executed letter waiving any objections is attached.

Yours very truly,

A handwritten signature in cursive script, appearing to read "David M. Poage".

David M. Poage  
Senior Staff Landman

DMP:gm

Enclosure  
Document 0115L  
Manana Gas

cc: Manana Gas, Inc.  
Attention: Mr. Ed. Hartman  
President



Manana Gas, Inc.

P. O. BOX 36990

ED HARTMAN, PRES.

ALBUQUERQUE, NEW MEXICO 87176

TELE: (505) 884-4863

(505) 884-0814

February 23, 1987

Meridian Oil Inc.  
3535 East 30th St., P.O. Box 4289  
Farmington, New Mexico 87499  
Attn: Van L. Goebel, Landman

Re: Proposed Directional Drilling  
Manana Gas, Inc.  
Cook #1-E  
D-22-29N-11W

Gentlemen:

Enclosed is an application for directional drilling for subject well. We propose to drill the surface at 235' FNL and 368' FWL but by directional drilling methods penetrate the Dakota formation within a standard location at least 790' FNL and 790' FWL of Section 22-29N-11W.

If you have no objection to this application please execute one copy of this waiver and send it to the New Mexico Oil Conservation Division.

Your cooperation in this matter would be appreciated.

Very truly yours,

*Ed Hartman*

Ed Hartman  
President, Manana Gas, Inc.

EMH/nh

Enclosure

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

We, as an offset operator, do hereby waive objection to the above application.

Operator

By

Title

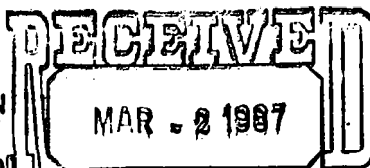
Date

*Meridian Oil Inc.*  
*Donald R. Reed*  
*Regional Operations Manager*  
*3-13-87*



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE



1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

OIL CONSERVATION DIVISION  
BOX 2088  
SANTA FE, NEW MEXICO 87501

OIL CONSERVATION DIVISION  
SANTA FE

DATE 2-26-87

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL X \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

*Directional*

Gentlemen:

I have examined the application dated 2-24-87

for the Manana Co. Inc. Cook #1E D-22-29N-1W8  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

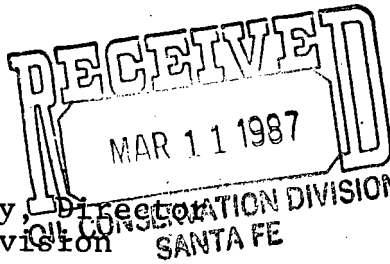
*E. R. [Signature]*



Texaco Inc

PO Box 2100  
Denver CO 80201

March 5, 1987



Mr. William J. LeMay, Director  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87501

SUBJECT: Application to Directionally Drill  
Manana Gas, Inc. - Cook No. 1-E  
Basin Dakota Pool  
235' FNL and 368' FWL (Surface)  
790' FNL and 790' FWL (Bottom Hole)  
Section 22-T29N-R11W  
San Juan County, NM

Dear Mr. LeMay:

Texaco Inc., operator of the Mexico Federal "N" Dakota Gas Unit which directly offsets the proposed well, hereby waives objection to the subject application. However, if the required directional survey of the entire wellbore shows that the wellbore penetrates the Dakota producing formation at a location which is unorthodox or is more than 50 feet from the approved bottom hole location, then Texaco Inc. reserves the right to protest the unorthodox bottomhole location.

Very truly yours,

J. A. SCHELL  
Attorney-in-Fact for Texaco Inc.

FSH/bw

cc: Mr. Ed Hartman, Manana Gas, Inc., P. O. Box 36990,  
Albuquerque, NM 87176  
Mr. Kenneth Bateman, Esq., P. O. Box 787, Santa Fe, NM 87504