

17  
CASE 6991: AMOCO PRODUCTION COMPANY FOR  
SALT WATER DISPOSAL, LEA COUNTY, NEW  
MEXICO

Cont'd to  
~~sep 13~~  
sep 17



Case No.

6991

Application

Transcripts

Small Exhibits

ETC



BRUCE KING  
GOVERNOR

LARRY KEHOE  
SECRETARY

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

October 23, 1980

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Mr. S. J. Okerson  
District Superintendent  
Amoco Production Company  
Post Office Box 68  
Hobbs, New Mexico 88240

Re: CASE NO. \_\_\_\_\_  
ORDER NO. 6991  
          R-6478

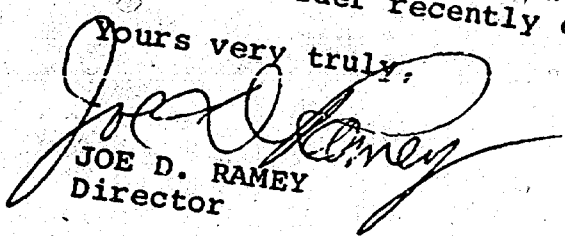
Applicant:

~~Amoco Production Company~~

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  
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. 6991  
Order No. R-6478

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR SALT WATER DISPOSAL,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 17, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 20th day of October, 1980, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 6991 is hereby dismissed.

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
JOE D. RAMEY,  
Director

dr/

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
17 September 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Richard L. Stamets

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:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7439

1 MR. STAMETS: We'll call next Case 6991.

2 MR. PADILLA: Application of Amoco Pro-  
3 duction Company for salt water disposal, Lea County, New  
4 Mexico.

5 MR. STAMETS: At the request of the  
6 applicant this case shall be dismissed.

7  
8 (Hearing concluded.)  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 195-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409



C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

Sally W. Boyd C.S.R.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6891  
heard by me on 9-12 1980.  
Richard L. Lamm, Examiner  
Oil Conservation Division



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
17 September 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Richard L. Stamets

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:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

MR. STAMETS: We'll call next Case 6991.

MR. PADILLA: Application of Amoco Production Company for salt water disposal, Lea County, New Mexico.

MR. STAMETS: At the request of the applicant this case shall be dismissed.

(Hearing concluded.)

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

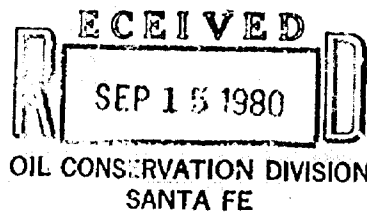
C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_,  
heard by me on \_\_\_\_\_ 19\_\_\_\_.

\_\_\_\_\_, Examiner  
Oil Conservation Division

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 435-7409



**Amoco Production Company**

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

J. R. Barnett  
Regional Engineering  
Manager

September 12, 1980

File: JCA-986.51NM-3154

Re: Case No. 6991  
Salt Water Disposal Application  
South Hobbs Unit  
Lea County, New Mexico

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

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco Production Company requests the dismissal of Case No. 6991 which is currently scheduled for the Examiner's Docket of September 17, 1980.

Yours very truly,

*J. R. Barnett*  
HMB

HMB/rw



**Amoco Production Company**

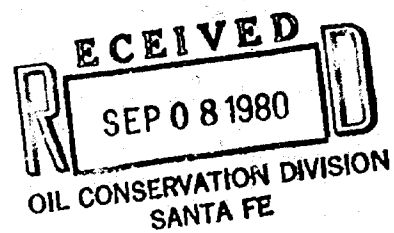
Houston Region  
600 Jefferson Building  
Post Office Box 3092  
Houston, Texas 77001

J. R. Barnett  
Regional Engineering  
Manager

August 29, 1980

File: JCA-986.51NM-3128

Re: Case No. 6991  
Application for Salt Water Disposal  
South Hobbs Unit Well No. 103  
Lea County, New Mexico



State of New Mexico  
Oil Conservation Division  
P. O. Box 2098  
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco Production Company respectfully requests Case No. 6991, set for examiner hearing of 9-3-80, be continued to the next examiner hearing on 9-17-80. This confirms our verbal request by Mr. Jim Allen on 8-29-80.

Yours very truly,

*J. R. Barnett*  
JCA/rw

Dockets Nos. 30-80 and 31-80 are tentatively set for October 1 and 15, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 17, 1980

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for October, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 7021: Application of Gulf Oil Corporation for simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 477-acre non-standard gas proration unit comprising the N/2 and SE/4 of Section 19, Township 19 South, Range 37 East, Eumont Gas Pool, to its B. V. Culp (NCT-A) Wells Nos. 3 and 9 located in Units F and J, respectively, of said Section 19.

CASE 6961: (Continued from August 20, 1980, Examiner Hearing)

Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Meyer A-29 Well No. 11 to be drilled at an unorthodox location 990 feet from the North line and 660 feet from the East line of Section 29, Township 22 South, Range 36 East, to produce gas from the Langley-Devonian and -Ellenburger Pools thru parallel strings of tubing, the E/2 of said Section 29 to be dedicated to the well.

CASE 7022: Application of Texas Pacific Oil Company, Inc. for a non-standard proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a 320-acre non-standard proration unit comprising the N/2 of Section 9, Township 22 South, Range 36 East, Jalmat Gas Pool, to its Wells Nos. 40 and 63 located in Units A and C, respectively, of said Section 9. Applicant further seeks approval to simultaneously dedicate its Wells Nos. 14, 36, 42, and 62 located in Units B, M, E, and K, respectively, of Section 11, Township 22 South, Range 36 East, to a standard proration unit to be comprised of all of said Section 11.

CASE 7008: (Continued from August 20, 1980, Examiner Hearing)

Application of Coronado Exploration Corp. for eight compulsory poolings, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying eight 40-acre proration units, being the NE/4 NE/4 of Section 4 and the NW/4 NE/4 of Section 5, both in Township 12 South, Range 28 East, and the NW/4 SE/4 of Section 6, the NE/4 NW/4 of Section 23, the NE/4 SE/4 of Section 28, the SE/4 SE/4 of Section 29, the NE/4 NW/4 of Section 32, and the SE/4 NW/4 of Section 33, all in Township 11 South, Range 28 East, each 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 wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a charge for risk involved in drilling said wells.

CASE 7004: (Continued from August 20, 1980, Examiner Hearing)

Application of Anadarko Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Morrow formations underlying the N/2 of Section 12, Township 19 South, Range 25 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 7023: Application of Shell Oil Company for pool creation and temporary special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool for its Askew Well No. 1 located in Unit L of Section 2, Township 5 South, Range 33 East, and the promulgation of special pool rules therefor, including a provision for 80-acre spacing.



CASE 7011: (Continued from August 20, 1980, Examiner Hearing)

Application of Amoco Production Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Blanco-Pictured Cliffs production in the wellbores of the following six wells: Elliott "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10; "A" Nos. 3 and 2, NE/4 and NW/4, Section 11; "D" No. 7, SW/4 of Section 11; and "E" No. 1, NW/4 of Section 14, all in Township 29 North, Range 9 West.

CASE 7019: (Continued from September 3, 1980, Examiner Hearing)

Application of Amoco Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 30, Township 23 South, Range 25 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 6991: (Continued from September 3, 1980, Examiner Hearing)

Application of Amoco Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in a 100 foot perforated interval between 4400 feet and 4800 feet in its South Hobbs Unit Well No. 103 in Unit B of Section 15, Township 19 South, Range 38 East, Hobbs Grayburg-San Andres Pool.

CASE 7024: Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 35, Township 18 South, Range 29 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 7025: Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 35, Township 18 South, Range 29 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 7005: (Continued from August 20, 1980, Examiner Hearing)

Application of Sol West III for an NCPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Turkey Track-Morrow Sand Well No. 1 in Unit I of Section 26, Township 18 South, Range 28 East.

CASE 6822: (Continued from September 3, 1980, Examiner Hearing)

In the matter of Case 6822 being reopened pursuant to the provisions of Order No. R-6293 which order created the West Double X-Wolfcamp Gas Pool as a retrograde gas condensate pool and set special production limitations therein. Operator(s) may appear and present evidence to establish the true nature of the reservoir and proper rates of withdrawal therefrom.

CASE 7026: Application of Bass Enterprises Production Company for pool creation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Bone Spring oil pool for its Big Eddy Unit Well No. 60 located in Unit J of Section 20, Township 21 South, Range 28 East, and the promulgation of special rules therefor including a gas-oil ratio limitation of 10,000 to one.

CASE 7027: Application of W. A. Moncrief, Jr. for an NCPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Marathon State Com. Well No. 1 in Unit J of Section 11, Township 24 South, Range 24 East.



CASE 7028: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, deleting, and extending certain pools in Chaves, Eddy, and Lea Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the North Bell Lake-Wolfcamp Pool. The discovery well is Amoco Production Company State HL Well No. 1 located in Unit L of Section 2, Township 23 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 33 EAST, NMPM  
Section 2: W/2

(b) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Golden Lane-Delaware Pool. The discovery well is Meadco Properties, Ltd. Hudson Federal Well No. 1 located in Unit C of Section 4, Township 21 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM  
Section 4: Lots 3, 4, 5, 6, 11, and 12

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the McDonald-Atoka Gas Pool. The discovery well is Harvey E. Yates Company Heyco Betenbough Well No. 1 located in Unit C of Section 32, Township 13 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 13 SOUTH, RANGE 36 EAST, NMPM  
Section 32: N/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Seven Rivers production and designated as the Pearsall-Seven Rivers Pool. The discovery well is Arrowhead Oil Corporation Hover Well No. 3 located in Unit D of Section 32, Township 17 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM  
Section 32: NW/4

(e) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the West Tonto-Wolfcamp Pool. The discovery well is Inexco Oil Company Federal Com 7 Well No. 2 located in Unit E of Section 7, Township 19 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM  
Section 7: NW/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Winchester-Bone Spring Pool. Further to assign approximately 38,955 barrels of discovery allowable to the discovery well, Marathon Oil Company Martinez "31" Federal Well No. 1 located in Unit F of Section 31, Township 19 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM  
Section 31: NW/4

(g) CONTRACT the horizontal limits of the Mid Bell Lake-Devonian Gas Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM  
Section 18: N/2 and SW/4

(h) CONTRACT the horizontal limits of the La Rica-Morrow Gas Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
Section 2: All

(i) EXTEND the Airstrip-Upper Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM  
Section 35: NE/4  
Section 36: NE/4

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM  
Section 31: NW/4

- (j) EXTEND the Airstrip-Lower Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM  
Section 23: SW/4  
Section 26: NE/4

- (k) EXTEND the Artesia Queen-Grayburg-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM  
Section 22: E/2 NE/4

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 35: W/2 NW/4

TOWNSHIP 19 SOUTH, RANGE 27 EAST, NMPM  
Section 2: NW/4 and N/2 SW/4

- (l) EXTEND the Bough-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM  
Section 14: NE/4

- (m) EXTEND the Buffalo-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM  
Section 8: E/2

- (n) EXTEND the North Burton Flat-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
Section 29: N/2

- (o) EXTEND the South Carlsbad-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
Section 16: W/2

- (p) EXTEND the Chaveroo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM  
Section 4: E/2 E/2

- (q) EXTEND the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM  
Section 24: S/2 NW/4 and N/2 S/2

- (r) EXTEND the Eagle Creek Permo-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM  
Section 31: All

- (s) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 12: All

- (t) EXTEND the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 28: N/2 N/2

- (u) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM  
Section 3: E/2

- (v) EXTEND the West Indian Basin-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 22 EAST, NMPM  
Section 24: N/2

- (w) EXTEND the Langley-Devonian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM  
Section 28: S/2

- (x) EXTEND the Langley-Ellenburger Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM  
Section 28: S/2

- (y) EXTEND the Los Medanos-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM  
Section 1: S/2

- (z) EXTEND the North Loving-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM  
Section 17: S/2  
Section 19: E/2  
Section 20: W/2

- (aa) EXTEND the Lusk-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM  
Section 13: All

- (bb) EXTEND the West Malaga-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NMPM  
Section 8: E/2  
Section 9: S/2

- (cc) EXTEND the Mesa-Queen Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM  
Section 1: SW/4

- (dd) EXTEND the Midway-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM  
Section 8: SE/4

- (ee) EXTEND the Nash Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM  
Section 7: S/2

- (ff) EXTEND the North Osudo-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM  
Section 29: S/2

- (gg) EXTEND the East Red Lake Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM  
Section 25: NW/4 and N/2 SW/4

- (hh) EXTEND the Sand Point-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 28 EAST, NMPM  
Section 3: Lots 1, 2, 7, 8, 9, 10,  
15 and 16

- (ii) EXTEND the Shoebar-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
Section 28: N/2 and SW/4

- (jj) EXTEND the Shugart-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:  
TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM  
Section 1: W/2  
Section 2: N/2
- (kk) EXTEND the Sioux Tansill-Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:  
TOWNSHIP 26 SOUTH, RANGE 36 EAST, NMPM  
Section 9: SE/4
- (ll) EXTEND the Teas Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:  
TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM  
Section 19: SE/4
- (mm) EXTEND the Tom-Tom San Andres Pool in Chaves County, New Mexico, to include therein:  
TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM  
Section 24: SW/4  
Section 35: NW/4
- (nn) EXTEND the Turkey Track-Atoka Gas Pool in Eddy County, New Mexico, to include therein:  
TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM  
Section 1: S/2  
Section 2: S/2  
Section 11: N/2  
Section 14: All
- (oo) EXTEND the Turkey Track-Morrow Gas Pool in Eddy County, New Mexico, to include therein:  
TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM  
Section 7: S/2  
Section 18: All
- (pp) EXTEND the Winchester-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:  
TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM  
Section 34: SE/4
- (qq) EXTEND the Yarrow-Delaware Gas Pool in Eddy County, New Mexico, to include therein:  
TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM  
Section 22: NE/4
- (rr) EXTEND the Young-Morrow Gas Pool in Lea County, New Mexico, to include therein:  
TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM  
Section 4: S/2  
Section 9: E/2

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
3 September 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Daniel S. Nutter

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:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 MR. NUTTER: Call next Case 6991.

2  
3 MR. PADILLA: Application of Amoco Pro-  
4 duction Company for salt water disposal, Lea County, New  
5 Mexico.

6 MR. NUTTER: The applicant has requested  
7 continuance.

8 Case Number 6991 will be continued to the  
9 Examiner Hearing scheduled to be held at this same place at  
10 9:00 o'clock a. m. September 17th, 1980.

11  
12 (Hearing concluded.)  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Sant. Fe, New Mexico 87501

Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6991  
heard by me on 9/3 1980.

[Signature], Examiner  
Oil Conservation Division

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
3 September 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Daniel S. Nutter

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:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

1 MR. NUTTER: Call next Case 6991.

2  
3 MR. PADILLA: Application of Amoco Pro-  
4 duction Company for salt water disposal, Lea County, New  
5 Mexico.

6 MR. NUTTER: The applicant has requested  
7 continuance.

8 Case Number 6991 will be continued to the  
9 Examiner Hearing scheduled to be held at this same place at  
10 9:00 o'clock a. m. September 17th, 1980.

11  
12 (Hearing concluded.)  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B


Santa Fe, New Mexico 87501

Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

I do hereby certify that the foregoing is  
a complete and correct transcript of the proceedings in  
the Examiner hearing of Case No. 6971  
heard by me on 9/3 1980.  
, Examiner  
Oil Conservation Division

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION )  
OF AMOCO PRODUCTION COMPANY FOR )  
SALT WATER DISPOSAL, LEA COUNTY, )  
NEW MEXICO. )

NO. 6991

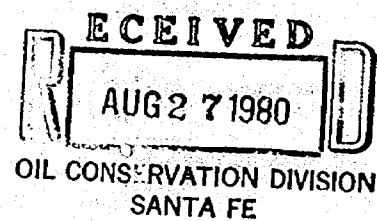
ENTRY OF APPEARANCE

The undersigned hereby enter their appearance on  
behalf of Amoco Production Company with Clyde Mote of Houston,  
Texas.

ATWOOD, MALONE, MANN & COOTER, P.A.

By 

P. O. Drawer 700  
Roswell, New Mexico 88201



Docket No. 27-80

Dockets Nos. 29-80 and 30-80 are tentatively set for September 17 and October 1, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 3, 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 7015:** Application of Tenneco Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the S/2 of Section 36, Township 18 South, Range 29 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 7016:** Application of Harvey E. Yates Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Mississippian formations underlying the E/2 of Section 18, Township 15 South, Range 27 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 7006:** (Continued from August 20, 1980, Examiner Hearing)  
Application of Harvey E. Yates Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Northwest Gladiola Unit Area, comprising 1,280 acres, more or less, of State and fee lands in Townships 11 and 12 South, Range 37 East.
- CASE 7007:** (Continued from August 20, 1980, Examiner Hearing)  
Application of Harvey E. Yates Company for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Morrow and Atoka production in the wellbore of its North Travis 12 Deep Well No. 1 located in Unit O of Section 12, Township 18 South, Range 28 East.
- CASE 7017:** Application of Bass Enterprises Production Company for pool creation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Bone Spring gas pool for its Big Eddy Unit Well No. 60 located in Unit J of Section 20, Township 21 South, Range 28 East, with classification of wells with a GOR of 20,000 or more as gas wells.
- CASE 7018:** Application of Shell Oil Company for an exception to Division Rule No. 202(B), San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a one year extension to the exception to Rule 202(B) previously approved by Order No. R-5655 for certain of its Carson Unit wells in the Bisti Pool. Applicant further requests an administrative procedure for any future extensions.
- CASE 7019:** Application of Amoco Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 30, Township 23 South, Range 25 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 6991:** (Continued from August 6, 1980, Examiner Hearing)  
Application of Amoco Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in a 100 foot perforated interval between 4400 feet and 4800 feet in its South Hobbs Unit Well No. 103 in Unit B of Section 15, Township 19 South, Range 38 East, Hobbs Grayburg-San Andres Pool.
- CASE 7000:** (Continued from August 20, 1980, Examiner Hearing)  
Application of Cavalcade Oil Corporation for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its McClay Well No. 11 2385 feet from the South line and 1834 feet from the West line of Section 33, Township 18 South, Range 30 East, the NE/4 SW/4 of said Section 33 to be dedicated to the well.

CASE 7020: Application of Mesa Petroleum Co. for pool creation, special pool rules and an oil discovery allowable, Rio Arriba and San Juan Counties, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Gallup oil pool for its South Blanco Federal Well No. 1-6 located in Unit A of Section 6, Township 23 North, Range 7 West, and special rules therefor, including a provision for 80-acre spacing units. Applicant further seeks a discovery allowable for the aforesaid well.

CASE 6822: (Reopened and Readvertised)

In the matter of Case 6822 being reopened pursuant to the provisions of Order No. R-6293 which order created the West Double X-Wolfcamp Gas Pool as a retrograde gas condensate pool and set special production limitations therein. Operator(s) may appear and present evidence to establish the true nature of the reservoir and proper rates of withdrawal therefrom.

CASE 6996: (Continued from August 20, 1980, Examiner Hearing)

Application of John E. Schalk for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blanco Mesa Verde Pool underlying the NE/4 of Section 8, Township 25 North, Range 3 West, 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.

\*\*\*\*\*

Docket No. 28-80

DOCKET: COMMISSION HEARING - THURSDAY - SEPTEMBER 4, 1980

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6889: (DE NOVO)

Application of Belco Petroleum Corporation for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill a well, the surface location of which is 1980 feet from the North line and 920 feet from the West line of Section 36, Township 22 South, Range 30 East, in such a manner as to bottom it at an unorthodox location within 100 feet of a point 1320 feet from the North line and 2640 feet from the West line of said Section 36 in the Morrow formation, the N/2 of said Section 36 to be dedicated to the well.

Upon application of Duval Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

Evidence and testimony or arguments in this hearing shall be limited to the issue of whether Duval Corporation has standing to object to the application of Belco Petroleum Corporation.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
6 August 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Daniel S. Nutter

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:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409



1 MR. NUTTER: Call Case Number 6991.

2 MR. PADILLA: Application of Amoco Pro-  
3 duction Company for salt water disposal, Lea County, New  
4 Mexico.

5 MR. MOTE: Clyde Mote for Amoco Production  
6 Company. We'd ask that case be continued until September 3rd,  
7 please.

8 MR. NUTTER: Case Number 6991 will be  
9 continued to the Examiner Hearing scheduled to be held at this  
10 same place at 9:00 a. m. September 3rd, 1980.

11  
12 (Hearing concluded.)  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6991,  
heard by me on Aug 6 1980.

[Signature], Examiner  
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
6 August 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Daniel S. Nutter

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:

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
6 August 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-  
pany for salt water disposal, Lea  
County, New Mexico.

CASE  
6991

BEFORE: Daniel S. Nutter

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:

SALLY W. BOYD, C.S.R.  
Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

1 MR. NUTTER: Call Case Number 6991.

2 MR. PADILLA: Application of Amoco Pro-  
3 duction Company for salt water disposal, Lea County, New  
4 Mexico.

5 MR. MOTE: Clyde Mote for Amoco Production  
6 Company. We'd ask that case be continued until September 3rd,  
7 please.

8 MR. NUTTER: Case Number 6991 will be  
9 continued to the Examiner Hearing scheduled to be held at this  
10 same place at 9:00 a. m. September 3rd, 1980.

11  
12 (Hearing concluded.)  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

C E R T I F I C A T E

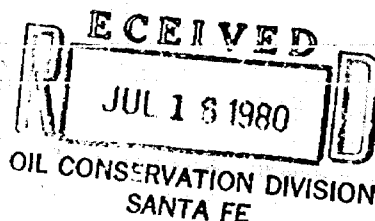
I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion Division was reported by me; that the said transcript  
is a full, true, and correct record of the hearing, prepared  
by me to the best of my ability.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6991  
heard by me on Aug 17, 1966  
[Signature], Examiner  
Oil Conservation Division





Amoco Production Company

Post Office Box 68  
Hobbs, New Mexico 88240

S. J. Okerson  
District Superintendent  
July 8, 1980

File: SJO-986.51 x WF-833

Re: Application for Salt Water Disposal  
South Hobbs Unit Well No. 103  
Hobbs Grayburg San Andres  
Lea County, New Mexico

*Case 6991*

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

Gentlemen:

Amoco Production Company requests administrative approval to dispose of produced water from the Hobbs Grayburg San Andres field into the San Andres formation in our South Hobbs Unit Well No. 103, located 990' FNL & 2310' FEL, Section 15, T-19-S, R-38-E, Lea County, New Mexico. In accordance with Rule 701-C, we are attaching hereto our "Application to Dispose of Salt Water by Injection Into a Porous Formation". Also attached is a plat, a diagrammatic sketch of the proposed injection well and a water analysis of the produced water to be injected. All acreage within a half mile radius of the proposed injection well is unitized into the South Hobbs Grayburg San Andres Unit.

South Hobbs Unit Well No. 103, the proposed injection well, was originally drilled as a producing well in the Hobbs Grayburg San Andres. Prior to conversion to a disposal well, the subject well will be deepened to a TD of 4822'. We will run a 4-1/2" flush joint liner from 3790' to TD and cement with 90 sx Class C cement. The interval to be perforated will be chosen after running logs. Approximately 100' will be perforated with 4 JSPF. Produced water from our South Hobbs Unit will be disposed of in the perforated San Andres interval through plastic coated tubing and packer set at approximately 4300'. Water will be injected at a maximum rate of 7500 bbl per day.

Yours very truly,

*S. J. Okerson*

Attachments

cc: NMOCD  
E. D. Newman  
Dave Lenard



JUL 16 1980

Form C-108  
Revised 1-1-65

Case 6991

NEW MEXICO OIL CONSERVATION COMMISSION  
OIL CONSERVATION DIVISION

## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Amoco Production Company</b>		ADDRESS <b>P. O. Box 68, Hobbs, NM 88240</b>			
LEASE NAME <b>South Hobbs Unit</b>	WELL NO. <b>103</b>	FIELD <b>Grayburg San Andres</b>	COUNTY <b>Lea</b>		
LOCATION UNIT LETTER <b>B</b> ; WELL IS LOCATED <b>990</b> FEET FROM THE <b>North</b> LINE AND <b>2310</b> FEET FROM THE <b>East</b> LINE, SECTION <b>15</b> TOWNSHIP <b>19-S</b> RANGE <b>38-E</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>12-1/2"</b>	<b>166'</b>	<b>100 SX</b>	<b>surface</b>	<b>circulated</b>
INTERMEDIATE	<b>8-1/4"</b>	<b>3186'</b>	<b>700 SX</b>	<b>btm 12-1/2"</b>	<b>calculated</b>
LONG STRING	<b>6-5/8"</b>	<b>3997'</b>	<b>50 SX</b>	<b>unknown</b>	
TUBING	<b>plastic coated</b>	<b>2-3/8"</b>	NAME, MODEL AND DEPTH OF TUBING PACKER <b>Guiberson Unit VI - approx. 4300'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>San Andres</b>		TOP OF FORMATION <b>4000'</b>		BOTTOM OF FORMATION <b>5300'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLES? <b>Perforations</b>		PROPOSED INTERVAL(S) OF INJECTION <b>Approx 100' between 4400'-4800'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Producing Well</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>400'</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>3900'</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>5300'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBL/DAY)	MINIMUM <b>4500</b>	MAXIMUM <b>7500</b>	OPEN OR CLOSED TYPE SYSTEM <b>closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>850#</b>
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE --			WATER TO BE DISPOSED OF <b>Yes</b>	NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>	ARE WATER ANALYSES ATTACHED? <b>Yes</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>Dave Lenard, Box 27, Hobbs, NM 88240</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>All acreage within 1/2 mile is unitized in the South Hobbs Grayburg San Andres Unit.</b>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER <b>Yes</b>		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>NA</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		PLAT OF AREA <b>Yes</b>		ELECTRICAL LOG <b>No</b>	
				THE NEW MEXICO STATE ENGINEER <b>Yes</b>	
				DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

**Bob Davis**  
(Signature)**Admin Analyst**  
(Title)**7/9/80**  
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

RECEIVED  
JUL 10 1980

Form C-108  
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Amoco Production Company</b>		ADDRESS <b>P. O. Box 68, Hobbs, NM 88240</b>	
LEASE NAME <b>South Hobbs Unit</b>	WELL NO. <b>103</b>	FIELD <b>Grayburg San Andres</b>	COUNTY <b>Lea</b>
LOCATION UNIT LETTER <b>B</b> ; WELL IS LOCATED <b>990</b> FEET FROM THE <b>North</b> LINE AND <b>2310</b> FEET FROM THE <b>East</b> LINE, SECTION <b>15</b> TOWNSHIP <b>19-S</b> RANGE <b>38-E</b> NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	12-1/2"	166'	100 sx	surface	circulated
INTERMEDIATE	8-1/4"	3186'	700 sx	btm 12-1/2"	calculated
LONG STRING	6-5/8"	3997'	50 sx	unknown	
TUBING	plastic coated 2-3/8"		NAME, MODEL AND DEPTH OF TUBING PACKER <b>Guiberson Unit VI - approx. 4300'</b>		

NAME OF PROPOSED INJECTION FORMATION <b>San Andres</b>		TOP OF FORMATION <b>4000'</b>	BOTTOM OF FORMATION <b>5300'</b>
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLES? <b>Perforations</b>	PROPOSED INTERVAL(S) OF INJECTION <b>Approx 100' between 4400'-4800'</b>
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Producing Well</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>400'</b>	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>3900'</b>	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>5300'</b>
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) <b>4500</b>	MINIMUM <b>7500</b>	MAXIMUM <b>closed</b>
OPEN OR CLOSED TYPE SYSTEM <b>closed</b>		IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>
APPROX. PRESSURE (PSI) <b>850#</b>		
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - <b>Yes</b>		WATER TO BE DISPOSED OF <b>Yes</b>
NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>		ARE WATER ANALYSES ATTACHED? <b>Yes</b>

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)  
**Dave Lenard, Box 27, Hobbs, NM 88240**

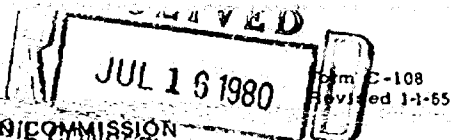
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL  
**All acreage within 1/2 mile is unitized in the South Hobbs Grayburg San Andres Unit.**

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?			
SURFACE OWNER <b>Yes</b>		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>NA</b>	
THE NEW MEXICO STATE ENGINEER <b>Yes</b>			
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		ELECTRICAL LOG <b>No</b>	
PLAT OF AREA <b>Yes</b>		DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

**Bob Davis** Admin Analyst **7/9/80**  
(Signature) (Title) (Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.



NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Amoco Production Company</b>		ADDRESS <b>P. O. Box 68, Hobbs, NM 88240</b>			
LEASE NAME <b>South Hobbs Unit</b>	WELL NO. <b>103</b>	FIELD <b>Grayburg San Andres</b>	COUNTY <b>Lea</b>		
LOCATION UNIT LETTER <b>B</b> ; WELL IS LOCATED <b>990</b> FEET FROM THE <b>North</b> LINE AND <b>2310</b> FEET FROM THE <b>East</b> LINE, SECTION <b>15</b> TOWNSHIP <b>19-S</b> RANGE <b>38-E</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>12-1/2"</b>	<b>166'</b>	<b>100 sx</b>	<b>surface</b>	<b>circulated</b>
INTERMEDIATE	<b>8-1/4"</b>	<b>3186'</b>	<b>700 sx</b>	<b>btm 12-1/2"</b>	<b>calculated</b>
LONG STRING	<b>6-5/8"</b>	<b>3997'</b>	<b>50 sx</b>	<b>unknown</b>	
TUBING	<b>plastic coated</b>	<b>2-3/8"</b>	NAME, MODEL AND DEPTH OF TUBING PACKER <b>Guiberson Unit VI - approx. 4300'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>San Andres</b>		TOP OF FORMATION <b>4000'</b>		BOTTOM OF FORMATION <b>5300'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLES <b>Perforations</b>		PROPOSED INTERVAL(S) OF INJECTION <b>Approx 100' between 4400'-4800'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Producing Well</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>400'</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>3900'</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>5300'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBL/DAY) <b>4500</b>	MINIMUM <b>4500</b>	MAXIMUM <b>7500</b>	OPEN OR CLOSED TYPE SYSTEM <b>closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>850#</b>
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE. <b>Yes</b>			WATER TO BE DISPOSED OF <b>Yes</b>		
			NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>		
			ARE WATER ANALYSES ATTACHED? <b>Yes</b>		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>Dave Lenard, Box 27, Hobbs, NM 88240</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>All acreage within 1/2 mile is unitized in the South Hobbs Grayburg San Andres Unit.</b>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
		<b>Yes</b>		<b>NA</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA		ELECTRICAL LOG	
		<b>Yes</b>		<b>No</b>	
				DIAGRAMMATIC SKETCH OF WELL	
				<b>Yes</b>	

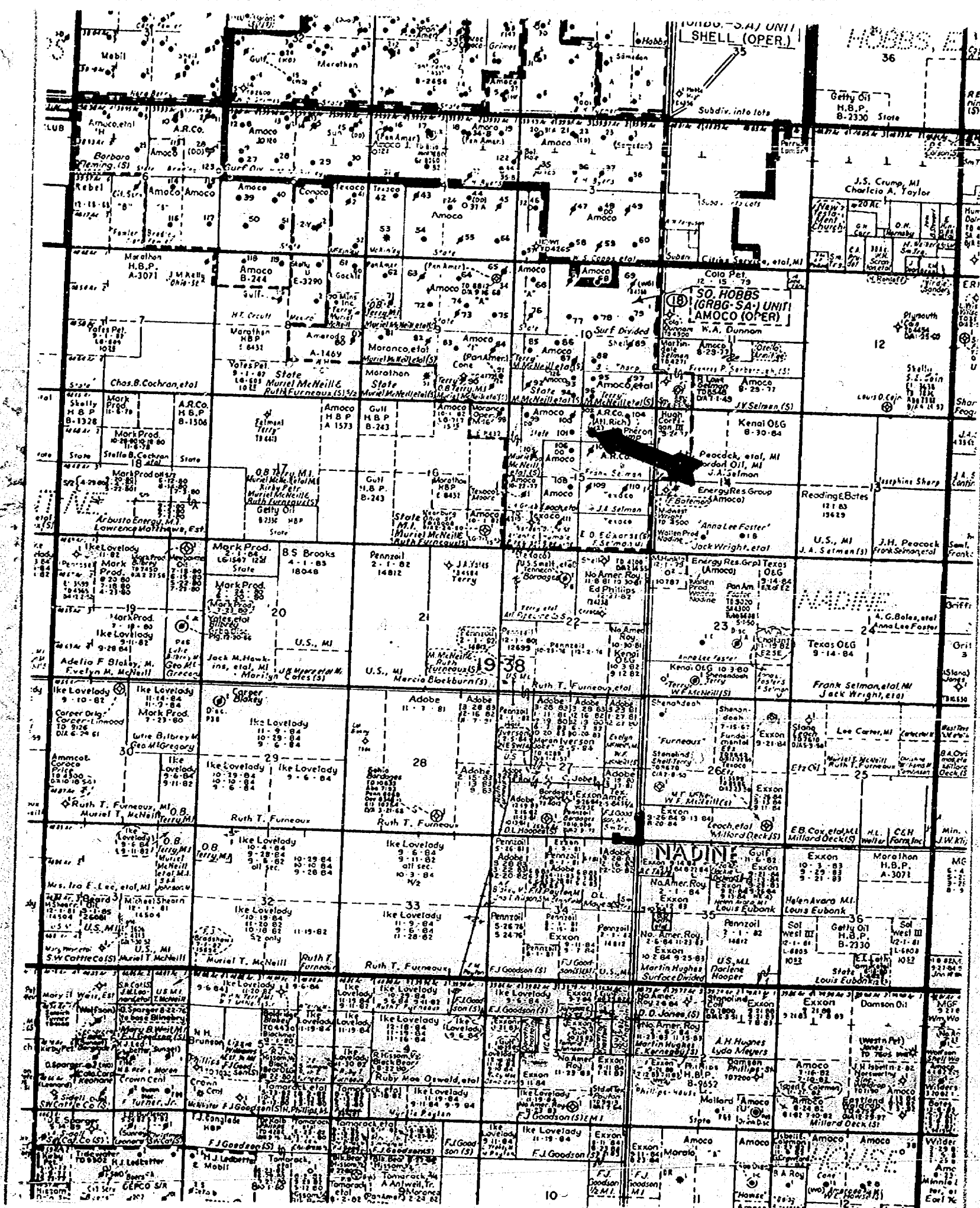
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Bob Davis  
(Signature)

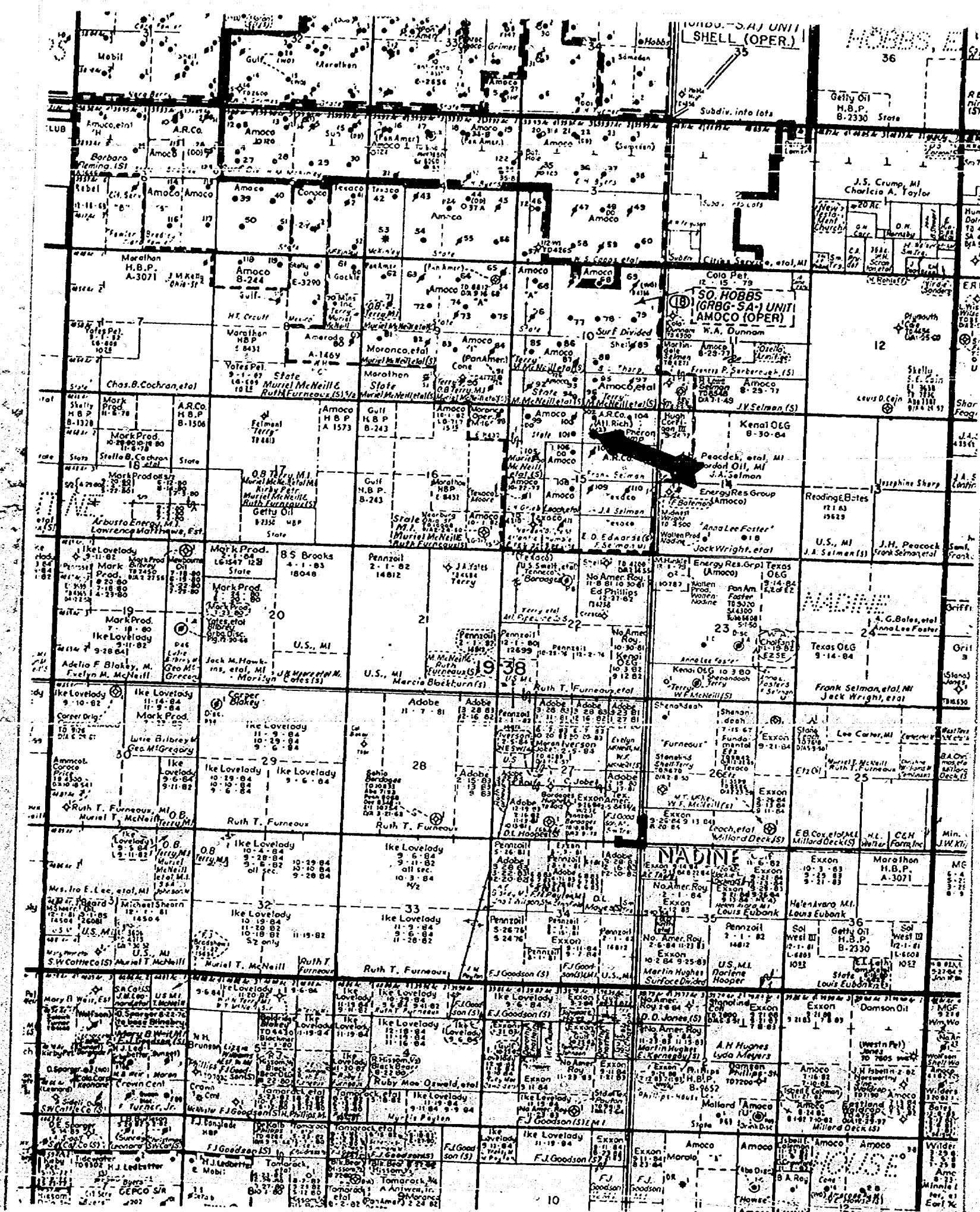
Admin Analyst  
(Title)

7/9/80  
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.







NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

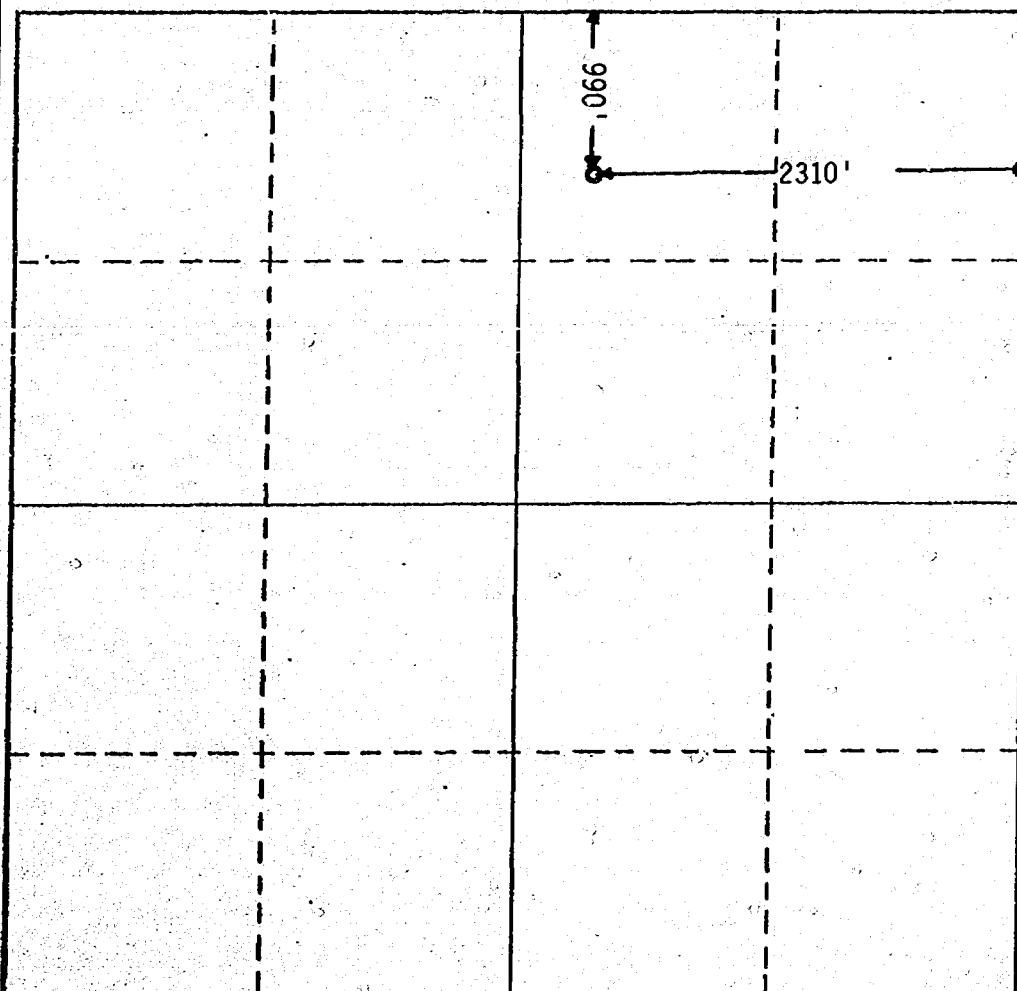
Operator <b>Amoco Production Company</b>		Lease <b>South Hobbs GSA Unit</b>			Well No. <b>103</b>
Unit Letter <b>B</b>	Section <b>15</b>	Township <b>19-S</b>	Range <b>38-E</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>990</b> feet from the <b>North</b> line and <b>2310</b> feet from the <b>East</b> line					
Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage: Acres		

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

☐ Yes ☐ No If answer is "yes," type of 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 communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name **Bob Davis**

Position **Admin. Analyst**

Company **Amoco Production Company**

Date **7-8-80**

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

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.





Amoco Production Company  
ENGINEERING CHART

SHEET NO. OF

FILE

APPN

DATE 7-02-80

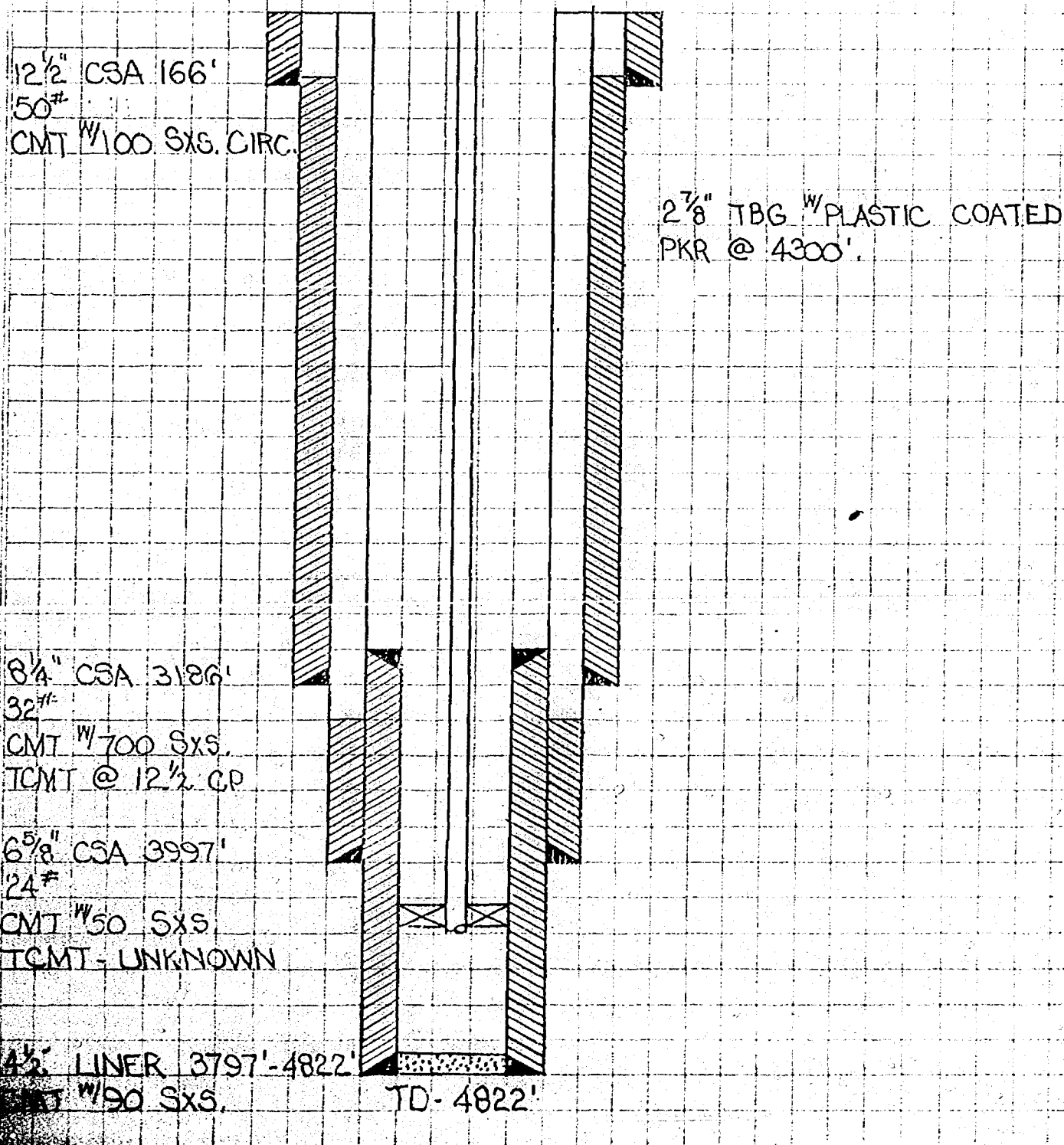
BY R.W.

SUBJECT SOUTH HOBBS UNIT #103

HOBBS GSA

UNIT B, 990' FNL & 2310 FEL, SEC 15, T-19-S, R-38-E  
LEA COUNTY, NEW MEXICO

ELEVATION: 3588' GL







To: File  
535.11

Amoco Production Company

**RESEARCH CENTER  
WATER ANALYSIS**

T.S. or File No. \_\_\_\_\_

Lab. No. T25439

Field No. \_\_\_\_\_

API Well No. \_\_\_\_\_

**LOCATION SAMPLED:** Region Houston Division \_\_\_\_\_ District Hobbs  
Operator (Plant) Amoco Well No. 102 Lease South Hobbs Unit  
State (Province) New Mexico County (Parish) Lea  
Twp. 19S Rng. 38E Sec. \_\_\_\_\_ Quarter (Lsd.) \_\_\_\_\_ Other (Meridian) \_\_\_\_\_  
Wildcat ( ) Field Well ( ) Field name \_\_\_\_\_  
Sample collected from Wellhead Date 5-13-79 Sample collected by \_\_\_\_\_  
Interval sampled \_\_\_\_\_ to \_\_\_\_\_ Interval name San Andres  
Recovery \_\_\_\_\_

Form 97 transmitted by V. E. Staley Date 6-6-79 Authorized by \_\_\_\_\_

**ORGANIC CONSTITUENTS in mg/l**

	BOTTOM	MIDDLE	TOP	MUD
Benzene				
Toluene				
HC Gases				

**DESCRIPTION OF SAMPLE**

Sample used for detailed analyses \_\_\_\_\_  
Date received \_\_\_\_\_  
Condition as received \_\_\_\_\_  
Color \_\_\_\_\_  
Odor \_\_\_\_\_  
Suspended solids \_\_\_\_\_  
Bottom sediment \_\_\_\_\_  
Oil or fluorescence \_\_\_\_\_

**QUALITY OF SAMPLE**

Chloride ion mg/l:	BOTTOM	MIDDLE	TOP

COMMENTS:

**CONVENTIONAL MAJOR ION ANALYSIS**

		Major Ions	% of Total	Reaction	% of Total
		mg/l	Major Ions	Value meq/l	Reaction Value
CATIONS	Sodium $\text{Na}^+$	1,002	21.71	43.58	29.52
	Calcium $\text{Ca}^{++}$	248	5.38	12.38	8.39
	Magnesium $\text{Mg}^{++}$	217	4.71	17.84	12.09
	Potassium $\text{K}^+$				
ANIONS	Chloride $\text{Cl}^-$	1,870	40.55	52.73	35.73
	Bicarbonate $\text{HCO}_3^-$	1,240	26.89	20.34	13.78
	Sulfate $\text{SO}_4^{--}$	35	.76	.73	.49
	Carbonate $\text{CO}_3^{--}$	0	0	0	0
TOTAL		4,612			

Total solids by evaporation 4,180 mg/l  
NaCl resistivity equivalent (Dunlap) 3,894 mg/l  
Resistivity 1.31 ohm-meters at 77 °F  
pH 7.4 Specific gravity 1.003 at 73 °F  
Ryznar stability index (2pHs-pH) \_\_\_\_\_ at \_\_\_\_\_ °F

**OTHER IONS AND DISSOLVED SOLIDS**

CATIONS	mg/l	ANIONS	mg/l	OTHERS	mg/l

REMARKS AND CONCLUSIONS:

CC: A. R. Reed  
V. E. Staley  
G. W. Schmidt

Analyst

Bruce Barnes

Date 6-22-79

Water charts on back ( )



To: File  
535.11

Amoco Production Company

**RESEARCH CENTER  
WATER ANALYSIS**

T.S. or File No.

Lab. No. T25452

Field No.

API Well No.

**LOCATION SAMPLED:** Region Houston Division \_\_\_\_\_ District Hobbs  
Operator (Plant) Amoco Well No. 126 Lease South Hobbs Unit  
State (Province) New Mexico County (Parish) Lea  
Twp. 19S Rng. 38E Sec. \_\_\_\_\_ Quarter (Lsd.) \_\_\_\_\_ Other (Meridian) \_\_\_\_\_  
Wildcat ( ) Field Well ( ) Field name \_\_\_\_\_  
Sample collected from Wellhead Date 5-7-79 Sample collected by \_\_\_\_\_  
Interval sampled \_\_\_\_\_ to \_\_\_\_\_ Interval name San Andres  
Recovery \_\_\_\_\_

Form 97 transmitted by V. E. Staley Date 6-6-79 Authorized by \_\_\_\_\_

**ORGANIC CONSTITUENTS in mg/l**

	BOTTOM	MIDDLE	TOP	MUD
Benzene				
Toluene				
HC Gases				

**DESCRIPTION OF SAMPLE**

Sample used for detailed analyses \_\_\_\_\_  
Date received \_\_\_\_\_  
Condition as received \_\_\_\_\_  
Color \_\_\_\_\_  
Odor \_\_\_\_\_  
Suspended solids \_\_\_\_\_  
Bottom sediment \_\_\_\_\_  
Oil or fluorescence \_\_\_\_\_

**QUALITY OF SAMPLE**

Chloride ion mg/l:	BOTTOM	MIDDLE	TOP

COMMENTS:

**CONVENTIONAL MAJOR ION ANALYSIS**

		Major Ions mg/l	% of Total Major Ions	Reaction Value meq/l	% of Total Reaction Value
CATIONS	Sodium Na <sup>+</sup>	1,134	23.16	49.32	32.74
	Calcium Ca <sup>++</sup>	292	5.97	14.57	9.67
	Magnesium Mg <sup>++</sup>	139	2.84	11.43	7.59
	Potassium K <sup>+</sup>				
ANIONS	Chloride Cl <sup>-</sup>	1,740	35.55	49.07	32.58
	Bicarbonate HCO <sub>3</sub> <sup>-</sup>	1,550	31.66	25.42	16.87
	Sulfate SO <sub>4</sub> <sup>--</sup>	40	.82	.83	.55
	Carbonate CO <sub>3</sub> <sup>--</sup>	0	0	0	0
TOTAL		4,895			

Total solids by evaporation 4,440 mg/l  
NaCl resistivity equivalent (Dunlap) 3,868 mg/l  
Resistivity 1.30 ohm-meters at 77 °F  
pH 7.2 Specific gravity 1.004 at 71 °F  
Ryznar stability index (2pHs-pH) \_\_\_\_\_ at \_\_\_\_\_ °F

**OTHER IONS AND DISSOLVED SOLIDS**

CATIONS	mg/l	ANIONS	mg/l	OTHERS	mg/l

**REMARKS AND CONCLUSIONS:**

CC: A. R. Reed  
V. E. Staley  
G. W. Schmidt

Analyst

Bruce Barnes

Date 6-22-79

Water charts on back ( )



10' File 535.11

Amoco Production Company  
**RESEARCH CENTER  
WATER ANALYSIS**

T.S. or File No. \_\_\_\_\_  
Lab. No. T25436  
Field No. \_\_\_\_\_  
API Well No. \_\_\_\_\_

**LOCATION SAMPLED:** Region Houston Division \_\_\_\_\_ District Hobbs  
Operator (Plant) Amoco Well No. 52 Lease South Hobbs Unit  
State (Province) New Mexico County (Parish) Lea  
Twp. 19S Rng. 38E Sec. \_\_\_\_\_ Quarter (Lsd.) \_\_\_\_\_ Other (Meridian) \_\_\_\_\_  
Wildcat ( ) Field Well ( ) Field name \_\_\_\_\_  
Sample collected from Wellhead Date 6-4-79 Sample collected by \_\_\_\_\_  
Interval sampled \_\_\_\_\_ to \_\_\_\_\_ Interval name San Andres  
Recovery \_\_\_\_\_

Form 97 transmitted by V. E. Staley Date 6-6-79 Authorized by \_\_\_\_\_

**ORGANIC CONSTITUENTS in mg/l**

	BOTTOM	MIDDLE	TOP	MUD
Benzene				
Toluene				
HC Gases				

**DESCRIPTION OF SAMPLE**

Sample used for detailed analyses \_\_\_\_\_  
Date received \_\_\_\_\_  
Condition as received \_\_\_\_\_  
Color \_\_\_\_\_  
Odor \_\_\_\_\_  
Suspended solids \_\_\_\_\_  
Bottom sediment \_\_\_\_\_  
Oil or fluorescence \_\_\_\_\_

**QUALITY OF SAMPLE**

	BOTTOM	MIDDLE	TOP
Chloride ion mg/l:			

COMMENTS:

**CONVENTIONAL MAJOR ION ANALYSIS**

		Major ions	% of Total	Reaction	% of Total
		mg/l	Major ions	Value meq/l	Reaction Value
CATIONS	Sodium Na <sup>+</sup>	2,774	29.66	120.68	41.54
	Calcium Ca <sup>++</sup>	260	2.78	12.97	4.47
	Magnesium Mg <sup>++</sup>	141	1.51	11.59	3.99
	Potassium K <sup>+</sup>				
ANIONS	Chloride Cl <sup>-</sup>	3,690	39.47	104.06	35.83
	Bicarbonate HCO <sub>3</sub> <sup>-</sup>	2,390	25.56	39.20	13.49
	Sulfate SO <sub>4</sub> <sup>-</sup>	95	1.02	1.98	.68
	Carbonate CO <sub>3</sub> <sup>-</sup>	0	0	0	0
TOTAL		9,350			

Total solids by evaporation 8,100 mg/l  
NaCl resistivity equivalent (Dunlap) 7,686 mg/l  
Resistivity .700 ohm-meters at 77 °F  
pH 7.4 Specific gravity 1.007 at 73 °F  
Ryznar stability index (2pHs-pH) \_\_\_\_\_ at \_\_\_\_\_ °F

**OTHER IONS AND DISSOLVED SOLIDS**

CATIONS	mg/l	ANIONS	mg/l	OTHERS	mg/l

**REMARKS AND CONCLUSIONS:**

CC: A. R. Reed  
V. E. Staley  
G. W. Schmidt

Analyst Bruce Barnes Date 6-22-79

Water charts on back ( )

DRAFT

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

dr/

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

CASE NO. 6991

Order No. R- 6478

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR SALT WATER DISPOSAL,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 17,  
19 80, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this \_\_\_\_\_ day of September, 19 80, the Division  
Director, having considered the record and the recommendations of  
the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 6991 is hereby dismissed.

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