

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



GARREY CARRUTHERS  
GOVERNOR

May 22, 1987

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

Amoco Production Company  
P. O. Box 3092  
Houston, Texas 77253

Gentlemen:

In accordance with the provisions of Division Order No. R-7556 entered on June 19, 1984, the Oil Conservation Division is reopening Case No. 8190 in order to give all interested parties in the Bravo Dome 640-Acre Area in Union, Harding, and Quay Counties, New Mexico, the opportunity to appear and show cause why said Bravo Dome 640-Acre Area should not be developed on less than 640-acre spacing and proration units.

This case will be heard before an examiner on June 3, 1987, in the Oil Conservation Division Conference Room, State Land Office Building, Santa Fe, New Mexico, at 8:15 a.m. A copy of the docket for this hearing is enclosed.

Sincerely,

*Florene Davidson*

Florene Davidson  
OC Staff Specialist

enc.

cc: Cities Service Oil & Gas Corporation



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
 OIL CONSERVATION DIVISION

TONEY ANAYA  
 GOVERNOR

June 20, 1984

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

Mr. Clyde Mote, Attorney  
 Amoco Production Company  
 P. O. Box 3092  
 Houston, Texas 77253

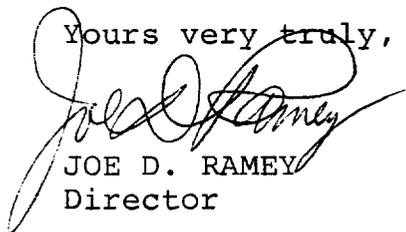
Re: CASE NO. 8190  
 ORDER NO. R-7556

Applicant:  
Amoco Production Company

Dear Sir:

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

Yours very truly,

  
 JOE D. RAMEY  
 Director

JDR/fd

Copy of order also sent to:

Hobbs OCD           x            
 Artesia OCD           x            
 Aztec OCD                           

Other William F. Carr, Thomas Kellahin, Ernest Padilla, Arturo Jaramillo, Owen Lopez

BRAVO DOME CARBON DIOXIDE GAS UNIT

UNION COUNTY, NEW MEXICO

TOWNSHIP 18 NORTH, RANGE 34 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 18 NORTH, RANGE 35 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 18 NORTH, RANGE 36 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 18 NORTH, RANGE 37 EAST, NMPM  
Section 6 and 7: All  
Sections 18 and 19: All  
Section 30 and 31: All

TOWNSHIP 19 NORTH, RANGE 34 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 19 NORTH, RANGE 35 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 19 NORTH, RANGE 36 EAST, NMPM  
Section 16: All  
Section 18: S/2  
Sections 19 and 20: All  
Section 21: W/2, W/2 NE/4 and SE/4 NE/4  
Section 26: S/2 S/2  
Section 28: W/2  
Sections 29 through 36: All

TOWNSHIP 20 NORTH, RANGE 34 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 20 NORTH, RANGE 35 EAST, NMPM  
Section 3: W/2  
Sections 4 through 10: All  
Section 11: SW/4  
Section 14: NW/4  
Sections 15 through 22: All  
Sections 23: NW/4  
Sections 27 through 34: All

TOWNSHIP 21 NORTH, RANGE 34 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 21 NORTH, RANGE 35 EAST, NMPM

Sections 1 through 24: All  
Section 25: N/2 and SW/4  
Section 26: All  
Section 27: NE/4 and N/2 NW/4  
Sections 28 through 33: All

TOWNSHIP 22 NORTH, RANGE 30 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 31 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 32 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 33 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 34 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 35 EAST, NMPM

Section 5: S/2  
Sections 6 through 8: All  
Section 9: W/2 and SE/4  
Section 10: S/2 S/2  
Sections 15 through 21: All  
Section 22: N/2  
Section 27: SW/4  
Sections 28 through 33: All  
Section 34: NW/4 and N/2 SW/4  
Section 36: All

TOWNSHIP 23 NORTH, RANGE 30 EAST, NMPM

Section 36: All

TOWNSHIP 23 NORTH, RANGE 31 EAST, NMPM

Section 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 32 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 33 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 34 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 35 EAST, NMPM

Section 31: All

TOWNSHIP 24 NORTH, RANGE 31 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 32 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 33 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 34 EAST, NMPM  
Sections 1 through 36: All

HARDING COUNTY, NEW MEXICO

~~TOWNSHIP 17 NORTH, RANGE 30 EAST, NMPM  
Section 1: N/2 and SE/4 and W/2 SE/4  
Section 11: SE/4 and W/2 SW/4  
Section 12: E/2 and SW/4 and E/2 NW/4  
Section 13: All  
Section 14: E/2 and E/2 W/2 and SW/4 NW/4  
Section 15: SE/4 NE/4  
Section 22: SE/4 SE/4  
Sections 23 through 25: All  
Section 26: NE/4 and W/2 NW/4  
Section 27: NE/4 NE/4  
Section 35: SE/4  
Section 36: All~~

TOWNSHIP 17 NORTH, RANGE 31 EAST, NMPM  
Sections 1 through 36: All

~~TOWNSHIP 17 NORTH, RANGE 32 EAST, NMPM  
Sections 1 through 36: All~~

TOWNSHIP 17 NORTH, RANGE 33 EAST, NMPM  
Sections 1 through 36: All

~~TOWNSHIP 18 NORTH, RANGE 30 EAST, NMPM  
Sections 1 and 2: All  
Section 3: E/2 E/2 and SW/4 SE/4  
Section 10: E/2 NE/4  
Section 11: N/2  
Sections 12 through 14: All  
Section 23: E/2 and E/2 W/2  
Section 24: All  
Section 25: E/2 and E/2 W/2 and W/2 NW/4 and NW/4 SW/4  
Section 26: NE/4 and E/2 NW/4 and N/2 S/2  
Section 36: All~~

~~TOWNSHIP 18 NORTH, RANGE 31 EAST, NMPM  
Sections 1 through 36: All~~

TOWNSHIP 18 NORTH, RANGE 32 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 18 NORTH, RANGE 33 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 19 NORTH, RANGE 29 EAST, NMPM  
Section 1: NE/4 and E/2 NW/4

TOWNSHIP 19 NORTH, RANGE 30 EAST, NMPM  
Sections 1 through 4: All  
Section 5: E/2  
Section 6: E/2 SE/4 and NW/4 SE/4 and NE/4 SW/4  
Section 7: NE/4 NE/4 and NE/4 SE/4 and SW/4 SE/4 and SE/4 SW/4  
Section 8: N/2 and SE/4 and SE/4 SW/4  
Sections 9 through 16: All  
Section 17: N/2 and SE/4  
Section 18: NE/4 NE/4  
Section 20: W/2 NE/4 and S/2 SE/4  
Sections 21 through 28: All  
Section 29: NE/4  
Section 32: NE/4 NE/4  
Section 33: NW/4 and W/2 NE/4 and NE/4 NE/4 and NW/4 SE/4 and  
NE/4 SW/4  
Section 34: N/2 and E/2 SE/4  
Sections 35 and 36: All

TOWNSHIP 19 NORTH, RANGE 31 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 19 NORTH, RANGE 32 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 19 NORTH, RANGE 33 EAST, NMPM  
Sections 1 through 36: All

TOWNSHIP 20 NORTH, RANGE 29 EAST, NMPM  
Sections 1 and 2: All  
Section 3: E/2 and SW/4 and S/2 NW/4 and Lot 3  
Section 4: Lot 4 and SE/4 NE/4 and E/2 SE/4  
Section 5: SW/4 and SW/4 SE/4  
Section 6: Lots 1, 2, and 3 and SE/4 NW/4 and S/2 NE/4 and  
SE/4 and NE/4 SW/4  
Section 7: Lots 2 and 3 and NE/4 SW/4 and N/2 SE/4  
Section 8: NW/4 NW/4 and W/2 SW/4  
Section 9: NE/4 NW/4 and SW/4 NE/4 and E/2 E/2  
Sections 10 through 15: All  
Section 16: E/2 and NE/4 NW/4 and S/2 SW/4 and NW/4 SW/4  
Section 17: S/2 and SW/4 NE/4 and S/2 NW/4 and NW/4 NW/4  
Section 18: Lots 1 through 4 and SE/4 NW/4 and E/2 SW/4  
and E/2  
Section 19: Lots 1 and 2 and E/2 W/2 and E/2  
Section 20: All  
Section 21: W/2 NW/4 and NW/4 SW/4 and NE/4 and NE/4 SE/4  
Sections 22 through 26: All  
Section 27: N/2 and SE/4 and NE/4 SW/4

Section 28: NE/4 NE/4  
Section 29: N/2  
Section 30: N/2 NE/4 and SE/4 NE/4  
Section 34: NE/4 NE/4  
Section 35: N/2 and SE/4  
Section 36: All

~~TOWNSHIP 20 NORTH, RANGE 30 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 20 NORTH, RANGE 31 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 20 NORTH, RANGE 32 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 20 NORTH, RANGE 33 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 21 NORTH, RANGE 29 EAST, NMPM~~  
~~Sections 1 through 27: All~~  
Section 28: N/2 and SE/4 and E/2 SW/4  
Section 29: All  
Section 30: Lots 1, 2 and 4 and E/2 NW/4 and NE/4 and N/2  
SE/4 and SE/4 SE/4  
Section 31: All  
Section 32: W/2 and SE/4 and W/2 NE/4 and SE/4 NE/4  
Section 33: W/2 SW/4 and NE/4 SW/4 and NE/4 NW/4 and N/2  
NE/4  
Sections 34 through 36: All

~~TOWNSHIP 21 NORTH, RANGE 30 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 21 NORTH, RANGE 31 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 21 NORTH, RANGE 32 EAST, NMPM~~  
~~Sections 1 through 36: All~~

~~TOWNSHIP 21 NORTH, RANGE 33 EAST, NMPM~~  
~~Sections 1 through 36: All~~

QUAY COUNTY, NEW MEXICO

~~TOWNSHIP 16 NORTH, RANGE 34 EAST, NMPM~~  
Section 3: Lots 3 through 6, 11 and 12  
Section 4: Lots 1, 2, 5 through 12, N/2 SE/4 and SW/4

TOWNSHIP 16 NORTH, RANGE 35 EAST, NMPM

Section 1: Lots 1 through 8, NW/4 SW/4 and S/2 SW/4

Sections 2 through 6: All

Section 7: Lots 1, 2, E/2 NW/4 and E/2

Sections 8 through 10: All

Section 11: NW/4, N/2 SW/4, and N/2 S/2 SW/4, and N/2 S/2  
S/2 SW/4

TOWNSHIP 16 NORTH, RANGE 36 EAST, NMPM

Section 5: Lots 4 and 5

Section 6: Lots 1 through 8 and 10

TOWNSHIP 17 NORTH, RANGE 34 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 17 NORTH, RANGE 35 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 17 NORTH, RANGE 36 EAST, NMPM

Sections 1 through 36: All

TOWNSHIP 17 NORTH, RANGE 37 EAST, NMPM

Sections 6 and 7: All

Sections 18 and 19: All

Sections 30 and 31: All

RA/jtp  
LR222/E

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
18 March 1981

COMMISSION HEARING

-----

IN THE MATTER OF: )  
 )  
 )  
Application of Amoco Production Com- )  
pany for temporary special pool ) CASE  
rules, Union, Harding, and Quay ) 7198  
Counties, New Mexico. )  
 )

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BEFORE: Commissioner Ramey  
Commissioner Arnold

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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

For the Applicant: William F. Carr, Esq.  
CAMPBELL, BYRD, & BLACK P.A.  
Jefferson Place  
Santa Fe, New Mexico 87501  
and  
Guy T. Buell, Esq.  
SCOTT, DOUGLASS, & KEETON  
Twelfth Floor  
City National Bank Bldg.  
Austin, Texas 78701  
and  
Clyde A. Mote, Esq.  
Amoco Production Company

## DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Sanders, would you state your complete name, by whom you're employed, and in what capacity, and in what location please?

A My name is L. J. Sanders Junior. I'm employed as Staff Petroleum Engineer and Associate by Amoco Production Company in Houston, Texas.

Q Mr. Sanders, in this hearing here today we're recommending temporary operating rules for the Bravo Dome Unit area. In connection with that temporary rule request we're making, have you made any study to enable you to make a recommendation to this Commission as to the temporary period that we might possibly need?

A Yes, I have, and I would recommend that we have a period of three years after first production into a pipeline.

Q From the unit?

A From the unit.

Q All right, sir, in connection with your recommendation, will you direct your attention now to what has been identified as Amoco Exhibit Sixteen and state for the record what Exhibit Sixteen reflects?

1  
2           A           Exhibit Sixteen is a timing calculation  
3 for an initial 25 psi reservoir pressure decrease using the  
4 Heimann No. 1 and Stato "FI" No. 1 area characteristics. This  
5 is the area where we had run our -- was two of the sites  
6 where we ran pressure interference tests.

7           Q           Would you point out the Heimann area  
8 generally on Exhibit One and just say that it appears to be  
9 about in the south central -- central south central area?

10          A           Well, it's in the -- might be called the  
11 east central. The Heimann 1 was our producing well. It's  
12 located in Township 19, 33 North, and then in the east central  
13 at the State "FI" site, this one -- this is a lease that's  
14 in Township 20, Range 34.

15          Q           All right, just what did you do in  
16 making your study to prepare yourself to make your recom-  
17 mendation to this Commission?

18          A           I looked at time here as the time that  
19 it would take to produce enough gas from an area to cause  
20 25 psi decrease. I picked an area five miles by five miles  
21 that was developed on 640-acres. I picked this large of an  
22 area because in the center of it is going to be a pressure  
23 observation well and I wanted to minimize as much as I could  
24 the interference from outside, just this five mile area that  
25 would facilitate evaluation of the tests.

1  
2 And in this five mile tract there's 10240  
3 acres. The net wells inside the test site, there's fifteen  
4 producers and one pressure observation well.

5 Millions of cubic feet of CO<sub>2</sub> were re-  
6 moved from this area to lower the initial pressure, which was  
7 375 psig, 25 psi, is 15.2 BCF, and the time to remove this  
8 15.2 BCF, using a million a day, million cubic feet per day  
9 producing rate for the producing wells, which I believe will  
10 be reasonable, that calculates then to be 2.78 years, the  
11 time required to remove enough gas to cause a 25 psi pressure  
12 decrease, and this is about a 7 percent pressure depletion  
13 from the initial pressure point.

14 Q So your 25 psi drawdown in your obser-  
15 vation well doesn't look like much when you're just saying  
16 25 psi, but percentagewise the original pressure that would  
17 be in your observation well is a significant percent?

18 A Yes, it is.

19 Q Now if your prediction on the original  
20 gas in place in the area that you studied is wrong in that  
21 there is less original gas in place, we should see the pres-  
22 sure interference in the observation well sooner than three  
23 years?

24 A We'll see it sooner and we'll see a  
25 larger decrease.

1  
2 Q And by the same token, if you have under-  
3 stated the original gas in place, and hopefully, I'm going  
4 to say I hope that's the case, it will take a little longer  
5 than your predicted three years to see the same incremental  
6 decrease in pressure in your observation well?

7 A Yes, sir, that's -- that's correct. }

8 Q All right, sir. I want you to turn now  
9 to your Exhibit Seventeen more or less a summary of the plans  
10 that Amoco intends to initiate in this three year period that  
11 we're asking for after the first unit production into a  
12 pipeline, to show the Commission the type of program we will  
13 have to gather data that we think we'll need to show defini-  
14 tive 640-acre spacing is correct?

15 A Yes, it is.

16 Q Why don't you, since Exhibit Seventeen  
17 is self-explanatory, why don't you just kind of summarize  
18 each of the four numbers, paragraphs, on the exhibit?

19 A Okay. Our plans at this time  
20 is there will be a central gathering system installed ulti-  
21 mately in approximately each quarter -- quadrant of the  
22 productive area of the unit.

23 Drilling that will be done in the next  
24 three to four years will be concentrated 640-acre development  
25 for initial production, with the exception of scattered



TONEY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

50 YEARS



1935 - 1985

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

March 14, 1986

Mr. R. E. Ogden  
Regional Engineering Manager  
Amoco Production Company  
Post Office Box 3092  
Houston, Texas 77253

Dear Mr. Ogden:

The revised plan to demonstrate drainage efficiency in the Bravo Dome 640-Acre Area as outlined in your letter of March 10, 1986, is hereby approved.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. L. Stamets".

R. L. STAMETS  
Director

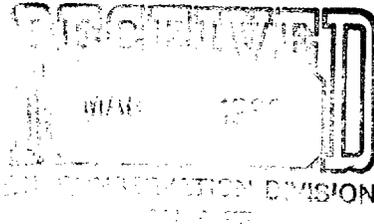
RLS/fd



**Amoco Production Company**

Houston Region  
501 WestLake Park Boulevard  
Post Office Box 3092  
Houston, Texas 77253

R. E. Ogden  
Regional Engineering  
Manager



March 10, 1986

File: JDM-416-597

Re: NMOCD Case No. 8190, Order No. R-7556  
Temporary Special Spacing Rules  
Bravo Dome Carbon Dioxide Gas Unit  
Union, Harding and Quay Counties, New Mexico

State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
State Land Office Building  
Old Santa Fe Trail  
P. O. Box 2088  
Santa Fe, NM 87501

Attention: Mr. R. L. Stamets

Gentlemen:

This serves to revise our plan to demonstrate the drainage efficiency of wells located on 640-acre spacing units as outlined in our letter dated August 15, 1984, File: JDM-507-964. The plan included monitoring shut-in bottom hole pressures in four wells as shown on Attachment No. 1 and from shut-in wells offsetting the Phase I producers as shown on Attachment No. 2. Other data to be collected included pressure and production data from long term flow tests in the northern and western parts of the unit and from Phase I and Phase II producing wells.

The only revision to this plan is that we are deferring the west long term flow test on BDCDGU Well No. 1930 251J shown on Attachment No. 1. The test will be deferred until preliminary results from the north test have been analyzed and other data sources in the west part of the unit have been evaluated. The test on the northern well, BDCDGU No. 2233 321K, will continue through the third quarter of 1986.

File: JDM-416-597

Page 2

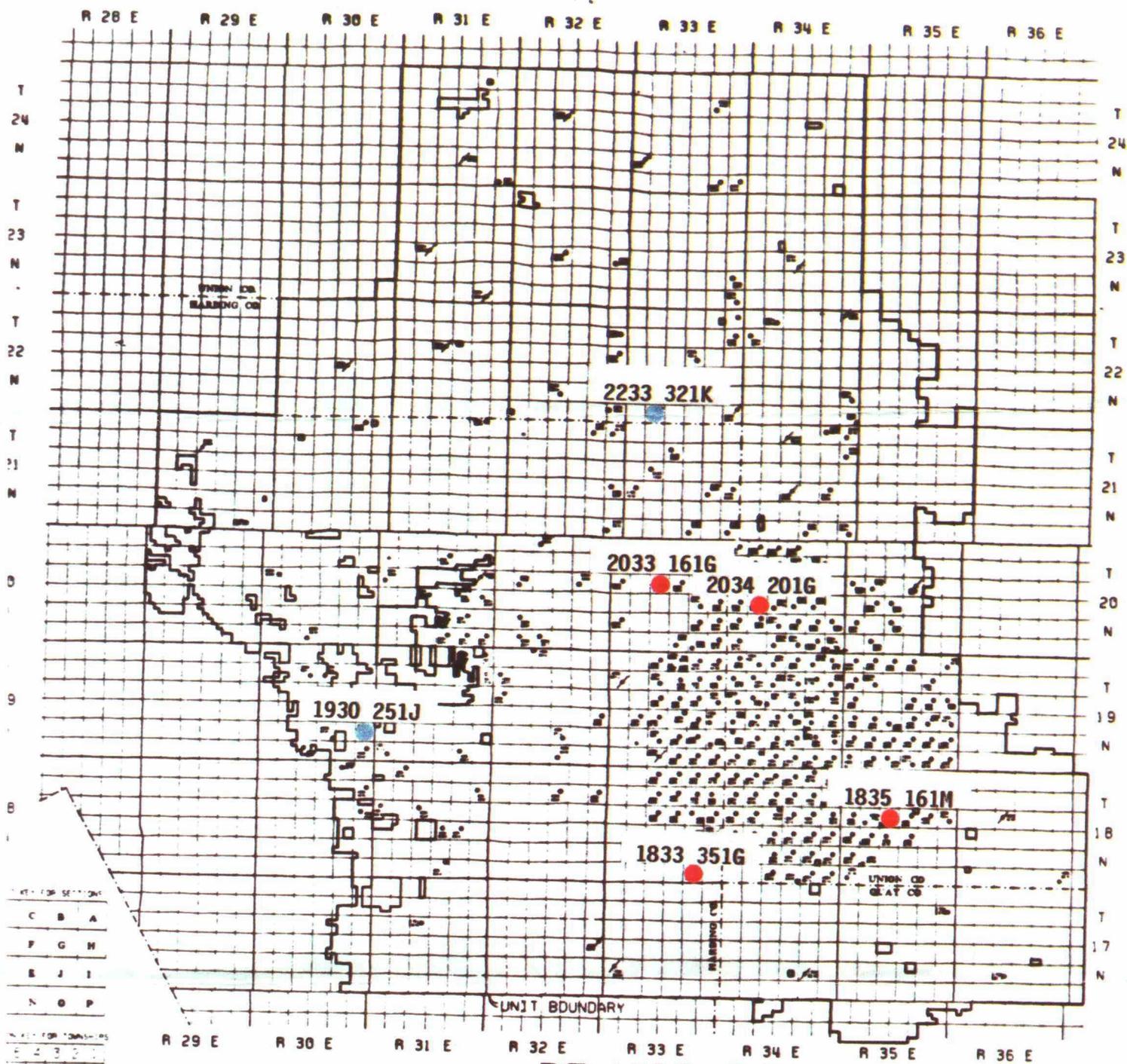
March 10, 1986

In accordance with the above-referenced order, your approval of this revised plan is respectfully requested. Please contact Mr. Jim Allen (713/556-3931) or Mr. Steve Scheffler (713/556-3929) if additional information is needed.

*A. E. Osden*  
*SE*

KML/kk1

Attachments



WELL TOP SECTIONS			
C	B	A	
F	G	H	
E	J	I	
N	O	P	
WELL TOP FORMATIONS			
5	4	3	2
5	5	5	2
5	5	4	3
5	5	3	4
5	5	2	5
5	5	1	6



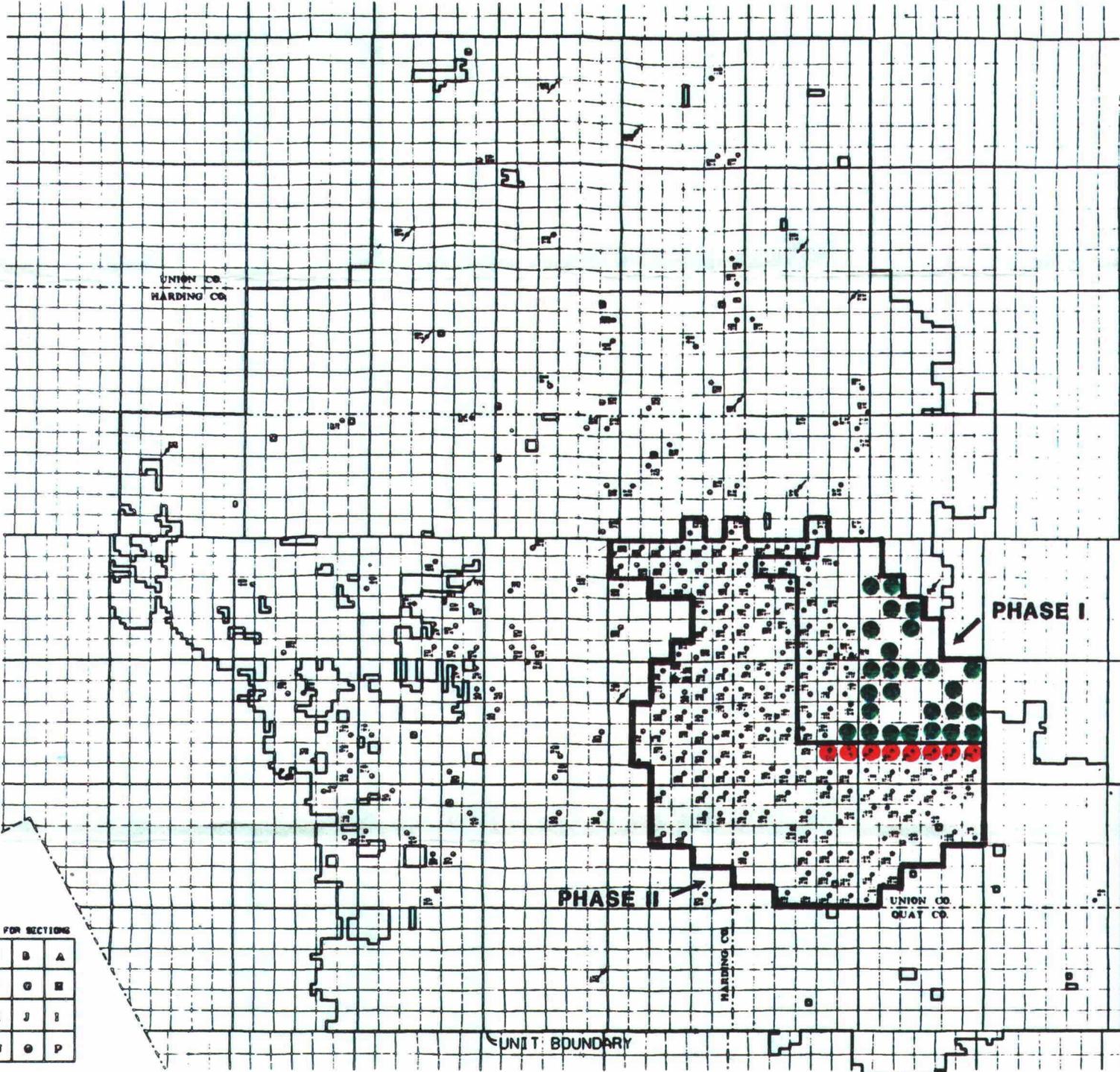
**BRAVO DOME  
CARBON DIOXIDE GAS UNIT**  
UNION, HARDING, AND QUAY COS., NEW MEXICO

- 1985-86 Long Term Flow Test Wells (2)
- Pressure Monitoring Wells (4)

R 28 E    R 29 E    R 30 E    R 31 E    R 32 E    R 33 E    R 34 E    R 35 E    R 36 E

T 24 N  
T 23 N  
T 22 N  
T 21 N  
T 20 N  
T 19 N  
T 18 N

T 24 N  
T 23 N  
T 22 N  
T 21 N  
T 20 N  
T 19 N  
T 18 N  
T 17 N



UNIT KEY FOR SECTIONS

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

SECTION KEY FOR TOWNSHIPS

6	5	4	3	2	1
7	8	9	0	1	2
8	7	6	5	4	3
9	0	1	2	3	4
8	0	9	8	7	6
5	6	7	8	9	0

LEGEND  
 ○ CO2 PRODUCER  
 ● PHASE I  
 ● PHASE II

000  
10  
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# BRAVO DOME CARBON DIOXIDE GAS UNIT

UNION, HARDING, AND QUAY COS., NEW MEXICO

- Phase I Active Producer
- Phase II Shut-In Producer

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION COMMISSION

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR TEMPORARY SPECIAL  
SPACING RULES, UNION, HARDING,  
AND QUAY COUNTIES, NEW MEXICO.

CASE NO. 8190  
ORDER NO. R-7556

RECEIVED

JUN 29 1984

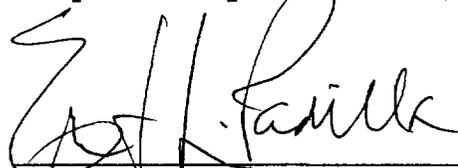
MOTION FOR REHEARING

OIL CONSERVATION DIVISION

Energy-AGRI Products, Inc., by its undersigned attorney, moves the Commission for rehearing of the above styled case and order, insofar as it grants authority for temporary 640 acre spacing, on the basis that the applicant, having the burden of proof, failed, on the basis of substantial evidence, to establish the necessity for temporary 640 acre spacing within the outer boundaries of the Bravo Dome Unit Area.

Further, rehearing is necessitated on the basis that the notice of hearing was insufficient and Order R-7556 should exclude uncommitted and unleased lands within the outer boundaries of the Bravo Dome Unit Area.

Respectfully submitted,



Ernest L. Padilla

**ERNEST L. PADILLA**  
ATTORNEY AND COUNSELOR AT LAW

First Northern Plaza  
P.O. Box 2523  
Santa Fe, New Mexico 87501  
(505) 988-7577

June 29, 1984

HAND DELIVERED

Joe D. Ramey, Director  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

RECEIVED

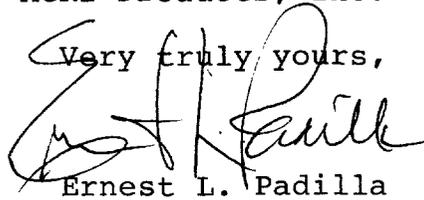
JUN 29 1984

OIL CONSERVATION DIVISION

RE: Case No. 8190  
Order No. R-7556

Dear Mr. Ramey:

Enclosed please find Motion for Rehearing which I am filing this date on behalf of Energy-AGRI Products, Inc.

Very truly yours,  
  
Ernest L. Padilla

ELP/bv  
Enc

cc: William F. Carr, Esq. w/encls  
Owen M. Lopez, Esq. w/encls  
Arthur Jaramillo, Esq. w/encls  
W. Thomas Kellahin, Esq. w/encls

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



TONY ANAYA  
GOVERNOR

December 15, 1986

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

Amoco Production Company  
P. O. Box 68  
Hobbs, New Mexico 88240

Attention: J. L. Krupka

Re: Annual Shut-In Gas Well Testing Period

Dear Mr. Krupka:

As per your request of November 19, 1986 you are hereby given a test period of January through September on the 258 wells within the Bravo Dome Unit. It is our understanding that this extension period will not hamper your daily operations and that all necessary reports will be filed with this office by September 30th of each year.

Should you have any questions pertaining to this matter, contact Mr. Roy Johnson in our Santa Fe Office.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. L. Stamets", written over a horizontal line.

R. L. STAMETS,  
Division Director

RLS/RJ/dr

Case # 8190



TOBY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

50 YEARS



1935 - 1985

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

September 26, 1985

Amoco Production Company  
Houston Region  
501 WestLake Park Blvd.  
P. O. Box 3092  
Houston, Texas 77253

Attention: R. E. Ogden

Re: Two Long Term Flow Tests and  
Reinjection of CO<sub>2</sub> Gas  
Bravo Dome Carbon Dioxide Gas Unit  
Union, Harding, and Quay Counties

Gentlemen:

As per your request in your letter of August 28, 1985, and under authority granted me by Division Order Nos. R-6645 and R-7556, you are hereby authorized to inject carbon dioxide for a one-year period in the following wells:

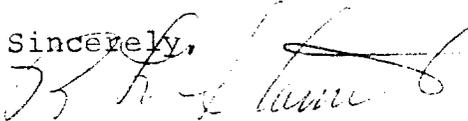
BDCDGU Well No. 2133 091F  
BDCDGU Well No. 1830 021F

Pressure limitation devices shall be installed on these wells to insure that fracturing of the Tubb formation does not occur.

It is also our understanding through verbal communication with Mr. Steve Scheffler that any produced water will be trucked off to one of your three disposal facilities located within the Bravo Dome Carbon Dioxide Unit.

It is also requested that Amoco Production Company notify Mr. Johnson of this office 48 hours prior to start up of these flow tests.

Sincerely,

  
R. L. STAMETS  
Director

RLS/fd

Verbal on 9-12-85



**Amoco Production Company**

Houston Region  
501 WestLake Park Boulevard  
Post Office Box 3092  
Houston, Texas 77253



R. E. Ogden  
Regional Engineering  
Manager

August 28, 1985

File: JCA-986.51NM-5153

Re: Reinjection of CO<sub>2</sub> Gas  
Bravo Dome Carbon Dioxide Gas Unit  
Union, Harding & Quay Counties, New Mexico

SWD or  
lined pit.  
Sec. 1 T.20N12R.30E  
NW/4 <sup>4E</sup>

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

Attention: Mr. R. L. Staments

Gentlemen:

In accordance with OCC Order No. R-7556 & R-6645, Amoco Production Company requests administrative approval to reinject produced CO<sub>2</sub> gas into the BDCDGU. Two long term flow test projects (1 year duration) requiring associated CO<sub>2</sub> reinjection are to be initiated in the northern and western portions of the unit during October of this year. These projects are consistent with the long term flow tests proposed in our letter to the NMOCD of August 15, 1984, detailing plans submitted in accordance with OCC Order No. R-7556 to demonstrate the drainage efficiency of wells in the BDCDGU located on 640 acre density. The project wells which are the subject of this application are as follows:

Northern BDCDGU Area  
BDCDGU Well No. 2233 321K (Producer)  
BDCDGU Well No. 2133 091F (Injector)

Western BDCDGU Area  
BDCDGU Well No. 1930 361G (Producer)  
BDCDGU Well No. 1830 021F (Injector)

Included as a part of this application are attachments I thru V which provide the details for the proposed projects. Attachment No. I is a BDCDGU base map showing the location of the well pairs in the northern and western portions of the unit. Attachment II (A-D) are wellbore sketches showing the perforated intervals and wellbore configuration that will exist in each well during the long term flow test.

File: JCA-986.51NM-5153

August 28, 1985

Page 2

Attachments III (A-D) are the corresponding porosity logs for each well with the top of the Tubb formation and perforated intervals identified. Producing and injection pressures and rates are shown on Attachment IV, and Attachment V shows the wellhead configurations for production and injection. Our current plan is to accumulate production and injection data for a period of one year beginning in October 1985. It should be noted that for each well pair, the producer and injector have assigned proration acreage that is fully committed to the unit. Should any additional information be required concerning this request, please contact Steve P. Scheffler at (713) 556-3929.

Yours very truly,

*H. E. Ogden* *SPS*

SPS/rr

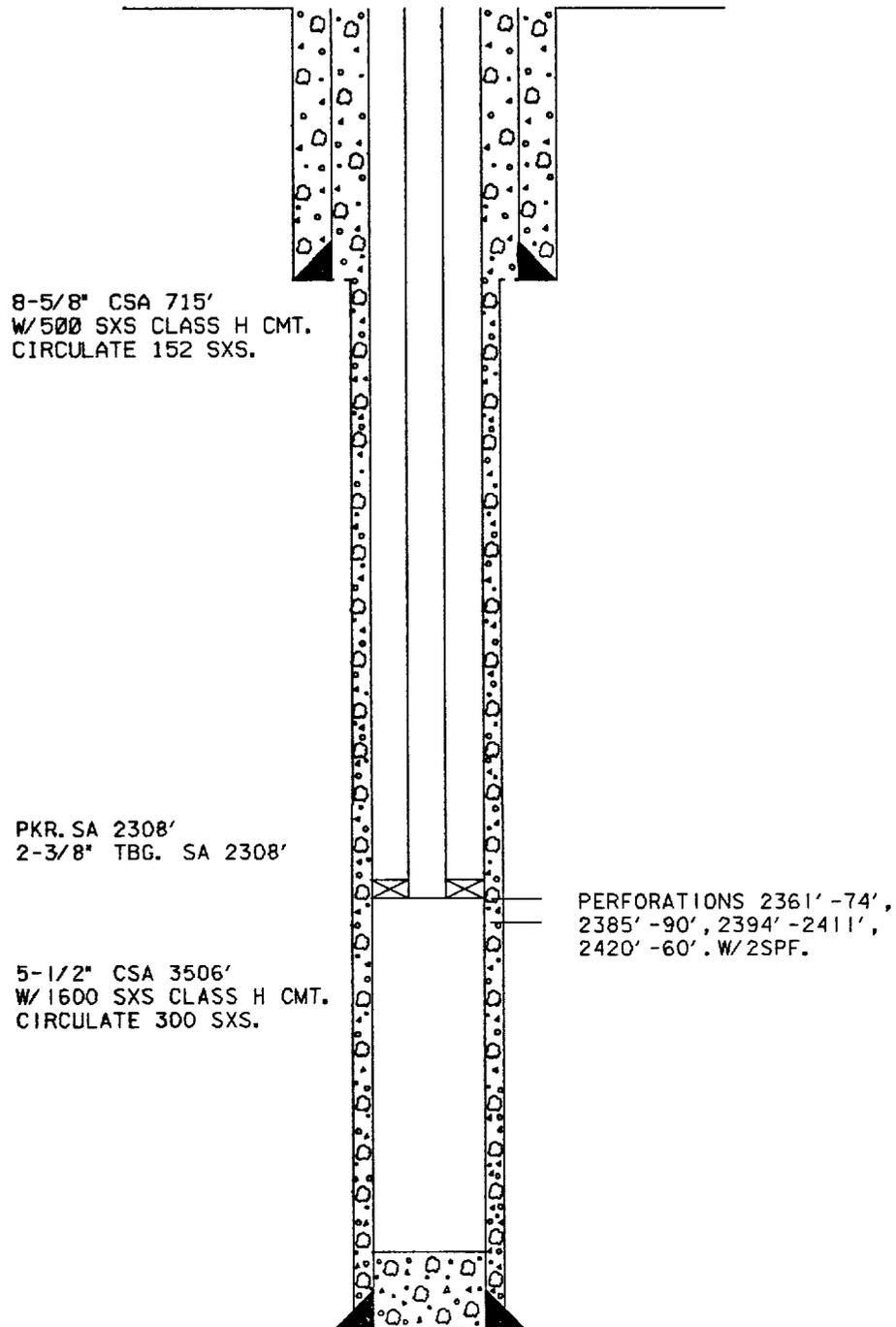
Attachments

*Boy verbally confirmed  
that surface owner (S)  
notified*

# BDCDU WELL NO. 2233 321K

(STATE "LJ" NO. 1)

ELEV. 4941' KB



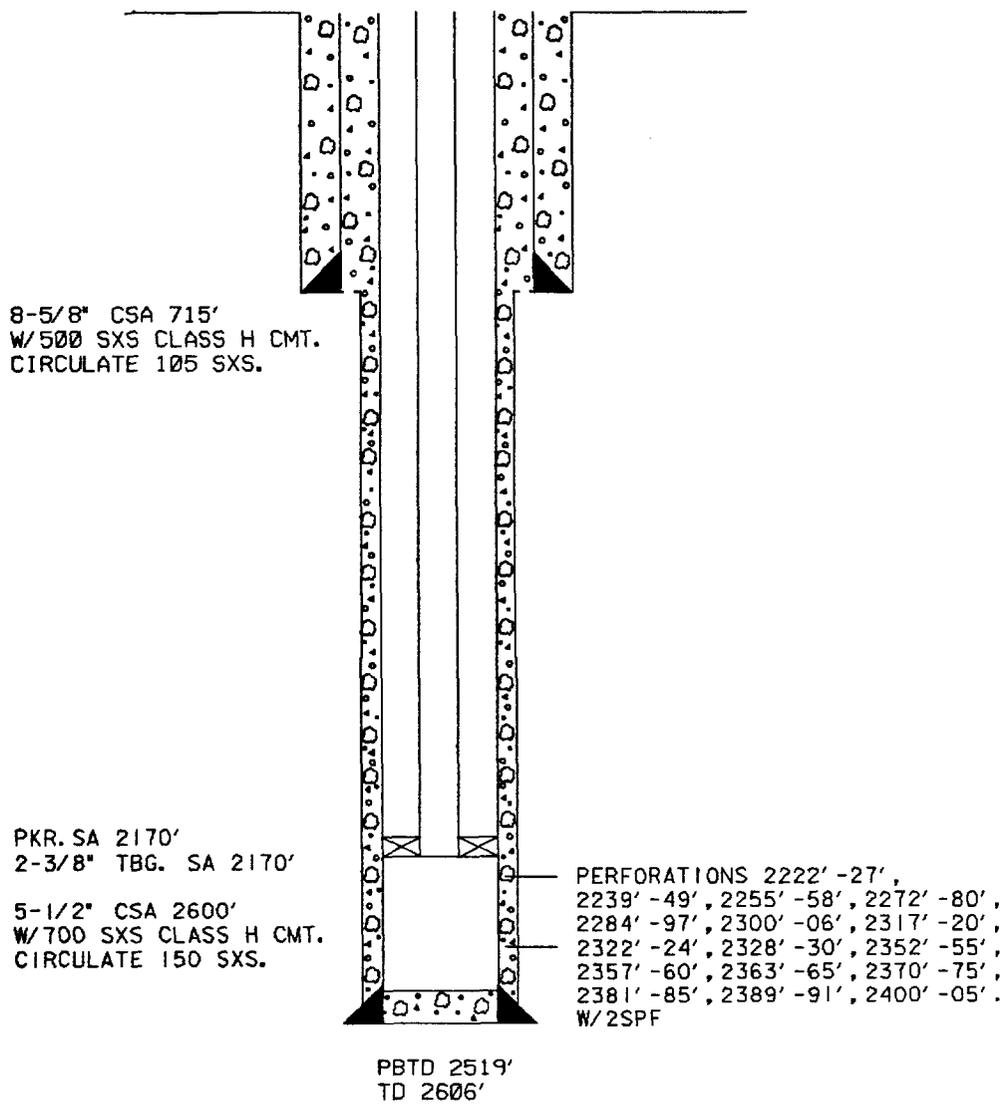
PBD 3460'  
TD 3506'

ATTACHMENT II-A

# BDCDU WELL NO. 2133 091F

(STATE "JM" NO. 1)

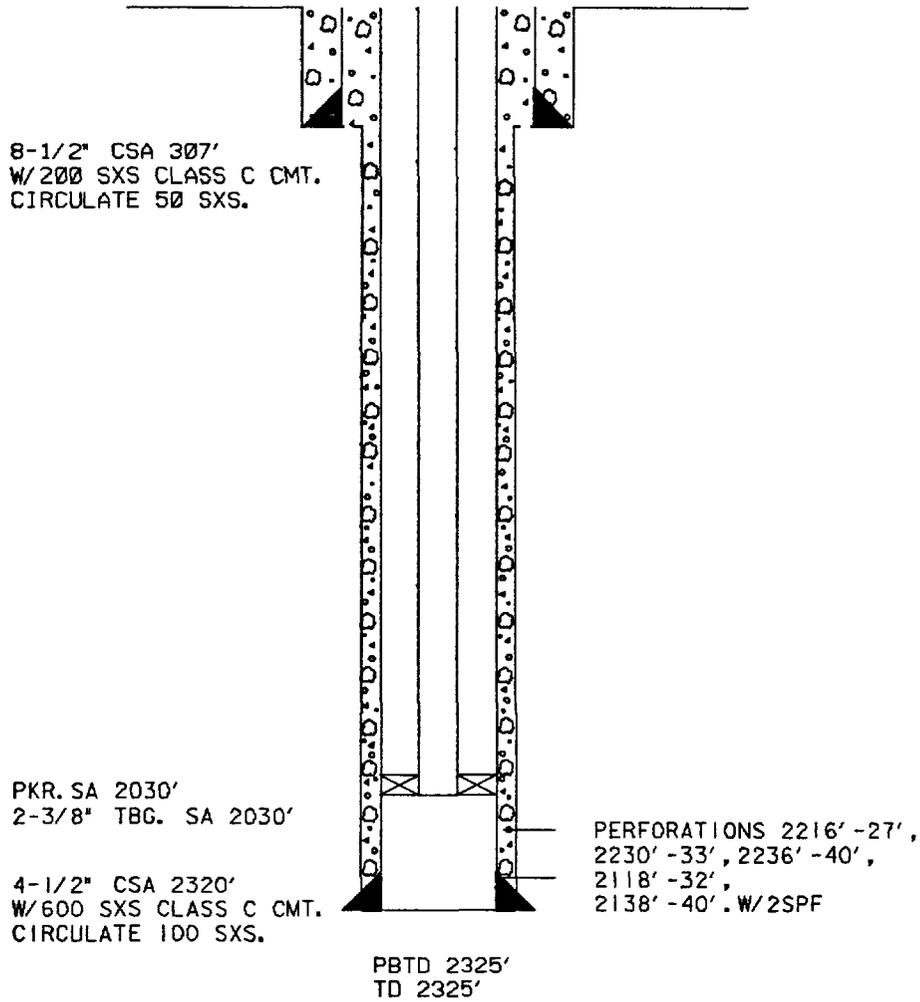
ELEV. 4851' KB



# BDCDU WELL NO. 1930 361G

( STATE " FM" NO. 1 )

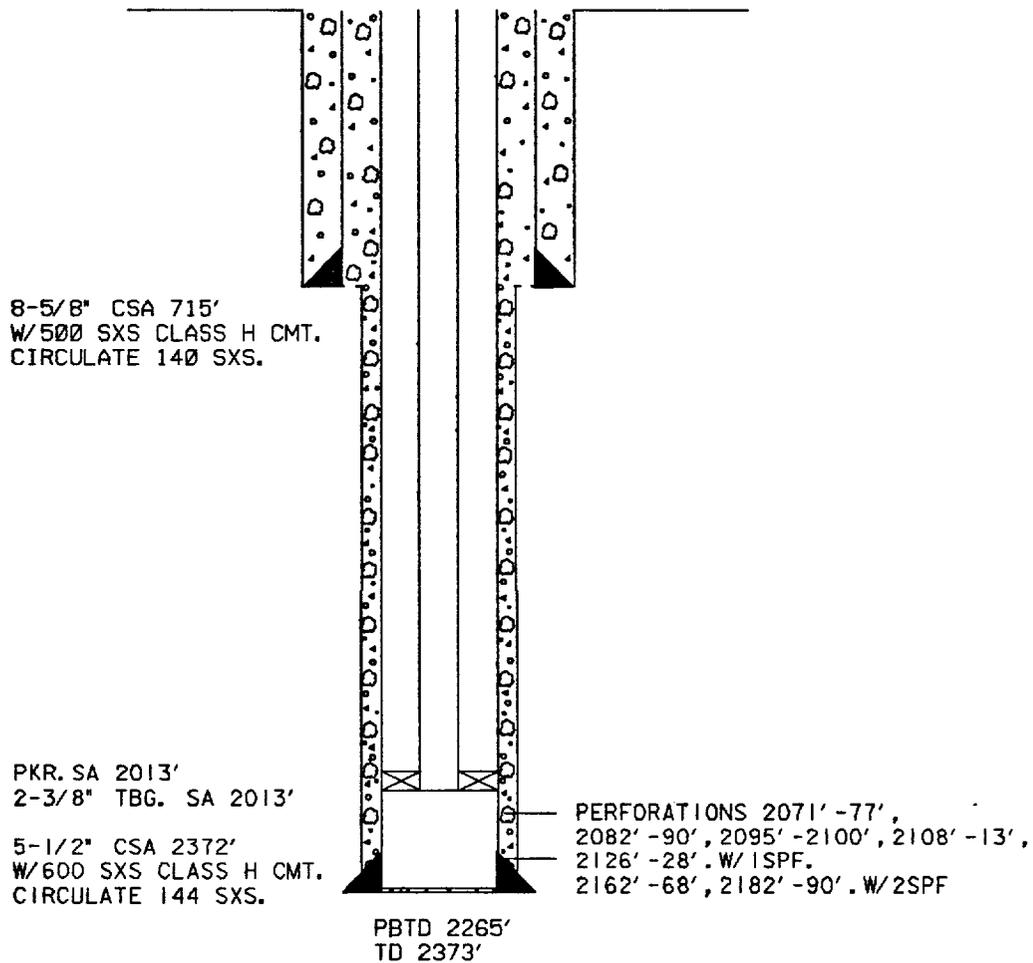
ELEV. 4531' KB



# BDCDU WELL NO. 1830 021F

(STATE "KZ" NO. 1)

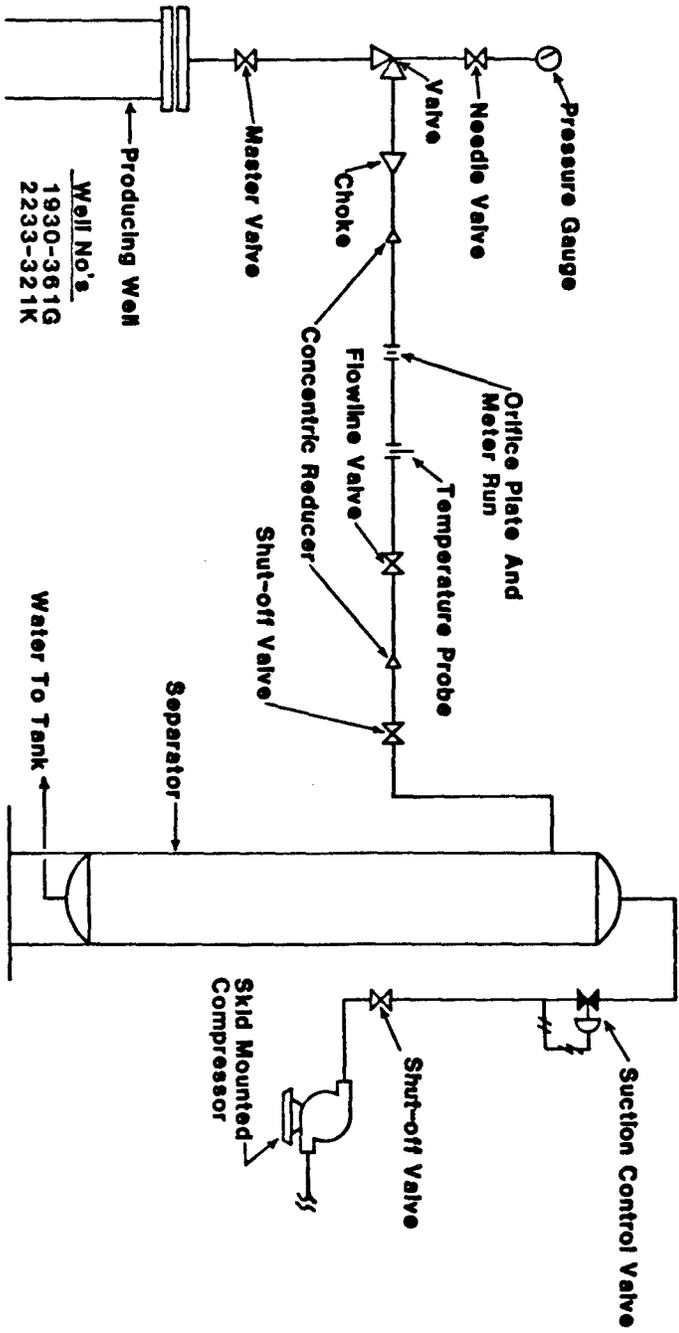
ELEV. 4456' KB





# Typical Surface Equipment Installations

Production Well Site



Injection Well Site

