

CASE 7113: FRED POOL, JR. FOR A DUAL  
COMPLETION, CHAVES COUNTY, NEW MEXICO

Case No.

7113

Application

Transcripts

Small Exhibits

ETC

1  
2 STATE OF NEW MEXICO  
3 ENERGY AND MINERALS DEPARTMENT  
4 OIL CONSERVATION DIVISION  
5 STATE LAND OFFICE BLDG.  
6 SANTA FE, NEW MEXICO  
7 30 December 1980

8 EXAMINER HEARING  
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11 IN THE MATTER OF:  
12 )  
13 Application of Fred Pool, Jr., for a )  
14 dual completion, Chaves County, New )  
15 Mexico. )  
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CASE  
7113

10 BEFORE: Daniel S. Nutter  
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25

## TRANSCRIPT OF HEARING

## APPEARANCES

16 For the Oil Conservation  
17 Division:

Ernest L. Padilla, Esq.  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

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19  
20 For the Applicant:  
21  
22  
23  
24  
25

W. Thomas Kellahin, Esq.  
KELLAHIN & KELLAHIN  
500 Don Gaspar Street  
Santa Fe, New Mexico 87501

## I N D E X

4 FRED POOL, JR.

5 Direct Examination by Mr. Kellahin 3

6 Cross Examination by Mr. Nutter 11

## E X H I B I T S

15 Applicant Exhibit One, Packet 5

1  
2 MR. NUTTER: We'll call next Case Number  
3 7113.

4  
5 MR. PADILLA: Application of Fred Pool,  
6 Jr., for a dual completion, Chaves County, New Mexico.  
7

8 MR. KELLAHIN: I'm Tom Kellahin of Santa  
9 Fe, New Mexico, appearing on behalf of the applicant, and I  
have one witness.  
10

11 (Witness sworn.)  
12

13 FRED POOL, JR.  
14

15 being called as a witness and being duly sworn upon his oath,  
16 testified as follows, to-wit:  
17

18 DIRECT EXAMINATION  
19

20 BY MR. KELLAHIN:  
21

22 Q. Mr. Pool, would you please state your  
23 name and occupation?  
24

25 A. Fred Pool, Jr., oil producer.  
26

27 Q. Mr. Pool, have you previously testified  
28 before the Oil Conservation Division?  
29

30 A. Yes, sir.  
31

32 Q. And you are an independent oil and gas  
operator?  
33

1  
2 A. Yes, sir.

3 Q. How long have you been in business?

4 A. 32 years.

5 Q. How many wells do you operate in the  
6 State of New Mexico?

7 A. Approximately 30 San Andres wells and  
8 3 -- 4 gas wells, 4 of these Abo wells.

9 Q. As a practical oil and gas operator, Mr.  
10 Pool, do you drill wells for other operators?

11 A. Yes, sir.

12 Q. How many rigs do you own?

13 A. Two.

14 Q. Would you approximate for us the number  
15 of wells you've drilled for other operators?

16 A. Well, over 30 years several hundred. I  
17 don't know the exact number. The last two years I've drilled  
18 about sixty or sixty five wells.

19 Q. All right, sir, and this well you're  
20 seeking approval of the dual completion, this is your well  
21 that you operate?

22 A. Yes, sir.

23 Q. And are you familiar with the facts and  
24 circumstances surrounding this particular application?

25 A. Yes, sir.

1  
2 MR. KELLAHIN: We tender Mr. Pool as a  
3 practical oil and gas operator.

4  
5 MR. NUTTER: Mr. Pool is so qualified.

6 Q. Mr. Pool, would you please turn to the  
7 package of exhibits that we've labeled Applicant Exhibit  
8 Number One, and if you'll turn, sir, to the Form C-107, which  
9 is the second page in the booklet, and identify the informa-  
10 tion contained on that form for us.

11 A. Well, this is an application for multiple  
12 completion and there are three sections of Abo perforated  
13 and one in the Penn, either Penn or Atoka. It hasn't -- the  
14 geologist hasn't identified exactly, but it's generally  
15 thought to be the Penn.  
16

17 And it's perforated at 4848 to 4854,  
18 and the Abo section is in three intervals from 3576 to 3796.

19 Q. This is a gas/gas dual?

20 A. Yes, sir.

21 Q. And has this well been drilled?

22 A. Yes, sir.

23 Q. Is it currently producing from either  
24 zone?

25 A. Yes, sir, from the Penn.

26 Q. Okay.

27 MR. NUTTER: Mr. Pool, I think you stated  
28

1  
2 the Abo was perforated from 3576 to 3796?

3 A. Yes, sir, in three different small sec-  
4 tions.

5 MR. NUTTER: Well, this exhibit in this  
6 brochure here indicates 3586. I wonder -- it's been corrected  
7 from 76 to 86 with a pen.

8 A. Yes, sir, it probably is 86. There's  
9 a 10-foot section in that upper one. This one has been cor-  
10 rected, too, I see.

11 MR. NUTTER: So the correct interval  
12 there would be from 3576 to 3796, overall.

13 A. 3586.

14 MR. NUTTER: I mean 3586.

15 A. Yes, sir, it would.

16 MR. NUTTER: Yeah, to 3796. Okay.

17 Q. All right, Mr. Pool, let's turn and skip  
18 a number of these Commission forms until you get to the  
19 acreage and location -- dedication plat, the C-102.

20 All right, sir, will you look at that  
21 exhibit and identify for us what acreage is dedicated to the  
22 two zones involved?

23 A. The southeast of the southeast is dedi-  
24 cated -- a quarter of the section is dedicated to Abo, loca-  
25 tion is 1980 from the east, 1980 from the south, and the

1  
2 east half of the Section 13 is dedicated to the Penn.

3 Q. You said the southeast of the southeast?  
4 A. The southeast quarter of the section,  
5 excuse me.

6 Q. All right.  
7 A. To the Abo.

8 Q. All right. All right, sir, if you'll  
9 continue to turn pages till we get to the first fold-out  
10 plat. It appears to be a structure map of some kind. Is  
11 that a structure map, Mr. Pool?

12 A. Topographic.  
13 Q. All right. Simply indicates the topo-

14 graphic condition of the surface?  
15 A. Yes, sir.

16 Q. All right, let's skip that for a moment  
17 and go to the schematic, which is the second fold-out. Is  
18 this the way the well is currently completed?

19 A. Yes, sir.

20 Q. And how will you produce the Penn forma-  
21 tion?

22 A. It is producing below the packer. The  
23 Otis sliding sleeve is closed and the Penn is producing up  
24 through the annulus to the packer and then up the tubing.

25 Q. The Penn, then, will be produced up

1  
2 through the tubing?

3 A. Yes, sir.

4 Q. And the Abo will be produced through the  
5 casing-tubing annulus?

6 A. Yes, sir.

7 Q. Do you have any pressure information on  
8 either or both of these zones?

9 A. Yes, sir. We took a 4-point test on the  
10 well, each zone when it was completed, and the bottom hole  
11 pressure on the Penn, shut-in tubing pressure, was 19 --  
12 1895 pounds. And on the Abo on the 4-point test it was 957  
13 pounds.

14 Q. That pressure information is included  
15 in the packet of exhibits, is it not?

16 A. Yes, sir.

17 Q. This is on Form C-122?

18 A. Yes, sir.

19 Q. Yes, sir, and you're referring to which  
20 pressure test?

21 A. The 4-point test tubing, shut-in --

22 Q. On the Abo or the Penn?

23 A. Well, on the Abo and the Penn.

24 Q. All right.

25 A. On tubing data.

1  
2 Q What is the pressure on the Abo formation  
3 at the surface?

4 A 957 pounds.

5 Q All right, sir, and what is the pressure  
6 on the Penn formation at the surface?

7 A Shut-in pressure is 1895 pounds.

8 Q What evidence or indication do you have  
9 that your packer is adequately set in the well and that there  
10 is not communication between the two formations?

11 A Well, the Abo was shut-in, has been since  
12 the Penn has been producing, and it has no change in the  
13 pressure on the surface gauge on the Abo. And the Penn is  
14 producing at 900 and -- no, 720 pounds on the tubing down from  
15 the 19 -- let's see, 1895 that it was shut-in with, but the  
16 Abo gauge has never changed any since we've been producing  
17 the Penn.

18 Q Based upon that information what con-  
19 clusion do you reach, Mr. Pool?

20 A I don't think the packer is leaking.  
21 It seems to be holding.

22 Q All right, sir.

23 A Exactly.

24 Q Now, as part of the packet of information  
25 on the 4-point -- the back pressure test, you've included a

1  
2           gas analysis of each of the zones?

3           A.       Yes, sir.

4           Q.       And what do those analyses show you,  
5           Mr. Pool?

6           A.       There are different gas, specific zones  
7           of gas, and different fluid amounts.

8  
9           Q.       All right, would you indicate for us  
10          the types of fluids that are being produced, or will be pro-  
11          duced out of the Abo?

12          A.       The Abo, other wells in the area, and  
13          indications in this well from what tests we've done, will  
14          not produce any fluid. It is dry gas, completely dry gas.

15          Q.       All right, sir, how about the Penn form-  
16          ation?

17          A.       The Penn makes a slight amount of dis-  
18          tillate, and it's very small but it makes a little in the  
19          tank through the stack pipe. We haven't produced it long  
20          enough to find out just exactly how much it is going to  
21          make.

22  
23          Q.       Mr. Pool, was the Exhibit Number One  
24          and the information contained in Exhibit Number One prepared  
25          by you or compiled under your direction and supervision?

26  
27          A.       Compiled under my direction and super-  
28          vision.

1  
2 Q. And in your opinion, Mr. Pool, will ap-  
3 proval of this application be in the best interest of conser-  
4 vation, the prevention of waste, and the protection of cor-  
5 relative rights?  
6

7 A. Yes, sir.  
8

9 MR. KELLAHIN: That concludes our exa-  
10 mination of Mr. Pool.  
11

#### CROSS EXAMINATION

12 BY MR. NUTTER:

13 Q. Mr. Pool, do you --- it must be in here  
14 in one of these forms -- do you have a potential on each of  
15 these two zones?  
16

17 A. Yes, sir. The -- the 4-point test is  
18 all I have, Mr. Nutter. It's shown by two C-122's.  
19

Q. Okay, and what are those, then?

A. Absolute open flow on the Penn is 1-1/2  
21 million; 1.550, and on the Abo was 1.463 million.  
22

Q. 1.463?

A. Yes, sir.

Q. And you haven't produced any liquids from  
25 the Abo at all and none of the wells in this vicinity produce  
26 any liquids from the Abo?  
27

A. No, sir, they haven't.  
28

1  
2 Q. Okay. Now, you do produce some liquids  
3 from the Penn but you haven't been able to get a GOR yet on  
4 the well, is that it?

5 A. No, sir.

6 Q. But it is producing through the tubing?

7 A. Yes, sir.

8 Q. Do you have any idea what the gravity is  
9 of the liquids in the Penn?

10 A. No, sir, I don't. I sure don't.

11 MR. NUTTER: Are there any further  
12 questions of Mr. Pool? He may be excused.

13 Do you have anything further, Mr. Kella-  
14 hin?

15 MR. KELLAHIN: No, sir.

16 MR. NUTTER: Does anyone have anything  
17 they wish to offer in Case Number 7113?

18 Exhibit Number One will be admitted in  
19 evidence and we'll take the case under advisement.

20  
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23 (Hearing concluded.)  
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2 C E R T I F I C A T E  
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5 I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that  
6 the foregoing Transcript of Hearing before the Oil Conserva-  
7 tion Division was reported by me; that the said transcript  
8 is a full, true, and correct record of the hearing, prepared  
9 by me to the best of my ability.

10 Sally W. Boyd C.S.R.

11  
12  
13 I do hereby certify that the foregoing is  
14 a complete record of the proceedings in  
15 the Examiner hearing of Case No. 7113,  
16 heard by me on 12/30 1980.  
17

Austin, Examiner  
18 Oil Conservation Division  
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24  
25

1 STATE OF NEW MEXICO  
2 ENERGY AND MINERALS DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BLDG.  
5 SANTA FE, NEW MEXICO

6 30 December 1980

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24 KELLAHIN & KELLAHIN  
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## EXHIBITS

15 Applicant Exhibit One, Packet 5

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26 Q And you are an independent oil and gas  
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3 proval of this application be in the best interest of conser-  
4 vation, the prevention of waste, and the protection of cor-  
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7 A Yes, sir.  
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9 MR. KELLAHIN: That concludes our exa-  
10 mination of Mr. Pool.  
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12 CROSS EXAMINATION  
13

14 BY MR. NUTTER:  
15

16 Q Mr. Pool, do you -- it must be in here  
17 in one of these forms -- do you have a potential on each of  
18 these two zones?  
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20 A Yes, sir. The -- the 4-point test is  
21 all I have, Mr. Nutter. It's shown by two C-122's.  
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23 Q Okay, and what are those, then?  
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25 million; 1.550, and on the Abo was 1.463 million.  
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27 Q 1.463?  
28 A Yes, sir.

29 Q And you haven't produced any liquids from  
30 the Abo at all and none of the wells in this vicinity produce  
31 any liquids from the Abo?  
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33 A No, sir, they haven't.

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2 Q Okay. Now, you do produce some liquids  
3 from the Penn but you haven't been able to get a GOR yet on  
4 the well, is that it?

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6 Q But it is producing through the tubing?

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9 of the liquids in the Penn?

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14 hin?

15 MR. KELLAHIN: No, sir.

16 MR. NUTTER: Does anyone have anything  
17 they wish to offer in Case Number 7113?

18 Exhibit Number One will be admitted in  
19 evidence and we'll take the case under advisement.

20  
21  
22  
23 (Hearing concluded.)  
24  
25  
26  
27  
28

1  
2 C E R T I F I C A T E  
34 I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
5 the foregoing Transcript of Hearing before the Oil Conserva-  
6 tion Division was reported by me; that the said transcript  
7 is a full, true, and correct record of the hearing, prepared  
8 by me to the best of my ability.9  
10 Sally W. Boyd C.S.R.  
1112  
13  
14  
15 I do hereby certify that the foregoing is  
16 a complete record of the proceedings in  
17 the Examiner hearing of Case No 71/2,  
18 heard by me on 12/30 1980.  
19  
20  
21  
22  
23  
24  
25John, Examiner  
Oil Conservation Division



BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

POST OFFICE BOX 2068  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

January 16, 1981

Re: CASE NO. 7113  
ORDER NO. R-6555

Applicant:

Fred Pool, Jr.

Dear Sir:

Enclosed herewith are two copies of the above-referenced  
Division order recently entered in the subject case.

Yours very truly,

*Joe D. Ramey*  
JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD   
Artesia OCD   
Aztec OCD

Other \_\_\_\_\_

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7113  
Order No. R-6555

APPLICATION OF FRED POOL, JR.  
FOR A DUAL COMPLETION, CHAVES  
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 30, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of January, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Fred Pool, Jr., seeks authority to complete his Grynberg Com Fed. Well No. 1, located in Unit J of Section 13, Township 6 South, Range 24 East, NMPM, Chaves County, New Mexico, as a dual completion (conventional) to produce gas from the Abo and Pennsylvanian formations with separation of the zones to be achieved by means of a packer set at approximately 4024 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Fred Pool, Jr., is hereby authorized to complete his Grynberg Com Fed. Well No. 1, located in Unit J

--2-

Case No. 7113  
Order No. R-6555

of Section 13, Township 6 South, Range 24 East, NMPM, Chaves County, New Mexico, as a dual completion (conventional) to produce gas from the Abo and Pennsylvanian formations through the casing tubing annulus and the tubing, respectively, with separation of the zones achieved by means of a packer set at approximately 4024 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the Annual Gas Well Shut-In Pressure Test Period for Southeast New Mexico.

(2) That 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

*Joe D. Ramey*  
JOE D. RAMEY  
Director

S E A L

fd/

Dockets Nos. 1-81 and 2-81 are tentatively set for January 14 and 26, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 30, 1980

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 7113: Application of Fred Pool, Jr. for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of his Grynberg Com Fed. Well No. 1 located in Unit J of Section 13, Township 6 South, Range 24 East, to produce gas from the Abo and Pennsylvanian formations.

CASE 7051: (Continued from November 25, 1980, Examiner Hearing)

Application of Petro Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinébry and Drinkard production in the wellbore of its L. G. Warlick "B" Well No. 2 located in Unit G of Section 19, Township 21 South, Range 37 East.

CASE 6940: (Continued from November 25, 1980, Examiner Hearing)

Application of Adobe Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through the Wolfcamp formation underlying the NW/4 SE/4 for oil and the SE/4 for gas, Section 23, Township 20 South, Range 38 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7103: (Continued from December 10, 1980, Examiner Hearing)

Application of E. L. Latham, Jr. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Pennsylvanian formations underlying the N/2 of Section 7, Township 22 South, Range 26 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7114: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Rio Penasco "JX" Well No. 2, a Morrow test to be drilled 660 feet from the South and East lines of Section 35, Township 18 South, Range 25 East, the S/2 of said Section 35 to be dedicated to the well.

CASE 7115: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the South and East lines of Section 14, Township 17 South, Range 26 East, the S/2 of said Section 14 to be dedicated to the well.

CASE 7116: Application of Southland Royalty Company for designation of a tight formation, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Dakota formation underlying portions of Townships 31 and 32 North, Ranges 10, 11, 12, and 13 West, containing 93,860 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271.701-705.

FRED POOL DRILLING, INC.

Box 1300, Clovis Star Route  
Roswell, New Mexico 88201

Dec. 29, 1980

CASE # 7113

FRED POOL DRILLING, Inc.

Multiple Completion

ABO

and

PERMO PENN Formations

DRILLER  
FRED POOL DRILLING  
7113

Dockets Nos. 1-81 and 2-81 are tentatively set for January 14 and 28, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 30, 1980

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STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

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NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator		County	Date
Fred Pool Jr.		Chaves	11-18-80
Address		Lease	Well No.
Box 1300 Clovis Star Rt. Roswell		Grynnberg Com Fed	#1
Location of Well	Unit	Section	Township
	J	13	6s
			Range
			24e

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES  NO
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Abo		Penn
b. Top and Bottom of Pay Section (Perforations)	3586' - 3596' 3697' - 3707' 3778' - 3796'		4848' - 4854'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

Yes  No

- 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 and type of packers and side door chokes, and such other information as may be pertinent.
- b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.
- d. 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 provided by Rule 112-4.)

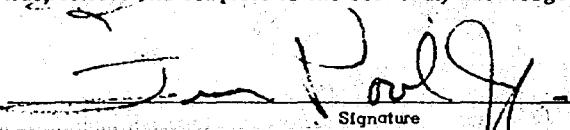
5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Jack Grynnberg 1050 17th Street Suite 1950 Denver, Colorado 80265

EXAMINED AND FILED	
OIL CONSERVATION DIVISION	
EXHIBIT NO. _____	
CASE NO. _____	

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES  NO  . If answer is yes, give date of such notification 11-18-80

CERTIFICATE: I, the undersigned, state that I am the President of the Fred Pool Drilling Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## MULTIPLE COMPLETION (CONVENTIONAL)

p.1

Gryberg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- 1) Said well is to be completed as a gas-gas and the hydrocarbons from each of the zones can be safely and efficiently produced through one string of tubing and one string of casing.
- 2) The packer used to segregate the separate zones of multiple completion will be a Baker Lockset Packer and shall effectively prevent communication between the two producing zones.
- 3) The two producing zones are the ABO and Penn respectively.
- 4) Form C-107 attached hereto.
- 5) For administrative approval;

- x      a) Diagramatic sketch of the Multiple completion:  
x      1) Showing all casing strings  
x      2) Diameters and setting depths  
x      3) Centralizers and/or turbolizers and location thereof  
x      4) Quantities used and top of cement  
x      5) Perforated intervals  
x      6) Tubing strings, including diameters and setting depth  
x      7) Location of packers  
x      8) Sleeves
- x      b) Plat showing the location of all wells on applicants lease  
x      1) All offset wells on offset leases  
x      2) The names and addresses of operators of leases  
x      3) Evidence that said offset operators have been furnished with copies of the application

FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

MULTIPLE COMPLETION  
(CONVENTIONAL)

P.2

Grynderg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- x 4) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforations indicated thereon.
- x c) Logs
  - x 1) Computer processed log.
  - x 2) Perforating depth control
  - x 3) Casing collar log and perforating record
  - x 4) Dual Laterolog Micro-SFL
- x d) Drilling status reports
  - x 1) Well completion reports

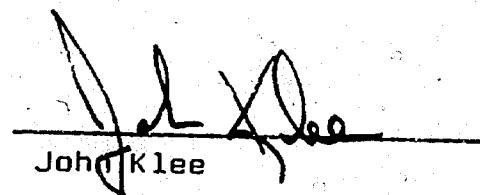
FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

AFFIDAVIT OF MAILING OR DELIVERY

Application for Multiple Completion  
Grynberg Com Federal #1  
Sec. 13 T6s R24e  
Chaves County, New Mexico

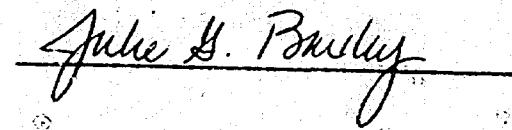
I hereby certify that I have this day mailed a copy of Form C-107 to Jack Grynberg, lease holder of lease No. 11795 Sec.12 T6s R24e north offset to captioned well.



John Klee

STATE OF NEW MEXICO  
COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 19th day of November, 1980, by John Klee.



Julie H. Bowley

My commission expires

Oct. 15, 1984

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

## 10. TYPE OF WORK

 DRILL  DEEPEN  PLUG BACK

## 11. TYPE OF WELL

OIL  GAS  WELL  OTHERSINGLE ZONE  MULTIPLE ZONE 

## 12. NAME OF OPERATOR

Fred Pool Drilling Company

## 13. ADDRESS OF OPERATOR

409 White Building, Roswell, New Mexico 88201

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

1980' FSI &amp; 1980' FEL of Sec. 13

## At proposed prod. zone

Same

## 15. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

27 air miles north-northeast of Roswell, N. M.

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY ON LEASE LINE, FT.  
(Also to nearest drilg. unit line, if any)

660'

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

N.A.

## 21. ELEVATIONS (Show whether DP, RT, GR, etc.)

3898 G. L.

16. NO. OF ACRES IN LEASE  
236017. NO. OF ACRES ASSIGNED  
TO THIS WELL  
32019. PROPOSED DEPTH  
5500 Granite Wash20. ROTARY OR CABLE TOOLS  
Rotary22. APPROX. DATE WORK WILL START  
April 15, 1980

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
3 1/2"	3 3/8"	48#	400' +/-	Circ.
12. 1/4" OR <del>3 1/2"</del>	8 5/8"	24#	1500' +/-	Circ.
7 7/8"	4 1/2"	10.5#	TD	1000' above pay

Selectively perforate and treat pay zone.

Gas is not dedicated to a pipeline.

Attached are: Survey Plat (C-102)

Supplemental Drilling Data

Surface Use Plan

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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED Fred Pool, Jr. TITLE Owner DATE 4-1-80  
(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128  
Effective 1-1-65

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

Operator <b>Fred Pool Drilg. Co.</b>			Lease <b>Grenberg Federal</b>		Well No. <b>1</b>
Unit Letter <b>J</b>	Section <b>13</b>	Tax Ship <b>6S</b>	Rango <b>24E</b>	County <b>Chaves</b>	
Actual Postage Location of Well					
2280 feet from the East		line end	1980	feet from the South	line
Ground Level Elev. <b>3896.0</b>	Producing Formation <b>Penn</b>		Pool <b>Wildcat</b>	Dedicated Acreage 160 Acre <b>320 PermoPenn Acre</b>	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, forced-pooling, etc?

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.

		<b>Fred Pool, Jr (W.I.)</b> <p>Section 13, T. 6 S., R. 24 E., N.M.P.M.</p> <p>1980' 1980'</p> <p>USA - NM - 11795</p> <p>Fred Pool, Jr (W.I.)</p> <p>Fee - Ruth Cornelius</p>		CERTIFICATION
				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
				John D. Jaquess, P.E. & L.S.
				Registered Professional Engineer and/or Land Surveyor
				March 22, 1980
				Date Surveyed
				John D. Jaquess
				Certificate No. 6290
				JOHN D. JAQUESS, P.E. & L.S.
				REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
				March 22, 1980
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				JOHN D. JAQUESS, P.E. & L.S.
				REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
				March 22, 1980
				Date Surveyed
				John D. Jaquess
				Certificate No. 6290
				JOHN D. JAQUESS, P.E. & L.S.
				REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
				March 22, 1980
				Date Surveyed
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				Date Surveyed
				John D. Jaquess
				Certificate No. 6290
				JOHN D. JAQUESS, P.E. & L.S.
				REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
				March 22, 198

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**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-B1424  
LEASE IDENTIFICATION AND SERIAL NO.

NM-11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynberg-Com Federal

9. WELL NO.

10.

FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLM. AND  
SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH 13. STATE

Chaves

N. M.

**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" for such proposals.)

1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Company

3. ADDRESS OF OPERATOR

409 White Bldg., Roswell, New Mexico 88201

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

At surface

1980' FSL &amp; 1980 PEL of Sec. 13

14. PERMIT NO.

15. PERIODS (Show whether 1st, 2d, 3d, etc.)

3898 G. L.

16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF PILE OR ALTER CABIN WATER SHUT-OFF REPAIRING WELL FRACTURE TREAT MULTIPLE COMPLET FRACTURE TREATMENT ALTERING CABIN SHOOT OR ACIDIZE ABANDON SHOOTING OR ACIDIZING ABANDONMENT REPAIR WELL CHANGE PLANS (Other) 

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones (well pertinent to this work).)

The rotary rig, which was scheduled to drill this well, has been delayed with a fishing job on another well; and as we plan to be drilling over May 31, 1980, the lease expiration date, it may be necessary, that we drill with a cable tool rig until the rotary rig becomes available.

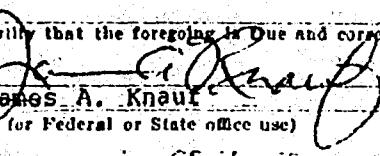
Anticipated spud date is May 28, 1980.

RECEIVED

MAY 21 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED   
James A. Kneur

(This space for Federal or State office use)

TITLE Agent

DATE May 19, 1980

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY: 

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1624.  
5 LEASE DESIGNATION AND SERIAL NO.  
N.M. 11795.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" for such proposals.)**RECEIVED**1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

JUN 6 1980

3. ADDRESS OF OPERATOR

409 White Bldg. Roswell, N.M. U.S. GEOLOGICAL SURVEY  
8 ARTESIA, NEW MEXICO4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

AT SURFACE

1980' FSL &amp; 1980 FEL of sec. 13

11. PERMIT NO.

15. ELEVATION (Show whether DEP, RT, OR, etc.)

12. SEC.

3828 S.L.

16.

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

NOTICE OF INTENT TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOTGUN OR ACIDIZE   
REPAIR WELL   
(Other) PULL OR ALTER CASING   
MULTIPLE COMPLET   
ABANDON   
CHANGE PLANS WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOTGUN OR ACIDIZING   
(Other) REPAIRING WELL   
ALTERING CASING   
ABANDONMENT 

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any new to this work.)

June 3, 1980

Ran 305 feet of 13 3/8" surface casing 48# API 8rd ST&C  
Cemented with 150 sx Class C Cement  
Cement circulated.  
Plugged down 2:00 p.m.

W.O.C. 6-4-80 and 6-5-80

18. I hereby certify that the foregoing is true and correct

SIGNED Pete Jones  
(This space for Federal or State office use)

TITLE Secretary

DATE 6-5-80

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACTING DISTRICT ENGINEER

TITLE

DATE JUN 06 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE.  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424  
5. LEASE DESIGNATION AND SERIAL NO.

N.M. 11795

6. IF INDIAN, ALLOTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. PARISH OR LEASE NAME

Grynderg-Corm Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC., T., R., M., OR BLK. AND

SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH

Chaves

13. STATE

N.M.

## 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" for such proposals.1. OIL  GAS   
WELL  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR

437 White Bldg. Roswell, N.M. 88201

U.S. GOVERNMENT  
FEDERAL ENERGY ADMINISTRATION

See also space 17 below. Report location clearly and in accordance with any State requirements.

At surface

1980 FSL; 1980 FEL of Sec. 13-6S-24E  
Chaves County, N.M.

14. PERMIT NO.

194

15. ELEVATIONS (Show whether DE, RT, OR, etc.)

3898.0L

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) intermediate casing

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT

8 5/8

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 8, 1980

Set 1449 Ft. new 24# 8 5/8 casing. Cemented with 550 lb cement;

(450 Halliburton Lite, 10) lb Class C). Cement circulated. Plug down at 9: a.m.

WOC 24hrs. Tested EOP and casing to 500' for 30 minutes.

No pressure drop.

Started drilling at 2 p.m. July 9, 1980

18. I hereby certify that the foregoing is true and correct

SIGNED Patti Janes

TITLE Secretary

DATE 7-11, 1980

(This space for Federal or State office use)

APPROVED BY (Sig.) PETER W. CHESTER TITLE ACTING DISTRICT ENGINEER

CONDITIONS OF APPROVAL, IF ANY:

DATE JU 14, 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

OPERATOR'S COPY

SUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.  
11795

SUNDY 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" for such proposals.)

1. OIL  
WELL  GAN  
WELL  OTHER

2. NAME OF OPERATOR

Fred Engel Drilling Co.

3. ADDRESS OF OPERATOR

437 Abitz Stdg. Room 11, N.L., 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

13-6-1-1380 ECL 13-6-1-2' S.  
Cimarron County, N.M.

14. PERMIT NO.

15. ELEVATION (Show whether DE, RT, OR, etc.)

16.

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

NOTICE OF INTENTION TO:

1. FIRST WATER SHUT-OFF  
2. FRACTURE TREAT  
3. SHOT OR ACIDIZE  
4. REPAIR WELL  
5. OTHER

6. FIELD OR ALTER CASING  
7. MULTIPLE COMPLETION  
8. ABANDON  
9. CHANGE PLANS

SUBSEQUENT REPORT OF:

10. WATER SHUT-OFF  
11. FRACTURE TREATMENT  
12. SHOOTING OR ACIDIZING  
(Other)  1 1/2" Casing

13. REPAIRING WELL  
14. ALTERING CASING  
15. ABANDONMENT

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

13-6-1-1380

1000 feet of 7", 10.5, 1 1/2" Casing

Completed with 4 1/2" Class 2 and 4 1/2" PUC Mix.

SPUD 1 lbs pk. salt to 350 ft.

On top 1600 ft by Enclosure Survey.

Plug down 5:27 p.m. July 21, 1980

Completion 1500 ft.

Total tel. 4991 ft.

Intend to Perforate and Acidize.

RECEIVED.

JUL 24 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED Peter W. Chester

TITLE Secretary

DATE 7-23,- 80

(This space for Federal or State office use)

APPROVED BY Peter W. Chester TITLE STATE DISTRICT DIRECTOR  
CONDITIONS OF APPROVAL, IF ANY:

DATE JUL 25 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE IDENTIFICATION AND SERIAL NO.

L.I. 11796

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. PARISH OR LEASE NAME

Tynberg-Com Fed.

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT  
Und. Wildcat11. SEC., T., R., M., OR BLK., AND  
SURVEY OR AREA

13-63-24E

12. COUNTY OR PARISH

Chaves

13. STATE

N. M.

1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Tool Drilling Co.

3. ADDRESS OF OPERATOR

137 Chile Stdg., Roswell, N. M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement. See also space 17 below.)

At surface

1630 FSL, 1680 FFL on lot 14, 13-63-24E

Chaves County, N. M.

14. PERMIT NO.

104

15. ELEVATIONS (Show whether DE, XT, OR, etc.)

3300 ft

16

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF FRACTURE TREAT MULTIPLE COMPLETION FRACTURE TREATMENT SHOOT OR ACIDIZE ABANDON\* SHOOTING OR ACIDIZING REPAIR WELL CHANGE PLANS (Other)  Acid Report OTHERS 

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any new work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones penetrated to this work.)\*

18. I hereby certify that the foregoing is true and correct

SIGNED K-E. Sayles  
(This space for Federal or State office use)

TITLE Secretary

DATE 8/18/80

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

ACCEPTED FOR RECORD  
DATE AUG 25 1980

\*See Instructions on Reverse Side

*K-E. Sayles*  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.6.

5. LEASE DESIGNATION AND SERIAL NO.

N.I.L. 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynbera-Com Federal  
9. WELL NO.

10. FIELD AND POOL, OR WILDCAT

Und, Wildcat

11. SEC. T. R. M., OR BLOCK AND SURVEY  
OR AREA

Sep. 13-68-24E

12. COUNTY OR PARISH Chaves

13. STATE N.M.

1. TYPE OF WELL:	OIL <input type="checkbox"/>	GAS <input checked="" type="checkbox"/>	DRY <input type="checkbox"/>	Other _____		
2. TYPE OF COMPLETION:	NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. SERVR. <input type="checkbox"/>	Other _____
3. NAME OF OPERATOR	Fred Pool Drilling Co.					
4. ADDRESS OF OPERATOR	Box 1300 Clovis Star Rd., Roswell, N.M. 88201					
5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*	At surface 1980 FSL, 1980 FFL, of Sec. 13-68-24E					
6. At top prod. interval reported below 4848-4854'.						
7. At total depth 4904'.						

14. PERMIT NO. 104 DATE ISSUED 4-2-80

15. DATE SPUNDED 5/28/80	16. DATE T.D. REACHED 7/20/80	17. DATE COMPL. (Ready to prod.) 8/20/80	18. ELEVATIONS (DP, RKB, RT, OR, ETC.)* 3898, GR	19. ELEV. CASINGHEAD 3898
20. TOTAL DEPTH, MD & TVD 5035 FT.	21. PLUG, BACK Y.D., MD & TVD 4904 FT.	22. IF MULTIPLE COMPL., HOW MANY? 1	23. INTERVALS DRILLED BY ROTARY TOOLS	CABLE TOOLS XX

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 4848-4854 Penn

25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron, Formation Density Dual Laterolog, Micro-Gamma, Perforating Depth Control 27. WAS WELL CORED no

28. Casing Record (Report all strings set in well)
CASING SIZE WEIGHT, LB./FT. DEPTH SET (MD) HOLE SIZE CEMENTING RECORD AMOUNT PULLED
13 3/8 13.7 1005 FT. 17" 150 sx Class C Circulated
8 5/8" 24" 1139 FT. 11" 450 Halliburton Lite "
4 1/2" 10.1" 1335 FT. 7 7/8 100 Class C "
4 1/2" 10.1" 1335 FT. 7 7/8 425 Class C, 425 PCZ "

29. LINER RECORD	30. TUBING RECORD
SIZE TOP (MD) BOTTOM (MD) BACKS CEMENT SCREEN (MD)	SIZE DEPTH SET (MD) PACKER SET (MD)
	2 3/8 4804 4804

31. PERFORATION RECORD (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
4848-4854 13 Holes 2 per Ft.	DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
	4848-4854V 1600 Gal. (600 gal 15% HCl, 1000Mud Acid)

33. DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or Shut-in)					
	Flowing	Shut-In					
DATE OF TEST 8/19/80	HOURS TESTED 72	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL. 1500	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS. Packer	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL. →	GAS-MCF. 0 84 500 0K	WATER-BBL. 0 0K	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Fred Pool, III

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Dottie Bel Janes TITLE Secretary

DATE 8/9/80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1421  
FEE DESIGNATION AND SERIAL NO.  
NM 11795  
6. IN INDIAN ALLOTTEE OR TRIBE NAME

## 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" for such proposals.)

1.

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilg. Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rt. Roswell, N.M. 88201  
See also space 17 below.  
At surface4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
At surface  
1980 FSL 1980 FEL; Sec. 13-6 S-24E

14. PERMIT NO.

15. ELEVATION (Show whether DE. RT. GR. etc.)  
2670.0 ft

16.

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

## NOTICE OF INTENTION TO

TEST WATER SHUT-OFF  
FRACTURE TREAT  
SHOOT OR ACIDIZE  
REPAIR WELL  
(Other) PULL OR ALTER CASING  
MULTIPLE COMPLETION  
ABANDON  
CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF  
FRACTURE TREATMENT  
SHOOTING OR ACIDIZING  
(Other) REPAIRING WELL  
ALTERING CASING  
ABANDONMENT

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and roads perforated to this work.)

Sept. 23, 1980:

Perforated 3778 - 83 6 shots 1/ft  
3786 - 90 5 shots 1/ft  
3792-96 5 shots 1/ft

Acidized with 2500 gallons 12% HCl/3% HF with 1000 SUS/bbl N2. Plowed well back. Intend to frac well.

18. I hereby certify that the foregoing is true and correct

SIGNED *Sexton Cole*

TITLE Secretary

DATE 9-27-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

Please advise as  
to results of this \*See Instructions on Reverse Side  
work.

## ACCEPTED FOR RECORD

DATE

OCT 8 1980  
*Rogers*  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

N.M. 11795

6. IF INDIAN, GIVE TRIBE OR CLAN NAME

7. ESTABLISHED DATE

8. FORM OF LEASE

9. RYMBERG-CO. FED.

10. WELL NO.

#1

11. PERMIT NUMBER

UND. WILDER

12. COUNTY OR PARISH

CHAVES N.M.

## SUNDY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir)

OIL  GAS  WELL  OTHER

9. NAME OF OPERATOR

Fred Pool Drilling Co.

10. ADDRESS OF OPERATOR

1300 Clovis Star Rd., Roswell, N.M. 88201  
Report location clearly and in accordance with my State requirements.At surface

11. PERMIT NO.

194

12. ELEVATION (ft) (or whether up, dn, ch, etc.)

3898.6L

13.

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON

CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONING

(Note: Report results of multiple completion on Well Completion or Recompletion Report Log form.)

17. DESCRIBE PROPOSED OR CONDUCTED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is fractionally drilled, give intermediate locations and measured and true vertical depths for all horizons and zones perffent to this work.) \*

9-29-80 Set retrievable bridge-plug at 3965  
 Perforated at 3778-3798 - 16 holes - 1 per ft.  
 Acidized with 2500 gallons MGR 123.

9-30-80 Used 50,000 gallons foam frac Used 53,000 lbs.  
 20/40 sand. Pumped in 16Bbl/min down tubing and annulus at 3200 lbs./min.  
 Opened up to flow back load.

RECEIVED

OCT 10 1980

U.S. GEOLOGICAL SURVEY,  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED *Derry A. L. 10/10/80* TITLE APPROVED FOR RECORDAPPROVED BY *B. Chester*  
CONDITIONS OF APPROVAL, IF ANYOCT 15 1980  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO \*See Instructions on Reverse Side

DATE 10-9-1980

DATE

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY(Other instructions on reverse side)  
Budget Bureau No. 42-R1424.  
LEASE DESIGNATION AND SERIAL NO.  
N M 11795

## 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" for such proposals.)1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Poll Drilling Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star St. Roswell, N. M. 88201

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

1980 FSL, 1980 FEL of Sec. 13 - 6s - 24e

14. PERMIT NO.

103

15. ELEVATIONS (Show whether DEP, RT, OR, etc.)

3898 6L

16. FIELD AND POOL, OR WILDCAT  
Und. Wildcat17. SEC., T., R., M., OR BBL, AND  
SURVEY OR AREA  
13-6s-24e18. COUNTY OR PARISH  
Dhaves

NM

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

## NOTICE OF INTENTION TO:

## OR SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON?

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

10-24-80 Set retrievable bridge-plug at 3800 ft.

Perforated at 7580-3596 and 3697-3702 10 Holes 1/min.

Used 60,000 gallons foam frac. Used 70,000 lbs. 20/40 sand. Total fluid 354 bbls. 20 ball sealers.

10-30-80 Retrieved bridge plug. Set Baker locker set packer at 2024 ft., Otis sliding sleeve at 3994 ft. Prepared to connect to gas line when line is ready.

18. I hereby certify that the foregoing is true and correct

SIGNED Penny Poll-Martin

(This space for Federal or State office use)

TITLE Secretary

DATE 10-27-80

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved,  
Budget Bureau No. 42-R355.6.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

18. TYPE OF WELL: OIL  GAS  DRY  Other \_\_\_\_\_19. TYPE OF COMPLETION:  
NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DRAINS  Other \_\_\_\_\_20. NAME OF OPERATOR  
Fred Pool Drilling Co.21. ADDRESS OF OPERATOR  
Box 1300 Clovis Star Rt. Roswell, N.M. 88201

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

At surface 1980 FSL, 1980 FEL, of Sec. 13-6S-24E

At top prod. interval reported below 4355 Ft.

At total depth 5035 Ft.

14. PERMIT NO. DATE ISSUED  
194 4-2-8015. DATE SPUNNED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DEP, AHD, RT, OR, ETC.)<sup>a</sup>  
5/28/80 7/20/80 8/25/80 11-0 3898 GR 389820. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS  
5035 ft. 4984 ft. → XX24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)  
4848-4854 Penn at present26. TYPE OF LOGS RUN Compensated Neutron-Formation Density  
Dual Laterolog Micro-SFL, Perforating Depth Control27. WAS WELL CORED  
no

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48#	305 ft.	17"	350 sx Class C	Circulated
8 5/8"	24#	1449 ft.	11"	450 Halliburton Lite	"
4 1/2"	10.5#	5035 ft.	7 7/8"	400 Class C	"
				425 Class C, 425 POZ	"

29. LINER RECORD

BIZZ	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZZ	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

31. PERFORATION RECORD (Interval, size and number)

4848-4854 13 Holes 2 per ft.		82. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL	
4848-4854v	1600 Gal. (600 gal.)	
	HCL, 1000Mud Acid	

33. \* 1.55 mcf sec no water PRODUCTION DATA AT PRESENT

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—name &amp; type of pump)

Flowing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL	GAS-MCF	WATER-BBL	GAS-OIL RATIO
8/19/80	72	→	0	0	1500	0	0
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL	WATER-BBL	OIL-GAS RATIO		
Packer		→	0	0	OK	0	0

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

Fred Pool

SIGNED *Dale R. Jones* TITLE: Secretary

DATE: 8/19/80

(See Instructions and Spaces for Additional Data on Reverse Side)

\*See Instructions and Spaces for Additional Data on Reverse Side)

## INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	275	1289	
Glorietta	1290	2824	
Guadalupe	2825	3387	
Abel	3388	4126	
Bolosando	4127	4354	
Genito	4355	4969	
Greccambria	4970	-	

38. GEOLOGIC MARKERS			
NAME	TOP	MEAS. DEPTH	TRUE VERT. DEPTH

\*U.S. GOVERNMENT PRINTING OFFICE: 1974-780-680/VIII-238

UNITED STATES SUBMIT  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUBMIT IN DUPLICATE.**

(See other instructions on reverse side)

Form approved.   
Budget Bureau No. 42-R355.8.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1. TYPE OF WELL GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____						7. UNIT AGREEMENT NO. S. FARM OR LEASE NAME <b>Grynderup Com Fed.</b>	
8. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK-UP <input type="checkbox"/> DEEP <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. BESVR <input type="checkbox"/> Other _____						9. WELL NO. #1	
10. NAME OF OPERATOR <b>Fred Faoel</b> driller						10. FIELD AND POOL, OR WILDCAT <b>Und. Wildcat</b>	
11. ADDRESS OF OPERATOR <b>C/O 1300 Clovis, Suite 100, Lubbock, Tx. 79420</b>						11. SEC., T., R. S., OR BLOCK AND SURVEY, OR AREA	
12. LOCATION OF WELL (Report location clearly and in accordance with my State requirements)* At surface 1980 FSL, 1980 FEL 6° Sec. 13-6s-24e						12. COUNTY OR PARISH <b>Chaves</b>	
13. top prod. interval reported below 1550 ft.						13. STATE <b>N M</b>	
14. PERMIT NO. 14						14. ELEVATION (F.F. B.M. RT. GR. ETC.) * 3898 GR	
15. DATE SPUDDED 16. DATE TO REACH C. 17. DATE COMPLETED Ready to produce 5-29-80 7-20-80 11-10-80						18. ELEVATIONS (F.F. B.M. RT. GR. ETC.) * 3898	
19. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPLETIONS, HOW MANY? 23. INTERVALS DRILLED BY 1980 ft. 1980 ft.						19. ELEV. CABINGHEAD 3898	
20. PRODUCING INTERVAL(S) OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND FT). 3586-3596 16 ft. 3778-3796 ft. 1 ft.						25. WAS DIRECTIONAL SURVEY MADE yes	
26. TYPE ELECTRIC AND OTHER LOGS RUN IN: Computerized Nuclear-Formation Density Dual Element Micro-IGE, Perforating Depth Control						27. WAS WELL CORED no	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
12 3/8	18	305	12"	150 sx Class C		Circulated	
8 5/8	24	1349	11"	450 Halliburton Lite		"	
7 1/2	18.5	5035	7 7/8"	100 Class C		"	
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804
31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
3586-3596 1 per ft.				DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED			
3778-3796 16 holes 1 per ft.				3778-3796 2500 Gals. 12% HCL/3%			
3697-3707 1 per ft.				with 1000 SFC/bbl N2			
				3586-3596 1500 gals. 28% HCL			
				3697-3707 1500 gals. 28% HCL			
33. PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in) <b>Shut-in</b>	
Abo flowing							
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL-OIL RATIO
	72		→	0	1000	0	0
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORR.)	
		→	0	.56	0		
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)						TEST WITNESSED BY <b>Fred Faoel, Jr.</b>	
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <b>Fred Faoel</b>		TITLE <b>Secretary</b>		DATE <b>11-18-80</b>			

**\* (See Instructions and Spaces for Additional Data on Reverse Side)**

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FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		NAME	TOP	
						MEAS. DEPTH	TRUE DEP. DEPTH
San Andres	295	1289					
Glorietta	1290	2824					
Tubb	2825	3387					
Abo	3387	4126					
Wolfcamp	4127	4354					
Penn	4355	4969					
Precambria	4970	-					

U.S. GOVERNMENT PRINTING OFFICE: 1953-O-683636

637-497

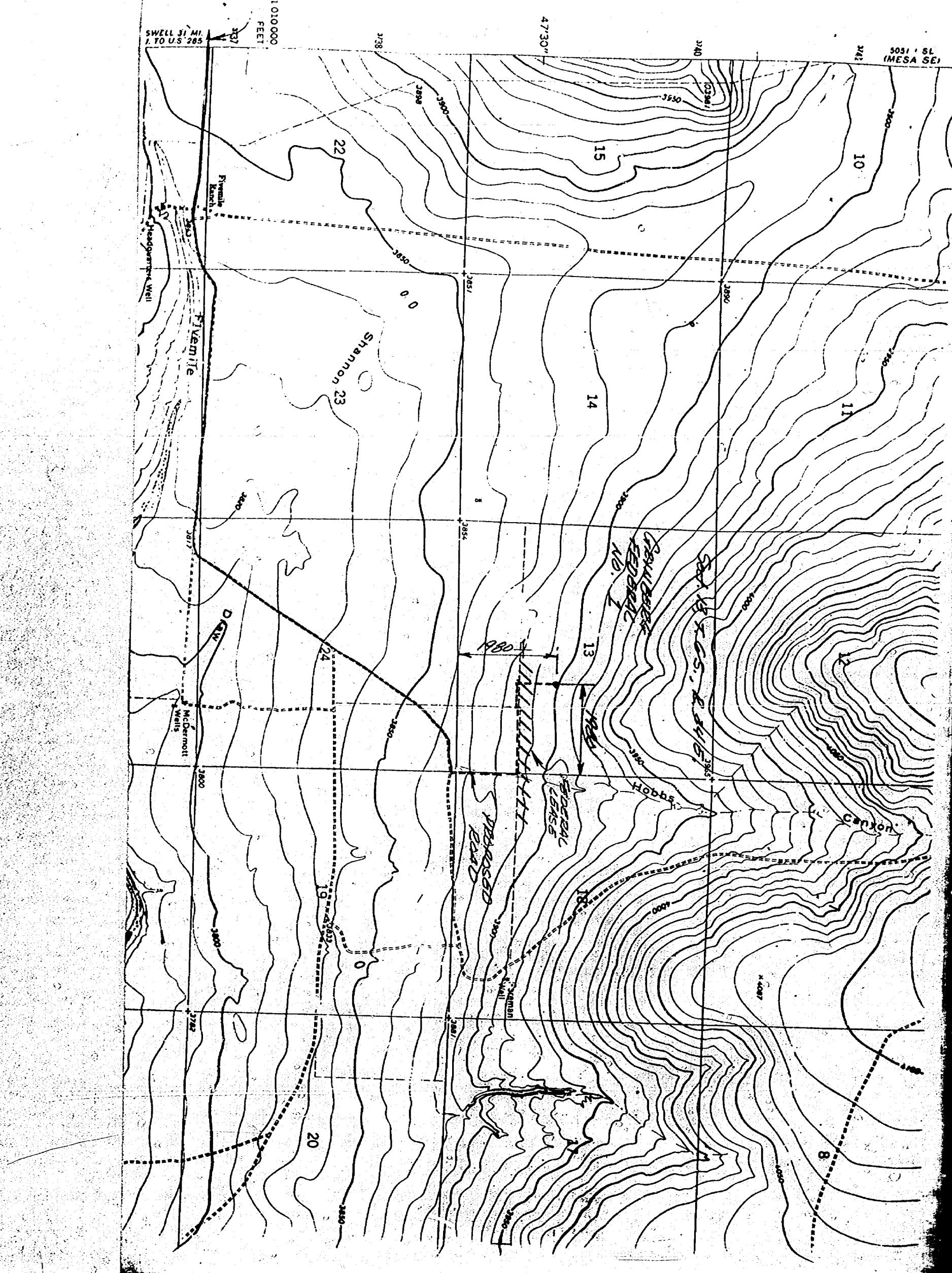
671-233

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## WELLHEAD DESCRIPTION

<u>Quantity</u>	<u>Type</u>
1	Gulfco - 4 1/2 8rd FE x 6"/3000 G25A tubing head assy w/2 2" LPO
2	Gulfco - 2 3/8 EUE 8rd 3000# WOG G-2 gate valve.
1	Gulfco - 2 3/8 " EU 8rd run x 2" LPO FS flow Tee.
1	2" LP inlet x 2" LPO AB-75 3000# adi choke assy.
1	2 3/8" 8rd x 12" lgth N-80Tubing nipple.
1	2 3/8" EUE8rd Bull plug tapped 1/2" 50# BM 1/2" Cemco needle valve.
1	45# LC 1/2" 3000# ashcroft pressure gauge
1	8 5/8 x 4 1/2 " type 75 Larkin casing head
1	2" xH Bull ring
1	2" B-136-CS-02 WKM ball valve.



WELLHEAD (SEE NEXT PAGE)

50 SX CLASS "C" CEMENT

305' 13 3/8" SURFACE

550 SX H. LIGURTON LITE CEMENT  
Top of CEMENT 2600'

1449' 8 5/8" CASING

305'

3586

Abo

3586

PERFORATIONS

3697

3707

PERFORATIONS

425 SX CLASS "C" + 425 POZ mix

SITP 957 psi  
MD Liquids

GOR 1.46<sup>3</sup>  
CAOF Brown

WELL BORE SKETCH

GRYNBERG Com. FEDERAL  
1980 FEL 660' FSL  
CHAVES CO., N.M.  
SEC. 13 T6S R24E

GUIDE SHOT

5035' 4 1/2" CASING

1449'

4024' 2 3/8" TUBING

3778'

PERFORATIONS  
OTIS WIRELINE  
OPERATED SLIDING  
SLEEVE

3796'

3994'

BAKER LOCKSET PACKER

4024'

Penn  
SITP 1895' psi

Penn  
PERFORATIONS

4848'

GOR does not know  
green

4854'

PBTD

CAOF 1.5 million

4994'

5035'



GENERALIZED STRATIGRAPHIC SECTION  
Grynb erg Comm. Federal #1  
T6s R24e Sec. 13  
Chaves County, New Mexico

SYSTEM	SERIES	ROCK UNIT	LITHOLOGY
PERMIAN	OCHOAN	RUSTLER	hatched
		SALADO	hatched
		TANSILL	hatched
		YATES	hatched
		SEVEN RIVERS	hatched
	GUADALUPIAN	QUEEN	hatched
		GRAYBURG	hatched
		SAN ANDRES	hatched
		"GLORIETA"	hatched
		UPPER YESO	hatched
MISSISSIPPIAN	LEONARDIAN	DRINKARD	hatched
		LOWER YESO	hatched
		ABO	hatched
		WOLFCAMPIAN	hatched
		HUECO	hatched
	PENNSYLVANIAN	VIRGILIAN	hatched
		CISCO	hatched
		MISSOURIAN	hatched
		DESMOINESIAN	hatched
		STRAWN	hatched
	DEVONIAN	ATOKAN	hatched
		" ATOKA "	hatched
		MORROWAN	hatched
		CHESTERAN	hatched
		MERAMECIAN OSAGIAN KINDERHOOKIAN	hatched
	ORDOVICIAN	MISSISSIPPIAN LIME	hatched
		WOODFORD	hatched
		"UNDIFFERENTIATED SILURIAN"	hatched
		MONToya	hatched
		SIMPSON	hatched
	PRECAMBRIAN	ELLENBURGER	hatched
		UNNAMED	wavy lines

Grynb erg Comm Federal #1 T6s R24e Sec. 13 Chaves County, NEW MEXICO
<b>GENERALIZED STRATIGRAPHIC SECTION</b>

**BENNETT WIRE LINE SERVICE**

P.O. BOX 787

ARTESIA, NEW MEXICO 88210

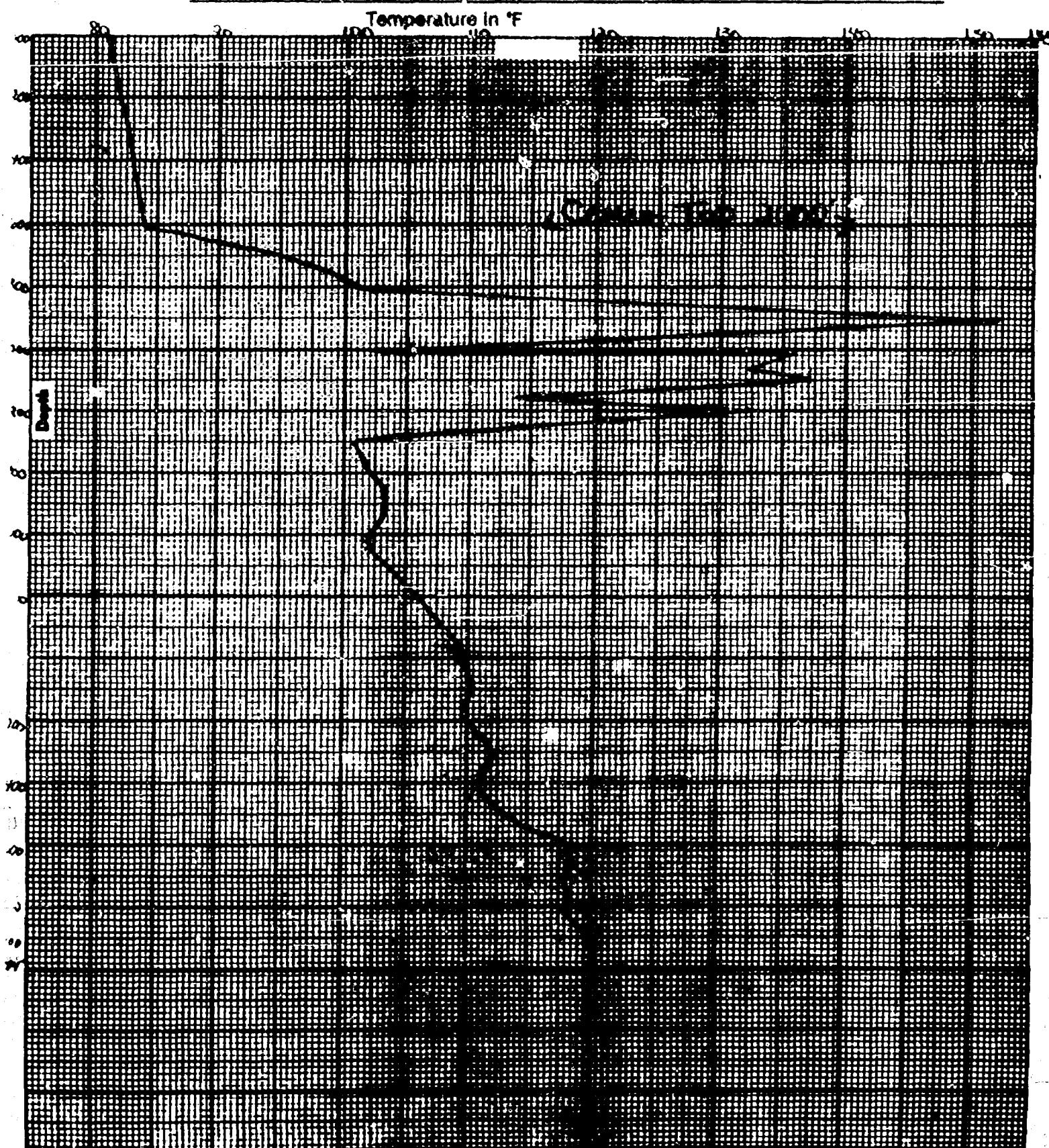
Phone 746-3281



FRED POOL

**TEMPERATURE SURVEY**

OPERATOR FRED POOL  
LEASE GYRNBERG FEDERAL  
WELL NO. 11  
FIELD NO. \_\_\_\_\_  
DATE & TIME CEMENT JOB COMPLETED 7-21-80 1700 HOURS  
DATE & TIME SURVEY MADE 7-22-80 0800 HOURS  
SURVEY RUN BY DON BENNETT  
DATUM \_\_\_\_\_  
WELL DATA TOTAL DEPTH 4,984 FEET  
CEMENT TOP 3,600 FEET



NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

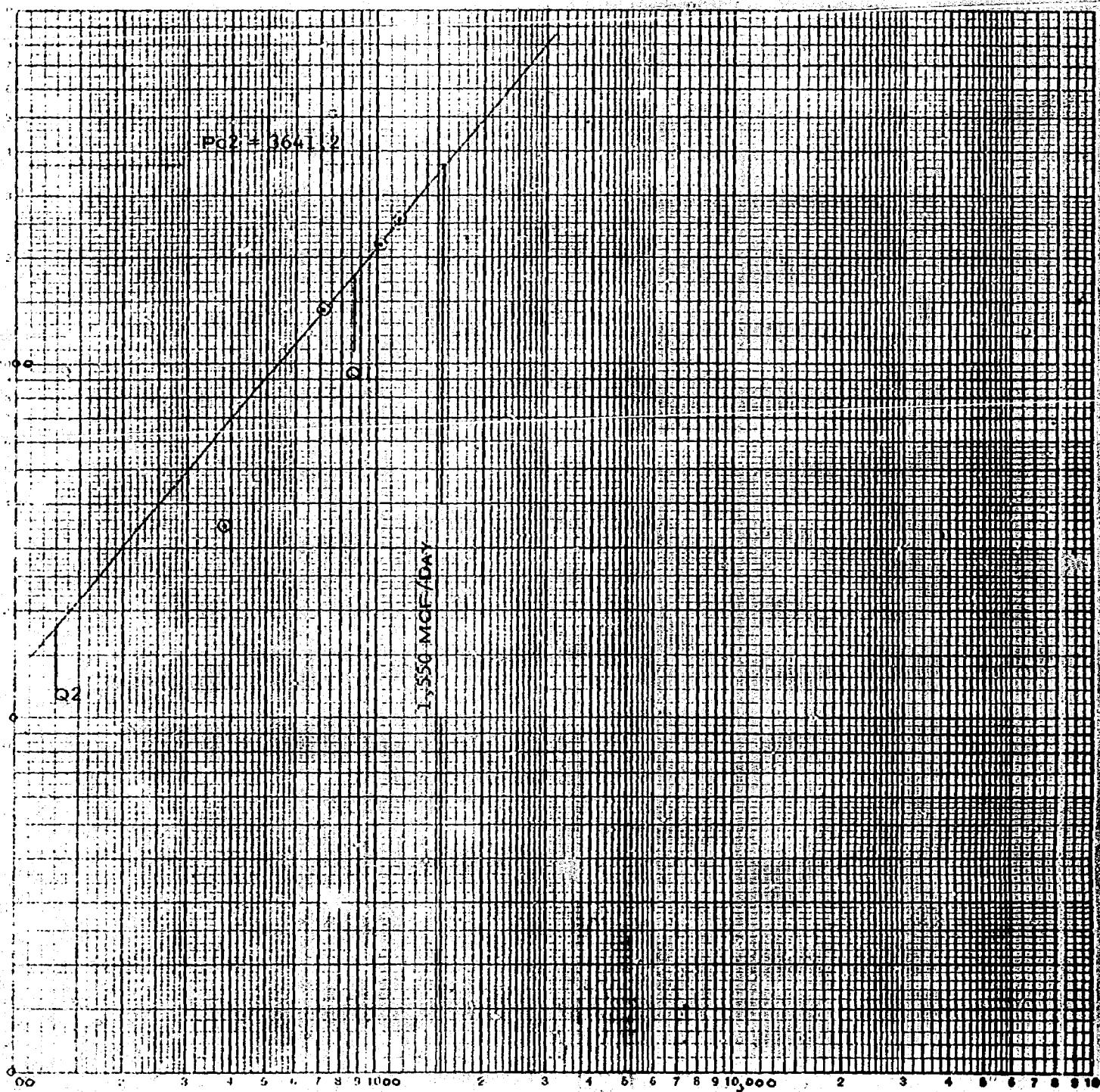
Form C-122  
Revised 9-1-65

Type Test		<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Annual	<input type="checkbox"/> Special	Test Date 8-19-80						
Company <b>FRED POOL</b>		TO AIR		PENN							
Completion Date <b>8-19-80</b>		Total Depth <b>5035</b>		Hub Back TD <b>4984</b>		Elevation <b>3898</b>					
Casing Size <b>4 1/2</b>		Wt. <b>11.60</b>		Set At <b>5035</b>		Perforations: From <b>4848</b> To <b>4854</b>					
Tubing Size <b>2 3/8</b>		Wt. <b>4.70</b>		Set At <b>4804</b>		Perforations: From <b>OPEN</b> To <b>END</b>					
Type Well - Single - Bradenhead - C.G. or G.O. Multiple <b>SINGLE</b>		Producing Thru <b>TUBING</b>		Reservoir Temp. °F <b>123°</b>		Mean Annual Temp. °F <b>4851</b>					
L		H		G <sub>g</sub>		Baro. Press. - P <sub>a</sub> <b>13.2</b>					
<b>4851</b>		<b>4851</b>		<b>.669</b>		% CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S <b>1.417    13.917</b>					
Prover      Meter Run      Tape <b>4"</b> <b>FLANGE</b>											
FLOW DATA      TUBING DATA      CASING DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI											
1.	<b>4 X 1.00</b>		<b>510</b>	<b>8</b>	<b>74</b>	<b>1895</b>					45 MIN.
2.	<b>4 X 1.00</b>		<b>530</b>	<b>26</b>	<b>70</b>	<b>1630</b>	<b>71</b>				45 MIN.
3.	<b>4 X 1.00</b>		<b>540</b>	<b>52</b>	<b>68</b>	<b>1420</b>	<b>70</b>				60 MIN.
4.	<b>4 X 1.00</b>		<b>540</b>	<b>68</b>	<b>68</b>	<b>1128</b>	<b>72</b>				60 MIN.
5.							<b>965</b>	<b>75</b>			60 MIN.
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)		$\sqrt{h_w P_m}$		Pressure P <sub>m</sub>	Flow Temp. Factor F <sub>l</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>p</sub>	Rate of Flow Q, Mcfd		
1.	<b>4.753</b>		<b>64.70</b>		<b>523.2</b>	<b>.9868</b>	<b>1.223</b>	<b>1.034</b>	<b>384</b>		
2.	<b>4.753</b>		<b>118.34</b>		<b>543.2</b>	<b>.9905</b>	<b>1.223</b>	<b>1.036</b>	<b>709</b>		
3.	<b>4.753</b>		<b>169.61</b>		<b>553.2</b>	<b>.9924</b>	<b>1.223</b>	<b>1.037</b>	<b>1015</b>		
4.	<b>4.753</b>		<b>193.95</b>		<b>553.2</b>	<b>.9924</b>	<b>1.223</b>	<b>1.037</b>	<b>1160</b>		
5.											
NO.	R	Temp. °R	T <sub>f</sub>	Z	Gas Liquid Hydrocarbon Ratio _____ A.P.I. Gravity of Liquid Hydrocarbons _____ Specific Gravity Separator Gas _____ Specific Gravity Flowing Fluid _____ Critical Pressure _____ Critical Temperature _____						
1.	<b>.81</b>	<b>534</b>	<b>1.59</b>	<b>.935</b>	Mc/bbl. Deg. XXXXXX						
2.	<b>.84</b>	<b>530</b>	<b>1.58</b>	<b>.932</b>							
3.	<b>.86</b>	<b>528</b>	<b>1.58</b>	<b>.930</b>	XXXXXX						
4.	<b>.86</b>	<b>528</b>	<b>1.58</b>	<b>.930</b>	P.S.I.A. _____ R _____						
5.											
NO.	$P_c^2$	$P_w^2$	$P_w^2$	$P_c^2 - P_w^2$	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.422$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.336$					
1.	<b>1672.1</b>	<b>2795.9</b>	<b>845.3</b>								
2.	<b>1488.6</b>	<b>2215.9</b>	<b>1425.3</b>								
3.	<b>1218.1</b>	<b>1483.1</b>	<b>2157.1</b>								
4.	<b>1039.3</b>	<b>1080.1</b>	<b>2561.1</b>								
5.											
Absolute Open Flow _____ Mcfd @ 15.025					Angle of Slope Θ _____ 50.5					Slope, n _____ .824	
Remarks: _____											
Approved By Commission:				Conducted By:			Calculated By:		Checked By:		
				W.S.			R.R.		J.W.W.		

FRED POOL  
GRYNBERG COMM, FEDERAL NO. 1

$$\begin{aligned} \text{ABS (N)} &= Q_1 = 867 = 2,937943 \\ Q_2 &= 130 = 2,113943 \\ N &= .824000 \end{aligned}$$

$$\begin{aligned} \text{CAOF} &= 1160 \frac{.824}{(3641.2)} = 1,550 \text{ MCF/DAY} \\ &\quad (2561.1) \end{aligned}$$



Q = MCF/DAY

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Rev C122F  
Adopted 1948COMPANY Fred RocLEASE CryenbergWELL NO. 1DATE 8/20/48LOCATION: Unit L 4851Section H 4851Township W.H. 10dRange 1

DATE

 $P_f = 1672 \text{ psia}$     $T_a = 335^\circ \text{ F}$   
 $\% \text{CO}_2 = 0$     $\% \text{N}_2 = 0$     $\% \text{H}_2S = 0$ 

LINE	1	2	3	4	5	6	7	8
1	$T_w(\text{W.H. } R)$	534	534	534	534	534	534	534
2	$T_s(\text{B.H. } R)$	583	583	583	583	583	583	583
3	$T = \frac{T_w + T_s}{2}$	559	559	559	559	559	559	559
4	$Z (\text{Est.})$	1866	1870	1873	1878	1881	1893	1900
5	$T_2$	483.7	485.9	487.6	490.4	495.9	498.7	502.7
6	$G/H/T_2$	6.71	6.68	6.66	6.62	6.50	6.46	6.42
7	$eS(\text{Table XIV})$	1.29	1.28	1.28	1.28	1.28	1.27	1.27
8	$P_i$ or $P_s$	1575.2	1551.2	1661.2	1683.2	1376.2	1372.2	1122.2
9	$P_i^2$ or $P_s^2$	3551.8	3551.8	2836.9	2639.5	1843.9	1853.9	1374.1
10	$P_c^2 = P_i^2/eS$ or $P_w^2 = P_s^2/eS$	2762.8	2761.1	2212.6	2215.8	1481.8	1453.9	1078.6
11	<del><math>P_w</math></del>	1671.2	1673.1	1467.5	1486.6	1273.2	1218.1	1038.6
12	$P \cdot \frac{(P_w + P_s)}{2}$ or $(P_s + P_i)$	1783.2	1783.7	1586.3	1586.9	1256.8	1257.2	1105.4
13	$P_i = (P/P_{G1})$	2.74	2.76	2.45	2.45	2.00	2.00	1.77
14	$T_p = (T/T_{G1})$	167	167	167	167	167	167	167

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Penn Oliver  
Advised byCOMPANY Fred PolLEASE BeynbergWELL NO. 1

DATE

LOCATION: Unit L 4851 Section H 4851 Township W.H. 102

Range

 $G 1669$  % CO<sub>2</sub>% N<sub>2</sub>CH 3245 P<sub>a</sub> 647 T<sub>a</sub> 335

TABLE II A 2

% H<sub>2</sub>S

LINE	1	2	3	4	5	6	7	8
1 $T_w$ (W.H. °R)	534	534						
2 $T_s$ (B.H. °R)	583	583						
3 $T = \frac{(T_w + T_s)}{2}$	559	559						
4 Z (Est.)	859	862						
5 T <sub>Z</sub>	478	481						
6 GH/T <sub>Z</sub>	6.76	6.76						
7 es(Table XIV)	1.29	1.29						
8 $P_t$ or $P_s$	2150.2	2150.2						
9 $P_t^2$ or $P_s^2$	4623.4	4623.4						
10 $P_c^2 = P_t^2/es$ or $P_w^2 = P_s^2/es$	3587.6	3587.6						
11 $\overline{P}_c$ or $\overline{P}_w$	1894.1	1894.9						
12 $P_c = \frac{(\overline{P}_c + P_s)}{2}$ or $P_w = \frac{(\overline{P}_w + P_s)}{2}$	2022.1	2022.6						
13 $P_t = (P_c/P_w)$	3.13	3.13						
14 $T_t = (T/T_c)$	1.67	1.67						

**NEW-TEX****LAB**P. O. BOX 1181  
HOBBS, N.M. 88240**COPY OF ORGINAL**

No. 3825  
 Run No.  
 Date of Run. 8-18-80  
 Date Secured. 8-16-80

**CERTIFICATE OF ANALYSIS**

Fred Pool  
 West Engineering  
 412 N. Dal Paso  
 Hobbs, NM 88240  
 Press  
 Temp.

Grinberg Com Fed. #1

Secured by \_\_\_\_\_  
Time \_\_\_\_\_ Date \_\_\_\_\_**FRACTIONAL ANALYSIS****Percentage Composition**

MOL % LIQ. % G.P.M.

Dioxide	1.412	
gen sulfide	13.917	
ten		
ne	80.447	
ne	2.100	.560
ne	.819	.225
ne	.195	.064
ne	.393	.124
ne		
ne	.092	.035
ne	.136	.049
es Plus	.092	.040
es Plus	.387	.178
	100.000	1.225

Calc. Sp. Gr. 0.6687  
 Calc. A.P.I. \_\_\_\_\_  
 Calc. Vapor Press. \_\_\_\_\_  
 Sp. Gr. \_\_\_\_\_  
 Mol. Wt. 19.40 PSIA

**LIQUID CONTENT (GAL./MCF)**

Propane Calc. G.P.M. .225  
 Butanes Calc. G.P.M. .188  
 Pentanes Plus. G.P.M. .302  
 Ethane Calc. G.P.M. .560  
 RVP Gasoline G.P.M. \_\_\_\_\_

B.T.U./Cu. Ft. @ 14.696 P.S.I.A.

Dry Basis 925  
 Wet Basis 909

Sulfur Analysis by Titration

Gr./100 Cu. Ft.

Hydrogen Sulfide

Mercaptans

Sulfides

Residual Sulfur

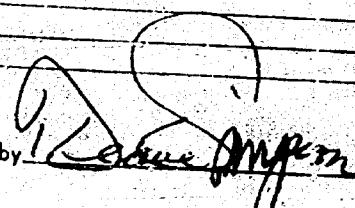
Total Sulfur

Deane Simpson

Checked by \_\_\_\_\_

Approved by

Additional Data and Remarks





UNICHEM  
INTERNATIONAL

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

Company John West Engineering

Field Grynberg

Lease Comm. Fed #1

Sampling Date 8-20-80

Type of Sample Separator

WATER ANALYSIS

IONIC FORM	me/l	mg/l
calcium (Ca++)	666.66	13333
magnesium (Mg++)	83.34	1000
sodium (Na+)	(CALCULATED)	1057.60
ion (Total)		24314
		2050
carbonate (HCO <sub>3</sub> -)	0.74	45
nitrate (NO <sub>3</sub> -)	Not	Found
hydroxide (OH-)	Not	Found
sulphate (SO <sub>4</sub> -)	16.16	776
chloride (Cl-)	1790.70	63500
Total Dissolved Solids		102964
94 pl/c 68°F		
Dissolved Solids on Evap. at 103°-105°C		
Hardness as CaCO <sub>3</sub>	750.00	37500
Carbonate Hardness as CaCO <sub>3</sub> (temporary)	0.74	37
Non-Carbonate Hardness as CaCO <sub>3</sub> (permanent)	749.26	37463
Alkalinity as CaCO <sub>3</sub>	0.74	37
Specific Gravity c 68°F 1.072		

\* mg/l = milligrams per liter  
\* me/l = milliequivalents per liter

CO<sub>3</sub> S.I. negative @ 86°F (1.97)

SiO<sub>2</sub> S.I. negative (0.42)

TEST DATE: AUGUST 16, TO AUGUST 19, 1980  
TEST DEPTH: 4851 FEET

ELEMENT No.: 43419  
RANGE: 0 - 3000 PSI  
CLOCK No.: 4052  
RANGE: 12 HOURS (4-POINT)  
CLOCK No.: E-794  
RANGE: 72 Hours (Build-Up)

NOTE: SEE FOLLOWING PAGE FOR TABULATION OF TIMES AND PRESSURES.

TIME - IN HOURS

0 20 40 60 80

ROSE REACHED 4851' 20  
SEN BONE 40  
SEND RATE I 60  
SEND RATE II 80  
NO RATE 0  
SHUT-OUT CHARGE CIRITS  
SEND RATE

SEN

SEND RATE I

SEND RATE II

NO RATE

SHUT-OUT

CHARGE

SOPEN CHOKE

SEN

SEN

SEN

SEN

SEN

SEN

SEN

SEN

FRED POOL

GRYNBERG COM. FEDERAL NO. 1

4-POINT BACK PRESSURE TEST, & BOTTOM HOLE  
PRESSURE BUILD-UP TES

JOHN W WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 8-21-80 Drawn by: LCH Scale: AS SHOWN

FRED POOL  
 GRYNBERG COMM. FEDERAL NO. 1  
 4-POINT BACK PRESSURE TEST &  
 BOTTOM HOLE PRESSURE BUILD-UP TEST  
 TABULATION OF TIMES AND PRESSURES

TEST CONDUCTED BY:  
 JOHN WEST ENGINEERING COMPANY

TEST DATE: AUGUST 16, TO AUGUST 19, 1980  
 TEST DEPTH: 4851 FEET  
 ELEMENT No.: 43419  
 OPERATOR: M.B.

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>	<u>PSIG @ 4851 FEET</u>
8-16-80	10:15 AM		2137 GAUGE REACHED 4851'
	10:30 AM	00 HRS. 00 MIN.	2137 OPEN CHOKE; BEGIN 4-POINT
	10:45 AM	00 15	2118
	11:00 AM	00 30	2055 END RATE I
8-16-80	11:15 AM	00 45	2034
	11:30 AM	01 00	2019 END RATE II
8-16-80	11:45 AM	01 15	2014
	12:00 NOON	01 30	2008 END RATE III
8-16-80	12:15 PM	01 45	1996
	12:30 PM	02 00	1981 END RATE IV; GAUGE OUT; CHANGE CHARTS
8-16-80	1:00 PM	02 30	2114 GAUGE RETURNED TO 4851'
	1:15 PM	02 45	2125
	1:30 PM	03 00	2127
	1:45 PM	03 15	2131
	2:00 PM	03 30	2131
	2:15 PM	03 45	2131
	2:30 PM	04 00	2131
8-16-80	3:00 PM	04 30	2134
	3:30 PM	05 00	2134
	4:00 PM	05 30	2134
	4:30 PM	06 00	2134
8-16-80	6:30 PM	08 00	2134
	8:30 PM	10 00	2137
8-17-80	1:30 AM	15 00	2137
	6:30 AM	20 00	2137
	10:30 AM	25 00	2137
	3:30 PM	30 00	2137
8-18-80	1:30 AM	40 00	2137
	11:30 AM	50 00	2137
	9:30 PM	60 00	2137
8-19-80	7:30 AM	70 00	2137
8-19-80	9:15 AM	71 45	2137 GAUGE OUT; CHANGE CHARTS

CONTINUED ON FOLLOWING PAGE

**GRYNBERG COMM. FEDERAL NO. 1**  
**4-POINT BACK PRESSURE TEST &**  
**BOTTOM HOLE PRESSURE BUILD-UP TEST**  
**TABULATION OF TIMES AND PRESSURES**

CONTINUED FROM PRECEDING PAGE

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>	<u>PSIG @ 4851 FEET</u>
8-19-80	9:45 AM	72 HRS. 15 MIN.	2137 GAUGE RETURNED TO 4851'
	10:00 AM	72 30	2137 OPEN CHOKE; BEGIN 4-POINT
	10:15 AM	72 45	1899
	10:30 AM	73 00	1870
	10:45 AM	73 15	1882 END RATE I
8-19-80	11:00 AM	73 30	1677
	11:15 AM	73 45	1662
	11:30 AM	74 00	1672 END RATE II
8-19-80	11:45 AM	74 15	1469
	12:00 NOON	74 30	1388
	12:15 PM	74 45	1369
	12:30 PM	75 00	1363 END RATE III
8-19-80	12:45 PM	75 15	1168
	1:00 PM	75 30	1164
	1:15 PM	75 45	1162
	1:30 PM	75 00	1159 END RATE IV; END 4-POINT; GAUGE OUT; END TEST

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

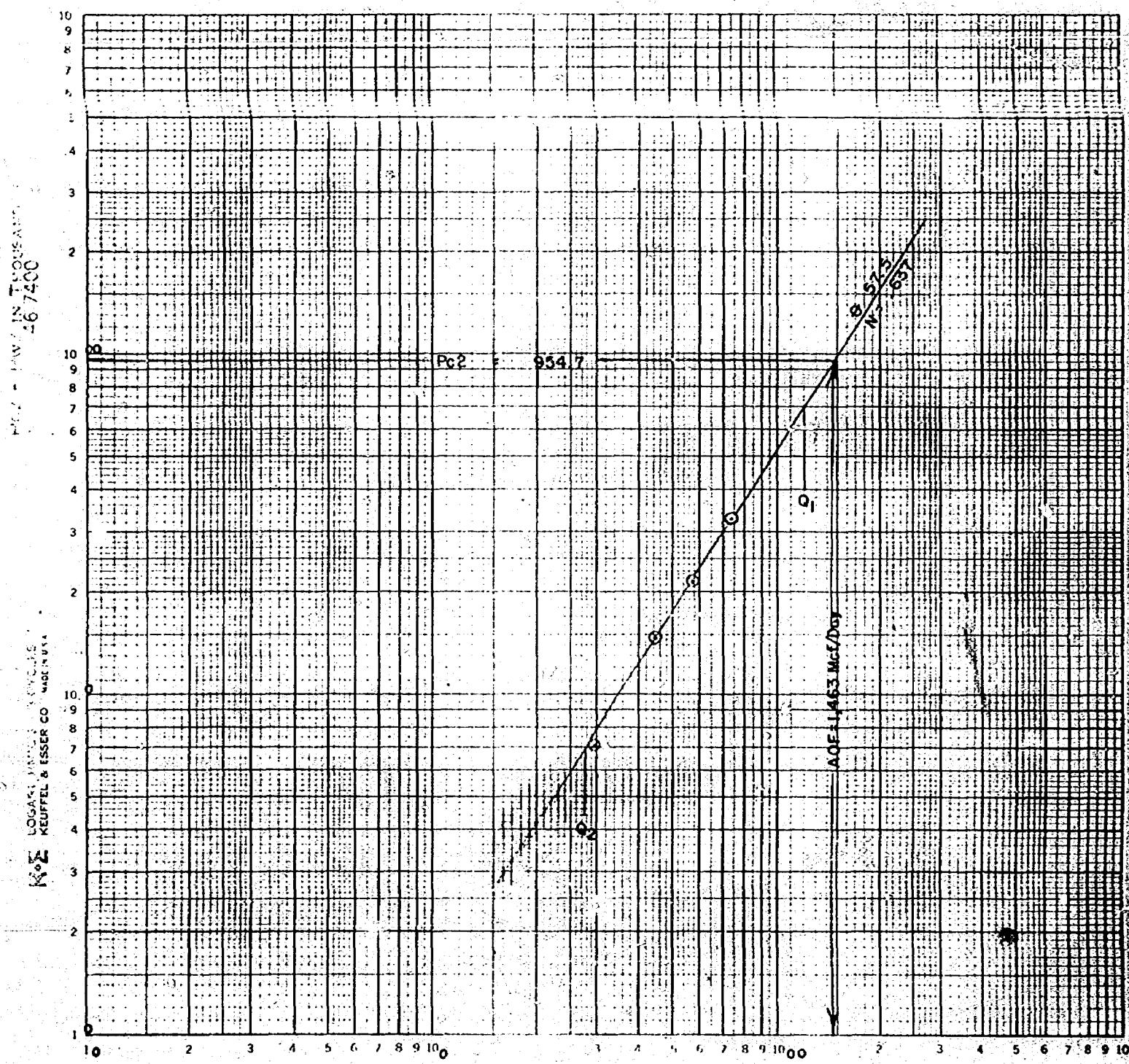
Form C-122  
Revised 9-1-65

Type Test	<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Annual	<input type="checkbox"/> Special	Test Date	10-5-80				
Company	FRED POOL				TO AIR				
Pool					ABO				
Completion Date	Total Depth		Surf Back Ht	Elevation	Name or Lease Name				
10-1-80	5035		3965	3898	GRYNBERG				
Csg. Size	Wt.	d	Set At	Perforations:	Well No.				
4x	11.6	4.000	5035	From 3778 To 3796	1				
Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Soc.	Twp.	Rgs.	
2 3/8	4.70	2.995	3700	From OPEN ENDED To	13	65	24		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple					Packer Set At	County			
SINGLE					3700	CHAVES			
Producing Thru	Reservolt Temp. °F		Mean Annual Temp. °F	Baro. Press. - P <sub>a</sub>	State				
TBG	112 & 3787		60	13.2	NEW MEXICO				
L	H	Gg	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover	Meter Run	Taps	
3787	3787	.677	,316	14.394	-0-		4	FLG	
FLOW DATA						TUBING DATA		CASING DATA	
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F
SI						957			
1.	4 x 1.00	320	8	95	919				CHOKE 24 HOUR
2.	4 x 1.00	325	18	93	876				8/64 1 HOUR
3.	4 x 1.00	330	29	89	830				11/64 1 HOUR
4.	4 x 1.00	330	48	85	757				14/64 1 HOUR
5.									16/64 1 HOUR
RATE OF FLOW CALCULATIONS									
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor F <sub>p</sub>	Rate of Flow Q, Mcfd		
1	4.753	51.63	333.2	.9680	1.215	1.021	295		
2	4.753	78.02	338.2	.9697	1.215	1.021	446		
3	4.753	99.76	343.2	.9732	1.215	1.022	573		
4	4.753	128.35	343.2	.9768	1.215	1.022	740		
5.									
NO.	P <sub>t</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio DRY Mcf/bbl.				
1	.52	555	1.62	.960	A.P.I. Gravity of Liquid Hydrocarbons Deg.				
2	.52	553	1.61	.959	Specific Gravity Separator Gas .677 XXXXXXXX				
3.	.53	549	1.60	.958	Specific Gravity Flowing Fluid XXXXX				
4.	.53	545	1.59	.957	Critical Pressure 645 P.S.I.A. P.S.I.A.				
5.					Critical Temperature 343 R R				
NO.	P <sub>c</sub>	P <sub>t</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.917$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.978$		
1	*	940.4	884.4	70.3					
2	*	898.1	806.6	148.1					
3	*	861.3	741.8	212.9					
4	*	792.1	627.4	327.3					
5									
Absolute Open Flow 1,463 Mcfd @ 15.025 Angle of Slope θ 57.5 Slope, n 637									
Remarks: CALCULATED FROM KNOWN BOTTOM PRESSURES, MEASURED WITH A KUSTER GAUGE.									
Approved By Commission:			Conducted By:		Calculated By:		Checked By:		
			M.R.		R.R.		J. W. W.		

FRED POOL  
GRYNBERG NO. 1

$$\begin{array}{r} \text{ABS (N)} \\ \hline Q1 = 120 = 3.081044 \\ Q2 = 278 = 2.444044 \\ \hline N = .637000 \end{array}$$

$$\text{CAOF} = \frac{740}{(954.7)} = 1,463 \text{ MCF/DAY}$$



$$Q = MCF / DAY$$

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_t$  or  $P_s$ )Form C-122F  
Adopted 9-1-65COMPANY Flech Rock LEASE Giryberg WELL NO. 1

LOCATION: Unit \_\_\_\_\_

Section \_\_\_\_\_

Township \_\_\_\_\_

Range \_\_\_\_\_

DATE \_\_\_\_\_

L 3282 H 3282 L/H 1.00 G .677 %CO<sub>2</sub> .316 %N<sub>2</sub> 14.394 %H<sub>2</sub>S \_\_\_\_\_GH 2564 P<sub>ct</sub> 645 T<sub>cc</sub> 343

TABLE IX &amp; X

LINE	1	2	3	4	5	6	7	8
1 $T_w$ (W.H. °R)	534	534	534	534	534	534	534	534
2 $T_s$ (B.H. °R)	572	572	572	572	572	572	572	572
3 $T = \frac{T_w + T_s}{2}$	553	553	553	553	553	553	553	553
4 Z (Est.)	1882	1887	1887	1891	1891	1895	1898	1902
5 -TZ	487.7	490.5	490.5	492.7	492.7	494.7	496.7	498.7
6 GH/TZ	5.26	5.23	5.23	5.20	5.20	5.18	5.16	5.14
7 es(Table XIV)	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21
8 $P_t$ or $P_s$	1032.2	1032.2	980.2	980.2	949.2	949.2	872.2	872.2
9 $P_t^2$ or $P_s^2$	1075.8	1075.8	980.5	980.5	901.0	901.0	760.7	760.7
10 $P_c^2 = P_t^2/es$ or $P_w^2 = P_s^2/es$	863.3	864.3	805.9	806.0	741.3	741.9	626.8	632.4
11 $P_c$ or $P_w$	935.8	940.4	897.8	898.1	860.9	861.3	791.2	792.1
12 $P_c = \frac{(P_w + P_s)}{2}$ or $(\frac{P_c + P_t}{2})$	988.5	988.8	944.0	944.2	905.1	905.3	832.0	832.1
13 $P_t = (P/P_{cr})$	1.53	1.53	1.46	1.46	1.40	1.40	1.29	1.29
14 $T_t = (T/T_{cr})$	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61
15 Z (Table XI)	1887	1887	1891	1891	1895	1895	1902	1902

One copy to be filled in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Form C-122F  
Adopted 9-1-65COMPANY Fred Rose LEASE Glynnberg WELL NO. / DATE LOCATION: Unit  Section  Township  Range L 3287 H 3287 L/H 1.00 C .622 % CO<sub>2</sub>  % N<sub>2</sub> 14.394 % H<sub>2</sub>S GH 2564  $P_{cr}$  124.5  $T_{cr}$  343

TABLE IXA X TABLE IXA X

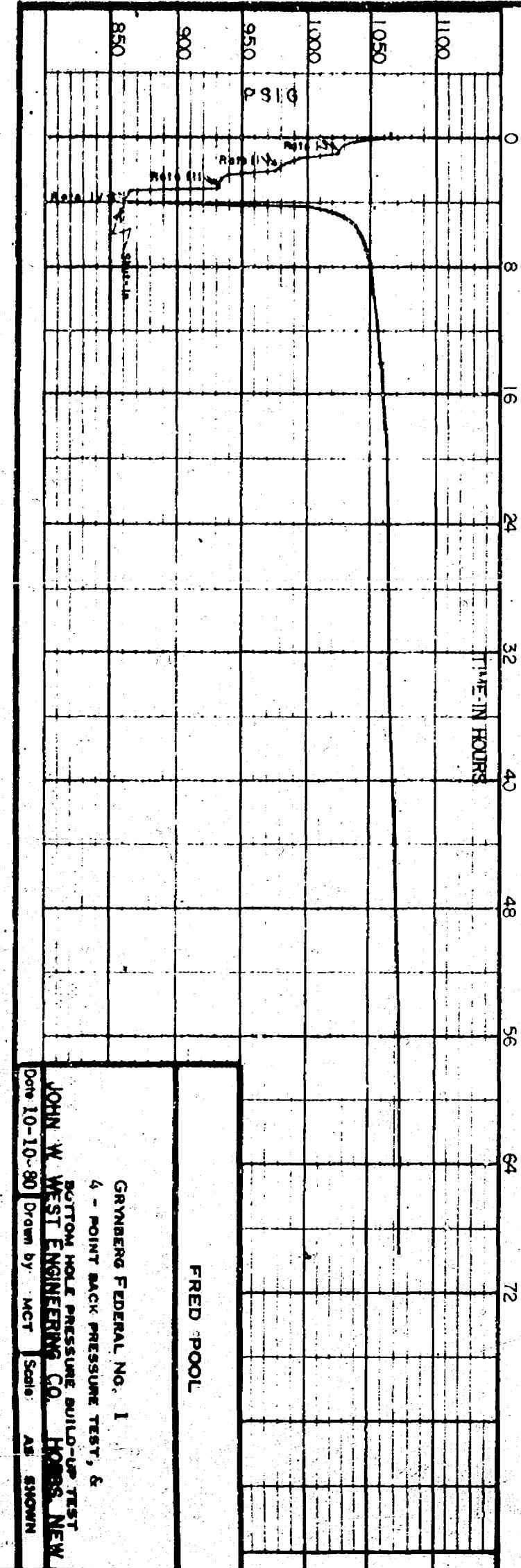
Sketch in

LINE	1	2	3	4	5	6	7	8
1 $T_w$ (W.H. °R)	534	534						
2 $T_s$ (B.H. °R)	572	572						
3 $\bar{T} = \frac{(T_w + T_s)}{2}$	553	553						
4 Z (Est.)	879	883						
5	1861	1883						
6 $\bar{S} = \frac{T_w + T_s}{2}$	522	525						
7 e <sup>S</sup> (Table XIV)	1.22	1.22						
8 $P_f$ or $P_s$	1078.2	1078.2						
9 $P_f^2$ or $P_s^2$	1162.5	1162.5						
10 $P_c^2 = P_f^2/\epsilon_s$ or $P_w^2 = P_s^2/\epsilon_s$	953.9	954.2						
11 $P_c$ or $P_w$	976.2	972.1						
12 $P_r = \frac{(P_w + P_S)}{2}$ or $(\frac{P_S + P_f}{2})$	1027.4	1027.7						
13 $P_r = (P/P_{cr})$	1.59	1.59						
14 $T_r = (T/T_{cr})$	1.61	1.61						
15 Z (Table XI)	1883	1883						

TEST DATE: 10/5 THRU 8/80  
TEST DEPTH: 3787

ELEMENT NO.: 43419  
RANGE : 0 ~ 3000 PSI  
CLOCK NO.: E 2145  
RANGE: 72 HOURS

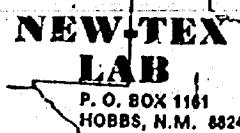
NOTE: SEE FOLLOWING PAGE FOR TABULATION OF TIMES AND PRESSURES.



**BOTTOM HOLE PRESSURE BUILD - UP TEST**  
**TABULATION OF TIMES AND PRESSURES**

TEST DATE: 10/5-8/80  
 TEST DEPTH: 3787  
 ELEMENT NO.: 43419  
 OPERATOR: M.R.

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. /MIN.</u>	<u>PSIG @ 3787 FEET</u>
10-5-80	12:30PM		
	12:45PM	0 00	1065 GAUGE REACHED 3787
	1:00PM	0 15	1065
	1:15PM	0 30	1038
	1:30PM	0 45	1030
	1:45PM	1 00	1027
			1024 END RATE I
	2:00PM	1 15	993
	2:15PM	1 30	986
	2:30PM	1 45	981
	2:45PM	2 00	977 END RATE II
	3:00PM	2 15	939
	3:15PM	2 30	933
	3:30PM	2 45	931
	3:45PM	3 00	931 END RATE III
	4:00PM	3 15	864
	4:15PM	3 30	863
	4:30PM	3 45	860
	4:45PM	4 00	859 END RATE IV
10-5-80	4:45PM	0 00	859 SHUT - IN , BEGIN BUILD-UP
	5:00PM	0 15	1003
	5:15PM	0 30	1018
	5:30PM	0 45	1025
	5:45PM	1 00	1034
	6:00PM	1 15	1038
	6:15PM	1 30	1039
	6:30PM	1 45	1041
	6:45PM	2 00	1042
	7:00PM	2 15	1045
	7:30PM	2 45	1047
	8:00PM	3 00	1047
	8:30PM	3 30	1048
	9:00PM	4 00	1050
	10:00PM	5 00	1051
10-6-80	11:00PM	6 00	1053
	1:00AM	8 00	1054
	3:00AM	10 00	1057
	8:00AM	19 00	1062
	1:00PM	20 00	1063
	11:00PM	30 00	1066
10-7-80	9:00AM	40 00	1069
10-7-80	7:00PM	54 00	1072
10-8-80	5:00AM	64 00	1074
10-8-80	10:30AM	65 30	1074 END TEST.



No. 4040  
Run No.  
Date of Run 10-8-80  
Date Secured 10-5-80

### CERTIFICATE OF ANALYSIS

Sample of Fred Pool  
Secured from West Engineering  
At 412 N. Dal Paso  
Hobbs, N.M. 88240  
Sampling conditions Press  
Temp.

Grynberg Federal #1

Secured by \_\_\_\_\_  
Time \_\_\_\_\_ Date \_\_\_\_\_

### FRACTIONAL ANALYSIS

#### Percentage Composition

MOL %	LIQ. %	G.P.M.
-------	--------	--------

Carbon Dioxide	.316	
Air		
Nitrogen	14.394	
Oxygen		
Hydrogen sulfide		
Hydrogen		
Methane	78.126	
Ethane	4.100	1.093
Propane	1.662	.456
Butanes		
Iso-Butane	.258	.084
n-Butane	.588	.185
Pentanes		
Iso-Pentane	.149	.054
n-Pentane	.184	.056
Hexanes	.104	.043
Heptanes	Plus .120	.055
Octanes		
TOTAL	100.000	2.036

Calc. Sp. Gr. 0.6768  
Calc. A.P.I. \_\_\_\_\_  
Calc. Vapor Press. \_\_\_\_\_ PSIA  
Sp. Gr. \_\_\_\_\_  
Mol. Wt. 19.60

#### LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M.	.456
Butanes Calc. G.P.M.	.269
Pentanes Plus. G.P.M.	.218
Ethane Calc. G.P.M.	1.093
RVP Gasoline G.P.M.	

B.T.U./Cu. Ft. @ 14.696 P.S.I.A.

Dry Basis	956
Wet Basis	939

Sulfur Analysis by Titration  
Gr./100 Cu. Ft.

Hydrogen Sulfide

Mercaptans

Sulfides

Residual Sulfur

Total Sulfur

Run by Deane Simpson Checked by \_\_\_\_\_

Approved by *Deane Simpson*

#### Additional Data and Remarks

**FRED POOL DRILLING, INC.**

Box 1300, Clovis Star Route  
Roswell, New Mexico 88201

Dec. 29, 1980

CASE # 7113

**FRED POOL DRILLING, Inc.**

**Multiple Completion**

**ABO**

**and**

**PERMO PENN Formations**

Appel Ex 1  
Cs 7113

Dockets Nos. 1-81 and 2-81 are tentatively set for January 14 and 28, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 30, 1980

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 7113: Application of Fred Pool, Jr. for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of his Grynberg Com Ped. Well No. 1 located in Unit J of Section 13, Township 6 South, Range 24 East, to produce gas from the Abo and Pennsylvanian formations.

CASE 7051: (Continued from November 25, 1980, Examiner Hearing)

Application of Petro Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinckry and Drinkard production in the wellbore of its L. G. Warlick "B" Well No. 2 located in Unit G of Section 19, Township 21 South, Range 37 East.

CASE 6940: (Continued from November 25, 1980, Examiner Hearing)

Application of Aeobe Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through the Wolfcamp formation underlying the NW/4 SE/4 for oil and the SE/4 for gas, Section 23, Township 20 South, Range 38 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7103: (Continued from December 10, 1980, Examiner Hearing)

Application of E. L. Latham, Jr. for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Pennsylvanian formations underlying the N/2 of Section 7, Township 22 South, Range 26 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7114: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Rio Penasco "JX" Well No. 2, a Morrow test to be drilled 660 feet from the South and East lines of Section 35, Township 18 South, Range 25 East, the S/2 of said Section 35 to be dedicated to the well.

CASE 7115: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the South and East lines of Section 14, Township 17 South, Range 26 East, the S/2 of said Section 14 to be dedicated to the well.

CASE 7116: Application of Southland Royalty Company for designation of a tight formation, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Dakota formation underlying portions of Townships 31 and 32 North, Ranges 10, 11, 12, and 13 West, containing 93,860 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271.701-705.

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Fred Pool Jr.</b>		County <b>Chaves</b>	Date <b>11-18-80</b>
Address <b>Box 1300 Clovis Star Rt. Roswell</b>		Lease <b>Grynnberg Com Fed</b>	Well No. <b>#1</b>
Location of Well	Unit 1	Section 13	Township 6s
			Range 24e

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES  NO
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Abo		Penn
b. Top and Bottom of Pay Section (Perforations)	3586' - 3596' 3697' - 3707' 3778' - 3796'		4848' - 4854'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

Yes  No

- 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 and type of packers and side door chokes, and such other information as may be pertinent.
- b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*
- d. 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 provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Jack Grynberg 1050 17th Street Suite 1950 Denver, Colorado 80265

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES  NO  . If answer is yes, give date of such notification 11-18-80.

CERTIFICATE: I, the undersigned, state that I am the President of the Fred Pool Drilling Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Fred Pool Jr.  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## MULTIPLE COMPLETION (CONVENTIONAL)

P.1

Grymberg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- 1) Said well is to be completed as a gas-gas and the hydrocarbons from each of the zones can be safely and efficiently produced through one string of tubing and one string of casing.
- 2) The packer used to segregate the separate zones of multiple completion will be a Baker Lockset Packer and shall effectively prevent communication between the two producing zones.
- 3) The two producing zones are the ABO and Penn respectively.
- 4) Form C-107 attached hereto.
- 5) For administrative approval;

- a) Diagramatic sketch of the Multiple completion:  
 1) Showing all casing strings  
 2) Diameters and setting depths  
 3) Centralizers and/or turbolizers and location thereof  
 4) Quantities used and top of cement  
 5) Perforated intervals  
 6) Tubing strings, including diameters and setting depth  
 7) Location of packers  
 8) Sleeves
- b) Plat showing the location of all wells on applicants lease  
 1) All offset wells on offset leases  
 2) The names and addresses of operators of leases  
 3) Evidence that said offset operators have been furnished with copies of the application

**RED POOL DRILLING, INC.**

Suite 437, White Building  
Roswell, New Mexico 88201

**MULTIPLE COMPLETION  
(CONVENTIONAL)**

P.2

Grynberg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- x 4) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforations indicated thereon.
- x c) Logs
- x 1) Computer processed log.
- x 2) Perforating depth control
- x 3) Casing collar log and perforating record
- x 4) Dual Laterolog Micro-SFL
- x d) Drilling status reports
- x 1) Well completion reports

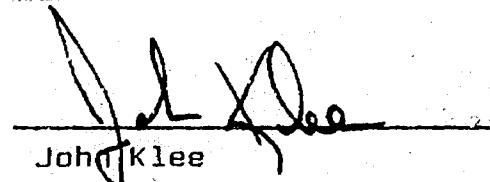
**FRED POOL DRILLING, INC.**

Suite 437, White Building  
Roswell, New Mexico 88201

**AFFIDAVIT OF MAILING OR DELIVERY**

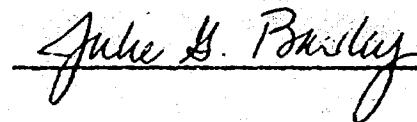
Application for Multiple Completion  
Grynberg Com Federal #1  
Sec. 13 T6s R24e  
Chaves County, New Mexico

I hereby certify that I have this day mailed a copy of Form C-107 to Jack Grynberg, lease holder of Lease No. 11795 Sec.12 T6s R24e north offset to captioned well.

  
John Klee

STATE OF NEW MEXICO  
COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 19th day of November, 1980, by John Klee.

  
Julie S. Barclay

My commission expires

Oct. 15, 1984

**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

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

1a. TYPE OF WORK

 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL

 OIL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

c. NAME OF OPERATOR

Fred Pool Drilling Company

d. ADDRESS OF OPERATOR

409 White Building, Roswell, New Mexico 88201

e. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
At surface

1980' FSL &amp; 1980' FEL of Sec. 13

At proposed prod. zone  
Same

f. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

27 air miles north-northeast of Roswell, N. M.

g. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST PROPERTY OR LEAD LINE, FT.  
(Also to nearest drilg. unit line, if any)

660'

10. NO. OF ACRES IN LEASE

2360

11. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

h. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THE LEAD, FT.

N.A.

12. PROPOSED DEPTH

5500 Granite Wash

13. ROTARY OR CABLE TOOLS

Rotary

i. ELEVATIONS (Show whether DE, RF, GR, etc.)

3898 G. L.

j. APPROX. DATE WORK WILL START\*

April 15, 1980

k.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
7 1/2"	13 3/8"	48#	400' +/-	Circ.
12 1/4" <del>or 13 1/2"</del>	8 5/8"	24#	1500' +/-	Circ.
7 7/8"	4 1/2"	10.5#	TD	1000' above pay

Selectively perforate and treat pay zone.

Gas is not dedicated to a pipeline.

Attached are: Survey Plat (C-102)

Supplemental Drilling Data

Surface Use Plan

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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Fred Pool, Jr. TITLE Owner DATE 4-1-80  
(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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

Owner Fred Pool Drilg. Co.			Lease Grynborg, Federal	Well No. 1
Section Letter S	Section 13	Township 68	Rango 21E	County Chaves
Actual Enclosure Location of Well:				
2280 feet from the East		Line and 1980	feet from the South	Line
Ground Level Elev. 3896.0	Producing Formation Penn	Pool Wildcat	Dedicated Acreage 160 1/2	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, forced-pooling, etc?

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.

		Fred Pool, Jr (W.T.)	CERTIFICATION
			I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
		1980'	Fred Pool, Jr.
		1980'	Name Owner
		USA - NM - 11795	Position Fred Pool Drilg. Co.
		Fred Pool, Jr (W.T.)	Company March 26, 1980
		Fec - Ruth Cornelius	Date
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.			
John D. Jaquess, P.E. & L.S.			
Registered Professional Engineer and/or Land Surveyor			
John D. Jaquess			
Certificate No. 6290			

**OPERATOR'S COPY**  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)

Form approved,  
Budget Bureau No. 42-R1424.  
LEASE DESIGNATION AND SERIAL NO.

NM-11795

G. LEASE INDIAN, ALLOTTED OR TRIBE NAME

**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" for such proposals.)

1.  OIL WELL  GAS WELL  OTHER

## 2. NAME OF OPERATOR

Fred Pool Drilling Company

## 3. ADDRESS OF OPERATOR

409 White Bldg., Roswell, New Mexico 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 See also space 17 below.  
 At surface

1980' FSL &amp; 1980 FBI of Sec. 13

## 11. PERMIT NO.

## 15. ELEVATIONS (Show whether ft. M. or GR. etc.)

77

3898 G. L.

## 12. COUNTY OR PARISH

Chaves

## 13. STATE

N. M.

## 16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

DRILL OR ALTER CASING

WATER SHUT-OFF

FRACTURE TREAT

MULTIPLE COMPLET

FRACTURE TREAT

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

REPAIR WELL

CHANGE PLANS

(Other)

\*OTHER

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directional - drilled, give subsurface locations and measured and true vertical depths for all markers and zones per-

The rotary rig, which was scheduled to drill this well, has been delayed with a fishing job on another well; and as we plan to be drilling over May 31, 1980, the lease expiration date, it may be necessary, that we drill with a cable tool rig until the rotary rig becomes available.

Anticipated spud date is May 28, 1980.

RECEIVED

MAY 21 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

James A. Knauf

(This space for Federal or State office use)

TITLE Agent

DATE May 19, 1980

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

SIGNER

DATE

MAY 21 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 43-11424.  
D. LEASE DESIGNATION AND SERIAL NO.  
N.M. 11795  
E. IN INDIAN, ALLOTTEE OR TRIBE NAME

## SUNDY 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" for such prop.)**RECEIVED**1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

JUN 6 1980

3. ADDRESS OF OPERATOR

U.S. GEOLOGICAL SURVEY  
409 White Bldg. Roswell, N.M. BARTESIA, NEW MEXICO4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

AT SURFACE

1980' FSL &amp; 1980 FEL of Sec. 13

14. PERMIT NO.

15. PREPARATIONS (Show whether DR. RT. OR. etc.)

3898 S.L.

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

WATER SHUT-OFF

FRACTURE TREAT

FRACTURE TREATMENT

SHOOT OR ACIDIZE

MULTIPLE COMPLETION

REPAIR WELL

ABANDON\*

(Other)

CHANGE PLANS

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(Other) Surface Casing

X

X

X

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 3, 1980

Ran 305 feet of 13 3/8" surface casing 48# N.R.I 8rd ST&amp;C

Cemented with 150 sx Class C Cement

Cement circulated.

Plugged down 2:00 p.m.

J.D.C. 6-4-80 and 6-5-80

18. I hereby certify that the foregoing is true and correct

SIGNED

Peter Jones

TITLE Secretary

DATE 6-5-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

ACTING DISTRICT ENGINEER

TITLE

DATE JUN 06 1980

\*See Instructions on Reverse Side

## OPERATOR'S COPY.

Form 9-331  
(May 1963)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.

N.M. 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Orynborg-Comm Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH

13. STATE

Chaves

N.M.

## SUNDY 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" for such proposals.)1. OIL  GAS  WELL  OTHER 111-1

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR  
437 White Bldg. Roswell, N.M. 88201

U.S. BLDG.

ALTESIA, N.M.

See also space 17 below.)  
At surface1980 FSL; 1980 FEL of Sec. 13-6S-24E  
Chaves County, N.M.

14. PERMIT NO.

191

15. ELEVATIONS (Show whether DE, RT, GR, etc.)

3898.0L

16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF



FRACTURE TREAT



SHOOT OR ACIDIZE



REPAIR WELL



(Other)

PULL OR ALTER CASING



MULTIPLE COMPLETE



ABANDON



CHANGE PLANS



WATER SHUT-OFF



FRACTURE TREATMENT



SHOOTING OR ACIDIZING

(Other) Intermediate Casing C 5/8

REPAIRING WELL



ALTERING CASING



ABANDONMENT



(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 8, 1980

Set 1 1/4" Ft. new 2 1/2" 8 5/8" casing. Cemented with 550 sx cement;  
(450 Halliburton Lite, 100 sx Class C). Cement circulated. Plug  
down at 9: a.m.WOC 24hrs. Tested EOP and casing to 500' for 30 minutes.  
No pressure drop.

Started drilling at 2 p.m. July 9, 1980

18. I hereby certify that the foregoing is true and correct

SIGNED Peter W. Chester

TITLE: Secretary

DATE 7-11-1980

(This space for Federal or State office use)

APPROVED BY (S. S.) PETER W. CHESTER TITLE ACTING DISTRICT ENGINEER

DATE JU 14 1980

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
LEASE DESIGNATION AND SERIAL NO.

D.B. 11795

6. INDIAN, ALLOTTEE OR TRIBB NAME

**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" for such proposals.)

1.  OIL WELL     GAN WELL     OTHER

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

4317 White Stdg., Roswell, N.M. 88201

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface1330 FUL. 1980 FUL. 13-61-1-24E  
Chaves County, N.M.

14. PERMIT NO.

15. ELEVATIONS (Show whether ft, ft, etc.)

16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF  
 FRAC TURE TREAT  
 ROOT OR ACIDIZE  
 REPAIR WELL  
 OTHER

PULL OR ALTER CASING  
 MULTIPLE COMPLETION  
 ABANDON  
 CHANGE PLANS

WATER SHUT-OFF  
 FRAC TURE TREATMENT  
 SHOOTING OR ACIDIZING  
(Other)  1 1/2" CASING

REPAIRING WELL  
 ALTERING CASING  
 ABANDONMENT

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and to this work.)

1330, 1980

Proposed 1,035 feet of 4 1/2", 10.5, 1 1/2" Casing

10' ID with 425 lbs Class C and 425 lbs PCZ mix.

Weight 165 pk. 111.4350 cu. yds.

Run 2600 ft by Casing Log Survey.

Plug down 5:27 p.m. July 21, 1980

Circulation 1500 gpm.

Total set 4591 ft.

Intend to Perforate and Acidize.

**RECEIVED**

JUL 24 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED Peter W. Chester

TITLE Secretary

DATE 7-23,- 80

(This space for Federal or State office use)

APPROVED BY (Orig. Sgn.) PETER W. CHESTER TITLE ACTING DISTRICT ENGINEER

DATE JUL 25 1980

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on re-  
verse side)Form approved,  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.  
J.L. 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR

437 Shilo Bldg., Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
See also space 17 below.  
At surface1000 F.S.L., 1000 F.C.L. at 100'. 13-63-24E  
Chaves County, N.M.

14. PERMIT NO.

134

15. ELEVATIONS (Show whether DE, RT, OR, etc.)

3000. ft

16. COUNTY OR PARISH 17. STATE

Chaves

N.M.

18.

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOT OR ACIDIZING   
REPAIR WELL   
(OTHER) PULL OR ALTER CASING   
MULTI TUBE COMPLETE   
ABANDON   
CHANGE PLANS WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOTTING OR ACIDIZING   
(OTHER) **XXXXX Acid Report** 

## SUBSEQUENT REPORT OF:

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT 

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log for.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

13-63-24E - 13 holes - 2 per foot.

Acidized with 1600 Gal. (500 15% HCl and 1000 gal mud acid.)  
Mud acid = 3% + 12% HCl

100' Cubic feet N2.

Sp. 7 3/8 at 4000 with R.C. Packer

Used Sulco variable choke.

Cleaned up and prepare to test well with 4 point test!

RECEIVED

U.S. GEOLOGICAL SURVEY  
BOSWELL, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Secretary

DATE 8/18/80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

ACCEPTED FOR RECORD

DATE

\*See Instructions on Reverse Side

AUG 25 1980  
K-E-Sayle  
U.S. GEOLOGICAL SURVEY  
BOSWELL, NEW MEXICO

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL  GAS  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION:

NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rd., Roswell, N.M. 88201

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

At surface 1980 FGL, 1980 FEL, of Sec. 13-6S-24E

At top prod. interval reported below 4355 ft.

At total depth 4000 ft.

14. PERMIT NO. 194 DATE ISSUED 4-2-80

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (OF, RMB, RT, OR, ETC.)\* 19. ELEV. Casing Head  
5/28/80 7/20/80 8/25/80 3898 GR 389820. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS  
5035 ft. 4984 ft. → XX24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE  
4848-4854 Penn Prod.

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation Density 27. WAS WELL CORED  
Dual Laterolog Micro-GFL Perforating Depth Control no

CASING RECORD (Report all strings set in well)				
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD
13 3/8"	13"	305 ft.	17"	150 sx Class C
8 5/8"	24"	1440 ft.	11"	450 Halliburton Lite
1 1/2"	10.5"	3035 ft.	7 7/8"	100 Class C
				425 Class C, 425 POZ

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	4804	4804

31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
4848-4854 13 Holes 7 per ft.				DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 4848-4854v 1600 Gal. (600 gal 15% HCl, 1000Mud Acid)			

33. PRODUCTION RECORD				PRODUCTION PERIOD AT PRESENT			
DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			TEST PERIOD			WELL STATUS (Producing or Shut-In)
8/19/80	Flowing			→			Shut-In
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8/19/80	72		→	1500			
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
	Packer	→	0	81 500 DK	0 DK	0 DK	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY  
Fred Pool, III

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Patti Red Jones TITLE Secretary DATE 8/9/80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved,  
Budget Bureau No. 43-R1624  
5. LEASE IDENTIFICATION AND SERIAL NO.

NM 21795

6. INDIAN, ALASKA OR TRIBE NAME

## SUNDY 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" for such proposals.)1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilg. Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rt., Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements,  
also space 17 below.)  
AT SURFACE

39°C FSL 1980 FEL; Sec. 13-5, S-218

14. PERMIT NO.

101

15. EQUIPMENT (Show whether P.V. RT. OR. etc.)

P.V. RT.

1. FIELD AND FOO. OR WILDCAT

Unit Wildcat

2. SEC. T. R. M. OR BLK. AND

SURVEY OR AREA

13-43-24E

12. COUNTY OR PARISH

San Miguel

13. STATE

N.M.

16.

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

## NOTICE OF INTENTION TO

## SUBSEQUENT REASON OF:

TEST WATER SHUT-OFF

PUMP OR ALTER PUMPING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETION

FRACTURE TREATMENT

ALTERING CABIN

SHOOT OR ACIDIZE

ABANDON

SHOOTING OR ACIDIZING

ABANDONMENT

REPAIR WELL

CHANGE PLANS

(Other)

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all work and zones pertinent to this work.)

Sept. 23, 1980:

Perforated 3778 - 83	6 shots	1/ft
3786 - 90	5 shots	1/ft
3792-96	5 ft. 554	1/ft

Acidized with 2500 gallons 12% HCl/3% HF with 1000 SCF/bbl N2. Plowed well back, intend to frac well.

18. I hereby certify that the foregoing is true and correct

SIGNED Frederick C. Cole

TITLE Secretary

DATE 9-27-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

Please advise as  
to results of this \*See Instructions on Reverse Side  
work.

## ACCEPTED FOR RECORD

DATE

OCT 18 1980  
John  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUNDY 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" for such proposals.)1.  OIL WELL  GAS WELL  WATER WELL

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR  
1300 Clovis Star Rd., Roswell, N.M. 88201  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
See also Spec. 17 below.  
At surface1980 FSL, 1980 FEL of Sec. 13-65-24E  
Chaves County, N.M.

14. PERMIT NO. 194

15. ELEVATION (Give whether up, in, etc.)

3898.6L

16.

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

## NOTICE OF INTENTION TO:

 TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other) PULL OR ALTER CASING MULTIPLE COMPLETION ABANDON CHANGE PLANS

## SUBSEQUENT REPORT OF:

 WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) REPAIRING WELL ALTERING CASING ABANDONING

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. NOTICE PROPOSED OR GIVEN IN CONNECTIONS WITH THE following details, and give pertinent dates, including estimated date of starting and completion of work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones per-

9-29-80 Set retrievable bridge-plug at 3965

Perforated at 3778-3796 - 16 holes - 1 per ft.

Acidized with 2500 gallons MGR 123.

9-30-80 Used 50,000 gallons foam frac. Used 53,000 lbs.

20/40 sand. Pumped in 168bbl/min down tubing and annulus at 3200 lbs./min.

Opened up to flow back load.

RECEIVED

OCT 10 1980

U.S. GEOLOGICAL SURVEY,  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED *Denny A. L. Miller* APPROVED FOR RECORDAPPROVED BY *B. Chester*  
CONDITIONS OF APPROVAL: *None*OCT 15 1980  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

TITLE: Secretary

DATE 10-9-1980

DATE

TITLE

Instructions on Reverse Side

## 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" for such proposals.)

G. INDIAN ALLOTTEE OR TRIBE NAME

1. OIL  
WELL  GAS  
WELL  OTHER

2. NAME OF OPERATOR

Fred Poll Drilling Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rt. Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also section 17 below.)  
At surface

1980 FSL, 1980 FEL of Sec. 13 - 6s - 24e

14. PERMIT NO.

194

15. ELEVATIONS (Show whether DP, RT, OM, etc.)

3898 BL

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynpberg Com Fed.

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC., T., R., M., OR BM., AND

SURVEY OR AREA

13-6s-24e

12. COUNTY OR PARISH

Dhaves

13. STATE

NM

16.

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

NOTICE OF INTENTION TO:

OR SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Others)

PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON   
CHANGE PLANS

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface location, and measured and true vertical depths for all markers and zones perforated to this work.)

10-24-80 Set retrievable bridge-plug at 3800 ft.

Perforate at 3586-3596 and 3697-3707 10 Holes 1/min.

Used 60,000 gallons foam frac. Used 70,000 lbs. 20/40 sand. Total fluid 354 bbls. 20 ball sealers.

10-30-80 Retrieved bridge plug. Set Baker locker set packer at 4024 ft/, Otis sliding sleeve at 3994 ft. Prepared to connect to gas line when line is ready.

18. I hereby certify that the foregoing is true and correct

SIGNED *Penny Poll-Martin*

(This space for Federal or State office use)

TITLE Secretary

DATE 10-27-80

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN DUPLICATE\*  
(See other instructions on reverse side)Form approved.  
Budget Bureau No. 42-2888.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

18. TYPE OF WELL: OIL  WELL  GAS  DRY  Other 19. TYPE OF COMPLETION:  
RAW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  Other 

20. NAME OF OPERATOR: Fred Pool Drilling Co.

21. ADDRESS OF OPERATOR: Box 1300 Clovis Star St., Roswell, N.M. 88201

22. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements). At surface 1980 FSL, 1980 FEL, of Sec. 13-6S-24E

At top prod. interval reported below 4355 ft.  
At total depth 5035 ft.

14. PERMIT NO. 194 DATE ISSUED 4-2-80

15. DATE SPUNDED 5/28/80 16. DATE T.D. REACHED 7/20/80 17. DATE COMPL. (Ready to prod.) 8/25/80 18. ELEVATIONS (DP, EBB, ST, GR, ETC.) 3898 GR 19. ELEV. CASINGHEAD 3898

20. TOTAL DEPTH, MD &amp; TVD 5035 ft. 21. PLUG, BACK T.D., MD &amp; TVD 4984 ft. 22. IF MULTIPLE COMPL., HOW MANY? → 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS XX

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) 4848-4854 Penn at present

25. PIPE ELECTRIC AND OTHER LOG AND Compensated Neutron Dual Laterolog Micro-3FL, Perforating Depth Control CEMENTATION Density 26. WAS WELL CORED no

27. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48#	305 ft.	17"	150 sx Class C	Circulated
8 5/8"	24#	1449 ft.	11"	450 Halliburton Lite	"
4 1/2	10.5#	5035 ft.	7 7/8	100 Class C	"
				425 Class C, 425 POZ	"

28. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	HACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

29. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	4804	4804

30. PERFORATION RECORD (Interval, size and number)

4848-4854 13 Holes 2 per ft.

31. ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

4848-4854 1600 Gal. (600 gal. 1600 HCl, 1000Mud Acid)

32. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED

4848-4854 1600 Gal. (600 gal. 1600 HCl, 1000Mud Acid)

33. PRODUCTION RECORD (Date first production, production method (Flowing, gas lift, pumping—see end of pump), well status (Producing or Shut-in))

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—see end of pump) WELL STATUS (Producing or Shut-in)

Flowing Shut-in

DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL-BBL

8/19/80 72 → 1500 GAS-MCF. WATER-BBL. OIL-GAS RATIO

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL-BBL 1500 WATER-BBL OIL-GAS RATIO

Packer → 0 0 0 0 0 0 0

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

SIGNED Date: 8/19/80 Secretary Fred Pool, Inc.

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED Date: 8/19/80 TITLE: Secretary

(See Instructions and Spaces for Additional Data on Reverse Side)

6. LEASE DESIGNATION AND SERIAL NO.

N.M. 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynberg-Com Federal

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA

Sec. 13-6S-24E

12. COUNTY OR PARISH

Chaves N.M.

13. STATE

Yes

20. WAS DIRECTIONAL SURVEY MADE

## INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for Items 22 and 24 above.)

**37. SUMMARY OF POROUS ZONES:**

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	275	1289	
Glorietta	1290	2824	
Tubb	2825	3387	
Abel	3388	4126	
Bull Creek	4127	4384	
Gehn	4385	4969	
Precambria	4970	-	
Upper sandstone			
Lower sandstone			
Upper dolomite			
Lower dolomite			
Upper limestone			
Lower limestone			
Upper shale			
Lower shale			

**38.**
**GEOLOGIC MARKERS**

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

\* U.S. GOVERNMENT PRINTING OFFICE: 1974-780-680/VIII-238

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved, \_\_\_\_\_  
Budget Bureau No. 42-RSS-6.

5. LEASE DESIGNATION AND SERIAL NO.

NM 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

7. TYPE OF WELL: OIL  GAS WELL  DRY  Other \_\_\_\_\_8. TYPE OF COMPLETION: NEW  WORK  DEEP  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_9. NAME OF OPERATOR: **First Coal Drilling Inc.**

10. ADDRESS OF OPERATOR: Box 1300 Clovis, New Mexico, Roswell, N.M. 88201

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

At surface 1980 FSL, 1980 FEL of Sec. 13-6s-24e

12. At top prod. interval reported below 3596 ft.

At total depth 3697 ft.

14. PERMIT NO.: 1-1 DATE ISSUED: 4-2-80

15. DATE SPILLED: 16. DATE T.D. REACHED: 17. DATE COMPL. (Ready to prod.): 18. ELEVATIONS (F.P., R.R., RT. GR. ETC.)\* 19. ELEV. CAVINGHEAD

5-20-80 7-20-80 11-10-80 3898 GR 3898

20. TOTAL DEPTH, MD &amp; TVD: 21. PLUG, BACK T.D., MD &amp; TVD: 22. IF MULTIPLE COMPL., HOW MANY\*: 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

5671 ft. 4931 ft. → XX

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

3596 - 3596 1/ft. 3778-3796 ft. 1/ft.

3697-3707 1/ft. 3778-37

# INSTRUCTIONS

- General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
- If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 33.
- Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
- Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
- Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
- Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
- Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS
FORMATION	TOP	NOTES	DESCRIPTION, CONTENTS, ETC.	
San Andres	275	1..19		
Glorietta	1290	2824		
Tubb	2825	3387		
Abo	3387	4126		
Wolfcamp	4127	4354		
Penn	4355	4969		
Precambria	4970	-		

U.S. GOVERNMENT PRINTING OFFICE: 1953 - O-683636  
637-497

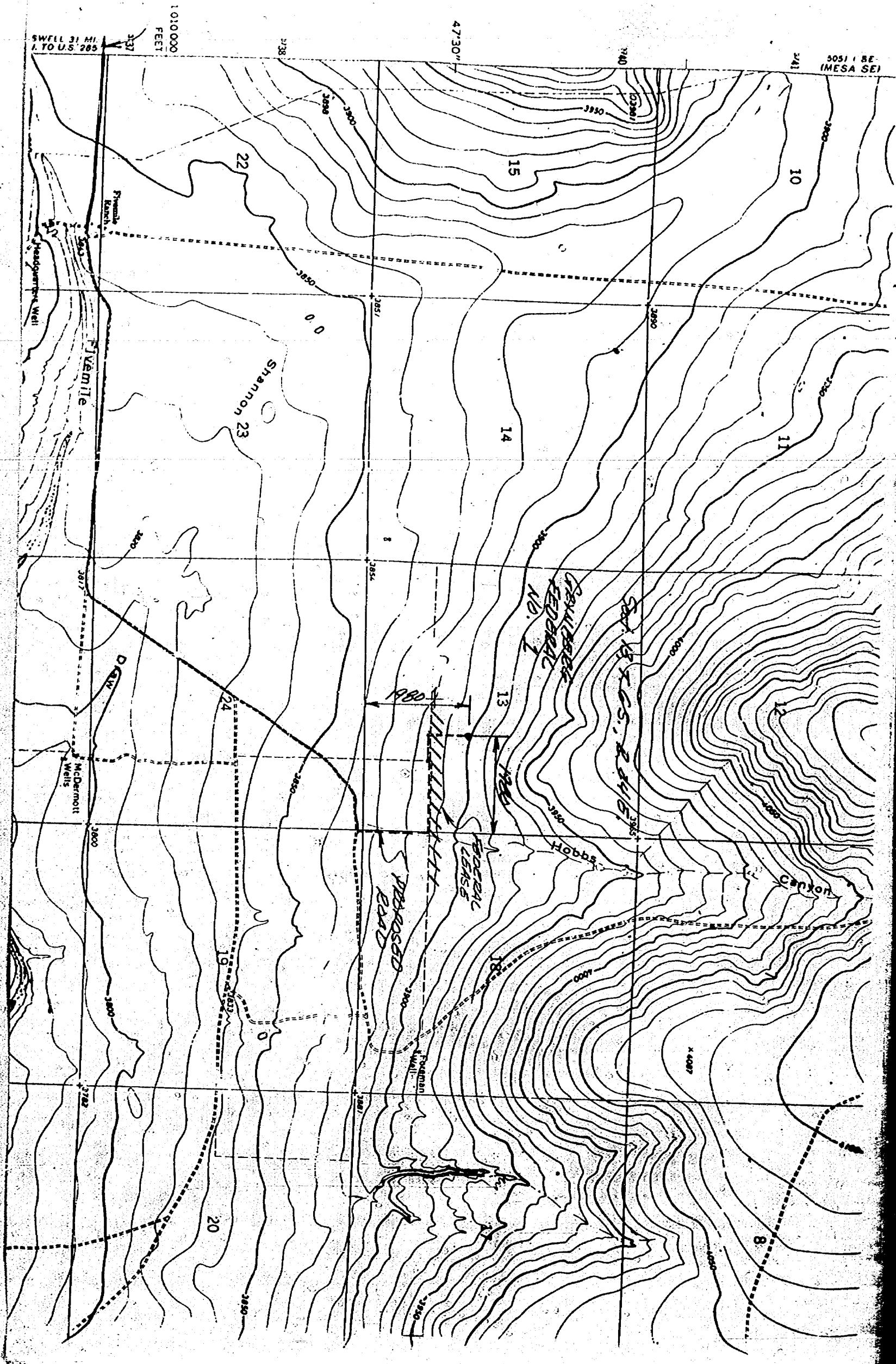
671-233

# FRED POOL DRILLING, INC.

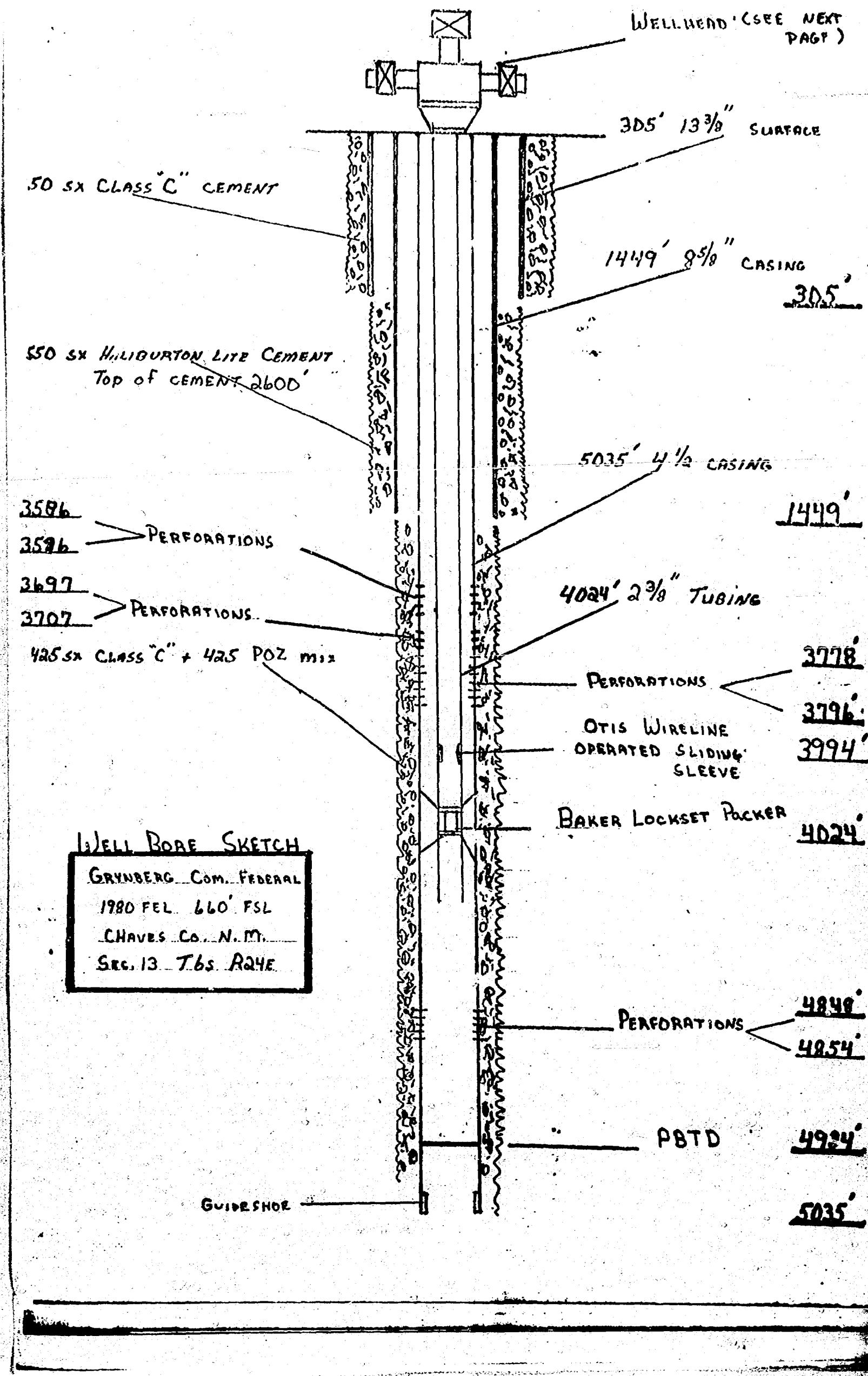
Suite 437, White Building  
Roswell, New Mexico 88201

## WELLHEAD DESCRIPTION

<u>Quantity</u>	<u>Type</u>
1	Gulfco - 4 1/2 8rd FE x 6" /3000 G2SA tubing head assy w/ 2 2" LPO
2	Gulfco - 2 3/8 EUE 8rd 3000# WOG G-2 gate valve.
1	Gulfco - 2 3/8 " EU 8rd run x 2" LPO FS flow Tee.
1	2" LP inlet x 2" LPO AB-75 3000# adi choke assy.
1	2 3/8" 8rd x 12" lgth N-80Tubing nipple.
1	2 3/8" EUE8rd Bull plug tapped 1/2"
1	50# BM 1/2" Cemco needle valve.
1	45# LC 1/2" 3000# ashcroft pressure gauge
1	8 5/8 x 4 1/2 " type 75 Larkin casing head
1	2" xH Bull ring
1	2" B-136-CS-02 WKM ball valve.



WELLHEAD (SEE NEXT PAGE)





**GENERALIZED STRATIGRAPHIC SECTION**  
**Grynb erg Comm. Federal #1**  
**T6s R24e Sec. 13**  
**Chaves County, New Mexico**

SYSTEM	SERIES	ROCK UNIT	LITHOLOGY
	OCHOAN	RUSTLER SALADO TANSILL YATES	hatched
		SEVEN RIVERS	horizontal lines
	GUADALUPIAN	QUEEN	hatched
		GRAYBURG	diagonal lines
PERMIAN		SAN ANDRES	hatched
		"GLORIETA"	horizontal lines
	LEONARDIAN	UPPER YESO DRINKARD LOWER YESO	hatched
		ABO	horizontal lines
	WOLFCAMPIAN	HUECO	horizontal lines
PENNSYLVANIAN	VIRGILIAN	CISCO	horizontal lines
	MISSOURIAN	CANYON	horizontal lines
	DESMOINESIAN	STRAWN	horizontal lines
	ATOKAN	"ATOKA"	horizontal lines
MISSISSIPPIAN	MORROWAN CHESTERAN MERAMECIAN OSAGIAN KINDERHOOKIAN	"MORROW" "CHESTER" MISSISSIPPIAN LIME	diagonal lines
DEVONIAN		WOODFORD	horizontal lines
SILURIAN		"UNDIFFERENTIATED SILURIAN"	horizontal lines
ORDOVICIAN		MONToya SIMPSON ELLENBURGER	diagonal lines
PRECAMBRIAN		UNNAMED	xxxxx

Grynb erg Comm Federal #1 T6s R24e Sec. 13 Chaves County, NEW MEXICO
<b>GENERALIZED</b> <b>STRATIGRAPHIC SECTION</b>

**BENNETT WIRE LINE SERVICE**P.O. BOX 787  
ARTESIA, NEW MEXICO 88210  
Phone 746-3281

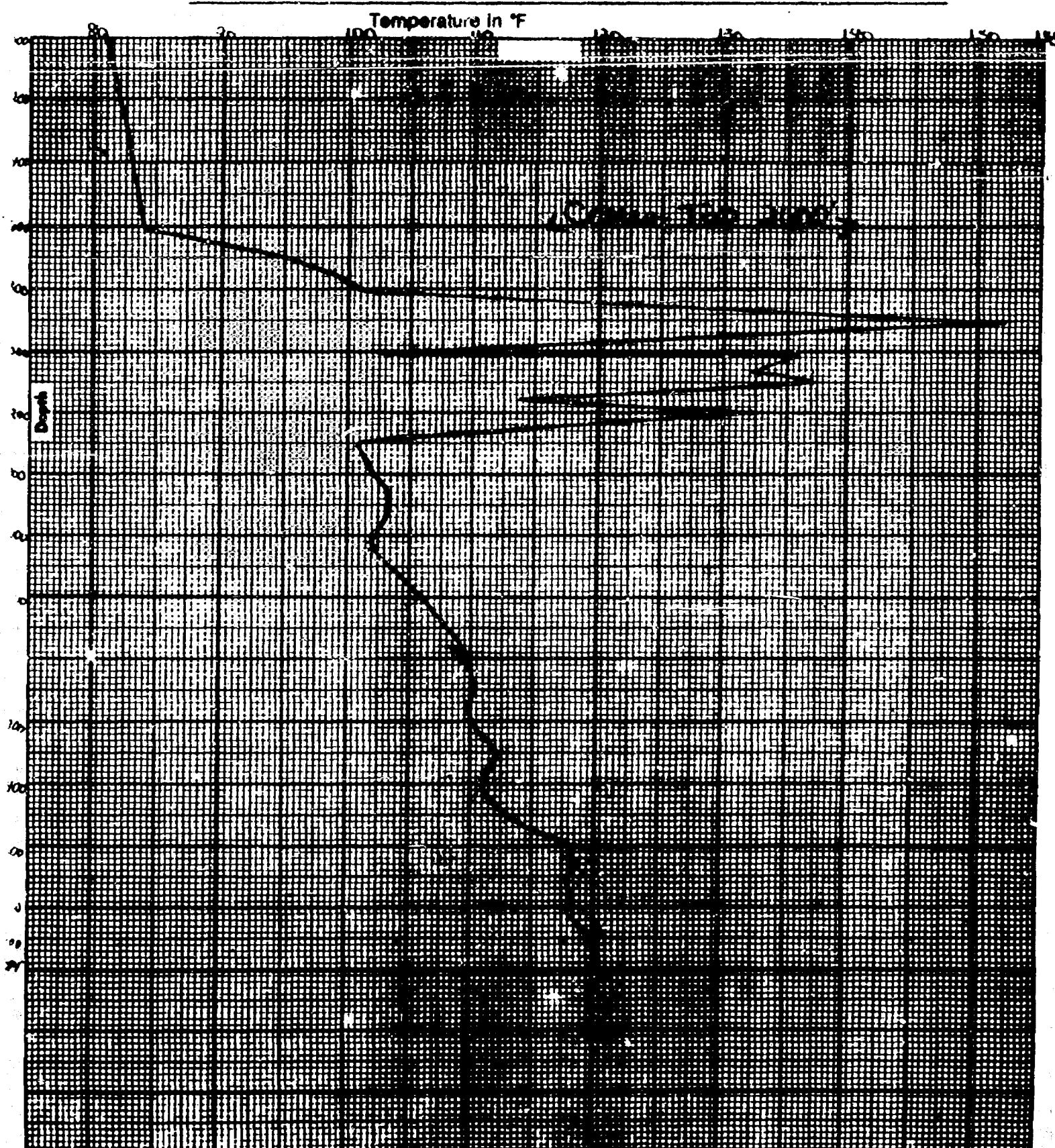
FRED POOL

**TEMPERATURE SURVEY**OPERATOR FRED POOLLEASE GYRNBERG FEDERALWELL NO. 11

FIELD NO. \_\_\_\_\_

DATE & TIME CEMENT JOB COMPLETED 7-21-80 1700 HOURSDATE & TIME SURVEY MADE 7-22-80 0800 HOURSSURVEY RUN BY DON BENNETT

DATUM \_\_\_\_\_

WELL DATA TOTAL DEPTH 4,984 FEET  
CEMENT TOP 34600 FEET

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

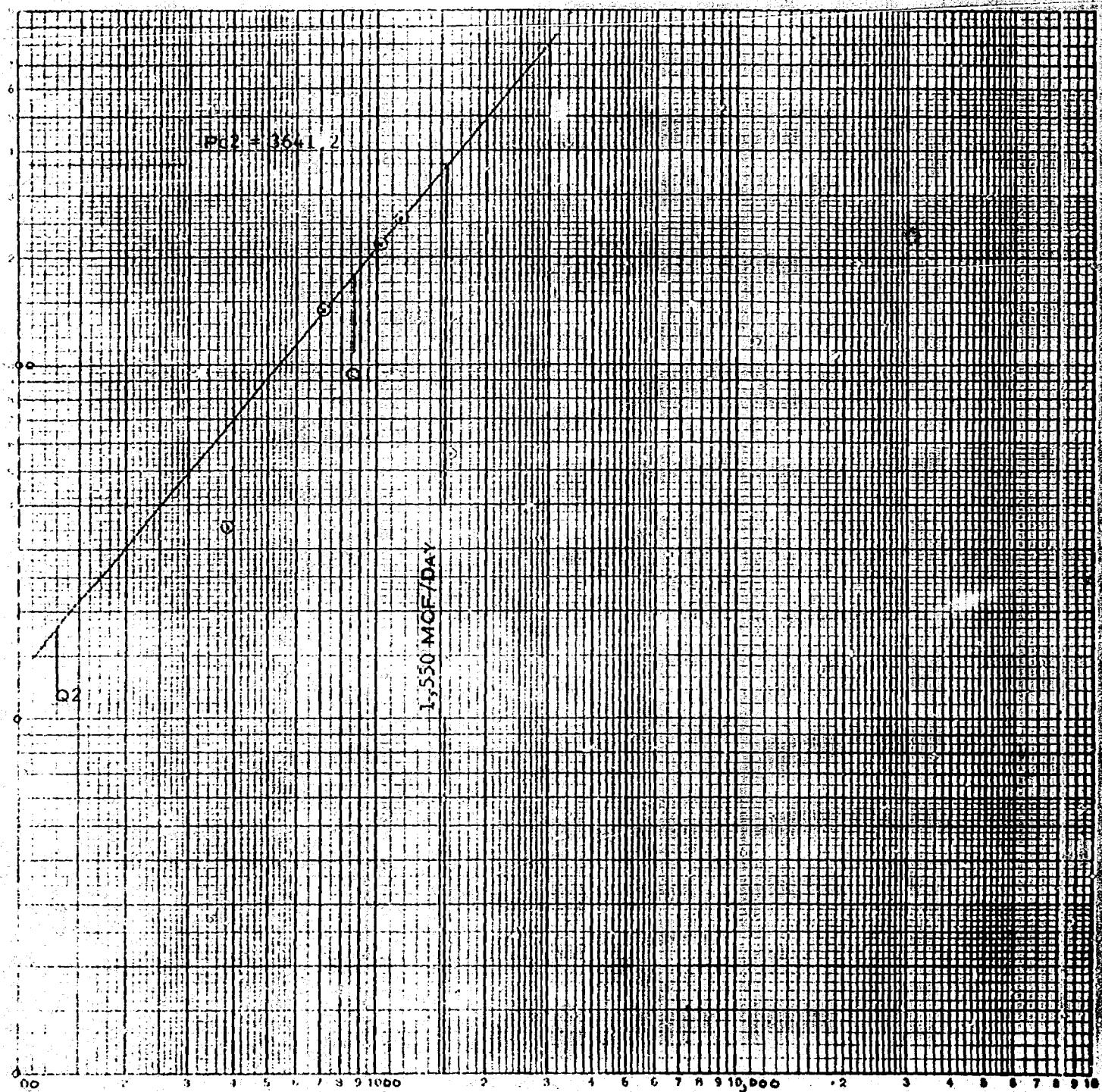
Type Test	<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Annual	<input type="checkbox"/> Special	Test Date	8-19-80					
Company	Connection									
FREO POOL	TO AIR									
Pool	Location				Unit					
Completion Date		Total Depth	Ring Back TD	Elevation	Farm or Lease Name					
8-19-80		5035	4984	3898	GRYNBERG COMM. FEDERAL					
Casing Size	Wt.	d	Set At	Perforations:	Well No.					
4 1/2	11.60	4,000	5035	From 4848 To 4854	1					
Pig Size	Wt.	d	Set At	Perforations:	Unit Sec. Twp. Range					
2 3/8	4.70	2,593	4804	From OPEN To END	13 6S 24E					
Type Well - Single - Braden Head - G.G. or G.O. Multiple					Packer Set At	County				
SINGLE					4804	CHAVES				
Producing Thru	Reservoir Temp. °F		Mean Annual Temp. °F	Boro. Press. - $P_a$	State					
TUBING	123° 4851		60°	13.2	NEW MEXICO					
L	H	G <sub>0</sub>	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover	Meter Run	Tape		
4851	4851	.669	1.417	13.917			4"	FLANGE		
FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Dif. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI						1895				
1.	4 X 1.00		510	8	74	1630	71			45 MIN.
2.	4 X 1.00		530	26	70	1420	70			45 MIN.
3.	4 X 1.00		540	52	68	1128	72			60 MIN.
4.	4 X 1.00		540	68	68	965	75			60 MIN.
5.										
RATE OF FLOW CALCULATIONS										
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>p</sub>	Rate of Flow Q, Mcfd			
1.	4.753	64.70	523.2	.9868	1.223	1.034	384			
2.	4.753	118.84	543.2	.9905	1.223	1.036	709			
3.	4.753	169.61	553.2	.9924	1.223	1.037	1015			
4.	4.753	193.95	553.2	.9924	1.223	1.037	1160			
5.										
NO.	R <sub>t</sub>	Temp. °R	T <sub>f</sub>	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.				
1.	.81	534	1.59	.935	A.P.I. Gravity of Liquid Hydrocarbons	Deg.				
2.	.84	530	1.58	.932	Specific Gravity Separator Gas .669	XXXXXX				
3.	.86	528	1.58	.930	Specific Gravity Flowing Fluid XXXXX					
4.	.86	528	1.58	.930	Critical Pressure 647 P.S.I.A.	P.S.I.A.				
5.					Critical Temperature 335 R	F				
NO.	P <sub>c</sub>	P <sub>c</sub> <sup>2</sup>	3641.2	(1) $\frac{P_c^2}{P_e^2 - R^2} = 1.422$	(2) $\left[ \frac{P_c^2}{P_e^2 - R^2} \right]^n = 1.336$					
1.	1908.2	1672.1	2795.9	845.3						
2.	1488.6	1488.6	2215.9	1425.3						
3.	1218.1	1218.1	1483.1	2157.3						
4.	1039.3	1039.3	1080.1	2561.1						
5.					$\left[ \frac{P_c^2}{P_e^2 - R^2} \right]^n = 1.550$					
Absolute Open Flow 1,550 Mcfd & 15.023 Angle of Slope 50.5 Slope, n 824										
Remarks:										
Approved By Commission:			Conducted By:		Calculated By:		Checked By:			
			W.S.		R.R.		J.W.W.			

FRED POOL  
GRYNBERG COMM. FEDERAL NO. 1

$$\begin{aligned} \text{ABS (N)} &= Q_1 - 867 = 2,937943 \\ Q_2 &= 130 = 2,113943 \\ N &= .824000 \end{aligned}$$

824

$$\begin{aligned} \text{CAOF} &= 1160 \frac{(3641,2)}{(2561,1)} = 1,550 \text{ MCF/DAY} \end{aligned}$$



Q = MCF/DAY

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Rate C-122  
Approved 4-63COMPANY Red Loc LEASE Cryneberg WELL NO. / DATE 5/29/60

LOCATION: Unit \_\_\_\_\_

Section \_\_\_\_\_

Township \_\_\_\_\_

Range \_\_\_\_\_

L 4851 H 4851 UH/Lod G 669 % CO<sub>2</sub> / % N<sub>2</sub> / % H<sub>2</sub>S /

GH 3245 Pa 497 T<sub>cr</sub> 335 TABLE 12-9\*

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	534	534	534	534	534	534	534
2	$T_s(B.H. \cdot R)$	583	583	583	583	583	583	583
3	$T = \frac{(T_w + T_s)}{2}$	559	559	559	559	559	559	559
4	Z (Est.)	1866	1870	1873	1878	1885	1893	1900
5	TZ	483.7	485.9	487.6	490.4	495.9	498.7	502.7
6	G/H/TZ	6.71	6.68	6.66	6.62	6.54	6.51	6.46
7	e <sup>s</sup> (Table XIV)	1.29	1.28	1.26	1.26	1.26	1.27	1.27
8	P <sub>f</sub> or P <sub>s</sub>	1375.2	1355.2	1335.2	1355.2	1376.2	1376.2	1372.2
9	P <sub>f</sub> <sup>2</sup> or P <sub>s</sub> <sup>2</sup>	3591.8	3591.8	2837.9	2839.5	1893.9	1893.9	1374.1
10	P <sub>c</sub> <sup>2</sup> = P <sub>f</sub> <sup>2</sup> /es or P <sub>w</sub> <sup>2</sup> = P <sub>s</sub> <sup>2</sup> /es	2252.8	2796.1	2212.6	2215.8	1481.8	1483.9	1078.6
11	<del>P<sub>f</sub> or P<sub>w</sub></del>	1671.2	1672.1	1467.5	1488.6	1223.3	1218.1	1038.6
12	$P_f \left( \frac{P_w + P_s}{2} \right)$ or $\left( \frac{P_c + P_f}{2} \right)$	1783.2	1783.7	1586.3	1586.9	1256.8	1257.2	1105.4
13	P <sub>f</sub> = (P/P <sub>cr</sub> )	2.76	2.76	2.65	2.45	2.00	1.00	1.71
14	T <sub>f</sub> = (T/T <sub>cr</sub> )	1.7	1.7	-	-	-	-	1.7

**WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )**

FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )

Form C-122  
Adopted 9-1-65

COMPANY Poco Oil LEASE Zwickberg WELL NO. / DATE /

LOCATION: Unit / Section / Township / Range /

L 4851 R 4851 LH 102 G 1669 % CO<sub>2</sub> / % N<sub>2</sub> / % H<sub>2</sub>S /  
GH 3245 Pg 647 Tu 335

TABLE IX A TABLE IX B

LINE		1	2	3	4	5	6	7	8
1	$T_w$ (W.H. "R")	534	534						
2	$T_s$ (B.H. "R")	583	583						
3	$T = \frac{T_w + T_s}{2}$	559	559						
4	$Z$ (Es::)	1859	1862						
5	TZ	473.8	471.4						
6	GH/TZ	6.76	6.74						
7	e <sup>s</sup> (Table XIV)	1,29	1,29						
8	$P_t$ or $P_s$	2150.2	2150.2						
9	$P_t^2$ or $P_s^2$	4623.4	4623.4						
10	$P_c^2 = P_t^2/e^s$ or $P_w^2 = P_s^2/e^s$	3587.6	3590.7						
11	<del><math>P_c</math> or <math>P_w</math></del>	1859.1	1859.9						
12	$P \cdot (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_t}{2})$	2022.1	2022.6						
13	$P_t = (P/P_{cr})$	3,13	3,13						
14	$T_t = (T/T_{cr})$	1,17	1,17						

**NEW-TEX****LAB**P. O. BOX 1161  
HOBBS, N.M. 88240**COPY OF ORIGINAL**

No. 3825  
 Run No.  
 Date of Run 8-18-80  
 Date Secured 8-16-80

**CERTIFICATE OF ANALYSIS**

Fred Pool  
 West Engineering  
 412 N. Dal Paso  
 Hobbs, NM 88240

Press  
Temp.**Grinberg Com Fed. #1**Secured by  
Time

Date

**FRACTIONAL ANALYSIS****Percentage Composition**

MOL %	UQ. %	G.P.M.
1.412		
13.917		
80.447		
2.100		.560
.819		.225
.195		.064
.393		.124
.097		.035
.136		.049
.097		.040
Plus 387		.178
100.000		1.225

Calc. Sp. Gr. 0.6687  
 Calc. A.P.I.  
 Calc. Vapor Press.  
 Sp. Gr.  
 Mol. Wt. 19.40

PSIA

**LIQUID CONTENT (GAL./MCF)**

Propane Calc. G.P.M.	.225
Butanes Calc. G.P.M.	.188
Pentanes Plus. G.P.M.	.302
Ethane Inc. G.P.M.	.560
RVP Gasoline G.P.M.	

8.1 U./Cu. Ft. @ 14.696 P.S.I.A.

Dry Basis	925
Wet Basis	909

Sulfur Analysis by Titration

Gr./100 Cu. Ft.

Hydrogen Sulfide

Mercaptans

Sulfides

Residual Sulfur

Total Sulfur

Deane Simpson

Checked by

Approved by

**Additional Data and Remarks**



**UNICHEM  
INTERNATIONAL**

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

Company John West Engineering

Field Grynberg

Lease Comm. Fed #1

Sampling Date 8-20-80

Type of Sample Separator

**WATER ANALYSIS**

IONIC FORM	me/l *	mg/l *
calcium (Ca++)	666.66	13333
magnesium (Mg++)	83.34	1000
sodium (Na+)	(CALCULATED)	24314
iron (Total)	1057.60	2050
carbonate (HCO <sub>3</sub> <sup>-</sup> )	0.74	45
bicarbonate (CO <sub>3</sub> <sup>2-</sup> )	Not	Found
hydroxide (OH <sup>-</sup> )	Not	Found
silphate (SO <sub>4</sub> <sup>2-</sup> )	16.16	776
chloride (Cl <sup>-</sup> )	1790.70	63500
Total Dissolved Solids		102969
1.94 pH at 68° F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as CaCO <sub>3</sub>	750.00	37500
Temporary Hardness as CaCO <sub>3</sub> (temporary)	0.74	37
Carbonate Hardness as CaCO <sub>3</sub> (permanent)	749.26	37463
Alkalinity as CaCO <sub>3</sub>	0.74	37
Pacific Gravity c 68° F 1.072		

\* mg/l = milligrams per liter

\* me/l = milliequivalents per liter

CO<sub>2</sub> S.I. negative @ 86° F (1.97)

CO<sub>2</sub> S.I. negative (0.42)

TEST DATE: AUGUST 16, TO AUGUST 19, 1980  
TEST DEPTH: 4851 FEET

ELEMENT NO.: 43419  
RANGE: 0 - 3000 PSI  
CLOCK NO.: 4052  
RANGE: 12 HOURS (4-POINT)  
CLOCK NO.: E-794  
RANGE: 72 HOURS (BUILD-UP)

NOTE: SEE FOLLOWING PAGE FOR TABULATION OF TIMES AND PRESSURES.

TIME - IN HOURS

0 20 40 60 80

GAUGE REACHED 2830' 20 40 60 80

GAUGE RETURNED TO 4851' 20 40 60 80

OPEN CHOKE CHAMBERS 20 40 60 80

SEND RATE II 20 40 60 80

SEND RATE I 20 40 60 80

SEND RATE 0 20 40 60 80

SEND RATE - 20 40 60 80

SEND RATE + 20 40 60 80

SEND RATE 0 20 40 60 80

SEND RATE I 20 40 60 80

SEND RATE II 20 40 60 80

SEND RATE III 20 40 60 80

SEND RATE IV 20 40 60 80

FRED POOL

GRYNBERG CO., FEDERAL NO. 1  
4-POINT BACK PRESSURE TEST, & BOTTOM HOLE  
PRESSURE BUILD-UP TEST

JOHN W WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 8-21-80 Drawn by: LCH Scale: AS SHOWN

FRED POOL  
 GRYNBERG COMM. FEDERAL NO. 1  
 4-POINT BACK PRESSURE TEST &  
 BOTTOM HOLE PRESSURE BUILD-UP TEST  
 TABULATION OF TIMES AND PRESSURES

TEST CONDUCTED BY:  
 JOHN WEST ENGINEERING COMPANY

TEST DATE: AUGUST 16, TO AUGUST 19, 1980  
 TEST DEPTH: 4851 FEET  
 ELEMENT No.: 43419  
 OPERATOR: M.B.

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>		<u>PSIG @ 4851 FEET</u>
8-16-80	10:15 AM			2137 GAUGE REACHED 4851'
	10:30 AM	00 HRS.	00 MIN.	2137 OPEN CHOKE; BEGIN 4-POINT
	10:45 AM	00	15	2118
	11:00 AM	00	30	2055 END RATE I
8-16-80	11:15 AM	00	45	2034
	11:30 AM	01	00	2019 END RATE II
8-16-80	11:45 AM	01	15	2014
	12:00 NOON	01	30	2008 END RATE III
8-16-80	12:15 PM	01	45	1996
	12:30 PM	02	00	1981 END RATE IV; GAUGE OUT; CHANGE CHARTS
8-16-80	1:00 PM	02	30	2114 GAUGE RETURNED TO 4851'
	1:15 PM	02	45	2125
	1:30 PM	03	00	2127
	1:45 PM	03	15	2131
	2:00 PM	03	30	2131
	2:15 PM	03	45	2131
	2:30 PM	04	00	2131
8-16-80	3:00 PM	04	30	2134
	3:30 PM	05	00	2134
	4:00 PM	05	30	2134
	4:30 PM	06	00	2134
8-16-80	6:30 PM	08	00	2134
	8:30 PM	10	00	2137
8-17-80	1:30 AM	15	00	2137
	6:30 AM	20	00	2137
	10:30 AM	25	00	2137
	3:30 PM	30	00	2137
8-18-80	1:30 AM	40	00	2137
	11:30 AM	50	00	2137
	9:30 PM	60	00	2137
8-19-80	7:30 AM	70	00	2137
8-19-80	9:15 AM	71	45	2137 GAUGE OUT; CHANGE CHARTS

CONTINUED ON FOLLOWING PAGE

**GRYNBERG COMM, FEDERAL No. 1**  
**4-POINT BACK PRESSURE TEST &**  
**BOTTOM HOLE PRESSURE BUILD-UP TEST**  
**TABULATION OF TIMES AND PRESSURES**

CONTINUED FROM PRECEDING PAGE

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>	<u>PSIG (@ 4851 FEET)</u>
8-19-80	9:45 AM	72 Hrs. 15 MIN.	2137 GAUGE RETURNED TO 4851'
	10:00 AM	72 30	2137 OPEN CHOKE; BEGIN 4-POINT
	10:15 AM	72 45	1899
	10:30 AM	73 00	1870
	10:45 AM	73 15	1882 END RATE I
8-19-80	11:00 AM	73 30	1677
	11:15 AM	73 45	1662
	11:30 AM	74 00	1672 END RATE II
8-19-80	11:45 AM	74 15	1469
	12:00 NOON	74 30	1388
	12:15 PM	74 45	1369
	12:30 PM	75 00	1363 END RATE III
8-19-80	12:45 PM	75 15	1168
	1:00 PM	75 30	1164
	1:15 PM	75 45	1162
	1:30 PM	75 00	1159 END RATE IV; END 4-POINT, GAUGE OUT; END TEST

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

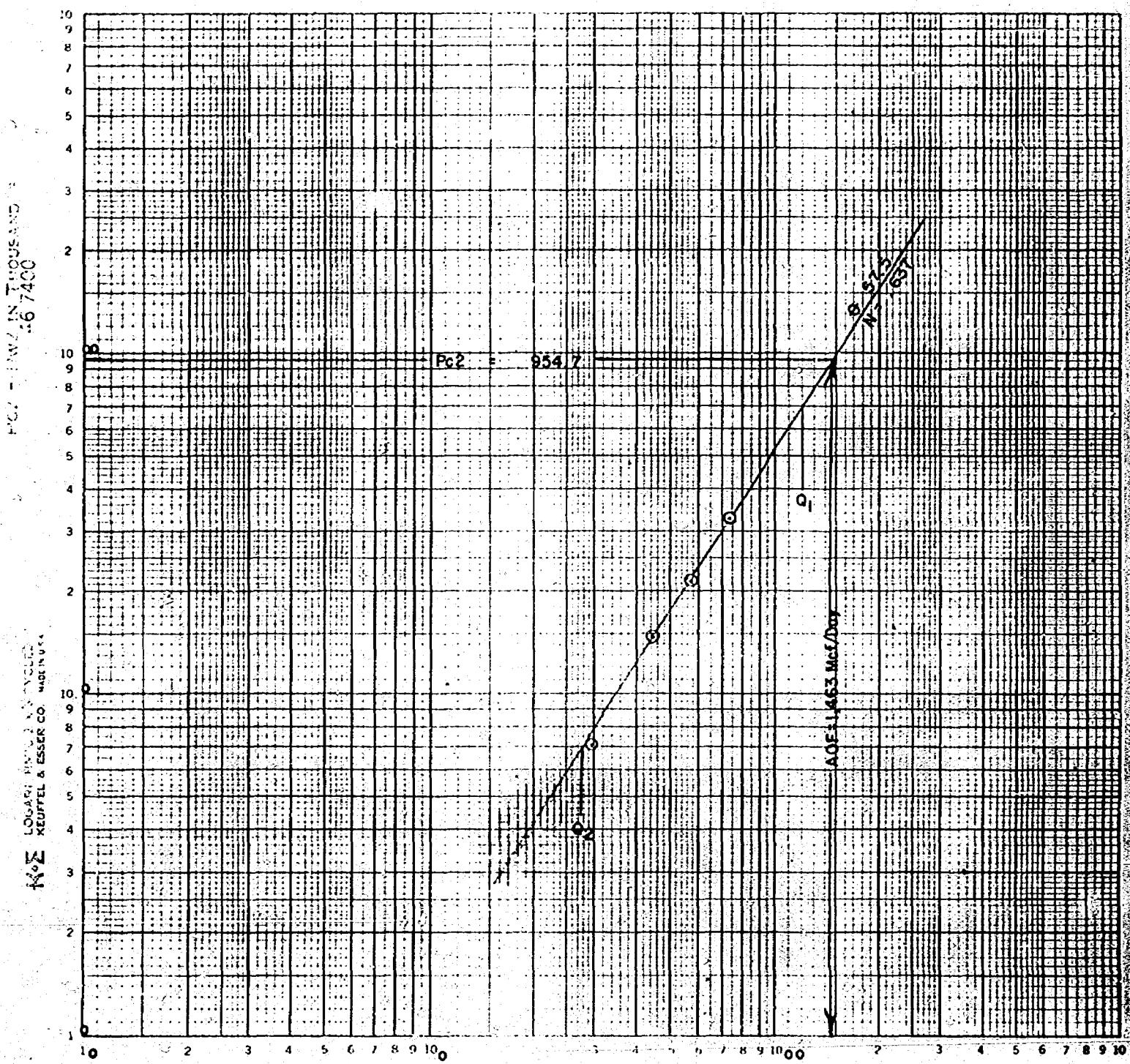
Form C-122  
Revised 9-1-65

Type Test	<input checked="" type="checkbox"/> Initial	<input type="checkbox"/> Annual	<input type="checkbox"/> Special	Test Date	10-5-80							
Company												
FRED POOL			TO AIR									
Pool	ABO											
Completion Date	Total Depth	Surf. Alt.	Elevation	Previous Lease Name								
10-1-80	5035	3965	3898	GRYNSENG								
Csg. Size	W.L.	Set At	Perforations:	Well No.								
4 1/2	11.6	4,000	From 3778 To 3796	1								
Thg. Size	W.L.	Set At	Perforations:	Unit Soc. Twp. Rigs								
2 3/8	4.70	2,995	From OPEN ENDED To 3700	13 65 24								
Type Well - Single - Bradenhead - G.G. or G.O. Multiple	Packer Set At 3700			County CHAVES								
SINGLE												
Fr. flowing Thru	Reservoir Temp. °F	Mean Annult Temp. °F	Baro. Press. - Pa	State NEW MEXICO								
TBG	112 & 3787	60	13.2									
L	H	G <sub>g</sub>	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover						
3787	3787	.677	.316	14.394	-0-							
FLOW DATA				TUBING DATA		CASING DATA	Duration of Flow					
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	D.H. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.		Temp. °F	Press. p.s.i.g.	Temp. °F		
SI.						957				CHOKE	24 HOUR	
1.	4 x 1.00	320	8	95	919						8/64	1 HOUR
2.	4 x 1.00	325	18	93	876						11/64	1 HOUR
3.	4 x 1.00	330	29	89	830						14/64	1 HOUR
4.	4 x 1.00	330	48	85	757						16/64	1 HOUR
5.												
RATE OF FLOW CALCULATIONS												
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor F	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>Pv</sub>	Rate of Flow Q, Mcfd					
1.	4.753	51.63	333.2	.9680	1.215	1.021	295					
2.	4.753	78.02	338.2	.9697	1.215	1.021	446					
3.	4.753	99.76	343.2	.9732	1.215	1.022	573					
4.	4.753	128.35	343.2	.9768	1.215	1.022	740					
5.												
NO.	R	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio DRY							
1.	.52	555	1.62	.960	A.P.I. Gravity of Liquid Hydrocarbons		Mcf/bbl.					
2.	.52	553	1.61	.959	Specific Gravity Separator Gas	.677	Deg.					
3.	.53	549	1.60	.958	Specific Gravity Flowing Fluid	XXXXXX						
4.	.53	545	1.59	.957	Critical Pressure	645	P.S.I.A.					
5.					Critical Temperature	343	R					
NO.	P <sub>c</sub>	P <sub>c</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.917$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.978$					
1.	*	977.1	954.7									
2.	*	898.1	806.6	148.1								
3.	*	861.3	741.8	212.9								
4.	*	792.1	627.4	327.3								
5.												
Absolute Open Flow 1,463				Mcfd @ 15.025		Angle of Slope θ 57.5	Slope, n .637					
Remarks: CALCULATED FROM KNOWN BOTTOM PRESSURES, MEASURED WITH A KUSTER GAUGE.												
Approved By Commission:		Conducted By:		Calculated By:		Checked By:						
		M.R.		R.R.		J. W. W.						

FRED POOL  
GRYNBERG No. 1

**ABS (N)**  $Q_1 = 1205 = 3,081,044$   
 $Q_2 = 278 = 2,444,044$   
**N** = .637000

.637  
**CAOF = 740 ( 954.7 )** = 1,463 MCF/DAY  
(327.3 )



LOGARITHMIC LOGOGRAM  
KEUFFEL & ESSER CO. MADE IN U.S.A.

Q = MCF / DAY

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Form C-122F  
Adopted 9-1-65COMPANY Fred Pool LEASE Grynderberg WELL NO. 1 DATE \_\_\_\_\_

LOCATION: Unit \_\_\_\_\_ Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_

L 3282 H 3282 L/H 1.00 G .677 % CO<sub>2</sub> .316 % N<sub>2</sub> .14.394 % H<sub>2</sub>S \_\_\_\_\_

GH 2564 P<sub>c</sub>: 645 T<sub>ct</sub> 343

TABLE IX A TABLE IX B

LINE	1	2	3	4	5	6	7	8
1	$T_w$ (W.H. °R)	530	530	530	530	530	530	530
2	$T_s$ (B.H. °R)	572	572	572	572	572	572	572
3	$T_e(\frac{T_w + T_s}{2})$	553	553	553	553	553	553	553
4	Z (Est.)	882	887	891	891	895	898	902
5	T <sub>2</sub>	487.7	490.1	490.5	492.7	495.7	498.7	501.8
6	G/H/T <sub>2</sub>	5.26	5.23	5.23	5.20	5.18	5.16	5.14
7	e <sub>s</sub> (Table XIV)	1.22	1.22	1.22	1.22	1.21	1.21	1.21
8	P <sub>f</sub> or P <sub>s</sub>	1032.2	1032.2	990.2	990.2	949.2	909.2	872.2
9	P <sub>f</sub> <sup>2</sup> or P <sub>s</sub> <sup>2</sup>	1075.8	1075.8	980.5	980.5	901.0	760.7	720.7
10	P <sub>c</sub> <sup>2</sup> = P <sub>f</sub> <sup>2</sup> /e <sub>s</sub> or P <sub>w</sub> <sup>2</sup> = P <sub>s</sub> <sup>2</sup> /e <sub>s</sub>	883.3	884.3	805.9	806.7	741.3	741.9	626.8
11	P <sub>c</sub> or P <sub>w</sub>	935.8	940.4	897.8	898.1	860.9	861.3	791.2
12	P <sub>c</sub> = $\frac{(P_w + P_s)}{2}$ or $\frac{(P_c + P_f)}{2}$	988.5	988.8	944.0	944.2	905.1	905.3	832.0
13	P <sub>f</sub> = (P/P <sub>ct</sub> )	1.53	1.53	1.46	1.46	1.40	1.40	1.29
14	T <sub>r</sub> = (T <sub>2</sub> /T <sub>ct</sub> )	1.61	1.61	1.61	1.61	1.61	1.61	1.61
15	Z (Table XI)	887	887	891	891	895	895	902

One copy to be filled in District Office (No 1 copy acceptable)

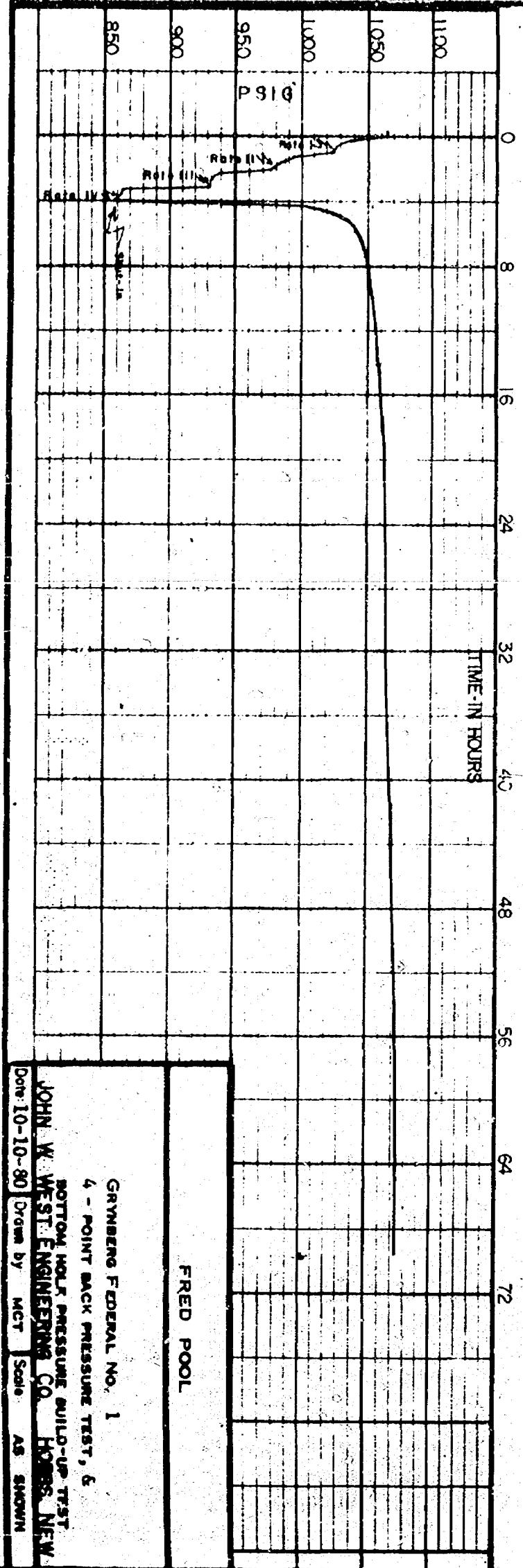
WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ( $P_c$  or  $P_w$ )FROM KNOWN BOTTOM HOLE PRESSURE ( $P_f$  or  $P_s$ )Form C-122F  
Adopted 9-1-65COMPANY Fred ProzLEASE GryobergWELL NO. /DATE LOCATION: Unit  Section  Township  Range L 3257 H 3287 L/H 1.00 G .672 % CO<sub>2</sub>  % N<sub>2</sub> 14.324 % H<sub>2</sub>S GH 2564 P<sub>c</sub> 1245 TABLE IX & X T<sub>Cr</sub> 343 TABLE IX & X

LINE	1	2	3	4	5	6	7	8
1 $T_w$ (W.H. °R)	534	534						
2 $T_s$ (B.H. °R)	572	572						
3 $T_a$ ( $\frac{T_w}{2} + T_s$ )	553	553						
4 Z (Est.)	879	883						
5 Z	1861	488						
6 GH/TZ	527	5.25						
7 es(Table XIV)	1.22	1.22						
8 P <sub>f</sub> or P <sub>s</sub>	1078.2	1078.2						
9 P <sub>f</sub> <sup>2</sup> or P <sub>s</sub> <sup>2</sup>	1162.5	1162.5						
10 P <sub>w</sub> <sup>2</sup> = P <sub>f</sub> <sup>2</sup> /es or P <sub>w</sub> <sup>2</sup> = P <sub>s</sub> <sup>2</sup> /es	953.9	954.2						
11 P <sub>c</sub> or P <sub>w</sub>	976.7	972.1						
12 P <sub>c</sub> ( $\frac{P_w + P_s}{2}$ ) or ( $\frac{P_c + P_f}{2}$ )	1027.4	1027.7						
13 P <sub>r</sub> = (F/P <sub>Cr</sub> )	1.59	1.55						
14 T <sub>r</sub> = (T/T <sub>Cr</sub> )	1.61	1.61						
15 Z (Table XI)	1883	1883						

TEST DATE: 10/5 THRU 8/30  
TEST DEPTH: 3737

ELEMENT NO.: 43419  
RANGE : 0 - 3000 PSI  
CLOCK NO.: E 2145  
RANGE: 72 HOURS

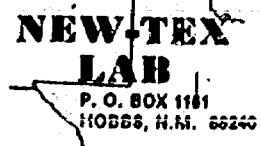
NOTE: SEE FOLLOWING PAGE FOR TABULATION OF TIMES AND PRESSURES.



**BOTTOM HOLE PRESSURE BUILD - UP TEST**  
**TABULATION OF TIMES AND PRESSURES**

TEST DATE: 10/5-8/80  
 TEST DEPTH: 3787  
 ELEMENT NO.: 43419  
 OPERATOR: M.R.

<u>DATE</u>	<u>TIME</u>	<u>CUM.HRS./MIN.</u>	<u>PSIG @ 3787 FEET</u>
10-5-80	12:30PM		
	12:45PM	0 00	1065 GAUGE REACHED 3787
	1:00PM	0 15	1065
	1:15PM	0 30	1038
	1:30PM	0 45	1030
	1:45PM	1 00	1027
			1024 END RATE I
	2:00PM	1 15	993
	2:15PM	1 30	986
	2:30PM	1 45	981
	2:45PM	2 00	977 END RATE II
	3:00PM	2 15	939
	3:15PM	2 30	933
	3:30PM	2 45	931
	3:45PM	3 00	931 END RATE III
	4:00PM	3 15	864
	4:15PM	3 30	863
	4:30PM	3 45	860
	4:45PM	4 00	859 END RATE IV
10-5-80	4:45PM	0 00	859 SHUT - IN , BEGIN BUILD-UP
	5:00PM	0 15	1003
	5:15PM	0 30	1018
	5:30PM	0 45	1025
	5:45PM	1 00	1034
	6:00PM	1 15	1038
	6:15PM	1 30	1039
	6:30PM	1 45	1041
	6:45PM	2 00	1042
	7:00PM	2 15	1045
	7:30PM	2 45	1047
	8:00PM	3 00	1047
	8:30PM	3 30	1048
	9:00PM	4 00	1050
	10:00PM	5 00	1051
10-6-80	11:00PM	6 00	1053
	1:00AM	8 00	1054
	3:00AM	10 00	1057
	8:00AM	19 00	1062
	1:00PM	20 00	1063
	11:00PM	30 00	1066
10-7-80	9:00AM	40 00	1069
10-7-80	7:00PM	54 00	1072
10-8-80	5:00AM	64 00	1074
10-8-80	10:30AM	65 30	1074 END TEST



P. O. BOX 1161  
HOBBS, N.M. 88240

No. 4040  
Run No.  
Date of Run 10-8-80  
Date Secured 10-5-80

### CERTIFICATE OF ANALYSIS

A. Sample of Fred Pool Grynsberg Federal #1  
Secured from West Engineering  
At 412 N. Dal Paso  
Hobbs, N.M. 88240  
Sampling conditions Press  
Temp.

### FRACTIONAL ANALYSIS

#### Percentage Composition

MOL %	LIQ. %	G.P.M.
-------	--------	--------

Carbon Dioxide	.316	
Air		
Nitrogen	14.394	
Oxygen		
Hydrogen sulfide		
Hydrogen		
Methane	78.126	
Ethane	4.100	1.093
Propane	1.662	.456
Butanes		
Iso-Butane	.258	.084
n-Butane	.588	.185
Pentanes		
Iso-Pentane	.149	.054
n-Pentane	.184	.056
Hexanes	.104	.043
Heptanes	Plus	.120 .055
Octanes		
TOTAL	100.000	2.036

Calc. Sp. Gr. 0.6768  
Calc. A.P.I.—  
Calc. Vapor Press.—  
Sp. Gr. PSIA  
Mol. Wt. 19.60

#### LIQUID CONTENT (GAL/MCF)

Propane Calc. G.P.M.	.456
Butanes Calc. G.P.M.	.269
Pentanes Plus. G.P.M.	.218
Ethane Calc. G.P.M.	1.093
RVP Gasoline G.P.M.	

B.I.U./Cu. Ft. @ 14.696 P.S.I.A.

Dry Basis	956
Wet Basis	939
Sulfur Analysis by Titration	
Gr./100 Cu. Ft.	
Hydrogen Sulfide	
Mercaptans	
Sulfides	
Residual Sulfur	
Total Sulfur	

Run by Deane Simpson Checked by

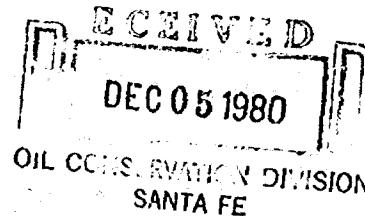
Approved by

Additional Data and Remarks

OIL CONSERVATION COMMISSION  
Artesia DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE 12-3-80



RE: Proposed MC   
Proposed DHC   
Proposed NSL   
Proposed SWD   
Proposed WFX   
Proposed FMX

Gentlemen:

I have examined the application dated 11-18-80  
for the Fred Pool Drilling Co., Gruenberg, Tex. Com. 11-J-13-6-24  
Operator \_\_\_\_\_ Lease and Well No. \_\_\_\_\_ Unit, S-T-R

and my recommendations are as follows:

Does not qualify for administrative approval  
Set for Hearing

Yours very truly,

W.A. Gressett

FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

Nov. 21, 1980

Set for  
12/30  
pkq

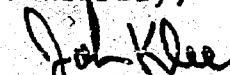
Mr. R. L. Stamets  
P.O. Box 2088  
Santa Fe, N.M. 87501

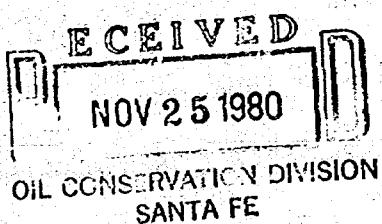
Re: Multiple Completion  
Grymberg Com Federal # 1  
Section 13-6S-24E  
Chaves County, N.M.

Dear Sir,

Please find enclosed herewith two (2) copies of the Application for Multiple Completion for the above captioned well. I have also sent two copies to the Oil Commission office in Santa Fe and Artesia. Thanking you for your cooperation in this matter is greatly appreciated.

Sincerely,

  
John Klee



NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Fred Pool Jr.</b>		County <b>Chaves</b>	Date <b>11-18-80</b>
Address <b>Box 1300 Clovis Star Rt. Roswell</b>		Lease <b>Grynderg Com Fed</b>	Well No. <b>#1</b>
Location of Well	Unit <b>J</b>	Section <b>13</b>	Township <b>6s</b>
			Range <b>24e</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES  NO
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No. \_\_\_\_\_

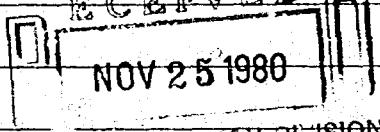
3. The following facts are submitted:		Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation		Abo		Penn
b. Top and Bottom of Pay Section (Perforations)		3586' - 3586' 3697' - 3707' 3778' - 3796'		4848' - 4854'
c. Type of production (Oil or Gas)		Gas		Gas
d. Method of Production (Flowing or Artificial Lift)		Flowing		Flowing

4. The following are attached. (Please check YES or NO)

Yes  No

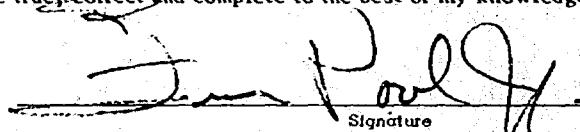
- a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbulators and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*
- d. 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 provided by Rule 112A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address:

Jack Grynderg 1050 17th Street Suite 1950 Denver, Colorado 80265  
  
 NOV 25 1980  
 OIL CONSERVATION DIVISION  
 SANTA FE

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES  NO  . If answer is yes, give date of such notification 11-18-80.

CERTIFICATE: I, the undersigned, state that I am the President of the Fred Pool Drilling Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

  
 Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard production unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## MULTIPLE COMPLETION (CONVENTIONAL)

P.1

Grymberg Com Federal #1  
16s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- 1) Said well is to be completed as a gas-gas and the hydrocarbons from each of the zones can be safely and efficiently produced through one string of tubing and one string of casing.
- 2) The packer used to segregate the separate zones of multiple completion will be a Baker Lockset Packer and shall effectively prevent communication between the two producing zones.
- 3) The two producing zones are the ABO and Penn respectively.
- 4) Form C-107 attached hereto.
- 5) For administrative approval;
  - a) Diagrammatic sketch of the Multiple completion;
    - 1) Showing all casing strings
    - 2) Diameters and setting depths
    - 3) Centralizers and/or turbolizers and location thereof
    - 4) Quantities used and top of cement
    - 5) Perforated intervals
    - 6) Tubing strings, including diameters and setting depth
    - 7) Location of packers
    - 8) Sleeves
  - b) Plat showing the location of all wells on applicants lease
    - 1) All offset wells on offset leases
    - 2) The names and addresses of operators of leases
    - 3) Evidence that said offset operators have been furnished with copies of the application

FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

MULTIPLE COMPLETION  
(CONVENTIONAL)

P.2

Grynderg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- x 4) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforations indicated thereon.
- x c) Logs
  - x 1) Computer processed log.
  - x 2) Perforating depth control
  - x 3) Casing collar log and perforating record
  - x 4) Dual Laterolog Micro-SFL
- x d) Drilling status reports
  - x 1) Well completion reports

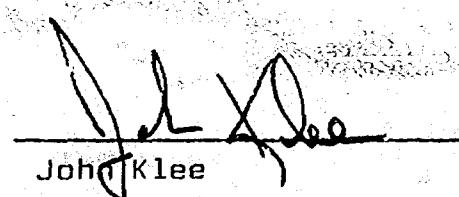
FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

AFFIDAVIT OF MAILING OR DELIVERY

Application for Multiple Completion  
Grynberg Com Federal #1  
Sec. 13 T6s R24e  
Chaves County, New Mexico

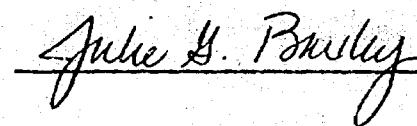
I hereby certify that I have this day mailed a copy of Form C-107 to Jack Grynberg, lease holder of lease No. 11795 Sec.12 T6s R24e north offset to captioned well.



John Klee

STATE OF NEW MEXICO  
COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 19th day of November, 1980, by John Klee.



Julie S. Bowley

My commission expires

Oct. 15, 1984

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

## 1a. TYPE OF WORK

 DRILL DEEPEN PLUG BACK

## b. TYPE OF WELL

OIL GAS WELL 

OTHER

SINGLE 

ZONE

MULTIPLE 

ZONE

## 2. NAME OF OPERATOR

Fred Pool Drilling Company

## 3. ADDRESS OF OPERATOR

409 White Building, Roswell, New Mexico 88201

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

At surface

1980' FSL &amp; 1980' PEL of Sec. 13

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

27 air miles north-northeast of Roswell, N. M.

## 15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OF LEASEE LINE, FT.

660'

(Also to nearest drig. unit line, if any)

## 16. NO. OF ACRES IN LEASE

2360

## 17. NO. OF ACRES ASSIGNED TO THIS WELL

320'

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

N.A.

## 19. PROPOSED DEPTH

5500 Granite Wash

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DE, RT, GR, etc.)

3898 G. L.

## 22. APPROX. DATE WORK WILL START

April 15, 1980

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	13 3/8"	48#	400' +/-	7 Circ.
12 1/4 or 11"	8 5/8"	24#	1500' +/-	Circ.
7 7/8"	4 1/2"	10.5#	TD	1000' above pay

Selectively perforate and treat pay zone.

Gas is not dedicated to a pipeline.

Attached are: Survey Plat (C-102)

Supplemental Drilling Data

Surface Use Plan

RECEIVED

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

Fred Pool, Jr.

TITLE Owner

DATE 4-1-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY

TITLE

DATE

All distances must be from the outer boundaries of the Section

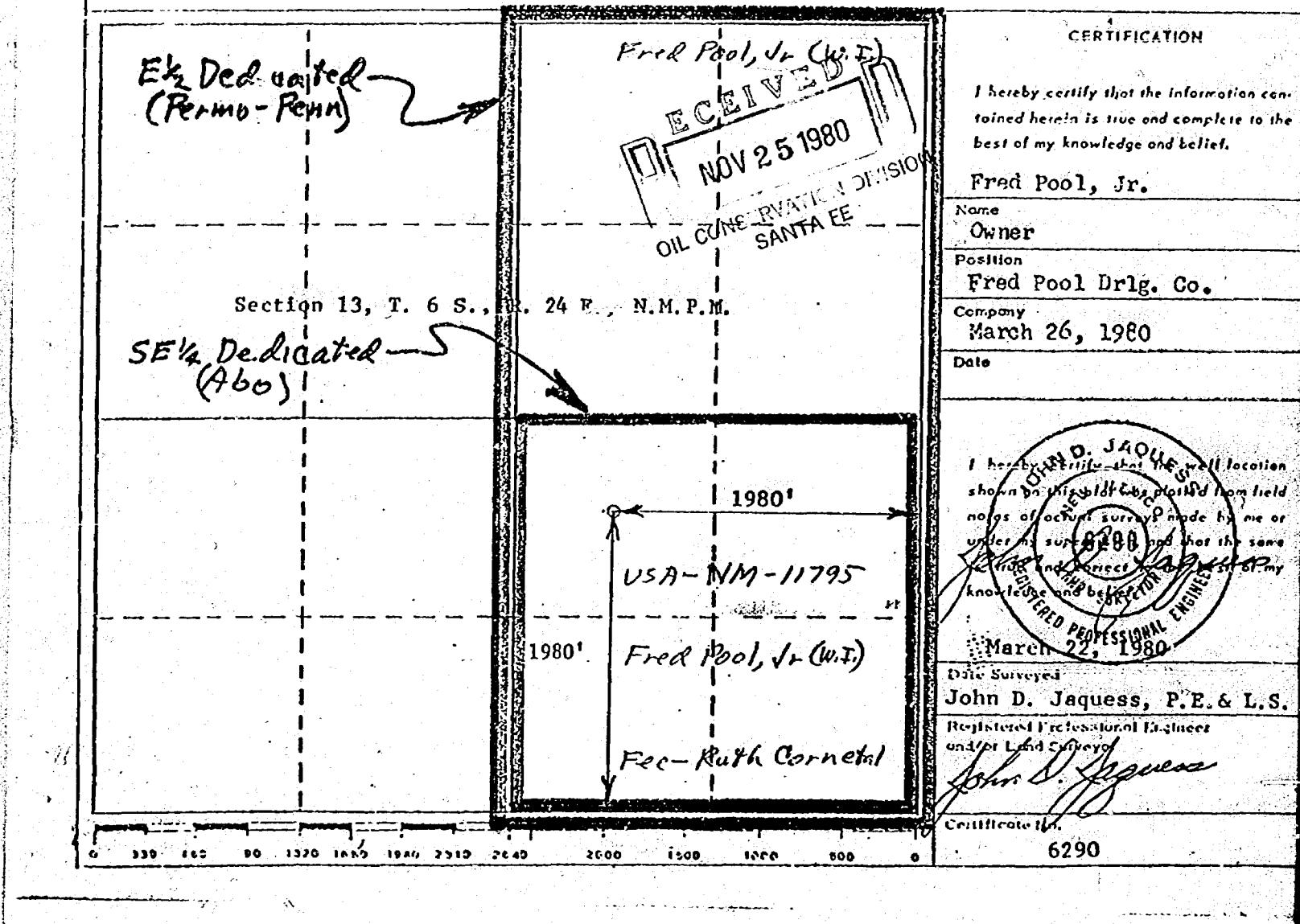
Operator <b>Fred Pool Drilg. Co.</b>		Lease <b>Grynberg, Federal</b>		Well No. <b>1</b>
Unit Letter <b>C</b>	Section <b>13</b>	Township <b>6S</b>	Range <b>2E</b>	County <b>Chaves</b>
Actual Lease Location of Well:				
<b>220</b>	feet from the <b>East</b>	Line card <b>1980</b>	feet from the <b>South</b>	Line card <b>160</b>
Ground Level Elev. <b>3896.0</b>	Fire fueling Formation <b>Penn</b>	Post <b>Wildcat</b>	Dedicated Acreage <b>320 Penn</b>	Acre

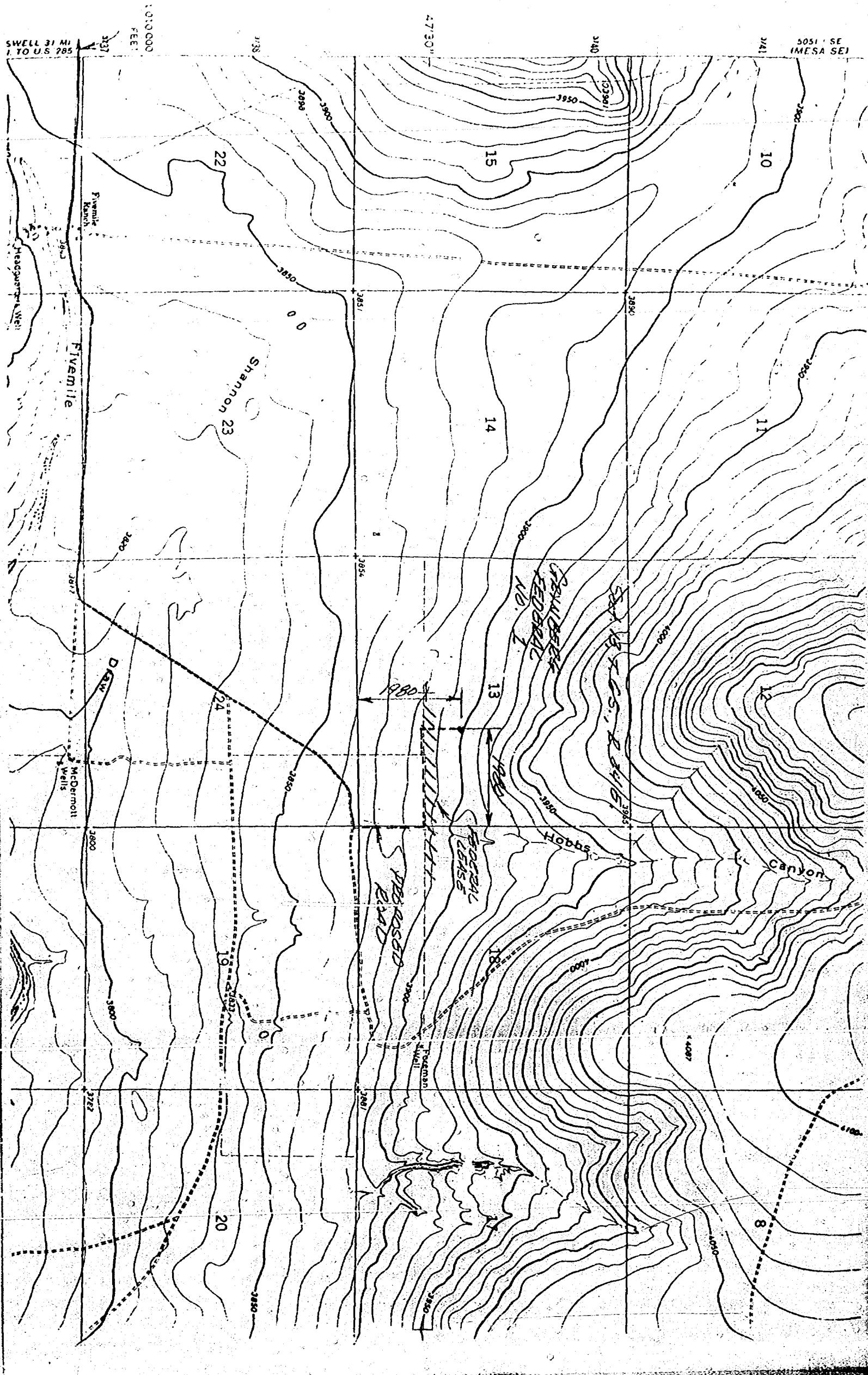
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
  3. If more than one lease of different ownership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

Yes  No If answer is "yes" type of consolidation Consolidation

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 communication, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.





**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE  
(Other Instructions on Re-  
verse Side)

Form approved,  
Budget Bureau No. 42-R1424  
5. LEASE DESIGNATION AND SERIAL NO.

NM-11795

6. LEASEE, ALLOUTEE OR TRADE NAME

—

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynborg-Com Federal

9. WELL NO.

1

10. FIELD AND POOL OR WILDCAT

Wildcat

11. SEC., T., R. M. OR BBL. AND  
SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH 13. STATE

Chaves

N. M.

**SUNDY 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" for such proposals.)

1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Trilling Company

3. ADDRESS OF OPERATOR

409 White Bldg., Roswell, New Mexico 88201

4. Location of well (Report location early and in accordance with any State requirements.)  
See also Space 17 below)  
At surface

1980' FSL &amp; 1980' FEL of Sec. 13

14. PERMIT NO.

15. ELEVATIONS (Show whether ft., m., or etc.)

3898 G. L.

- 16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TINY WATER SHUT-OFF TINY OR AFTER CASING WATER SHUT-OFF REPAIRING WELL FRACTURE TREAT MULTIPLE COMPLETION FRACTURE TREATMENT ATTENDING CASINO SHOOT OR ACIDIZE ABANDON\* SHOOTING OR ACIDIZING ABANDONMENT\* REPAIR WELL CHANGE PLANS (Other) 

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

The rotary rig, which was scheduled to drill this well, has been delayed with a fishing job on another well; and as we plan to be drilling over May 31, 1980, the lease expiration date, it may be necessary, that we drill with a cable tool rig until the rotary rig becomes available.

Anticipated spud date is May 28, 1980.

RECEIVED

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

RECEIVED

MAY 21 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

James A. Knauf

(This space for Federal or State office use)

TITLE Agent

DATE May 19, 1980

APPROVED BY

CONDITIONS OF APPROVAL IF ANY:

TITLE

DATE

MAY 21 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.

6. LEASE DESIGNATION AND SERIAL NO.

N.M. 11795

7. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. PART OF LEASE NAME

Drynberga-Com Fed

9. WELL NO.

1

10. FIELD AND FOOIL, OR WILDER

Wildcat

11. SEC., T., R., M., OR B.R. AND

SURVEY OR AREA

13-65-24E

12. COUNTY OR PARISH 13. STATE

Chaves

N.M.

## 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" for such proposals.

RECEIVED

1. OIL WELL  GAS WELL  OTHER

## 2. NAME OF OPERATOR

Fred Pool Drilling Co.

JUN 6 1980

## 3. ADDRESS OF OPERATOR

409 White Bldg., Roswell, N.M. 88201 NEW MEXICO

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

At surface

1980' FSL &amp; 1980 FEL of Sec. 13

## 14. PERMIT NO.

## 15. ELEVATIONS (Show whether DE, ST, OR, etc.)

3898 S.L.

## 16.

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

## SUBSEQUENT REPORT OF:

FRACTURE TREAT

MULTIPLE COMPLETE

WATER SHUT-OFF

SHOOT OR ACIDIZE

ABANDON\*

FRACTURE TREATMENT

REPAIR WELL

CHANGE PLANS

SHOOTING OR ACIDIZING

(Other)

(Other) SURFACE Basing

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 3, 1980

Ran 305 feet of 13 3/8" surface casing 48# NGL 8rd ST&C  
Cemented with 150 sx Class C Cement  
Cement circulated.  
Plugged down 2:00 p.m.

M.O.C. 6-4-80 and 6-5-80

RECEIVED  
NOV 25 1980  
OIL CONSERVATION DIVISION  
SANTA FE

18. I hereby certify that the foregoing is true and correct

SIGNED

*Pete Janes*

TITLE Secretary

DATE 6-5-80

(This space for Federal or State office use)

ACTING DISTRICT ENGINEER

APPROVED BY

TITLE

DATE JUN 06 1980

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TWO PARTS  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.N.M. 11795  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Orynberg-Comm Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC., T., R., M., OR BLK., AND

SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH

Chaves

13. STATE

N.M.

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" for such proposals.)1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR  
437 White Bldg., Roswell, N.M. 88201U.S. LEVEL  
ACTESIA, N.M.

See also space 17 below.) At surface

5. LOCATION OF WELL (Report location clearly and in accordance with any State Requirements.)  
At surface

See also space 17 below.) At surface

OPERATOR'S COPY  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424  
5. LEASE DESIGNATION AND SERIAL NO.  
N.M. 11796  
6. IN INDIAN, ALLOTTEE OR TRIBE NAME:

## 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--" for such proposals.)1. OIL WELL  GAS WELL  OTHER 

2. NAME OF OPERATOR

3. FEDERAL DRILLING CO.

4. ADDRESS OF OPERATOR

107 White Ledge, Roswell, N.M., 88201

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements. See also space 17 below.)

At surface

1700 feet; 1380 TGL; 13-1-24E  
Otero County, N.M.

14. PERMIT NO.

13-64-24E

15. CIRCUMSTANCES (Show whether br. kr. ox. etc.)

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

## NOTICE OF INTENTION TO:

1. TEST WATER SHUT-OFF 2. FRACTURE TREATMENT 3. SHOT OR ACIDIZE 4. REPAIR WELL 5. OTHER 6. PULL OR ALTER CASING 7. MULTIPLE COMPLETION 8. ABANDON 9. CHANGE PLANS 

## SUBSEQUENT REPORT OF:

10. WATER SHUT-OFF 11. FRACTURE TREATMENT 12. SHOTTING OR ACIDIZING 13. (Other)  1 1/2" Casing 14. REPAIRING WELL 15. ALTERING CASING 16. ABANDONMENT 

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

July 21, 1980

2000' - 75 feet of 4 7/8", 10.5, 1 1/2" Casing

Completed with 4 25/32 Class C and 4 25/32 PZ Mix.

Banded to 1050 pk. ball to 1050 pk.

Top at 2600 ft by Superficial Survey.

Plug down 5:27 p.m. July 21, 1980

Casing shoe at 5035 ft.

Float set at 4991 ft.

Intent to Perforate and Acidize.

RECEIVED

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

RECEIVED

JUL 24 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct.

SIGNED PETER W. CHESTER

(This space for Federal or State office use)

TITLE Secretary

DATE JUL 23, 1980

APPROVED BY PETER W. CHESTER TITLE 13-64 DISTRICT ENGINEER

DATE JUL 25 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other Instructions on Re-  
verse side)Form approved.  
Budget Bureau No. 42-R1421.  
5. LEASE DESIGNATION AND SERIAL NO.  
U.S. 11735

## SUNDY 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" for such proposals.)

1. OIL  GAS  WELL  OTHER
2. NAME OF OPERATOR  
**Fred Pool Drilling Co.**
3. ADDRESS OF OPERATOR  
**437 White Bldg., Roswell, N.M., 88201**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

**1730 FOL, 1980 FEL, lot 1 sec. 13-6-24E  
Chaves County, N.M.**

14. PERMIT NO.

**134**15. ELEVATIONS (Show whether DEP, RT, OR, etc.)  
**3830 ft. 31**

7. UNIT AGREEMENT NAME

8. PARISH OR LEASE NAME  
**Erynberg-Cam Fed.**9. WELL NO.  
**1**10. FIELD AND POOL, OR WILDCAT  
**Und. Wildcat**11. SEC., T., R., M., OR BLK., AND  
SURVEY OR AREA  
**13-6-24E**12. COUNTY OR PARISH  
**Chaves**13. STATE  
**N.M.**

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

## NOTICE OF INTENTION TO:

- FLOW WATER RIOT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)

- PULL OR ACTER CASING   
SHOOT PIPE COMPLETE   
ABANDON   
CHANGE PLANS

## SUBSEQUENT REPORT OF:

- WATER RIOT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other) **XXXXXX Acid Report**

- REPAIRING WELL   
ALTERING CABING   
ABANDONMENT

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIPTION OF PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones per-

18. DRILLED FROM 4840-81 - 13 holes - 2 per foot.

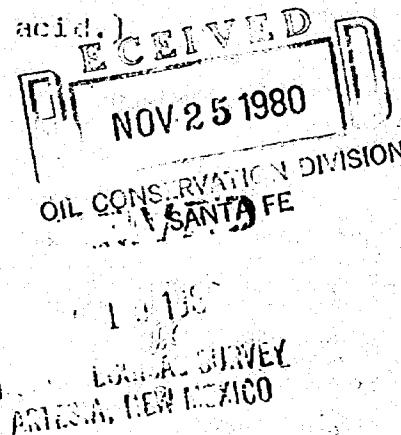
Acidized with 1600 Gal. (500 15% HCl and 1000 gal mud acid.)  
mud acid = 3% \* 12% HCl

1000 cubic feet N2.

Sp. 2 3/3 at **4024** with A.C. Facker

Used Sulfco variable choke.

Cleaned up and prepare to test well with 4 point test!



18. I hereby certify that the foregoing is true and correct

SIGNED John C. Facker  
(This space for Federal or State office use)

TITLE Secretary

DATE 8/18/80

APPROVED BY K-E. Sayles  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

ACCEPTED FOR RECORD

AUG 25 1980  
K-E. Sayles  
U.S. GEOLOGICAL SURVEY  
BOSWELL, NEW MEXICO

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.6.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL  GAN  DRY  Other \_\_\_\_\_b. TYPE OF COMPLETION: NEW  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR: F. J. Pool Drilling Co.

3. ADDRESS OF OPERATOR: Box 1300 Clovis Star Rd., Roswell, N.M. 88201

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

At surface 1980 F.G.L., 1980 F.T.L., of Sec. 13-6S-24E

At top prod. interval reported below 4848 ft.

At total depth 4904 ft.

14. PERMIT NO. 194 DATE ISSUED 4-2-80

15. DATE SPUNDED 5/28/80 16. DATE T.D. REACHED 7/20/80 17. DATE COMPL. (Ready to prod.) 8/25/80 18. ELEVATIONS (DP, REB, RT, GR, ETC.)\* 3898 GR 19. ELEV. CABINHEAD 3898

20. TOTAL DEPTH, MD &amp; TVD 5035 ft. 21. PLUG, BACK T.D., MD &amp; TVD 4984 ft. 22. IF MULTIPLE COMPL., HOW MANY? → 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS XX

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 4848-4854 Penn at present 25. WAS DIRECTIONAL SURVEY MADE YES

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation Density Dual Laterolog, micro-FTL, Perforating Depth Control 27. WAS WELL COMPLETED NOV 25 1980

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	SPUD CONSTRUCTION	ADDITIONAL
13 3/8	13	305 ft.	17"	150 sx Class C	SANT	AFFECulated
8 5/8"	24	1746 ft.	11"	450 Halliburton Lite		"
7 1/2	13	1035 ft.	7 7/8	100 Class C		"
				425 Class C, 425 PCZ		"

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4848-4854v	1600 Gal. (600 gal 15% HCl, 1000 Gal Acid)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

33. DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

Flowing Shut-In

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL-OIL RATIO
8/19/80	72		→			1500	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORR.)
Packer		→	0	84500 OK	0 OK	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS Fred Pool, III

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Dale A. Jones TITLE Secretary

DATE 8/5/80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1421.

5. LEASE DESIGNATION AND SERIAL NO.

RM 21795

6. IN INDEX, ALLOWANCE OR SHARE NAME

7. STATE AGREEMENT NUMBER

8. FARM OR LEASE NAME

9. DRILLING COM. FEDERAL

10. WELL NO.

11. FIELD AND POOL, OR WILDCAT

12. SEC., T., R., M., OR BLK. AND

SURVEY OR AREA

13. COUNTY OR PARISH

14. STATE

15. DIVISION

16. FIELD OFFICE

**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" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

1980 FSL 1980 FEL; Sec. 13-5, S-21E

14. PERMIT NO.

19.

15. ELEVATIONS (Show whether DEP, RT, CH, etc.)

2670 ft

16.

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

NOTICE OF INTENTION TO

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACKURE TREAT

MULTIPLE COMPLETE

FRACKURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON

SHOOTING OR ACIDIZING

ABANDONMENT

REPAIR WELL

CHANGE PLANS

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones penetrated by this work.)

Sept. 23, 1980:

Prolocated 3778 - 83 6 shots 1/ft

3786 - 90 5 shots 1/ft

3792-96 5 shots 1/ft

Acidized with 2500 gallons 12% HCL/3% HF with 1000 SCF/bbl N2. Flowed well back. Intend to frac well.

RECEIVED

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

18. I hereby certify that the foregoing is true and correct

SIGNED

*Freda Cole*

TITLE Secretary

DATE 10-27-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

Please advise as

to results of this \*See Instructions on Reverse Side  
work.

TITLE

ACCEPTED FOR RECORD

DATE

OCT 8 1980

*[Signature]*  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

## SUNDY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir than "APPLICATION FOR PERMIT" for such proposals.)

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR

1300 Clovis Star Rd., Roswell, N.M. 88201

4. LOCATION OF WELL. Report location on charts and in accordance with any State requirements.  
(See notes at #11 below.)

At surface

1980 FSL, 1980 FEL of Sec. 13-65-24E

Chaves County, N.M.

14. PERMIT NO.

194

15. ELEVATION (ft) (or whether DE, RL, etc.)

3898.6L

16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	PULL OR ALTER CASING
FRACTURE TREAT	MULTIPLE COMPLETION
SHOOT OR ACIDIZE	ABANDON
REPAIR WELL	CHANGE PLANS

(Other)

WATER SHUT-OFF	X
FRACTURE TREATMENT	
SHOOTING OR ACIDIZING	
(Other)	

REPAIRING WELL	
ALTERING CASING	
ABANDONING WELL	

17. DESCRIBE PROPOSED OR CONDUCTED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated dates of starting and ending to this work.)

9-29-80 Set retrievable bridge-plug at 3965

Perforated at 3778-3796 - 16 holes - 1 per ft.

Acidized with 2500 gallons MGR 123.

9-30-80 Used 50,000 gallons foam frac. Used 53,000 lbs.

20/40 sand. Pumped in 166bbl/min down tubing and OIL CONSERVATION DIVISION annulus at 3200 lbs./min.

Opened up to flow back load.

NOV 25 1980

SANTA FE

RECEIVED

OCT 10 1980

U.S. GEOLOGICAL SURVEY,  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

*Perry A. L. Jr.*

TITLE Secretary

DATE 10-9-1980

(This space for Federal acceptance for record)

APPROVED BY

*B. Chester*

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY

OCT 15 1980

U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

Instructions on Reverse Side

GEOLOGICAL SURVEY  
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--" for such proposals.)1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Fred Poll Drilling Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rd., Roswell, N. M. 88201

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements.)  
See also space 17 below.  
At surface

1980 FSL, 1980 FEL of Sec. 13 - 6s - 24e

14. PERMIT NO.

194

15. ELEVATIONS (Show whether DE, RT, OR, etc.)

3898 ft.

16.

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

 FULL OR ALTER CASING

## O. SUBSEQUENT REPORT OF:

FRACTURE TREAT

 MULTIPLE COMPLETE WATER SHUT-OFF

SHOOT OR ACIDIZE

ABANDON

 X

REPAIR WELL

 CHANGE PLANS REPAIRING WELL

(Other)

 ALTERING CASING ABANDONMENT

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

10-24-80 Set retrievable bridge-plug at 3800 ft.

Perforated at 3580-3590 and 3697-3707 10 Holes 1/min.

Used 60,000 gallons foam frac. Used 70,000 lbs. 20/40 sand. Total fluid 354 bbls. 20 ball sealers.

10-30-80 Retrieved bridge plug. Set Baker locker set packer at 4024 ft., Otis sliding sleeve at 3994 ft. Prepared to connect to gas line when line is ready.

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

18. I hereby certify that the foregoing is true and correct

SIGNED Penny Poll-Martin  
(This space for Federal or State office use)

TITLE Secretary

DATE 10-27-80

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

\*See Instructions on Reverse Side



## **INSTRUCTIONS**

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See Instructions on items 22 and 24; and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.  
**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.  
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

### **37. SUMMARY OF POROUS ZONES:**

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED; TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				32	GEOLOGIC MARKERS
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		NAME
					TOP
San Andres	275	1289			
Glorietta	1290	2824			
Pueblo	2825	3387			
Abiquiu	3388	4126			
Wolfcamp	4127	4354			
Sedna	4355	4969			
Ediacambria	4970	-			

★ U.S. GOVERNMENT PRINTING OFFICE: 1974-780-680/VIII-238

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE.  
(See other instructions on reverse side)

Form approved  
Budget Bureau No. 42-R355.8.

5. LEASE DESIGNATION AND SERIAL NO.

No. 11795

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynborg Com Fed.

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Dadd Wildcat

11. SECTION, T.L., OR BLOCK AND SURVEY

12. PARISH

Chaves

13. STATE

N.M.

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

1A. TYPE OF WELL: OIL  GAS  OXY  OTHER

1B. TYPE OF COMPLETION:

NEW  WORK  DEEP  PLUG  DIFF.  EGSVR.  Other

1C. NAME OF OPERATOR

Fred Pool Drilling Co.

1D. ADDRESS OF OPERATOR

C/O 1300 Clovis Street N.E. Roswell, N.M. 88201

1E. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

AT SURFACE 1980 FSL, 1980 FT. OF SEC. 13-6s-24e

1F. top prod. interval reported below 3586 ft.

AT TOTAL DEPTH 5035 ft.

NOV 25 1980

OIL CONS.

14. PERMIT NO.

DATE ISSUED

4-2-80

SANTA FE

15. DATE SPILLED TO DATE T.D. REACHED 16. DATE COMPL. (Ready to prod.) 17. ELEVATIONS (F.P. R.R. RT. GR. ETC.)<sup>\*</sup> 18. ELEVATION (F.P. R.R. RT. GR. ETC.)<sup>\*</sup> 19. ELEV. Casinghead

5-22-80 7-20-80 11-10-80

3898.0R

3898

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

5035 ft. 4984 ft.

XX

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

3586-3596 1/4 ft., 3778-3796 ft. 1/ft.

25. WAS DIRECTIONAL SURVEY MADE

yes

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation Density

27. WAS WELL CORED Dual Lateralog Micro-FL, Perforating Depth Control

no

28. Casing Record (Report all strings set in well)

CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	18	305 ft.	17"	150 sx Class C	Circulated
9 5/8	24	1349 ft.	11"	450 Halliburton Lite	"
7 1/2	16.5	5035 ft.	7 7/8"	100 Class C	"
				425 Class C 425 Poz	"

29. Liner Record

SIZE	TOP (MD)	BOTTOM (TD)	BACK CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

30. Production

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

Abo flowing

WELL STATUS (Producing or Shut-in)

Shut-in

DATE OF TEST	TIME TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
10-18-80	72		→	0	1400	0	0
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORR.)	

31. Disposition of Gas (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

Fred Pool, Jr.

32. List of Attachments

33. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *Sante Goal*

TITLE

Secretary

DATE

11-18-80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

## INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

**37. SUMMARY OF POROUS ZONES:**

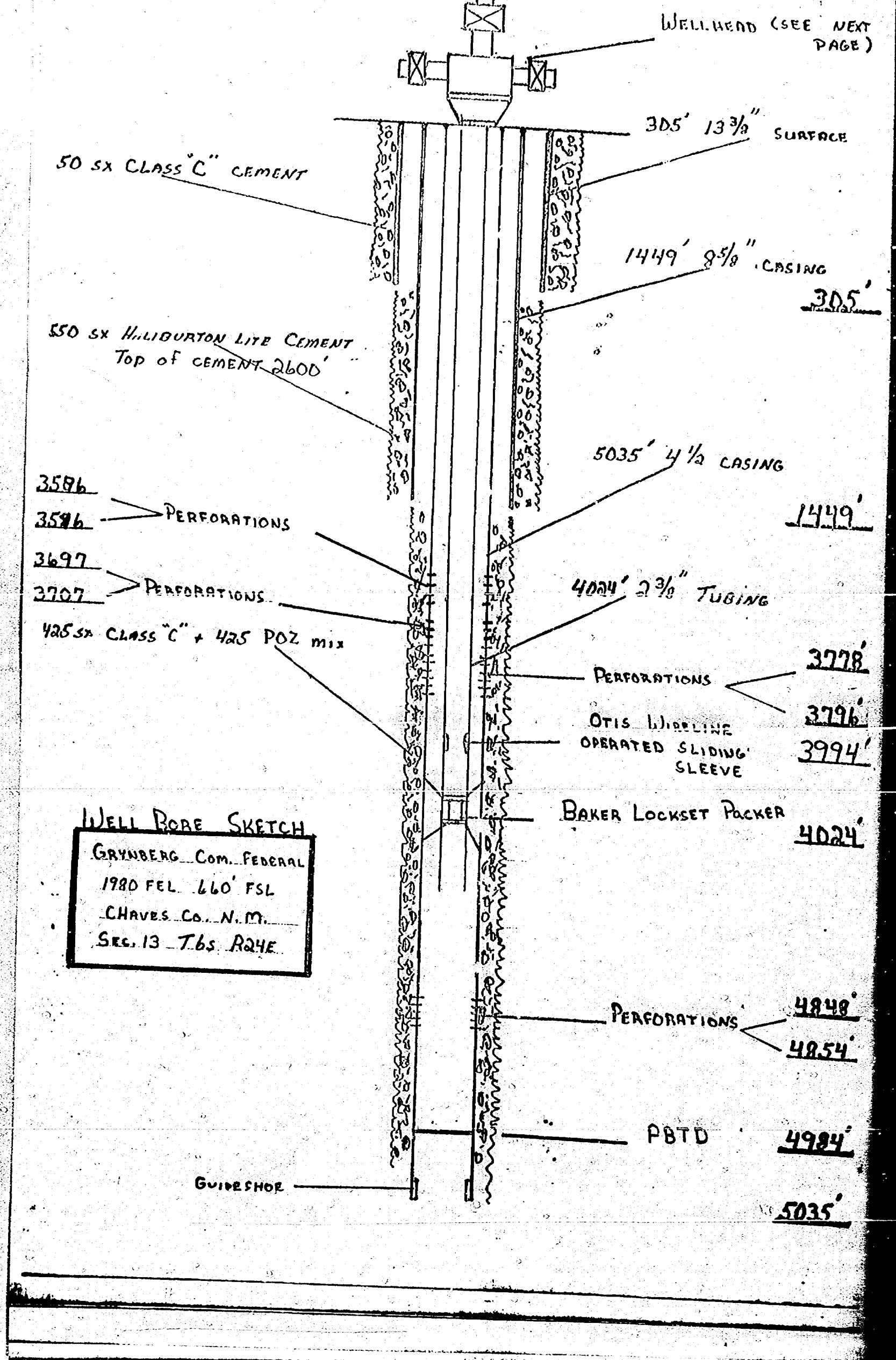
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	275	1289	
Glorietta	1290	2824	
Tubb	2825	3387	
Abo	3387	4126	
Wolfcamp	4127	4354	
Penn	4355	4969	
Precambria	4970	-	

**38. GEOLOGIC MARKERS**

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

WELLHEAD (SEE NEXT PAGE)



# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## WELLHEAD DESCRIPTION

<u>Quantity</u>	<u>Type</u>
1	Gulfco - 4 1/2 8rd FE x 6" /3000 G2SA tubing head assy w/2 2" LPO
2	Gulfco - 2 3/8 EUE 8rd 3000# WOG G-2 gate valve.
1	Gulfco - 2 3/8" EU 8rd run x 2" LPO FS flow Tee.
1	2" LP inlet x 2" LPO 485-5 3000# adi choke assy.
1	2 3/8" 8rd x 12" lgth N-BOTubing nipple.
1	2 3/8" EUE8rd Bull plug tapped 1/2"
1	50# SM 1/2" Camco needle valve.
1	45# LC 1/2" 3000# ashcroft pressure gauge
1	8 5/8 x 4 1/2 " type 75 Larkin casing head
1	2" xH Bull ring
1	2" B-136-CS-02 WKM ball valve.

1980 FEL 1980 FSL

Grynb erg Comm. Federal #1  
T6s R24e Sec. 13  
Chaves County, New Mexico

SYSTEM	SERIES	ROCK UNIT	LITHOLOGY
PERMIAN	OCHOAN	RUSTLER	
		SALADO	
		TANSILL	
		YATES	
		SEVEN RIVERS	
	GUADALUPIAN	QUEEN	
		GRAYBURG	
		SAN ANDRES	
		"GLORIETA"	
		UPPER YESO	
LEONARDIAN	DRINKARD		
	LOWER YESO		
	ABO		
	HUECO		
	VIRGILIAN	CISCO	
PENNSYLVANIAN	MISSOURIAN	CANYON	
	DESMOINESIAN	STRAWN	
	ATOKAN	"ATOKA"	
	MORROWAN	"MORROW"	
	CHESTERAN	"CHESTER"	
MISSISSIPPIAN	MERAMECIAN	MISSISSIPPIAN	
	OSAGIAN	LIME	
	KINDERHOOKIAN		
DEVONIAN	WOODFORD		
SILURIAN	"UNDIFFERENTIATED SILURIAN"		
ORDOVICIAN	MONToya		
	SIMPSON		
	ELLENBURGER		
PRECAMBRIAN	UNNAMED	XXXXX XXXX	

Grynb erg Comm Federal #1  
T6s R24e Sec. 13

Chaves County, NEW MEXICO

**GENERALIZED  
STRATIGRAPHIC SECTION**

SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Operator <b>Fred Pool Jr.</b>		County <b>Chaves</b>	Date <b>11-18-80</b>
Address <b>Box 1300 Clovis Star Rt. Roswell</b>		Lease <b>Grynnberg Com Fed</b>	Well No. <b>#1</b>
Location of Well <b>J</b>	Unit <b>J</b>	Section <b>13</b>	Township <b>6s</b>
		Range <b>24e</b>	

- Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES  NO
- If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Abo		Penn
b. Top and Bottom of Pay Section (Perforations)	3586' - 3586' 3697' - 3707' 3778' - 3796'		4848' - 4854'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

- The following are attached. (Please check YES or NO)

OIL COMMISSION  
SANTA FE

- |     |    |
|-----|----|
| Yes | No |
|-----|----|
- 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 and type of packers and side door chokes, and such other information as may be pertinent.
  - b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
  - c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*
  - d. 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 provided by Rule 112A.)

- List all offset operators to the lease on which this well is located together with their correct mailing address.

Jack Grynberg 1050 17th Street Suite 1950 Denver, Colorado 80265

- Were all operators listed in Item 5 above notified and furnished a copy of this application? YES  NO  . If answer is yes, give date of such notification 11-18-80.

CERTIFICATE: I, the undersigned, state that I am the President of the Fred Pool Drilling Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## MULTIPLE COMPLETION (CONVENTIONAL)

P.1

Grynberg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- 1) Said well is to be completed as a gas-gas and the hydrocarbons from each of the zones can be safely and efficiently produced through one string of tubing and one string of casing.
- 2) The packer used to segregate the separate zones of multiple completion will be a Baker Lockset Packer and shall effectively prevent communication between the two producing zones.
- 3) The two producing zones are the ABO and Penn respectively.
- 4) Form C-107 attached hereto.
- 5) For administrative approval;

- a) Diagrammatic sketch of the Multiple completion:
  - 1) Showing all casing strings
  - 2) Diameters and setting depths
  - 3) Centralizers and/or turbolizers and location thereof
  - 4) Quantities used and top of cement
  - 5) Perforated intervals
  - 6) Tubing strings, including diameters and setting depth
  - 7) Location of packers
  - 8) Sleeves
- b) Plat showing the location of all wells on applicants lease
  - 1) All offset wells on offset leases
  - 2) The names and addresses of operators of leases
  - 3) Evidence that said offset operators have been furnished with copies of the application

FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

MULTIPLE COMPLETION  
(CONVENTIONAL)

P.2

Gryberg Com Federal #1  
T6s R24e Sec. 13  
1980 FEL 1980 FSL  
Chaves County, New Mexico

- x 4) Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforations indicated thereon.
- x c) Logs
  - 1) Computer processed log.
  - 2) Perforating depth control
  - 3) Casing collar log and perforating record
  - 4) Dual Laterolog Micro-SFL
- x d) Drilling status reports
  - 1) Well completion reports

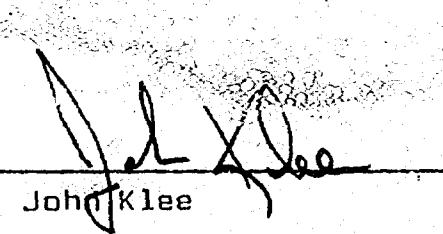
FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

AFFIDAVIT OF MAILING OR DELIVERY

Application for Multiple Completion  
Grynberg Com Federal #1  
Sec. 13 T6s R24e  
Chaves County, New Mexico

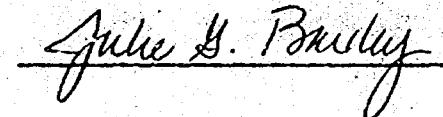
I hereby certify that I have this day mailed a copy of Form C-107  
to Jack Grynberg, lease holder of lease No. 11795 Sec.12 T6s R24e  
north offset to captioned well.



John Klee

STATE OF NEW MEXICO  
COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 19th  
day of November, 1980, by John Klee.



Julie S. Bowley

My commission expires

Oct. 15, 1984

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

## 1a. TYPE OF WORK

 DRILL DEEPEN PLUG BACK

## b. TYPE OF WELL

OIL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE 

## 2. NAME OF OPERATOR

Fred Pool Drilling Company

## 3. ADDRESS OF OPERATOR

409 White Building, Roswell, New Mexico 88201

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

1980' FSI &amp; 1980' FEL of Sec. 13

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

27 air miles north-northeast of Roswell, N. M.

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LUBAR LINE, FT.  
(Also to nearest drilg. unit line, if any)

660'

## 16. NO. OF ACRES IN LEASE

2360

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

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

N.A.

## 19. PROPOSED DEPTH

5500 Granite Wash

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DEP, RT, GR, etc.)

3898 G. L.

## 22. APPROX. DATE WORK WILL START\*

April 15, 1980

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
1 7/8"	13 3/8"	48#	400' +/-	Circ.
12 1/4 or 11"	8 5/8"	24#	1500' +/-	Circ.
7 7/8"	4 1/2"	10.5#	TD	1000' above pay

Selectively perforate and treat pay zone.

Gas is not dedicated to a pipeline.

Attached are: Survey Plat (C-102)

Supplemental Drilling Data

Surface Use Plan



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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED Fred Pool, Jr. TITLE Owner DATE 4-1-80  
(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

## DEED LOCATION AND SURVEYAGE DEDICATION PLAT

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

Operator Fred Pool Drilg. Co.			Lease Grynberg, Federal		Well No. 1
Unit Letter J	Section 13	Township 6S	Ranch 24E	County Chaves	
Actual Postage Location of Well:					
1280 feet from the East		Line rod	1980	feet from the South	line
Ground Level Elev. 3896.0	1 Refracting Formation Penn	Pool	Wildcat	Dedicated Acreage 160 1/4	
320 Permo-Penn					

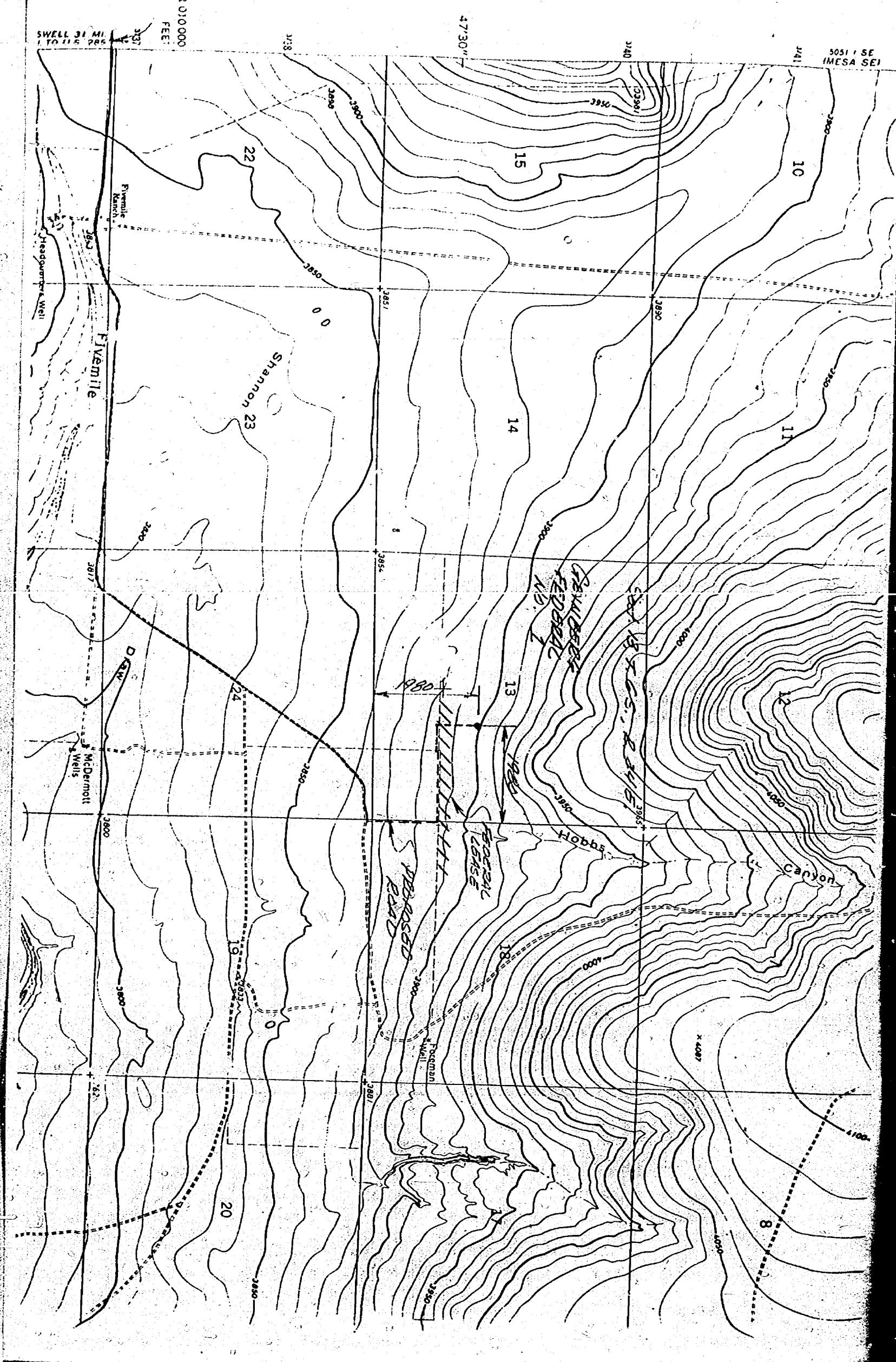
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is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

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 assignable 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.

<p><i>E½ Dedicated (Permo-Penn)</i></p> <p><i>SE¼ Dedicated (A60)</i></p> <p>Section 13, T. 6 S., R. 24 E., N.M.P.M.</p>		<p>Fred Pool, Jr (W.I.)</p> <p>REC'D NOV 2</p> <p>OIL CONS SA</p> <p>1980 Fred Pool, Jr.</p> <p>Name: Position: Company: Date:</p> <p>CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>John D. Jaquess, P.E. &amp; L.S.</p> <p>Registered Professional Engineer and Land Surveyor</p> <p>John D. Jaquess</p> <p>Date Surveyed: March 22, 1980</p> <p>March 22, 1980</p> <p>John D. Jaquess, P.E. &amp; L.S.</p> <p>Registered Professional Engineer and Land Surveyor</p> <p>John D. Jaquess</p> <p>Certificate No.: 6290</p>	
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**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

**OPERATOR'S COPY**

SUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424  
LEASE DESIGNATION AND SERIAL NO.  
**NM-11795**

**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" for such proposals.)

1. OIL  GAS  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Company

3. ADDRESS OF OPERATOR

409 White Bldg., Roswell, New Mexico 88201  
(See also space 17 below)  
AT SURFACE

1980' FSL & 1980 PEL of Sec. 13

11. PERMIT NO.

15. LOCATION (Show whether pp, ir, or etc.)

3898 G. L.

13-6S-24E

12. COUNTY OR PARISH 13. STATE

Chaves

N. M.

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRAC TREATMENT

MULTIPLE COMPLETION

FRAC TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON

SHOOTING OR ACIDIZING

ABANDONMENT

REPAIR WELL

CHANGE PLANS

(Other)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The rotary rig, which was scheduled to drill this well, has been delayed with a fishing job on another well; and as we plan to be drilling over May 31, 1980, the lease expiration date, it may be necessary that we drill with a cable tool rig until the rotary rig becomes available.

Anticipated spud date is May 28, 1980.

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

**RECEIVED**

MAY 21 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

James A. Knauf

(This space for Federal or State office use)

TITLE Agent

DATE May 19, 1980

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

MAY 21 1980

DATE

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
5. FEDERAL DESIGNATION AND SERIAL NO.  
N.M.11795

6. IN INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO. Grynberg-Com Fed

10. FIELD AND POOL, OR WILDCAT Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 13-65-24E

12. COUNTY OR PARISH Chaves 13. STATE N.M.

## 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" for such proposals.)

RECEIVED

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR Fred Pool Drilling Co.

JUN 6 1980

3. ADDRESS OF OPERATOR

U.S. GEOLOGICAL SURVEY

409 White Bldg. Roswell, N.M. 88201, NEW MEXICO

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

At surface

1980' FSL &amp; 1980 FEL of Sec. 13

14. PERMIT NO.

15. ELEVATION (Show whether DR. HT. OR. etc.)

3808 S.L.

16.

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

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TENET WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETION

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other)

Surface Gasing

X

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 3, 1980

Run 305 feet of 13 3/8" surface casing 48# H6J 8rd ST&amp;C

Cemented with 150 # Class C Cement

Cement circulated.

Plugged down 2:00 p.m.

J.D.C. 6-4-80 and 6-5-80

NOV 25 1980

OIL CONSERVATION DIVISION  
SANTA FE

18. I hereby certify that the foregoing is true and correct

SIGNED

*Pete Jones*

TITLE Secretary

DATE 6-5-80

(This space for Federal or State office use)

ACTING DISTRICT ENGINEER

APPROVED BY

TITLE

DATE JUN 06 1980

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.

N.M. 11795

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Grynborg-Comm Federal

D. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC. T., R., M., OR BLK. AND  
SURVEY OR AREA

13-6S-24E

12. COUNTY OR PARISH

Chaves

13. STATE

N.M.

1. OIL  Y. GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR  
437 White Bldg. Roswell, N.M. 88201

U.S. GEOLOGIC

SURVEY

See also space 17 below.)  
At surface1980 FSL; 1980 FEL of Sec. 13-6S-24E  
Chaves County, N.M.

14. PERMIT NO.

194

15. ELEVATIONS (Show whether DE, RT, GR, etc.)

3898.0L

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

WATER SHUT-OFF

FRACTURE TREAT

FRACTURE TREATMENT

SHOOT OR ACIDIZE

SHOOTING OR ACIDIZING

REPAIR WELL

(Other)

CHANGE PLANS

REPAIRING WELL

ALTERING CASING

ABANDONMENT

(Other) Intermediate casing 8 5/8

(Note: Report results of initial completion on Well Completion or Recompletion Log and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent locations and measured and true vertical depths for all markers and zones pertinent to this work.)

June 8, 1980

NOV 25 1980

Set 1149 Ft. new 24# 8 5/8 casing. Cemented with 550 sx cement;

(450 Halliburton Lite, 100 sx Class C). Cement circulated. Plug SANTA FE down at 9: a.m.

WOC 24hrs. Tested BOP and casing to 500# for 30 minutes.  
No pressure drop.

Started drilling at 2 p.m. July 9, 1980

18. I hereby certify that the foregoing is true and correct

SIGNED

*Peter W. Gleser*

TITLE Secretary

DATE 7-11, 1980

(This space for Federal or State office use)

APPROVED BY (Sig. G34) PETER W. GLESTER TITLE ACTING DISTRICT ENGINEER

DATE JUL 17, 1980

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

**OPERATOR'S COPY**  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TRIPPLICATE.  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424  
5. LEASE DESIGNATION AND SERIAL NO.  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
9. WELL NO.  
10. FIELD AND POOL, OR WILDCAT  
11. SEC., T., R., M., OR BLK., AND  
SURVEY OR AREA  
12. COUNTY OR PARISH  
13. STATE

JUL. 11798

**SUNDY 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" for such proposals.)1.  OIL WELL     GAS WELL     OTHER

2. NAME OF OPERATOR

3. ADDRESS OF OPERATOR

437 White Sldg., 3030 E. 1st, Tuc. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface1330 ft. : 1980 FSL inf. 13-61-2-2  
Chaves County, N.M.

14. PERMIT NO.

173

15. OPERATIONS (Show whether P.R., RT, GA, etc.)

P.R. RT GA

16.

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

## NOTICE OF INTENTION TO:

 TEST WATER SHUT-OFF FRACTURE TREAT DUST OR ACIDIZE PERFORATE WELL OTHER PULL OR ALTER CASING MULTIPLE COMPLETION ABANDON\* CHANGE PLANS

## SUBSEQUENT REPORT OF:

 WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) 1 1/2" casing REPAIRING WELL ALTERING CASING ABANDONMENT\*

XX

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

July 21, 1980

1. 1,345 feet of 4E, 10.5, 1 1/2" Casing

2. Cased with 3 1/2" Class C and 4 2/5" x 4 PCZ mix.

3. 1 1/2" 1b spcy. ball. to 350 ft.

4. Top - 2600 ft by subsurface Survey.

Flug down 5:27 p.m. July 21, 1980

Bottom - 1535 ft.

Total net - 499 ft.

Intend to Perforate and Acidize.

RECEIVED  
NOV 25 1980  
OIL CONSERVATION DIVISION  
SANTA FE

RECEIVED

JUL 24 1980

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

Peter W. Chester

TITLE

Secretary

DATE 7-23,- 80

(This space for Federal or State office use)

APPROVED BY (Sig. S.G.) PETER W. CHESTER TITLE: ANGUS DISTRICT ENGINEER

CONDITIONS OF APPROVAL, IF ANY:

DATE JUL 25 1980

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.  
J.J. 11795

6. INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. PARISH OR LEASE NAME

Crynberg-Cam Fed.

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT  
Und. Wildcat11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

13-66-24E

12. COUNTY OR PARISH

Chaves

13. STATE

N.M.

1. OIL  GAS  WELL  OTHER

2. NAME OF OPERATOR

Fred Pool Drilling Co.

3. ADDRESS OF OPERATOR

137 White Bldg. Room 11, P.O. Box 88201  
See also space 17 below.)

At surface

1380 FUL, 1380 FUL or 1380 17-66-24E

Chaves County, N.M.

14. PERMIT NO.

134

15. ELEVATIONS (Show whether DE, RT, OR, etc.)

3300. 35

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

## SUBSEQUENT REPORT OF:

FRACTURE TREAT

MULTIPLE COMPLET

REPAIRING WELL

SHOOT OR ACIDIZE

ABANDON

ALTERING CASING

REPAIR WELL

CHANGE PLANS

ABANDONMENT

(Other)

(Other) XXXXX Acid Report

X

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

27. Drilled from 4848-8 - 13 holes - 2 per foot

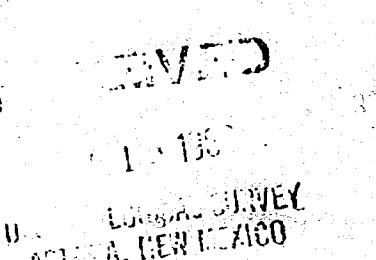
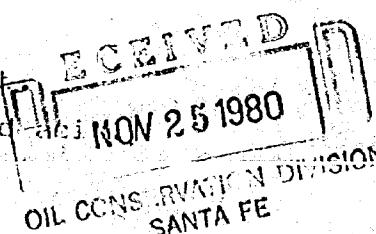
Acidized with 1600 Gal. (500 15% HCl and 1000 gal mud acid - mud acid = 3% \* 12% HCl)

1000 Cubic feet N2.

SP 2 3/8 at 4084 with 3 1/2 Facker

150 ft Gulfco variable choke.

Cleaned up and prepare to test well with 4 point test!



18. I hereby certify that the foregoing is true and correct

SIGNED

J. E. S.

Saylor

TITLE Secretary

DATE 8/18/80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

ACCEPTED FOR RECORD

DATE

\*See Instructions on Reverse Side

AUG 25 1980  
J-E Saylor  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.6.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

16. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_17. TYPE OF COMPLETION: SW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. CAVR.  Other \_\_\_\_\_

18. NAME OF OPERATOR: Full Pool Drilling Co.

19. ADDRESS OF OPERATOR: Box 1300 Clovis Star Rd., Roswell, N.M. 88201

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

At surface 1080 FSL, 1980 FEL, of Sec. 13-6S-24E

At top prod. Interval reported below 4848 ft.

At total depth 4848 ft.

14. PERMIT NO. 194 DATE ISSUED 4-2-80

15. DATE SPUNDED 5/28/80 16. DATE T.D. REACHED 7/20/80 17. DATE COMPL. (Ready to prod.) 8/25/80 18. ELEVATIONS (FT, BBL, FT, OR, ETC.): 3898 GR 19. ELEV. CASING HEAD 3898

20. TOTAL DEPTH, MD &amp; TVD 5035 FT. 21. PLUG, BACK T.D., MD &amp; TVD 4984 FT. 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 4848-4854 Fenn

25. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation Density 26. WAS DIRECTIONAL SURVEY MADE Dual Laterolog Micro-Gamma, Perforating Depth Control SANTA FE NO

27. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	13	305 FT.	17"	150 sx Class C	Circulated
8 5/8"	24	1449 FT.	11"	450 Halliburton Lite	"
7 1/2	10	4035 FT.	7 7/8	100 Class C	"
				425 Class C, 425 PCZ	"

28. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

31. PERFORATION RECORD (Interval, size and number)

4848-4854 13 Holes 2 per ft.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4848-4854	1500 Gal. (600 gal 15% ICL, 10000 Mud Acid)

33. DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

8/19/80 Flowing

WELL STATUS (Producing or shut-in) Shut-In

DATE OF TEST HOURS TESTED CHORE SIZE PROD'N. FOR TEST PERIOD OIL-BBL. GAS-MCF. WATER-BBL. GAS-OIL RATIO

8/19/80 72 → 1500

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL-BBL. GAS-MCF. WATER-BBL. OIL GRAVITY-API (CORR.)

Packer → 0 84500 BBL 0 BBL

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

Fre d Pool, III

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Patricia L. Jones TITLE Secretary

DATE 8/9/80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424  
3. LEASE DESIGNATION AND SERIAL NO.

NM 21795

4. INDIAN ALLOTTEE OR TRIBE NAME

## 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--" for such proposals.)1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

Prest Pool Drilg. Co.

3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rt. 3 well, N.M. 88001

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)

At surface

19°0' FSL 1980 FEL; Sec. 13-6 S-24E

14. PERMIT NO.

101

15. ELEVATIONS (Show whether DE, RT, CR, etc.)

3610 ft

16.

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

## NOTICE OF INTENTION TO

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETION

ABANDON\*

CHANGE PLANS

REPAIR WELL

Other

(Other)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and  
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent  
to this work.)

Sept. 23, 1980:

Perforated 3770 - 83	6 shots	1/ft
3786 - 90	5 shots	1/ft
3792-96	5 shots	1/ft

Acidized with 2500 gallons 12% HCl/3% NF with 1000 SCF/bbl N2. Plowed well  
back. Intend to frac well.

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Completion or Recompletion Report and Log form.)

RECEIVED

NOV 25 1980

OIL CULTIVATION DIVISION

SANTA FE

18. I hereby certify that the foregoing is true and correct.

SIGNED: *F. Costa*

TITLE Secretary

DATE 9-27-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

Please advise as  
to results of this \*See Instructions on Reverse Side  
work.

TITLE

ACCEPTED FOR RECORD

DATE

OCT 18 1980

U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

## GEOLOGICAL SURVEY

## SUNDY 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" for such proposals.)OIL  GAS  WELL  OTHER

## 2. NAME OF OPERATOR

Fred Pool Drilling Co.

## 3. ADDRESS OF OPERATOR

1300 Clovis Star Rd., Roswell, N.M. 88201

4. LOCATION OF WELL (Report seat on clearly and in accordance with any State requirements.  
See also Item 17 below.)  
At surface

1980 FSL, 1980 FEL of Sec. 13-65-24E

Chaves County, N.M.

## 14. PERMIT NO.

194

## 15. ELEVATION (Show whether or; in, etc.)

3898.6L

## 16.

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

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF  
 FRACTURE TREAT  
 SHOOT OR ACIDIZE  
 REPAIR WELL  
 (Others)

PULL OR ALTER Casing  
 MULTIPLE COMPLETION  
 GROUTING  
 CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF  
 FRACTURE TREATMENT  
 SHOOTING OR ACIDIZING  
 (Other)

REPAIRING WELL  
 ALTERING CASING  
 ABANDONING WELL

17. TO SUBMIT PROPOSED OPERATIONS OFFICIALLY STATE all pertinent details, and give pertinent dates, including estimated date of starting and completion of proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones penetrated by this work.)

9-29-80 Set retrievable bridge-plug at 3965  
 Perforated at 3778-3796 - 16 holes - 1 per ft.  
 Acidized with 25.00 gallons MGR 123.

9-30-80 Used 50,000 gallons foam frac. Used 53,000 lbs.  
 20/40 sand. Pumped in 16Bbl/min down tubing and  
 annulus at 3200 lbs./min.  
 Opened up to flow back load.

NOV 25 1980  
 OIL CONSERVATION DIVISION  
 SANTA FE

RECEIVED

OCT 10 1980

U.S. GEOLOGICAL SURVEY  
 ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED *Perry J. H. Jr.* TITLE Secretary

(This space for Federal acceptance for record)

APPROVED BY *B. Chester* TITLE  
 CONDITIONS OF APPROVAL, IF ANY  
 OCT 15 1980

DATE 10-9-1980

U.S. GEOLOGICAL SURVEY  
 ROSWELL, NEW MEXICO Instructions on Reverse Side

N M 11795

6. IF INDIAN, ALLOTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

71

10. FIELD AND POOL, OR WILDCAT

Und. Wildcat

11. SEC., T., R., M., OR BLK. AND

SURVEY OR AREA

13-6S-24e

12. COUNTY OR PARISH

Ohaves

NM

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

## NOTICE OF INTENTION TO:

## OR SUBSEQUENT REPORT OF:

 TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF

NOV 9 1980

 FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT

REPAIRING WELL

 SHOOT OR ACIDIZE ABANDON\* SHOOTING OR ACIDIZING

ALTERING CASING

 REPAIR WELL CHANGE PLANS (Other)

ABANDONMENT

 (Other)

(Note: Report results of multiple operations on well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and completion of work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all intervals and tools per-

OI

SANTA FE

10-24-80 Set retrievable bridge-plug at 3800 ft.

Perforated at 3586-3590 and 3697-3707 10 Holes 1/min.

Used 60,000 gallons foam frac. Used 70,000 lbs. 20/40 sand. Total fluid 354 bbls. 20 ball sealers.

10-30-80 Retrieved bridge plug. Set Baker locker set packer at 4024 ft/, Otis sliding sleeve at 3994 ft. Prepared to connect to gas line when line is ready.

18. I hereby certify that the foregoing is true and correct

SIGNED

Henry Pool-Martin

TITLE Secretary

DATE 10-27-80

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved,  
Budget Bureau No. 42-R555.6

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

## b. TYPE OF COMPLETION:

NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

## 2. NAME OF OPERATOR

Fred Pool Drilling Co.

## 3. ADDRESS OF OPERATOR

Box 1300 Clovis Star Rt., Roswell, N.M., 88201

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

At surface 1980 FSL, 1980 FFL, SEF Sec. 13-6S-24E

At top prod. Interval reported below 4355 ft.

At total depth 5035 ft.

14. PERMIT NO. 194 DATE ISSUED 4-2-80

15. DATE SPILLED 5/28/80 16. DATE T.D. REACHED 7/20/80 17. DATE COMPL. (Ready to prod.) 8/25/80 18. ELEVATIONS (DP, RKB, RT, OR, ETC.)\* 3898 GR 19. ELEV. CASINGHEAD 5309

20. TOTAL DEPTH, MD &amp; TVD 5035 ft. 21. PLUG, BACK T.D., MD &amp; TVD 4984 ft. 22. IF MULTIPLE COMPL., HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) NOV 25 1980 25. WAS DIRECTIONAL SURVEY MADE

4848-4854 Penn at present

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation SANTAYNE 27. WAS WELL CORED Dual Laterolog Micro-SFL, Perforating Depth Control no

CASING RECORD (Report all strings set in well)				
CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD
13 3/8	48#	305 ft.	17"	50 sx Class C
8 5/8"	24#	1449 ft.	11"	450 Halliburton Lite
4 1/2	10.5#	5035 ft.	7 7/8	400 Class C
				425 Class C, 425 POZ

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

31. PERFORATION RECORD (Interval, size and number)					32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED						
4848-4854v	1600 Gal.	(600 gal. 15% HCl, 1000 mud Acid)					

33. PRODUCTION RECORD					PRODUCTION			WELL STATUS (Producing or Shut-In)	
DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				Penn at present			Shut-In	
	Flowing								
8/19/80	HOURS TESTED 72	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO		
			→		1500				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.		OIL GRAVITY-API (CODE)		
	Packer	→	0	8K1 500 QKI	0 QK				

34. DISPOSITION OF O&G (Sold, used for fuel, vented, etc.)					TEST WITNESSED BY		
SIGNED <i>Patti Bel Jones</i> TITLE Secretary					DATE 8/9/80		

35. LIST OF ATTACHMENTS				

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.				
SIGNED <i>Patti Bel Jones</i>	TITLE Secretary			

\*(See Instructions and Spaces for Additional Data on Reverse Side)

## **INSTRUCTIONS**

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified,

for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

### **37. SUMMARY OF POROUS ZONES:**

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	275	1289	
Glorietta	1290	2824	
Tubb	2835	3387	
Abel	3388	4126	
Wolfcamp	4127	4354	
Benn	4355	4969	
Pre cambria	4970		
Unconformable			

38.

## GEOLOGIC MARKERS

★ U.S. GOVERNMENT PRINTING OFFICE: 1974-780-680/VIII-238

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*  
(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

1A. TYPE OF WELL:  OIL WELL  GAS WELL  DRY  Other

1B. TYPE OF COMPLETION:

NEW  WORKOVER  DEEPEN  PLUG BACK  DUFF RESUME  Other

1C. NAME OF OPERATOR:

Fred Pool Drilling Co.

1D. ADDRESS OF OPERATOR:

Box 1300 Clovis Star Rd., Roswell, N.M. 88201

1E. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1980 FSL, 1980 FEL of Sec. 13-6s-24e

1F. top prod. interval reported below 3586 ft.

At total depth 5035 ft.

14. PERMIT NO. 19 DATE ISSUED 4-2-80

12. COUNTY OR PARISH Chaves 13. STATE N M

15. DATE SPILLED 5-20-80 16. DATE T.D. REACHED 7-20-80 17. DATE COMPL. (Ready to prod.) 11-10-80 18. ELEVATIONS (F.P., R.R., RT. GR. ETC.)\* 3898.68 19. ELEV. CABIN/HEAD 3898

20. TOTAL DEPTH, MD & TVD 5035 ft. 21. PLUG, BACK T.D., MD & TVD 4981 ft. 22. IF MULTIPLE COMPL., HOW MANY? 1 23. INTERVALS DRILLED BY ROTARY TOOLS XX CABLE TOOLS

24. PRODUCING INTERVAL(S) OR THIS COMPLETION (TOP, BOTTOM, NAME (MD AND TVD)\* 3586 - 3596 1/8 ft. 3778 - 3796 ft. 1/ft. NOV 25 1980 25. WAS DIRECTIONAL SURVEY MADE SIONES

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Formation Density 27. WAS WELL CORED Dual Laterolog Micro-SFL, Perforating Depth Configuration SANTA FE no

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	18"	305 ft.	17"	150 sx Class C	Circulated
9 5/8	24"	1449 ft.	11"	450 Halliburton Lite	"
7 1/2	10.5	5035 ft.	7 7/8"	100 Class C 425 Class C 425 Poz	"

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4804	4804

31. PERFORATION RECORD (Interval, size and number)

3586-3596 1 per ft.  
3778-3796 16 holes 1 per ft.  
3697-3707 1 per ft.

32. DEPTH INTERVAL (MD)	ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	AMOUNT AND KIND OF MATERIAL USED
3778-3796	2500 Gals. 12% HCL/3%	with 1000 SFC/bbl N2
3586-3596	1500 gals. 28% HCl	
3697-3707	1500 gals. 28% HCl	

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
	Abo flowing				Shut-in	

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
11-5-80	72	72	→	0	1400	0	0
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	→ OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Fred Pool, Jr.

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *Sentie Pool*

TITLE Secretary

DATE 11-18-80

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for Items 22 and 24 above.)

**37. SUMMARY OF POROUS ZONES:**

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	33. GEOLOGIC MARKERS		
				NAME	TOP	MEAS. DEPTH
San Andres	275	1299				
Glorietta	1290	2624				
Tubb	2825	3387				
Abo	330	4126				
Wolfcamp	4127	4354				
Penn	4355	4969				
Precambria	4970	-				

# FRED POOL DRILLING, INC.

Suite 437, White Building  
Roswell, New Mexico 88201

## WELLHEAD DESCRIPTION

<u>Quantity</u>	<u>Type</u>
1	Gulfco - 4 1/2 Brd FE x 6"/3000 G2SA tubing head assy w/2 2" LPO
2	Gulfco - 2 3/8 EUE 8rd 3000# WOG G-2 gate valve.
1	Gulfco - 2 3/8 " EU 8rd run x 2" LPO FS flow Tee.
1	2" LP inlet x 2" LPO AB-75 3000# adi choke assy.
1	2 3/8" 8rd x 12" lgth N-80Tubing nipple.
1	2 3/8" EUE8rd Bull plug tapped 1/2"
1	50# BM 1/2" Cemco needle valve.
1	45# LC 1/2" 3000# ashcroft pressure gauge
1	8 5/8 x 4 1/2 " type 75 Larkin casing head
1	2" xH Bull ring
1	2" B-136-CS-02 WKM ball valve.

WELL HEAD (SEE NEXT PAGE)

50 SX CLASS "C" CEMENT

305' 13 3/8" SURFACE

550 SX HILLBURTON LITE CEMENT  
TOP OF CEMENT 2600'

3586

3586 PERFORATIONS

3697

3707 PERFORATIONS

425 SX CLASS "C" + 425 POZ mix

WELL BORE SKETCH

GRYNBERG Com. FEDERAL

1980 FEL. 660' FSL

CHAVES CO., N.M.

SEC. 13 T6S R24E

1449' 8 5/8" CASING

305'

5035' 4 1/2" CASING

1449'

4024' 2 3/8" TUBING

3778'

PERFORATIONS

OTIS WIRELINE  
OPERATED SLIDING  
SLEEVE

BAKER LOCKSET PACKER

4024'

PERFORATIONS

4848'

4054'

PBTD

4984'

5035'

GUIDE SHOE

Strynberg Com Federa  
1980 FEL 1980 FSL  
T6s R24e Sec. 13

Gryberg Comm. Federal #1  
T6s R24e Sec. 13  
Chaves County, New Mexico

SYSTEM	SERIES	ROCK UNIT	LITHOLOGY
PERMIAN	GUADALUPIAN	OCHOAN	RUSTLER SALADO TANSILL YATES SEVEN RIVERS
		QUEEN	
	LEONARDIAN	GRAYBURG	
		SAN ANDRES	
		"GLORIETA"	
		UPPER YESO	
		DRINKARD	
PENNSYLVANIAN	WOLFCAMPIAN	LOWER YESO	
		ABO	1210' 1280' 2826' 3384' 4354'
		HUECO	
		VIRGILIAN	
		CISCO	
	MISSISSIPPIAN	MISSOURIAN	CANYON
		DESMOINESIAN	STRAWN
		ATOKAN	"ATOKA"
		MORROWAN	"MORROW"
		CHESTERAN	"CHESTER"
MISSISSIPPIAN	DEVONIAN	MERAMECIAN	MISSISSIPPIAN
		OSAGIAN	LIME
	KINDERHOOKIAN		
		WOODFORD	
ORDOVICIAN	SILURIAN		"UNDIFFERENTIATED SILURIAN"
PRECAMBRIAN		MONToya	
		SIMPSON	
		ELLENBURGER	
		UNNAMED	XXXXX XXXXX

Gryberg Comm Federal #1  
T6s R24e Sec. 13  
Chaves County, NEW MEXICO

**GENERALIZED  
STRATIGRAPHIC SECTION**

ROUGH

dr/

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7113

Order No. R- 6555

~~XX~~  
APPLICATION OF FRED POOL, JR.  
FOR A DUAL COMPLETION, CHAVES  
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

*Dale*  
*Jahr*  
This cause came on for hearing at 9 o'clock a.m. on  
December 30, 1980, at Santa Fe, New Mexico, before  
Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of January, 19 81, the  
Division Director, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Division has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Fred Pool, Jr.,  
seeks authority to complete his Grynberg Com Fed. Well No. 1  
Well No. XXXXXXXX, located in Unit J of Section 13, Town-  
ship 6 South, Range 24 East, NMPM, Chaves  
County, New Mexico, as a dual completion (conventional) to  
combination tubing/casing.

*xoxkx*  
produce gas from the Abo and Pennsylvanian formations with  
separation of the zones to be achieved by means of a packer  
at approximately 4024 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Fred Pool, Jr.,  
is hereby authorized to complete ~~the~~ <sup>his</sup> Grynberg Com Fed.

Well No. 1, located in Unit J of Section 13,

Township 6 South, Range 24 East, NMPM, Chaves

County, New Mexico, as a dual completion (conventional)  
(combination)  
(tubingless)

~~xxokk~~  
to produce gas from the Abo and Pennsylvanian formations through  
the casing tubing annulus and the tubing respectively,  
with separation of the zones achieved by means  
of a packer set at approximately 4024 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take

Packer leakage tests upon completion and  
annually thereafter during the Annual gas Well Shut-in  
Pressure Test Period for the Southeast New Mexico. Pool.

(2) That 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.