Dockets Nos. 6-86 and 7-86 are tentatively set for February 19 and March 5, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 5, 1986

8:15 A.M. OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before David R. Catanach, Examiner, or Michael E. Stogner, Alternate Examiner:

CASE 8816: Application of C & C Operating Corporation 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 the perforated interval from approximately 4942 feet to 4986 feet in its Lea "OR" State Well No. 3 located 660 feet from the South and East lines of Section 12, Township 18 South, Range 36 East, Arkansas Junction-San Andres Pool.

CASE 8817: Application of Pollution Control, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo, Wolfcamp, and Devonian formations in the perforated intervals from approximately 5000 feet to 12,164 feet in the L & B Oil Company Inc. State "AJ" Well No. 1 located 2310 feet from the North and East lines (Unit G) of Section 33, Township 18 South, Range 36 East.

CASE 8818: Application of Yates Petroleum Corporation for a pressure maintenance project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Avalon-Delaware Pool by the injection of water into the perforated interval from approximately 2595 feet to 3685 feet in its Stonewall "YE" State Well No. 1 located 1650 feet from the South line and 1980 feet from the East line (Unit J) of Section 30, Township 20 South, Range 28 East.

CASE 8775: (Continued from January 9, 1986, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Abo formation underlying the SW/4 of Section 23, Township 5 South, Range 25 East, Undesignated Pecos Slope Abo Gas Pool, to be dedicated to a well to be drilled at a standard gas well 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 8809: (Continued and Readvertised)

Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Delaware formation underlying four standard 40-acre oil spacing and proration units being the NW/4 SE/4, NE/4 SE/4, SW/4 SE/4 and SE/4 SE/4 of Section 13, Township 18 South, Range 31 East, each unit 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 each of said wells and the allocation of the costs 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 8784: (Continued from January 22, 1986, Examiner Hearing)

Application of TXO Production Corp. for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in all formations from the surface through the base of the Queen formation underlying the NW/4 NE/4 of Section 14, Township 18 South, Range 38 East, forming a standard 40-acre spacing and proration unit, to be dedicated to a well to be drilled at a standard oil well 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 8810: (Continued from January 22, 1986, Examiner Hearing)

Application of Bliss Petroleum, Inc. for an exception to the special rules and regulations for the Dean Permo-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations of the Dean Permo-Pennsylvanian Pool, as promulgated by Division Order No. R-892, authorizing a 40-acre non-standard oil spacing and proration unit comprising the SW/4 NW/4 of Section 35, Township 15 South, Range 36 East, to be dedicated to a well to be located at a standard oil well location thereon.

CASE 8819: Application of The Petroleum Corporation of Delaware for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from 3500 feet to 5600 feet underlying the SE/4 SW/4 of Section 12, Township 26 South, Range 29 East, forming a standard 40-acre oil spacing and proration unit, to be dedicated to a well located at a standard oil well 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 8820: Application of Santa Fe Energy Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp, Strawn, Atoka, and Morrow formations underlying the W/2 of Section 24, Township 22 South, Range 27 East, forming a standard 320-acre gas spacing and proration unit, to be dedicated to a well to be drilled at a standard gas well 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 8821: Application of Earle M. Craig, Jr. Corporation for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 1250 feet from the South line and 660 feet from the East line of Section 25, Township 26 South, Range 30 East, Undesignated Ross Draw-Wolfcamp Gas Pool, the S/2 of said Section 25 to be dedicated to the well.

CASE 8806: (Continued from January 22, 1986, Examiner Hearing)

Application of Coquina Oil Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Cisco formation in the perforated interval from approximately 7870 feet to 8196 feet in its Pan Canadian Well No. 1 located 1980 feet from the North and West lines (Unit F) of Section 34, Township 19 South, Range 25 East.

CASE 8812: (Continued and Readvertised)

Application of Sun Exploration and Production Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 2080 feet from the North line and 600 feet from the East line of Section 24, Township 18 South, Range 33 East, Morrow formation, the N/2 of said Section 24 to be dedicated to the well.

CASE 8805: (Continued from January 9, 1986, Examiner Hearing)

Application of Gary-Williams Oil Producer for a pressure maintenance project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Rio Puerco-Mancos Oil Pool by the reinjection of natural gas into the perforated interval from approximately 3691 feet to 4127 feet in its San Isidro "13" Well No. 11 located 1980 feet from the South and West lines of Section 13, Township 20 North, Range 3 West.

CASE 8822: Application of Amoco Production Company for pool creation and special pool rules, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Gallup production comprising all of Sections 25, 26, 35 and 36 in Township 26 North, Range 3 West, and the promulgation of special rules therefor including a provision for 160-acre spacing and designated well locations.

CASE 8789: (Continued from January 9, 1986, Examiner Hearing)

Application of Geo Engineering, Inc. for a unit agreement and for authorization for a unit plan of development to more efficiently recover primary reserves and for the purpose of secondary recovery, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval of a unit area for the Mesaverde formation encompassing 1580 acres, more or less, of State and fee lands underlying either all or portions of Sections 20, 21, 22, 27, 28, 29 and 30, Township 20 North, Range 9 West. Applicant further seeks an order authorizing a plan of development within said unit area to include:

1) an exception to Division General Rule 104.F., to provide for oil wells to be located not nearer than 165 feet to the unit boundary nor nearer than 10 feet to any quarter-quarter section or subdivision inner boundary;

2) an exception to Division General Rule 104.C.I., allowing the operator to develop the unit area with more than four wells on each 40-acre tract; and,

CASE 8849: (Continued from April 2, 1986, Examiner Hearing)

Application of Southland Royalty Company for NGPA Wellhead Price Ceiling Category Determinations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a determination by the Division that the following four wells in Township 19 South, Range 35 East, Scharb-Bone Springs Pool, meet the NGPA well category criteria for New Onshore Reservoir under Section 102 of the Natural Gas Policy Act of 1978 and the applicable rules of the Federal Energy Regulatory Commission:

1) Smith "5" Well No. 2 located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 5;

2) Smith "5" Well No. 4 located 2149 feet from the South line and 700 feet from the East line (Unit I) of Section 5;

3) Scharb "8" Well No. 2 located 660 feet from the North line and 2180 feet from the East line (Unit B) of Section 8; and,

4) Scharb "9" Well No. 4 located 766 feet from the North line and 2086 feet from the West line (Unit C) of Section 9.

CASE 8818: (Readvertised)

Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Avalon-Delaware Pool in the perforated interval from 2595 feet to 3685 feet in its Stonewall "YE" State Well No. 1 located 1650 feet from the South line and 1980 feet from the East line (Unit J), Section 30, Township 20 South, Range 28 East. In the absence of objection, this case will be approved prusuant to Division Rules and Regulations.

CASE 8897: Application of Mesa Grande Resources, Inc. for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Undesignated Gavilan-Pictured Cliffs Pool underlying the SE/4 of Section 5, Township 25 North, Range 2 West, to be dedicated to a well to be drilled at a standard gas well 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 8898: Application of HNG Oil Company for compulsory pooling. Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the top of the Wolfcamp formation underlying the SW/4 of Section 31, Township 24 South, Range 29 East, forming a standard 160-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing. Applicant further seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Undesignated Salt Draw-Atoka Gas Pool underlying the W/2 of said Section 31, to form a standard 320-acre gas spacing and proration unit both aforementioned units to be dedicated to a well to be drilled at a standard gas well 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 8870: (Continued from April 30, 1986, Examiner Hearing)

Application of Nearburg Producing Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Cisco and Canyon formations in the perforated interval from approximately 7772 feet to 7850 feet in the Coquina Oil Corporation Aikman State Well No. 1 located 660 feet from the SOuth line and 1980 feet from the West line (Unit N) of Section 27, Township 19 South, Range 25 East.

CASE 8899: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, assigning a discovery allowable, and extending certain pools in Chaves and Eddy Counties, New Mexico:

(a) CREATE a new pool in Chaves County, New Mexico, classified as a gas pool for Morrow Production and designated as the Buffalo Valley-Morrow Gas Pool. The discovery well is the Read and Stevens, Inc. Langley Federal Com Well No. 3, located in Unit O of Section 14, Township 15 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM
Section 14: S/2

(b) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the South Corral Canyon-Bone Spring Pool. The discovery well is the United Petroleum Corporation Exxon Federal Well No. 1, located in Unit M of Section 31, Township 25 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 30 EAST, NMPM
Section 31: SW/4

(c) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware Production and designated as the South Culebra Bluff-Delaware Pool. The discovery well is the Amoco Production Company Brantly B Well No. 1, located in Unit J of Section 24, Township 23 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 24: SE/4

(d) CREATE a new pool in Chaves County, New Mexico, classified as a gas pool for Pennsylvanian production and designated as the North Foor Ranch-Pennsylvanian Gas Pool. The discovery well is the Plains Radio Broadcasting Company Camel State Well No. 2, located in Unit K of Section 6, Township 9 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 9 SOUTH, RANGE 27 EAST, NMPM
Section 6: W/2

(e) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the South Leo-Bone Spring Pool. The discovery well is the Yates Petroleum Corporation Benson Deep Unit Well No. 2, located in Unit E of Section 23, Township 18 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
Section 34: NW/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Loco Hills-Atoka Gas Pool. The discovery well is the Yates Petroleum Corporation Cedar Lake ADI Federal Com. Well No. 1, located in Unit E of Section 26, Township 17 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM
Section 26: W/2

(g) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the East Loco Hills-Bone Spring Pool. The discovery well is the Harvey E. Yates Loco Sand Hills 9 Federal Well No. 1, located in Unit P of Section 9, Township 18 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
Section 9: SE/4

(h) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the North Ross Draw-Delaware Pool. The discovery well is the J.C. Williamson Wright Federal Well No. 1, located in Unit P of Section 15, Township 26 South, Range 30 East, NMPM. Said pool would comprise:

TOWNSHIP 26 SOUTH, RANGE 30 EAST, NMPM
Section 15: SE/4

(i) ASSIGN a discovery allowable of 13,890 barrels to the discovery well for the Catclaw Draw-Delaware Pool in Eddy County, New Mexico. Said discovery well is the Exxon Corporation Catclaw Draw Well No. 8 located in Unit G of Section 22, Township 21 South, Range 25 East, NMPM.

(j) EXTEND the Atoka Glorieta-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 26 EAST, NMPM
Section 4: NE/4 NE/4, S/2 NE/4, SE/4, and NW/4

(k) EXTEND the Brushy Draw-Delaware Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 26 SOUTH, RANGE 29 EAST, NMPM
Section 12: N/2 SW/4

(l) EXTEND the Four Mile Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM
Section 25: S/2

CASE 3892: (Continued from May 14, 1986, Examiner Hearing)

Application of Manana Gas, Inc. for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its proposed Nancy Hartman Well No. 1 to be drilled 1100 feet from the North line and 55 feet from the East line of Section 22, Township 29 North, Range 11 West, Bloomfield-Chacra Pool, the NE/4 of said Section 22 to be dedicated to the well.

CASE 8870: (Continued from May 14, 1986, Examiner Hearing)

Application of Nearburg Producing Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Cisco and Canyon formations in the perforated interval from approximately 7772 feet to 7850 feet in the Coquina Oil Corporation Aikman State Well No. 1 located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 27, Township 19 South, Range 25 East.

CASE 8907: Application of Minerals Inc. for Hardship Gas Well Classification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a determination that its Llano "34" State Com Well No. 1 located 1650 feet from the South line and 660 feet from the East line (Unit I) of Section 34, Township 21 South, Range 34 East, East Grama Ridge-Morrow Gas Pool, is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 8866: (Continued from April 30, 1986, Examiner Hearing)

Application of Amoco Production Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox well location 180 feet from the South line and 130 feet from the East line of Section 9, Township 27 North, Range 12 West, Wildcat Gallup/Basin Dakota Pool, the SW/4 and S/2, respectively, of said Section 9, to be dedicated to the well.

CASE 8874: (Continued from April 30, 1986, Examiner Hearing)

Application of Union Texas Petroleum Corporation for Pool Reclassification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of the Crosby-Devonian Gas Pool as an associated pool and the promulgation of special pool rules therefor.

CASE 8818: (Continued from May 14, 1986, Examiner Hearing)

Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Avalon-Delaware Pool in the perforated interval from 2595 feet to 3685 feet in its Stonewall "YE" State Well No. 1 located 1650 feet from the South line and 1980 feet from the East line (Unit J), Section 30, Township 20 South, Range 28 East. In the absence of objection, this case will be approved pursuant to Division Rules and Regulations.

CASE 3908: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, assigning a discovery allowable, contracting, and extending certain pools in Lea County, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Yates production and designated as the Buffalo-Yates Pool. Further, assign approximately 17,550 barrels of discovery allowable to the discovery well, the Amoco Production Company Nellis Fed Well No. 3 located in Unit F of Section 6, Township 19 South, Range 33 East, NMPM. Said Pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM
Section 6: NW/4

(b) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Delaware production and designated as the Northeast Lea-Delaware Pool. The discovery well is the Spectrum 7 Exploration Company Mobil State Well No. 1 located in Unit J of Section 2, Township 20 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM
Section 2: SE/4

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the Lea-Wolfcamp Gas Pool. The discovery well is the TXO Production Corporation Jordan B Well No. 2 located in Unit G of Section 11, Township 20 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 35 EAST, NMPM
Section 11: N/2

Dockets Nos. 18-86 and 19-86 are tentatively set for June 12 and June 25, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 28, 1986
8:15 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Michael E. Stogner, Examiner, or David R. Catanach, Alternate Examiner:

CASE 8878: (Continued from May 14, 1986, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to consider the amendment of Rule 101 relating to bonds. The proposed amendment would provide for the posting of a cash bond upon a showing that the operator is unable to obtain a surety bond.

CASE 8903: In the matter of the hearing called by the Oil Conservation Division on its own motion to consider amendments to its SPECIAL RULES FOR APPLICATIONS FOR WELLHEAD PRICE CEILING CATEGORY DETERMINATIONS, pursuant to the Natural Gas Policy Act of 1978, as promulgated by Division Order No. R-5878-B, as amended. The proposed amendments to be considered include:

1) adopting an administrative procedure for NGPA Section 107, Occluded Natural Gas Produced from Coal Seams, wellhead filing requirements;

2) instituting a $25.00 filing fee for each Application for Wellhead Price Ceiling Category Determinations; and,

3) minor changes and/or clarification to the GENERAL RULES, DEFINITIONS, AND FILING REQUIREMENTS for NGPA Categories 102, 103, 107, and 108.

CASE 8904 Application of Amerind Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location for its proposed Wiser "B" State Well No. 1 to be drilled 810 feet from the North line and 1650 feet from the East line of Section 29, Township 16 South, Range 37 East, Northeast Lovington-Pennsylvanian Pool, the W/2 NE/4 of said Section 29 to be dedicated to the well.

CASE 8905: Application of Oilfield Services for an oil treating plant permit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the SE/4 NW/4 of Section 33, Township 29 North, Range 11 West.

CASE 8890: (Continued from May 14, 1986, Examiner Hearing)

Application of Northwest Pipeline Corp. for Hardship Gas Well Classification, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a determination that its San Juan 29-5 Unit Well No. 91 located 1140 feet from the North line and 1840 feet from the East line (Unit B) of Section 35, Township 29 North, Range 5 West, Basin-Dakota Pool, is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 8906: (This case will be dismissed)

Application of Shell Western E & P, Inc. for waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Shell Black Waterflood Project, authorized by Division Order No. R-2747, dated July 29, 1964, by converting its Black Well No. 1 located 1980 feet from the South and East lines (Unit J) of Section 21, Township 24 South, Range 37 East, Langlie Mattix (Seven Rivers-Queen) Pool, from a producing oil well to a water injection well.

CASE 8891: (Continued from May 14, 1986, Examiner Hearing)

Application of Manana Gas, Inc. for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its proposed Hartman Well No. 1-E to be drilled 1230 feet from the North line and 55 feet from the East line of Section 22, Township 29 North, Range 11 West, Basin-Dakota Pool, the E/2 of said Section 22 to be dedicated to the well.

Dakota Pool on its City of Farmington Lease, all in Section 10, Township 29 North, Range 13 West, Farmington city limits, as follows:

1) Well No. 1
Surface Location (S.L.) - 2160' FSL - 1591' FEL
Bottom Hole Location (B.H.L.) - 1750' FSL - 1775' FEL

2) Well No. 1-E
S.L. - 2203' FSL - 1653' FEL
B.H.L. - 1650' FN & EL

3) Well No. 2
S.L. - 2159' FSL - 1712' FEL
B.H.L. - 1650' FS & WL

4) Well No. 2-E
S.L. - 2246' FSL - 1712' FEL
B.H.L. - 1650' FN & WL

Wells Nos. 1 and 1-E to be dedicated to the E/2 of said Section 10 and Wells Nos. 2 and 2E to be dedicated to the W/2 of said Section 10.

CASE 8870: (Continued from May 28, 1986, Examiner Hearing)

Application of Nearburg Producing Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in to the Cisco and Canyon formations in the perforated interval from approximately 7772 feet to 7850 feet in the Coquina Oil Corporation Aikman State Well No. 1 located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 27, Township 19 South, Range 25 East.

CASE 8874: (Continued from May 28, 1986, Examiner Hearing)

Application of Union Texas Petroleum Corporation for Pool Reclassification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of the Crosby-Devonian Gas Pool as an associated pool and the promulgation of special pool rules therefor.

CASE 8916: Application of Yates Drilling Company for waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Yates Artesia Metex Unit Waterflood Project, authorized by Division Order No. R-4609, dated August 13, 1973, by converting its Artesia Metex Unit Well No. 35 located 1650 feet from the North line and 330 feet from the East line (Unit H) of Section 26, Township 18 South, Range 27 East, Artesia-Queen-Grayburg-San Andres Pool, Artesia Metex Unit Area, from a producing oil well to a water injection well.

CASE 8818: (Continued from May 28, 1986, Examiner Hearing)

Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Avalon-Delaware Pool in the perforated interval from 2595 feet to 3685 feet in its Stonewall "YE" State Well No. 1 located 1650 feet from the South line and 1980 feet from the East line (Unit J), Section 30, Township 20 South, Range 28 East. In the absence of objection, this case will be approved pursuant to Division Rules and Regulations.

CASE 8948: (Continued from May 14, 1986, Examiner Hearing)

Application of Amoco Production Company for NGPA Wellhead Price Ceiling Category Determinations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a determination by the Division that the following three wells in Township 19 South, Range 35 East, Scharb-Bone Springs Pool, meet the NGPA well category criteria for New Onshore Reservoir under Section 102 of the Natural Gas Policy Act of 1978 and the applicable rules of the Federal Energy Regulatory Commission:

1) Elkan Well No. 3 located 1980 feet from the South and East lines (Unit J) of Section 9;

2) Elkan Well No. 4 located 519 feet from the South line and 2121 feet from the West line (Unit N) of Section 9; and,

Dockets Nos. 20-86 and 21-86 are tentatively set for June 25 and July 9, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 11, 1986
8:15 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before David P. Catanach, Examiner, or Michael E. Stogner, Alternate Examiner:

CASE 8909: In the matter of the hearing called by the Oil Conservation Division on its own motion to amend Rule 312 to provide for administrative approval of applications for treating plants, to require a cash or surety bond sufficient for surface reclamation of the treating plant facility site, and to additionally condition the bond upon land surface reclamation to OCD standards.

CASE 8910: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit A. F. Roberts, Jr., Great American Insurance Company, and other interested parties to appear and show cause why the Bogle Farms SWD Well No.1 located 660 feet from the South and West lines of Section 16, Township 11 South, Range 34 East, Lea County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 8911: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit I. & W., Inc. to appear and show cause why its Form C-133, Authorization to Haul Water, should not be cancelled for non-compliance with Oil Conservation Division's regulations.

CASE 8912: Application of Parabo, Inc. 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 the perforated interval from 4300 feet to 4950 feet in its Royalty Holding Well No. 4, located 660 feet from the North and East lines of Section 25, Township 21 South, Range 37 East.

CASE 8913: Application of Exxon Corporation for an unorthodox gas well location and a non-standard gas proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 1980 feet from the North line and 525 feet from the West line of Section 7, Township 17 South, Range 29 East, Undesignated South Empire-Morrow Gas Pool, the NE/4, E/2 NW/4, and Lots 1 and 2 of said Section 7 to be dedicated to said well forming a 292.32-acre non-standard gas spacing and proration unit.

CASE 8914: Application of Chase Energy, Inc. for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Slick Rock-Dakota Oil Pool in the open-hole interval from 750 feet to 758 feet in their DEB Well No. 18 located 810 feet from the South line and 420 feet from the East line (Unit P) of Section 36, Township 30 North, Range 17 West.

CASE 8891: (Continued from May 28, 1986, Examiner Hearing)

Application of Manana Gas, Inc. for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its proposed Hartman Well No. 1-E to be drilled 1230 feet from the North line and 55 feet from the East line of Section 22, Township 29 North, Range 11 West, Basin-Dakota Pool, the E/2 of said Section 22 to be dedicated to the well.

CASE 8892: (Continued from May 28, 1986, Examiner Hearing)

Application of Manana Gas, Inc. for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seks approval of an unorthodox gas well location for its proposed Nancy Hartman Well No. 1 to be drilled 1100 feet from the North line and 55 feet from the East line of Section 22, Township 29 North, Range 11 West, Bloomfield-Chacra Pool, the NE/4 of said Section 22 to be dedicated to the well.

CASE 8915: (This case will be continued to June 25, 1986)

Application of Tenneco Oil Company for directional drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority for the directional drilling of four wells to the Basin-

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

5 February 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corporation for a pressure maintenance project, Eddy County, New Mexico. CASE 8818

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: William F. Carr
Attorney at Law
CAMPBELL & BLACK P. A.
P. O. Box 2208
Santa Fe, New Mexico 87501

I N D E X

E X H I B I T S

MR. CATANACH: Call next Case 8818.

MR. TAYLOR: Application of Yates Petroleum Corporation for a pressure maintenance project, Eddy County, New Mexico.

MR. CARR: May it please the Examiner, my name is William F. Carr, with the law firm Campbell & Black, P. A., of Santa Fe, appearing on behalf of Yates Petroleum Corporation.

We have one witness.

MR. CATANACH: Are there other appearances in this case?

Will the witness please stand and be sworn?

(Witness sworn.)

DAVID L. LANNING,

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place

of residence?

A David L. Lanning, Artesia, New Mexico.

Q Mr. Lanning, by whom are you employed and in what capacity?

A Yates Petroleum Corporation as a petroleum engineer.

Q Have you previously testified before this Commission or this Division?

A No, I have not.

Q Would you briefly summarize for Mr. Catanach your educational background and your work experience?

A My education, I have a petroleum degree from Texas Tech University.

My work experience, I have eight years of engineering experience in the Navy and four years as a petroleum engineer, two with Union Oil of California and approximately two with Yates Petroleum.

Q Now with Union Oil of California and with Yates, in both of those jobs was your area of responsibility southeastern New Mexico?

A Yes, it was.

Q Are you familiar with the application filed in this case?

A Yes, I am.

Q And are you familiar with the subject

well?

A Yes, I am.

MR. CARR: We tender Mr. Lanning as an expert witness in petroleum engineering.

MR. CATANACH: Mr. Lanning is so qualified.

Q Mr. Lanning, will you briefly state what Yates Petroleum Corporation seeks with this application?

A Yes. Yates Petroleum is seeking authorization to inject for pressure maintenance purposes in the Avalon Delaware Pool through the Stonewall Whitten Well No. 1.

This well is currently a shut-in producer. It was completed of January of 1984.

Q Would you identify for Mr. Catanach what has been marked as Yates Exhibit No. 1?

A This is the Oil Conservation Division's Form C-108 with all of the required attachments explaining Yates application for authorization to inject.

Q Now you stated this well was -- the subject well was completed in 1984. What are the injection zones that we're talking about here today?

A We're talking about the Avalon Delaware formation, which is the productive formation in the pool.

Q And what is the present status of this

well?

A It is shut-in.

Q Would you refer to the plat which is contained in Exhibit Number One, and review the information contained on this plat for Mr. Catanach?

A This plat shows the location of the subject well notated by a triangle in the center of the plat. It shows all wells within a 2-mile radius, notated by the larger circle. It shows the lease ownership and it shows the area of review, notated by a one-half mile radius circle, and I'll point out that there is a fresh water well notated by a square within the one-half mile radius circle.

Q That's to the southeast of the proposed injection well?

A Yes, it is.

Q The other wells that are within the area of review, are those Delaware wells?

A Yes, all but three of them are. There are three gas wells in the area, also.

Q Now, Mr. Lanning, I'd like to direct your attention on this plat to Section 31 --

A Yes.

Q -- and the injection well symbol in the southeast quarter of that section.

A Okay, in the southwest of the southeast

quarter there is an injection well also in the Avalon Delaware Pool operated by Exxon.

Q Would you now go to the next page in Exhibit Number One, which is the tabular data, and review this information for the examiner?

A This shows the details of the sixteen wells located within one-half mile of the proposed injection well; gives the well name and location; spud date; completion date; the type of well; total depth; the construction and the completion record.

Q Mr. Lanning, are there any plugged and abandoned wells within the area of review?

A No, there are not.

Q Would you -- I'd like to direct your attention to the first well on this tabular data and ask you just to advise Mr. Catanach of the status of that well.

A This Federal "DS" No. 1 is the water well which was notated on the plat. Yates Petroleum drilled the well in 1974 to a total depth of 670 feet and then released that well to the rancer as a water well. It is not being used as a water well; it's abandoned, temporarily abandoned.

Q All right. Would you now go back in Exhibit Number One to the schematic drawings of the subject well and review those?

A Page number three is the injection well

data sheet after it was converted to injection.

It shows the packer to be set at approximately 2500 feet.

It shows the injection interval through perforations between 2595 and 3685.

It shows that the well will have 2-3/8ths plastic-coated tubing set in a plastic-coated or nickel packer. The annulus will be filled with fluid and will be pressure tested as required by the Federal Underground Injection Control Program.

Q Now, Mr. Lanning, you've indicated you're going to be injecting into the Delaware formation. Would you now go to Exhibit Number Two, which is your cross section, and review that for Mr. Catanach?

A This is just a cross section showing the proposed injection well in the center and the well immediately to the west and to the south.

The purpose of the exhibit is just to show that the proposed injection intervals are continuous throughout the field and therefore a pressure maintenance project will be viable.

And I would also like to bring up at this time that after the well is converted and we've had time to evaluate it, we may like to add additional perforations in other zones that are continuous and productive in offset

wells and if that could be done in a way that we could get approval to add perforations with administrative approval, we would like for that to take place.

Q Now, Mr. Lanning, if I look at the index map, the disposal well is to the north and east of the two offsetting producers.

A Yes.

Q How was that disposal well located in regard to the producing portion of the Delaware in this area?

A This well is on the edge of the field. It has only produced about 1600 barrels of oil, primarily makes water because of its location in the field, and if we do add additional injection intervals based on our completion history of the field, evaluation of the mud logs, and the well logs, we do not believe that we would sacrifice any oil production, by adding additional perforations, if we need to.

Q So when you ran the mud log on the well there was nothing in any of these other zones that would have warranted going forward with any testing --

A No, there was not.

Q -- or perforating?

A No, there was not.

Q What is the source of the water you're proposing to inject into the subject well?

A It is formation water produced from the Avalon Delaware Pool.

Q So you're just reinjecting into that formation water produced from it.

A That's correct.

Q What are you presently doing with this water?

A It is currently being hauled for disposal.

Q And what volumes are you proposing to inject?

A We're expecting an initial rate of between 4-and-500 barrels of water a day, a maximum rate of probably 1000 barrels of water a day; a total volume of possibly 2-million barrels.

A closed water system is expected to be used.

I'd like to make a correction on page nine. The maximum injection pressure I have stated, of 735 pounds, I'd like to correct to 520 pounds, based on the highest perforation and the .2 psi per foot limit, and we would also like addressed in the order to allow us to go to higher pressures, if necessary, contingent on the Oil Conservation District's acceptance of step rate injectivity tests.

Q Will you now refer to page number ten of Exhibit One and identify this?

A This is a water sample of one of the offset producing wells, of the Delaware formation water.

Q Are there fresh water zones in the area?

A Yes, there are. The only known source of fresh water in the area occurs in the Rustler formation at depths up to about 250 feet.

Q And how many -- are there fresh water wells within a mile of the disposal well, other --

A Just -- just the one well which I addressed, which is temporarily abandoned and we were not able to obtain a sample from that well.

Q And from that interval was it that that well is producing, or was producing water?

A From the Rustler formation, which is approximately 1925 feet above the proposed injection interval.

Q Has a log of the proposed injection well been filed with the Oil Conservation Division?

A Yes, it has.

Q Were copies of this application mailed to the offsetting property owners and the surface owner?

A Yes, they were.

Q And is page number twelve of Exhibit One an affidavit indicating that proper notice has been in fact

provided?

A Yes, it is.

Q Could you identify what has been marked as Exhibit Number Three, please?

A This is just a copy of the return receipts from Mesa Petroleum, Exxon, and the Commissioner of Public Lands, State of New Mexico, showing that they did receive their notices.

Q In addition to providing notices required by Division rules, have you discussed your plan to institute pressure maintenance with offsetting operators?

A Yes, I've discussed it with our offsetting operators and all of our partners in the subject wells, and everyoe agrees that the area has enhanced recovery potential and that this pressure maintenance project is just the first project that we're undertaking.

Q Now, Mr. Lanning, I'd like you to go back to your plat. The wells that are offsetting the proposed injection well to the south and the west, are those operated by Yates Petroleum Corporation?

A The wells within Section 30 are, yes.

Q Have you examined the available geologic and engineering data on this area?

A Yes, I have.

Q And as a result of this examination have

you discovered any evidence of open faults or other hydrologic connections between the disposal zone and any underground source of drinking water?

A No, we have not identified any.

Q In your opinion will granting this application be in the best interest of conservation, the prevention of waste, and the protection of correlative rights?

A Yes, it will.

Q Were Exhibits One through Three prepared by you or compiled under your direction and supervision?

A Yes, they were.

MR. CARR: Mr. Catanach, at this time we would offer Yates Petroleum Corporation Exhibits One through Three into evidence.

MR. CATANACH: Exhibits One through Three will be admitted as evidence.

MR. CARR: That concludes my direct examination of Mr. Lanning.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. Lanning, on page five of Exhibit One, is it, the C-108 form?

A Yes.

Q Can you identify for us the oil wells and

the gas wells in the vicinity of that injection well?

A Okay, within that one-half mile radius, you see the 1-EP, which is a gas well. You also see a gas well in the upper right quadrant of the half-mile circle, which is the EP-4, which is a gas well, and then directly east of the proposed injection well you see the PC-1, which is a gas well.

Q Those three gas wells, do you know in what -- what zone they're completed in?

A They're completed in the Morrow.

Q Completed in the Morrow. All of the other wells located west and south of the injection well, those are all Avalon Delaware oil wells?

A Yes, they are. Excuse me, the WM-2, which is south and east of the proposed injection well in the corner, that is now -- the Delaware has been abandoned in that well. It's also on the edge of the field and it's now completed in the Bone Springs as a gas well and it is shut in.

Q Mr. Lanning, you stated that you would like to have permission to add perforations at a later date. Is this within the Avalon Delaware Pool?

A Yes, this is all within the Avalon Delaware in zones that are already productive in offset wells.

Q Mr. Lanning, on your tabular data, well data, you have listed the casing and the depths set and the amount of cement used, but you don't have listed the tops of the cements on any of these.

Can you provide that information to us?

A On the -- on the gas well, the Federal "DC" No. 1, which is the second well, top of cement is 7700 feet on the long string.

On page seven, the "EP" State Com No. 1, the first well is top of cement is 4800 feet, and on the next one, the "EP" State No. 4, the top of cement is 8300 feet.

I'd like to add that Yates Petroleum operates all of these wells and we do not object to filling the annulus with fluid and monitoring them.

Q Okay, how about -- do you have any information on the rest of these wells within a half mile?

A Not on tops of cement, no.

Q Okay, can you provide that information?

A Yes, I can.

Q Mr. Lanning, is this a project that is going to be expanded in the future or is this going to be the only injection well?

A Well, initially this is the only thing we have plans for. All of the offset operators are interested

in evaluating and studying the enhanced recovery potential of the reservoir, but there has been no in depth study done at this time.

Q So this will be more or less a pilot study to determine if it would be successful to go full scale?

A Yes.

Q Mr. Lanning, would you request that in the order that it be stated that it can be expanded administratively, or do you not need that?

A If you're willing to put it in the order, we're willing to accept it.

Q But you're not specifically asking for it.

A No, we are not.

MR. CATANACH: I have no further questions of Mr. Lanning at this time.

Are there any other questions of the witness?

MR. CARR: Nothing further, Mr. Catanach.

MR. CATANACH: Is there anything further in Case 8818?

If not, it will be taken under advisement.

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) 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 CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8918, heard by me on Feb. 5 1996.

David R. Catanach, Examiner
Oil Conservation Division

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

14 May 1986

EXAMINER HEARING

IN THE MATTER OF:

The disposition of cases called on Docket 15-86 for which no testimony was presented.

CASE 8848, 8849, 8818.

Transcript in Case 8848

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

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

28 May 1986

EXAMINER HEARING

IN THE MATTER OF:

The disposition of cases called on Docket No. 17-86 for which no testimony was presented.

CASES 8906. 8891, 8892, 8870, 8866, 8874, 8818.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

12 June 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. CASE 8818

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Jeff Taylor
Legal Counsel to the Division
Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: William F. Carr
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Santa Fe, New Mexico 87501

A P P E A R A N C E S

For Bob Boling:

Ernest L. Padilla
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Santa Fe, New Mexico 87504

I N D E X

I N D E X CONT'D

E X H I B I T S

MR. CATANACH: Call next Case 8818.

The application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico.

MR. CARR: May it please the Examiner, my name is William F. Carr, with the law firm Campbell & Black, P. A., of Santa Fe.

We represent Yates Petroleum Corporation and I have one witness.

MR. CATANACH: Are there other appearances in this case?

MR. PADILLA: Mr. Examiner, my name is Ernest L. Padilla, Santa Fe, for Bob Boling.

MR. CATANACH: Will the witnesses please stand and be sworn in?

(Witnesses sworn.)

MR. CARR: Mr. Examiner, on February 5th, 1986, Case 8818 came before you. At that time it was styled application of Yates Petroleum Corporation for a pressure maintenance project, Eddy County, New Mexico.

Following that hearing there

were a number of conversations between representatives of Yates, you, and Mr. Stamets, and it was agreed that the case be readvertised styled an application for salt water disposal. That was done. That's why we're here before you today.

In February, David Lanning, an engineer with Yates Petroleum Corporation appeared before you and testified from the C-108 that was filed in this case and presented all attachments.

We will not repeat that testimony here today.

I will call Dr. Boneau, who will review recent events, who will provide you with certain data on other wells in the immediate area surrounding the disposal, or proposed disposal well, and discuss generally recent activity in the area.

At this time I call Dr. Boneau.

DAVID F. BONEAU,

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place

of residence?

A David F. Boneau. I live in Artesia, New Mexico.

Q By whom are you employed and in what capacity?

A I'm employed as Engineering Manager for Yates Petroleum Corporation.

Q Have you previously testified before the Division?

A Yes, sir.

Q At that -- at the time you testified, were your credentials as a petroleum engineer accepted and made a matter of record?

A Yes, sir, they were.

Q Are you familiar with the application filed in this case on behalf of Yates Petroleum Corporation?

A Yes, sir.

Q Are you familiar with the well that is the subject of this application and the surrounding wells?

A Yes, sir.

MR. CARR: Are the witness' qualifications acceptable?

MR. CATANACH: Mr. Boneau is considered qualified.

Q Would you briefly state what Yates seeks

with this application?

A Yates seeks in this application the authority to dispose of produced salt water into the Stonewall "YE" No. 1 Well.

Q What is the present status of this well?

A This well is presently shut in.

Q Would you review the recent events which have resulted in today's hearing?

A In February Yates requested a hearing that injection into this Stonewall "YE" No. 1 Well be approved for pressure maintenance.

The staff at the NMOCD questioned whether the operating agreement for the Stonewall working interest unit covered explicitly pressure maintenance. After consulting with the NMOCD Yates decided to change its application to one that covers salt water disposal.

The case has been readvertised and Robert E. Boling had indicated he plans to object.

Q Mr. Bonneau, have you prepared certain exhibits for introduction in this case?

A Yes, I have prepared two exhibits.

Q Would you refer to what has been marked as Yates Exhibit A, identify this, and review the exhibit for Mr. Catanach?

A Yates Exhibit A is a map showing certain

wells in the -- in the area. The purpose of Exhibit A is to illustrate the issues involved, as I see them in this case.

The subject well, the Stonewall "YE" No. 1, is located by a green dot in Section 30. That's the well Yates proposes for injection for salt water disposal purposes. This well is located at the northeast edge of the Avalon Delaware Pool.

The blue dots on Exhibit A show wells that have produced from the Delaware formation.

The Delaware wells in Section 30 are operated by Yates Petroleum. The Delaware wells in Section 31, and parenthetically, there's more of them to the south that are not shown on the map, those wells are operated by Exxon.

These Delaware wells are about 4000 feet deep.

The red dots on the map, and the one yellow dot over in Section 29, show the location of Morrow gas wells that were drilled to about 11,000 feet. We'll talk about why that one well is marked yellow in a little bit but the yellow ones and the red ones are Morrow, deep Morrow wells.

Q What do the circles on the exhibit indicate?

A There's a half mile circle drawn around a

green dot. That indicates the area of review for the Stonewall "YE" No. 1 Well.

There are two gas wells located within that half mile circle. These are the Stonewall "EP" No. 1 Well in Unit F, operated by Yates Petroleum, and the Stonewall "EP" No. 4 Well in Unit H of Section 30.

I think the issue here is whether the deep gas wells have productive -- have protective cement across the interval proposed for injection, and that's the issue that I'm trying to address.

The well to the northwest, the Stonewall "EP" No. 1, does have cement across the proposed injection interval.

Q Does Exhibit B, is that the sundry notice which reports the cementing of that well to the Oil Conservation Division?

A Yes. Exhibit B is a sundry notice on Form C-103 showing that Yates squeezed cement across the Delaware in the Stonewall "EP" No. 1 in 1984.

Q Okay. Would you now go to the No. 4 Well?

A Okay. Now back to Exhibit A, the Stonewall "EP" No. 4 Well has cement across the Upper Delaware, but does not have cement across the Lower Delaware.

Continuing, then, there are two other

deep gas wells that are just barely outside the half mile circle. These are the Yates Federal "DC" No. 1 in Unit L of Section 29, and the Exxon operated Yates Federal "C" No. 1 in Unit C of Section 31.

These two wells have cement across the Upper Delaware but not across the Lower Delaware.

Okay. The situation, then, is that there's one well within the half mile circle where cement covers only a portion of the proposed injection interval, and there are two wells just outside the half mile circle where cement covers only a portion of the proposed injection interval.

Q I believe you testified that Yates operates all the blue wells in Section 30, all the Delaware wells.

A Yes, sir, that's correct.

Q Does Yates operate the deep wells in Section 30, as well?

A Yates operates the deep wells in Section 30.

Q What about in Section 29?

A In Section 29 Yates operates the deep wells that are marked with red dots, the Federal "DC" No. 1 and the "DS" No. 2.

Q What is the current status of the Delaware

wells in Section 30? Are they -- are they now producing?

A Most of these wells are shut in waiting on a suitable salt water disposal facility so we can cut down the operating expenses. These wells make about 400 barrels of oil and 6-or-700 barrels of water a day and they're shut in until we can get a place to dispose of 700 barrels a day economically.

Q If this application is approved and you're granted authority to inject in the subject well, what will be the source of the water that you're injecting in that well?

A The water that we propose to inject into the Stonewall "YE" No. 1 will come from the Delaware wells operated by Yates Petroleum in Section 30.

Q In your opinion will injection of water in the proposed well endanger other wells offsetting that well?

A I surely think that injecting the well will help the overall situation.

Let's -- let's talk about the wells in there for a minute, if we can.

The two wells to the northeast, the Stonewall "EP" No. 4, the Federal "DC" No. 1, are operated by Yates Petroleum. Yates Petroleum can and will monitor these wells for pressure communication and Yates can, and

I'm sure the Commission will hold us responsible for repairing any damage that might possibly occur.

The Exxon well to the south is outside the circle but it's shielded by a number of Delaware producers which are going to relieve any pressure that might build up in the Delaware formation in that direction.

In fact there's a Delaware producer only 100 feet from that Exxon well in Section 31.

Yates is the -- the third point I'd like to make, Yates is merely re-injecting into the Delaware formation water that we're taking out of the Delaware formation in that immediate vicinity.

We are not operating a commercial water disposal well open to other water. We're simply re-injecting formation water back into the Delaware that came from very near that injection well.

Q If you were able to -- if the application is approved and you're therefore able to dispose of the water produced from these Delaware wells in an economic fashion, that will result in increased production in the area, is that not true?

A Yes, sir, very definitely.

Q In your opinion would the wells, the Delaware wells offsetting the disposal well experience any benefit from the increased pressure in the formation that

will come from the disposal well?

A I think so, and we want to see whether it will. That's why we originally tried to get it for pressure maintenance, because we think that this injection well may increase production from the Delaware wells and this proposed well was a kind of pilot test of waterflooding in the area. That was our original idea and I think that we still want to determine whether the injection of water into that well will increase production from the Delware units around the wells.

Q Mr. Bonneau, would you now refer to the well that is shaded yellow in Section 29, and identify that well, please?

A Yes, sir. The well marked in yellow in Section 29 is the Gulf Cardenas Federal No. 1. It's a Morrow test that was abandoned about 1980.

About two years ago Mr. Boling came and talked to me about the proposal he had to inject water into the Delaware formation through the Cardenas Federal No. 1. Mr. Boling is well known to me and a lot of people in Artesia and is an overriding royalty owner in most or all of these operated wells in this area.

As you can see from this Exhibit A, there are four gas wells operated by Yates Petroleum within about one-half mile of the Cardenas Federal No. 1.

At that time I pointed this out to Mr. Boling and told about my experience with salt water disposal in the Saunders Field, where the NMOCD did not approve a salt water disposal request we had in a case with similar circumstances to what he was proposing at the time.

I don't know exactly what happened to Mr. Boling's proposal, but reading the dockets every week, I know that it never did come for hearing.

So then when Yates readvertised the Stonewall "YE" No. 1 for salt water disposal, and that was this spring, as you've heard already, Mr. Boling came to see me again. I think this was in the latter part of April, 1986.

What he said to me was, "Do you remember what you did to me on the Cardenas Federal No. 1", and surely I remembered the facts that I just have described to you.

At the time I listened to his complaint and I explained why I thought our situation with the Stonewall "YE" No. 1 was -- was different than what he had originally proposed for the Cardenas Federal.

I told Bob Boling that I would take his complaint to the bosses at Yates, and I did that.

I know that Yates has negotiated with Mr. Boling for approximately a month and the differences were

never settled.

Finally Yates decided to bring the salt water disposal case here for hearing so the NMOCD could make a decision on the merits of the case.

The testimony I've gone through here this morning has tried to lay out the facts of the case to you so that you can make an informed decision. I've tried to explain why I think the right decision is to allow Yates to dispose of salt water in this Stonewall "YE" No. 1 Well.

Q In your opinion will granting this application be in the best interest of conservation, the prevention of waste, and the protection of correlative rights?

A Yes, sir.

Q Was Exhibit A prepared by you?

A Exhibit A was prepared by me and under my supervision.

Q Is Exhibit B a document on file with the State of New Mexico and also contained in Yates' records on the well?

A Yes, sir, it is a true copy of Commission Form C-103.

MR. CARR: At this time, Mr. Catanach, we would offer into evidence Yates Petroleum Corporation Exhibits A and B.

MR. CATANACH: Any objection?

MR. PADILLA: Exhibits A and B will be admitted into evidence.

MR. CARR: That concludes my direct examination of this witness.

MR. CATANACH: Mr. Padilla.

CROSS EXAMINATION

BY MR. PADILLA:

Q Mr. Bonneau, is it your testimony that Yates Petroleum cannot conduct a pressure maintenance program or use the well in green in your Exhibit Number One as a pressure maintenance well?

A It's my testimony, and it is my belief from what I understand from land things, that the working interest unit agreement which now binds the Stonewall Unit together, does not explicitly cover pressure maintenance and Mr. Catanach and some of the other people here thought that he could not approve it for pressure maintenance under that agreement, which sounds to me like he would approve it or it would fly if we should go back and redo the agreement with all the people involved in the unit.

Q Instead you've changed the name from a salt -- from a pressure maintenance well, then, to a salt water disposal well in order to do the same thing, as I understand your testimony.

A Yes, sir, that's very close to an accurate summary of the facts.

Q How much cement went into the "EP" No. 1 Well? Into the Delaware formation?

A Well, the Exhibit B says that -- well, the Exhibit B says that 375 sacks were squeezed into squeeze holes at 499.

Background, what happened, we -- we had a temperature survey which shows the top of the cement at, I think, about 4150, 4175, something like that. We -- we put two squeeze holes at 4150 and were not able to pump in and to circulate.

Okay, we put two squeeze holes approximately 50 foot higher and were able to circulate and we squeezed 375 sacks into those perforations.

Q Does that mean there's a portion of that hole that is not cemented properly in the Delaware?

A No, I don't think it means that. I'm not sure --

Q You couldn't circulate --

A -- what you're getting at.

Q Your testimony is that you couldn't circulate cement in a portion of the Delaware.

A My testimony is that at 4150 we couldn't circulate because there was already cement there and we had

to move up above where there was cement. We -- we mis-estimated where the cement was by 50 or 100 feet. We tried to put squeeze holes in and ran into cement. So we went up higher and found a place where there was no cement and circulated cement up into the intermediate casing.

There is cement from below the base of the Delaware all the way up through the Delaware. It was placed in two or more stages. The original cement job came to some point and then we squeezed cement above that, but there is cement behind the whole Delaware in that one well.

Q At what pressure are you intending to inject water into the green well?

A The application requests that we be allowed to inject water at the 2 psi gradient, which is 520 pounds injection pressure. It also requests that we be able to run step rate tests and get administrativ approval to raise that injection pressure after those step rate tests are reviewed by the NMOCD.

Q To what level would you anticipate increasing the pressure in the well once the step rate tests are completed?

A If necessary, we would go to as high a pressure as they would allow. I simply do not know if we'll need all that pressure or not.

Q Again, you essentially want to conduct a

pressure maintenance project with this well, isn't that correct?

A Well, the people at Yates want to get rid of this water so we can produce the oil.

Q That's not my question, Mr. Boneau. My question was you essentially want to conduct a pressure maintenance project with this well?

A Yeah, I'm -- I think I'm getting to that. My personal feeling in the original idea behind my assigning David Lanning to look at the project, was to see if we couldn't justify secondary recovery in this field. That is correct, if that's what you're asking.

Q Mr. Boneau, two years ago you recommended not to sign the waiver on the application that Mr. Boling had to inject water into the well marked in yellow, is that correct?

A I do not remember his presenting me with a waiver. I remember it the way I described, that we had an informal discussion and I told him about these Yates wells that could possibly be damaged or were in the area of review, and told him that in similar circumstances we had not been able to get approval for a salt water disposal well.

I'm not denying that he did offer me a waiver. I do not remember a waiver, but the basic, we agree

on the basic facts of what happened, I think.

Q Nothing has changed with respect to the condition of the "EP" No. 4 and the "DC" No. 1 Wells.

A Nor the -- nor the other two Yates wells, that's correct. They're in the same condition they were two years ago, the four Yates wells that are approximately a half mile from the Cardenas Federal.

Q What is the cement condition in the "EP" No. 4 behind the pipe?

A All those wells are similar and if you really want a number to the exact foot we can do that, but all those wells are similar. They have intermediate casing set around 3000 feet, 2800 to 3300 feet, and that's about 500 feet into the Delaware. It covers the top of the Delaware.

They're drilled to around 11,000 feet and production casing for Morrow is cemented and that cement comes up to 6-or-8000 feet from the surface. It does not come to the bottom of the Delaware.

That's the situation in -- in summary in all those wells near the Cardenas Federal Well.

MR. PADILLA: Mr. Examiner, we have no further questions.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. Boneau, if injection into your well is approved, how would Yates propose to monitor the "EP" No. 4 Well for any waterflow problems?

A We would propose to fill the annulus with inert fluid and install a pressure measuring device on the surface, a gauge on the surface.

Q Has anything changed, Mr. Boneau, has any information changed from your original C-108 which you filed, or from the last hearing we had?

A Okay, you'll recall that at the last hearing you asked for some detailed cement tops on the wells within the area of review, and that was provided.

The only additional information that was not provided either of those times at the hearing of subsequent to the hearing, was the cementing of the casing behind this "EP" No. 1, and we just failed to note that that had been done in 1984.

Q Okay, any information regarding the injection well itself is still the same?

A Still exactly the same, yes, sir.

MR. CATANACH: I have no further questions of Mr. Boneau. He may be excused.

MR. PADILLA: Mr. Examiner, we

call Mike Boling.

ROBERT MICHAEL BOLING,

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

DIRECT EXAMINATION

BY MR. PADILLA:

Q Mr. Boling, would you please state your name and where you reside?

A Robert Michael Boling, from Roswell, New Mexico.

Q Mr. Boling, have you previously testified before the Oil Conservation Division and had your credentials accepted as a matter of record?

A Yes, I have.

Q As a geologist?

A Yes, sir.

Q And what is your connection with the applicant -- or protestant, Bob Boling, in this case?

A I'm am employee of Robert E. Boling.

Q Have you made a study -- have you familiarized yourself with the application of Yates Petroleum Corporation for salt water disposal in the well --

A Yes, I am.

Q -- in the area of Section 30, 29, and 31?

A Are you familiar with the holdings of Bob Boling in the area of the application?

A Yes, I am. Exhibit One sets out Bob Boling's standing of interest in the area. As Dr. Boneau pointed out, he has an overriding royalty interest under Section 19, the south half of Section 19, 20, 28, all of Section 20; the southwest quarter west half and southeast southeast quarters of Section 29; north half southwest quarter of south half southeast quarter in Section 30, all in 20, 28.

In Exhibit One that interest is highlighted on the map included in yellow. The wells that Dr. Boneau mentioned in Section 31 that Exxon produces out of the Delaware are also shown on this map, along with the wells in the south half of 30, the west half of west half west half of Section 32, all of which produce out of the Delaware formation.

The -- approximately four or five miles to the southeast down in Section 1, east half of Section 2, north half of Section 12, 20, 29, there's a prolific, shallow Bone Springs formation oilfield that produces from approximately 5000 feet down there, and in Section 30, in the northwest northwest of Section 30, there is on this map a well, gas well, indicated No. 7. That is the "EP" No. 7, well operated by Yates Petroleum, that produces gas from the

shallow Bone Springs in the area.

Exhibit --

Q Mr. Boling, let me ask a question on that.

Why do you mention the Bone Springs in connection with this?

A The Bone Springs is a -- both of the deep wells that are in question, in fact all of the deeper wells that are Morrow production in this area, penetrated the entire Delaware and Bone Springs section and as evidenced by the wells in 30 and 31 and west half west half of 32, the Delaware is prolific in the area.

The Bone Springs has a potential for producing in the area. In several of these wells, these deep holes, particularly in the "DC" 1 and the "EP" 4, the potential, those potential reservoirs are unprotected behind the 5-1/2 inch casing.

Q Let's go on to what we have marked as Exhibit Number Two and tell us what that is and what it contains.

A Exhibit Number Two is a plat that shows the general vicinity of the -- in the southwest portion of Section -- of Township 20 South, 28 East, including the subject well.

The well marked in red is the proposed

injection well with its half mile radius circle.

The two wells marked in yellow are the wells that we have a serious question about. They are the "EP" 4 as Dr. Boneau pointed out in H of 30 and the "DC" 3 in L of 29.

Also included in Exhibit Two are the complete well records on file with the Oil Conservation Commission for both the "DC" 1 and the "EP" 4. I would like to point out that there are two paper clips inserted in this exhibit. Those indicate the portion, sundry notices, that do describe the exact footage on the tops of the cements in those wells.

As Dr. Boneau pointed out, the intermediate casing in these two wells is at approximately 2850 feet. In the Federal "DC" No. 1 the -- below 2850 feet there is no cement encountered in the hole until 7700 feet, approximately 4500 unprotected wellbore.

In the "EP" 4 the top of the cement is not -- is at 8300 feet by temperature survey, and also there is a question two pages back from that notation on the "EP" No. 4. There is a notation where there's -- here given to the government, federal government, while at the time in which they were setting -- cementing this casing, the cement did not circulate at the surface during cementing of the surface casing, and the hole was filled with several yards

of pea (sic) gravel and then the well was continued to drill.

So there's a couple of spots above and below the proposed injection zone in "EP" 4 that do not have cement on them.

One, I wanted to point out that also --

Q Mr. Boling, what is the significance of that gravel being in the wellbore?

A Well, it means that it's not cemented to the surface to me. I'm no engineer but that's what it says to me.

Q Would that allow water to migrate?

A Yes, it would. I would say that if there was any surface water in the area, and I'm no hydrologist so I can't tell you, but if there would be surface water or fresh water, excuse me, it would be near surface water. The fact that they only had 726 feet of surface casing and did not cement -- circulate, would indicate to me that somewhere near the top of the hole there is no cement near the surface where if any fresh water existed, that's where it would exist, in my opinion.

Q Could salt water percolate from the injection interval to the surface given that condition?

A Highly unlikely, in my opinion, unless the cement was damaged behind the intermediate pipe.

I would like to point out that the proposed injection interval is from 2595 to 3685 in the "YE" No. 1. Dr. Boneau was correct in pointing out that cement covered the upper part of the Delaware but that, the upper part of the Delaware that he was discussing is 200 feet in each well. Of the proposed injection interval there is 890 feet exposed in both wells, the "DC" 1 and the "EP" 4, that do not have cement behind the pipe.

I have included an Exhibit Three which shows the -- each of the two wells that we're talking about, the "EP" Com -- "EP" State Com No. 4, and the "DC" 1, with the proposed injection interval marked in red for your interest there.

I would like to also point out for the record that while I was not immediately privy to the discussions between Yates Petroleum and Robert E. Boling two years ago concerning the proposed injection in the Cardenas, I was privy to those discussions after the fact, and -- and I think that -- I know that Dr. Boneau is a very busy man, so I might be able to help his recollection on what happened.

MR. CARR: I'm going to object. This is clearly hearsay. I mean he's admitted he wasn't there and he doesn't know but after the fact he couldn't be there and couldn't correct anything.

A Let me restate my position.

MR. PADILLA: Mr. Examiner, let me ask a question.

Q Mr. Boling, do you know whether Yates Petroleum refused to sign a waiver of Mr. Boling's application?

A Yes, I do.

Q Do you know also what discussions were had with the Oil Conservation Division concerning your application?

A Yes, I do.

Q Did the Oil Conservation Division approve your application?

A We never -- Robert E. Boling never came to a hearing on that application.

Q Why was that?

A Once Yates failed to sign the waiver Mr. Stamets was approached concerning the administrative possibility of going ahead with the case.

The Cardenas Well had some additional problems, one of the major of which was that not all of the Capitan Reef was covered by cement and there is -- that's a fresh water source and that was considered a problem at that time.

Q What were the other problems?

A The biggest other problem was Yates was

going to object to our application because there was no cement behind the pipe in the 4 and the "DC" 1 primarily.

The -- I know for a fact --

Q Did Robert E. Boling at that time suggest a solution to taking care of the problem --

A Yes.

Q -- of the two wells?

A Yes.

Q What was that solution?

A In those -- after negotiation with Yates, Robert E. Boling offered to fill the annulus with inert fluid and put pressure gauges on both those wells in an attempt to satisfy the concerns of Dr. Boneau, and that was an unacceptable solution to the problem at that time, and I might point out --

Q Was that acceptable to the Oil Conservation Division?

A I believe that would have been acceptable at the time if Yates would have not objected to it.

I want to point out that, for the record, that it is my direct knowledge that at the time these discussions were taking place Dr. Boneau's objection to injecting water in the Cardenas Well was absolute and unequivocal. No negotiation point was found. The -- the offer to monitor the pressure on the back side of those two wells was

unacceptable. There has been nothing in the last two years done to change the condition of those wellbores. His -- his well founded concerns at that time still exist.

Q Mr. Boling, how could the interest of Robert E. Boling be impaired should this well --

A Well, there are several things.

First of all, we don't know that the Delaware or the Bone Springs won't produce in either one of those wells. There's a potential reservoir there. The Delaware is a highly complex, stratigraphically complex, geologic formation that no one can come to a consensus on about much of anything about it. We can't really predict very well whether those things will produce or not.

If the casing were to collapse in those two wells, absolutely revenue, the revenue stream would be shut off to everyone, to the state, to Yates, to overriding royalty interest, to the working interest owners, and therefore there's a great concern from -- from the productivity point of view of both of those wells and from a waste point of view that there could be harm to the reservoirs and could be harm to the wellbore and the equipment in the holes.

Q Could waste be created by allowing injection into the -- forced injection into the --

A I believe so. I believe that the condition of the hole might be altered such that you wouldn't be

able to go and recomplete those things.

Q Mr. Bolilng, do you have anything further to add to your testimony?

A Again, only to state that our major objection is the same objection that Dr. Boneau had two years ago; that the holes, there's no cement behind pipes and that that condtion exists today.

If Yates is willing to go in and squeeze those holes off and satisfy the state, we would withdraw our objection.

MR. PADILLA: Mr. Examiner, we offer Exhibits One through Three and pass the witness.

MR. CARR: No objection.

MR. CATANACH: Exhibits One through Three will be admitted into evidence.

Mr. Carr, your witness.

CROSS EXAMINATION

BY MR. CARR:

Q Mr. Boling, let's look at Exhibit Number One.

You have indicated on the first page of Exhibit Number One certain properties in which Bob Boling has an overriding royalty interest.

A Yes, sir.

Q What percentage interest does he have under those tracts, do you know?

A I do not know.

Q But he does have some percentage overriding royalty in each of the tracts set forth on the first page of this exhibit.

A Yes, sir.

Q That would mean that Mr. Boling has an ownership interest in the nature of an overriding royalty interest in each of the Delaware wells in Section 30 that are operated by Yates?

A Correct.

Q Mr. Boling also has an ownership interest, if I look at your plat and compare that to our Exhibit A, in each of the deeper wells that are operated by Yates in both Sections 30 and Section 29.

A Correct.

Q Now, if we go to Section 29 and look at the well that you proposed to use for salt water disposal a couple of years ago, was that well originally drilled by Gulf?

A I don't know. I believe it was but I -- I don't know. I can't answer that.

Q And then Robert E. Boling acquired it?

A Yes. Once that well was abandoned he ap-

plied to the BLM and got a right-of-way, which is included in Exhibit Three, that gave him permission as far as the BLM was concerneds, to use that well for water disposal purposes.

Q So it's not a purchase from a prior owner.

A That is correct.

Q Did Mr. Boling have any partners in the proposal to develop that as a disposal well?

A At the time that he approached Yates he did not. His intention was to seek approval from the state first and then build a -- some kind of a partnership arrangement around that approved application to dispose water.

Q And Mr. Boling was proposing a commercial disposal well.

A Correct.

Q Into what zone would the water be produced?

A Into the --

Q Disposed.

A -- Delaware.

Q And that's basically the same zone that we're talking about --

A Correct.

Q -- here today.

A Correct.

Q What volumes did Mr. Boling propose to dispose of in that well?

A I have no recollection.

Q Do you know if he had any limitations on the volumes in mind?

A I would doubt that he had any -- any limitations other than what they might request.

At the time that he proposed to inject water into that well, this Avalon Delaware was not completely developed. There were fewer wells, significantly fewer wells than there are now that were actually producing. Some had been drilled but hadn't been put on because they produced a lot of gas and there was a question about getting the gas hooked up.

So some of those wells were not producing so the volumes then relative to what they are now, we're talking about an apples and oranges case now.

Q And as we talk about apples and oranges, we also would be receiving any water that would be tendered or delivered to that well, is that not correct?

A The initial proposal was to -- to primarily contract from Exxon, Gulf, and Yates, who are the primary operators in the area, to get their total volumes

first.

At that point, if -- if the well could, with that capacity, with the volumes from the Delaware, then that would have been the end of the seeking of market. There would have been no additional market necessary.

Q But it could have been available for water from other sources.

A Correct.

Q The reason you didn't go forward with that really is that Yates was objecting to it, isn't that true?

A That's correct.

Q Now, in coming forward with this proposal, you studied the well and the area and it looked like a good prospect, didn't it?

A For water injection?

Q Yes.

A It appeared to meet criterion necessary, yes, sir.

Q And at the time that well was proposed, the four deep wells in Sections 30 and 29 were there.

A Yes, sir.

Q And they were cased exactly as they are today.

A Correct.

Q And you had an ownership interest in each of those wells --

A Correct.

Q -- at that time.

A Correct.

Q And you didn't see any danger to those wells at that time, did you?

A We recognized danger. We offered to perform the type of pressure monitoring that Yates is now proposing.

Q And when you --

A It was unacceptable two years ago.

Q To who?

A We --

Q It was unacceptable to Yates.

A To Yates.

Q It was acceptable to you then.

A It was.

Q And it is not acceptable to you today.

A We feel that -- that we have to defer to Dr. Boneau's engineering expertise and his -- the conditions that he found that concerned him still exist, so we feel that he approached this proposal in good faith then and we recognize and defer to his concerns at that time.

The fact that they're willing to maintain

pressure now is purely a question of economics; that -- it is going to be tremendously more expensive going into those wells and squeeze them than it is to put inert fluid in there and put a valve system to maintain it.

So the question is not one of engineering integrity, a question of economics, now and then.

Q Now, Mr. Boling, you were interested in deferring to Mr. -- or Dr. Boneau's expertise two years ago but you're not interested in doing that today, if I understand your testimony.

A What I said was that two years ago we recognized his concern. We recognize that those same concerns exist today and that the same solutions that we proposed two years ago are now -- that were unacceptable then, are now acceptable to Yates, and we have a problem understanding that.

Q And yet your position is diametrically opposed to that, what it was two years ago, as is Yates.

A We would like to see the wellbores protected, yes.

Q And yet you're not willing to have them protected as you proposed to this Division two years ago.

A We would prefer to have them protected in the most risk-free manner, which would be to squeeze that -- those two wellbores.

Q My question is you're not agreeable today to having the wellbores that you're concerned about protected in the same fashion that you recommended they be protected two years today, or two years ago, is that correct?

A I would have to defer answering that from this point of view.

I am an employee of this individual. I am not a partner. I have no interest in that well. I have no interest other than an employee-employer relationship in his operation and I don't feel I'm qualified to make a statement about what might or might not affect his future business condition about what's acceptable on that well and what's not.

Q In that regard are you qualfied to testify as to what sort of protection needs to be provided for those wells?

A On the basis of my experience in the area I feel I am, yes, sir.

Q And so you're today recommending that certain things be done that are inconsistent -- be done by Yates that are inconsistent with what your employer recommended two years ago.

A I -- I believe that -- I am suggesting that Yates follow their own criterion as they set out two years ago. Yes, sir.

Q But not what they see as unnecessary in the well today based on their current knowledge of the situation.

A That's correct.

Q Now, if your application, or if the application of Boling had been approved two years ago, you would have had a commercial well out there.

A That's correct.

Q It would have been a disposal well.

A That's correct.

Q It would have been available to Yates for disposal of produced water from the Delaware.

A Correct.

Q You would have been charging them a fee for the disposal.

A Correct.

MR. CARR: Thank you. I have no further questions.

REDIRECT EXAMINATION

BY MR. PADILLA:

Q Mr. Boling.

A Yes.

Q The question remains that the standards that Yates used two years ago have not been down-graded by

themselves, is that corrct?

A I'd say that the economic considerations have changed for them since we have changed positions. Two years ago the solutions that they're now proposing, that we're now proposing -- that we proposed, were unacceptable because they had no economic interest, and the fact that we were willing to go to the lengths to -- to put this pressure maintenance system together today as a solution, the least cost solution to their problem, it's become acceptable to them.

Q Yates has the -- is the operator of the wells in Section 29, is that correct?

A Yes, sir.

Q Do they have the lion's share of the production in those wells?

A I do not know the interest breakdown in those two wells.

I'ts normal that the greatest working interest owner in a project is the operator, though.

Q Is it still your opinion, Mr. Boling, that as to wells in Section 30, that your override -- well, Boling's override may be impaired?

A I believe that -- that it certainly could be impaired in the "EP" No. 4, and I'm -- in Section 30, and I believe that the same possibility for harm to the wellbore

exists in the "DC" No. 1 in 29.

MR. PADILLA: I don't believe I have any further questions, Mr. Examiner.

MR. CARR: I have just one.

MR. CATANACH: Mr. Carr.

RECROSS EXAMINATION

BY MR. CARR:

Q Mr. Boling, you testified about certain things that the largest interest owner in a well normally undertakes.

Do you happen to know what percentage interest Yates owns in any of these wells?

A I do not, no, sir.

Q And would you be surprised to learn it's as low as 15 percent?

A No, I would not.

Q Thank you.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. Boling, you indicated there were some potential Bone Springs -- or there were some Bone Springs producers in the area?

A Yes, sir.

Q Would you point those out for me?

A On the map, Exhibit One, in the location immediately northwest of the "EP" No. -- in Section 30, the northwest northwest of 30 there is a well marked 7, a gas well. That well is a gas well currently producing -- or has productive capacity -- ability to produce out of the Bone Springs at approximately 5000 feet.

The majority of the Bone Springs oil production is to the southeast in Section 1; the east half east half of Section 2; north half of Section 12, in Township 20 -- 20, 29, which is to the southeast.

Now, northwest, north -- yeah, northwest of the No. 7 Well in Section 24, there to the northwest, there are several deep gas wells up there that penetrated the Bone Springs. They -- none of those wells have been attempted. No completion attempt has been made in those wells but they appear on the geophysical logs to have the same characteristics, log characteristics, that the wells down in Sections 1 and 2 possess that are currently productive in oil.

I might point out that on the "DC" 1, the log that I included, at 5100 feet is the zone that correlates to the Bone Spring production.

Q Mr. Boling, I'm a little curious as to why you did not show up at the first hearing for a pressure

maintenance project in this well.

A I have no answer to that question. I don't really know.

Again, you know, as I said, in my capacity as an employee, I am not privy to all business that my employer undertakes and nowhere involved in all the business that my employer undertakes.

I -- I have no answer for that. I don't know.

Q Thank you.

MR. CATANACH: I have no other questions of this witness.

MR. CARR: I have just one.

RECROSS EXAMINATION

BY MR. CARR:

Q Mr. Boling, looking at your Exhibit Number Two --

A Yes, sir.

Q -- the well, the most southeastern well --

A Okay.

Q -- in Section 30, has the numeral 2 and then hyphen WM after it.

A Yes, sir, uh-huh.

Q Are you aware that the attempt -- an attempt was recently made to complete that well in the Bone Spring?

A No, sir.

Q Then you're not aware that it was noncommercial?

A No, sir.

MR. CARR: That's all.

MR. CATANACH: Mr. Carr, will you give me that location again?

MR. CARR: It's the southeasternmost well in Section 30, directly southeast of the proposed disposal well.

It's depicted on Boling Exhibit Number Two; it has the numeral 2-WM after it.

MR. CATANACH: Are there any other questions of the witness?

If not, he may be excused.

Is there anything further in this case?

MR. PADILLA: Mr. Examiner, I'd like to move that this application be dismissed at this time on the basis that this really -- and on the basis of Mr. Boneau's testimony -- that this is really a pressure maintenance case.

It's improperly advertised, as far as I can tell. The true intent of the application and the injection of water in this well is for a pressure maintenance project.

MR. CARR: Mr. Catanach, in response to that, I'd like to ask you to recall that when Mr. Padilla on cross asked Mr. Boling -- asked Dr. Boneau if in fact this wasn't a pressure maintenance case, Dr. Boneau's answer was that the people at Yates talked and they had to get -- come up with something to handle the water they had out in this area.

It is a salt water disposal case but we don't deny there'll be, we believe, pressure maintenance benefits that come from it.

It was docketed as a pressure maintenance application in the first instance. After meeting with you we readvertised it as a salt water disposal, but we have never pretended this was only fish or fowl. Both benefits are there to us and the motion should be denied.

MR. CATANACH: If there isn't anything further in Case 88 --

MR. CARR: Are you going to rule on the motion, Mr. Examiner?

Mr. Padilla has move that the

application be dismissed.

MR. CATANACH: I'll have to deny Mr. Padilla's motion at this time.

MR. CARR: I have a brief closing.

MR. CATANACH: Thank you, Mr. Carr.

MR. PADILLA: I do, too, if Mr. Carr is going to close.

Mr. Examiner, this is still a pressure maintenance project and whether or not Yates can do it is something outside the scope of this hearing.

The fact remains that -- and Dr. Boneau testified that in effect they're running a pressure maintenance project, but more than that, this is a -- our case is based on waste.

I don't see how you can get away with salt water disposal regulations and we've seen a lot of recent activity on salt water disposal as far as regulations from the Oil Conservation Division are concerned.

The intent of those regulations is to isolate and segregate zones within wellbores. It's clear that this is not going to happen in the "EP" No. 4 and the "DC" No. 1 Wells.

Admittedly the "DC" No. 1 Well

is -- may be within the circle, it may be or may not be within the circle, but it certainly will be (not clearly understood) within the circle.

Standards, they at least gave uses that obviously are being used to their advantage at this point, considering their failure to make a waiver on Mr. Boling's application two years ago. I suppose that you could characterize our opposition in this case as sour grapes but you really have to take this as what's good for the goose is good for the gander, and we're not -- the regulations are there and they have to be complied with.

In our opinion Yates' standard of care for this well is not good enough and it does not comply with those regulations and the attempt to seek an application for salt water disposal to segregate and prevent contamination of fresh water in this case, particularly, to prevent waste of potential hydrocarbons within the wellbore.

MR. CARR: Mr. Catanach, I'm going to resist, following comments about apples and oranges and what's good for the goose is good for the gander, and sour grapes, I'm going to resist opening this by reminding you that a rolling stone gathers no moss.

What we've got here is a situation where we have got a water problem. We've brought an application before you for a partial pressure maintenance

project because admittedly there will be pressure benefit from the disposal of water in the subject well.

There's also a water problem and we've got to do something with it and we're proposing to do something that will result in an economic way to get rid of certain Delaware water that's going to increase production from wells in the area by, hopefully, 500 barrels a day.

We submit that our application shows that if granted waste will be prevented. There is no evidence that refutes this in this record.

Mr. Boling is unhappy. He's unhappy because he thought he'd found a way to dispose of produced water by acquiring a lease and rights to a wellbore and he talked to Yates and Yates didn't think it was a very good idea. They're the operator of the wells offsetting the property, and yet Mr. Boling never followed up; he never brought an application before you.

He did, however, come back and talk with Mr. Stamets, and Mr. Boling and Mr. Stamets agreed that putting fluid in the annular space and putting a gauge on the surface of these wells, that they could monitor them sufficiently so that they could exercise -- so that the Commission's authority to protect the hydrocarbons from being damaged by water influx, that that could be handled and the

danger could be avoided.

But now they want to come back when we have another well and another situation and they want to object to the same sort of precautions being taken in the very same wells in the very same condition they were two years ago.

This isn't the same situation that was presented two years ago. We are not proposing a commercial waterflood or a water disposal project. We're talking about taking water from Delaware wells immediately offsetting the injection well and putting it right back in the Delaware. This is a very different fact situation than what was presented to you.

We have proposed to you a way to monitor the other wells that will be -- certainly meets the standard that they agreed to two years ago and we submit is adequate to fully protect all interest owners in these wells.

We think that the only way for you to carry out your statutory duties of preventing waste and protecting the rights of all interest owners in this area is to grant the application of Yates Petroleum, Incorporated.

MR. CATANACH: Thank you, Mr. Carr.

Is there anything further in Case 8818?

If not, it will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) 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 CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8818, heard by me on June 12 1986.

David R. Catanach, Examiner
Oil Conservation Division

ENERGY AND MINERALS DEPARTMENT

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no

II. Operator: Yates Petroleum Corporation

Address: 207 S. 4th Street; Artesia, N.M. 88210

Contact party: David Lanning Phone: (505) 748-1331

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: David L. Lanning Title Engineer

Signature: David L. Lanning Date: December 13, 1985

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION

YATES EXHIBIT NO. 1

CASE NO. 8818

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

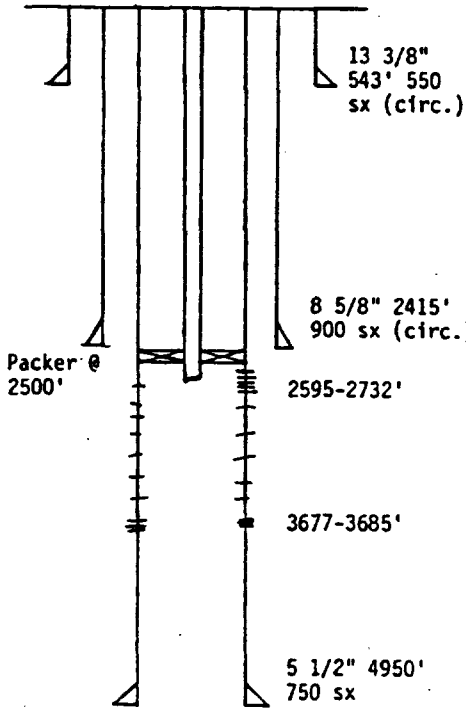
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Yates Petroleum Corporation	Stonewall "YE" State			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
#1	1650' FSL & 1980' FEL	30	20S	28E

Schematic



Tabular Data

Surface Casing

Size 13 3/8" Cemented with 550 sx.

TOC Surface feet determined by circulated

Hole size 17 1/2"

Intermediate Casing

Size 8 5/8" Cemented with 900 sx.

TOC Surface feet determined by circulated

Hole size 12 1/4"

Long string

Size 5 1/2" Cemented with 750 sx.

TOC 2000 feet determined by calculation

Hole size 7 7/8"

Total depth 4950' ?

Injection interval

2595 feet to 3685 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with Plastic (material) set in a

Baker AD-1 Tension (or equivalent) (brand and model) packer at 2500 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Delaware

2. Name of field or Pool (if applicable) Avalon

3. Is this a new well drilled for injection? [ ] Yes [X] No

If no, for what purpose was the well originally drilled? Producer

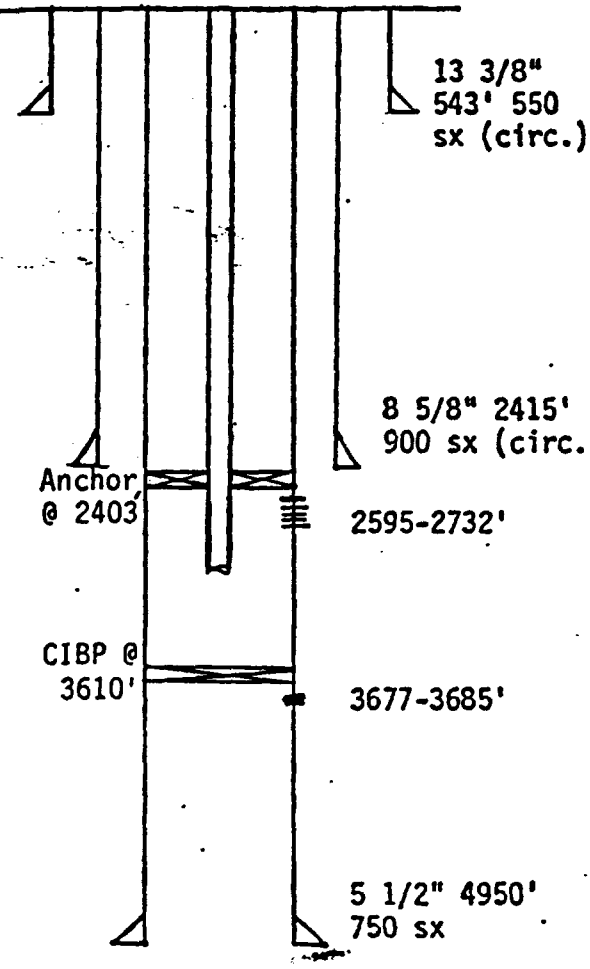
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Saladar Yates - 600'; Avalon Bone Springs - 4900'; Avalon Wolfcamp - 8600'; Burton Flat Atoka - 10,500'; Burton Flat Morrow - 11,000'

INJECTION WELL DATA SHEET (WELL'S CURRENT STATUS)

Yates Petroleum Corporation	Stonewall "YE" State			
OPERATOR	LEASE			
#1	1650' FSL & 1980' FEL	30	20S	28E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13 3/8" Cemented with 550 sx.

TOC Surface feet determined by circulated

Hole size 17 1/2"

Intermediate Casing

Size 8 5/8" Cemented with 900 sx.

TOC Surface feet determined by circulated

Hole size 12 1/4"

Long string

Size 5 1/2" Cemented with 750 sx.

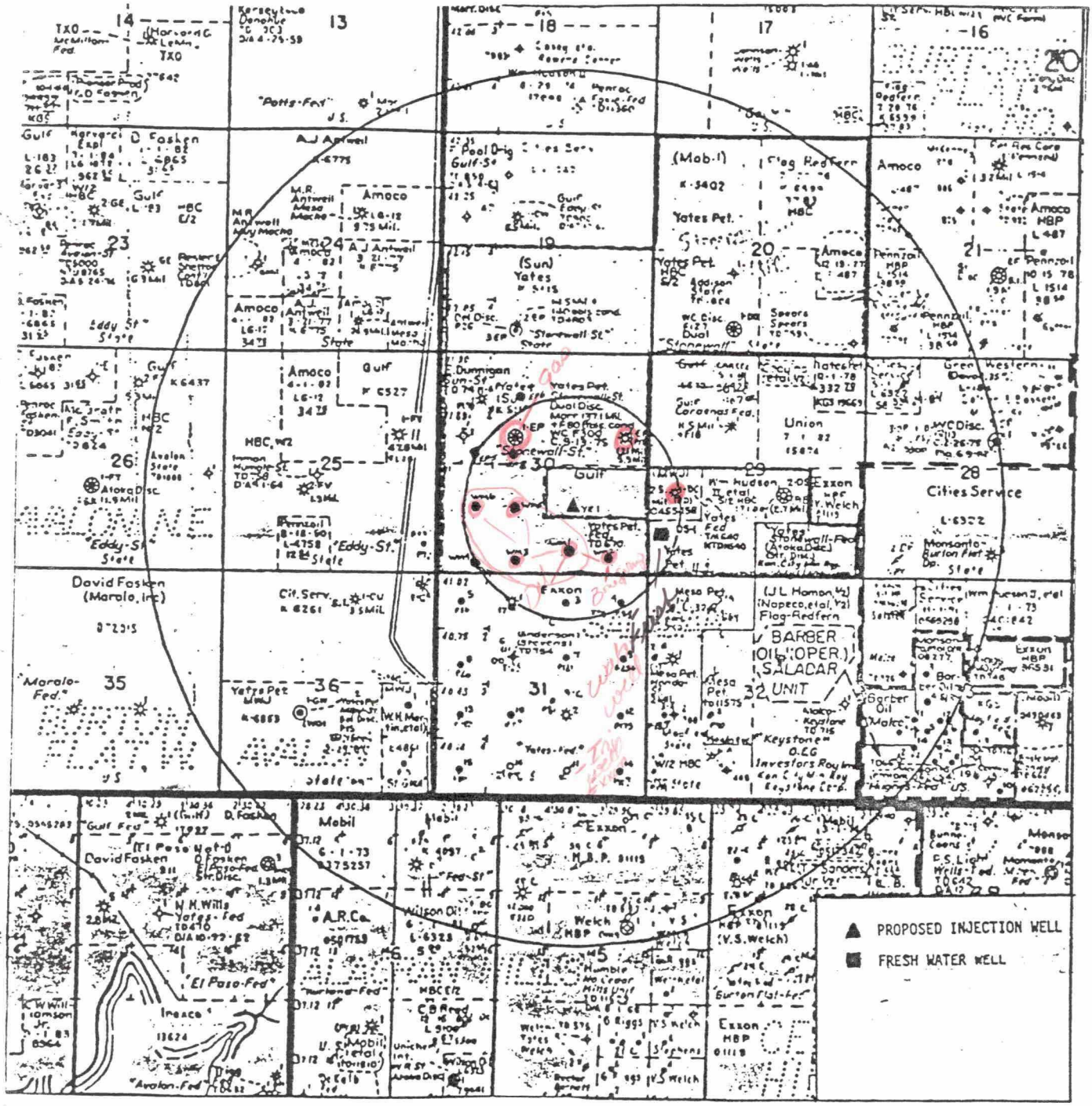
TOC 2000 feet determined by calculation

Hole size 7 7/8"

Total depth 4950'

PART V C-108

T20S-R28E



PART VI C-108
DETAILS OF WELLS WITHIN ONE-HALF MILE OF PROPOSED INJECTION WELL

WELL NAME & LOCATION	SPUD DATE	COMPLETION DATE	TYPE	TD	CONSTRUCTION	COMPLETION RECORD
Federal DS #1 (fresh water well. TD-670') 29-20S-28E 990' FSL & 330' FWL	8-28-74	11-01-74	Abn.	670'	8 5/8" 285'/200 sx	Released to rancher for water well. Temporarily abandoned.
Federal DC #1 29-20S-28E 1980' FSL & 660' FWL	Re-Spud 4-16-78	9-02-78 5-14-84	Gas Shut-In	OTD 640' 11,540'	8 5/8" 285'/200 sx (pulled) 13 3/8" 585'/550 sx 8 5/8" 2845'/1840 sx TOC 7700 5 1/2" 11,495'/650 sx	Perf. 10,524-10,634', A/1500 gal. Sqz. 10624-10634' R/C 11227-11276', A/2500 gal.
Stonewall WM State #1 30-20S-28E 560' FSL & 1980' FEL	2-16-83	6-02-83	Oil Producer	4,953'	20" 40'/set 10 3/4" 545'/500 sx 8 5/8" 2485'/1350 sx 5 1/2" 4953'/700 sx	Perf. 2587-2680', A/3000 gal. SWF 40000 gal. + 52000#
Stonewall WM State #2 30-20S-28E 480' FSL & 990' FEL	9-20-83	8-07-84	Gas Shut-In	5,450'	13 3/8" 546'/550 sx 8 5/8" 2410'/1050 sx 5 1/2" 4960'/750 sx	PB OH 5216', A/2000 gal. SWF 40000 gal. + 80000#
Stonewall WM State #3 30-20S-28E 330' FSL & 1980' FWL	6-14-83	7-22-83	Oil Shut-In	4,865'	13 3/8" 545'/650 sx 8 5/8" 2470'/550 sx 5 1/2" 4864'/500 sx	Perf. 2530-2622', 3422-3602' A/15500 gal., SWF 27000 gal. + 1621 MCF N_2 + 117500#
Stonewall WM State #4 30-20S-28E 330' FSL & 990' FWL	8-29-83	11-28-83	Oil Producer	4,866'	13 3/8" 535'/500 sx 8 5/8" 2642'/1300 sx 5 1/2" 4860'/750 sx	Perf. 2524-3671', A/4500 gal. SWF 36000 gal. + 45000#, A/7000 gal. SWF 40000 gal. + 52000#
Stonewall WM State #5 30-20S-28E 1650' FSL & 1980' FWL	9-15-83	11-10-83	Oil Shut-In	4,900'	13 3/8" 535'/600 sx 8 5/8" 2404'/1355 sx 5 1/2" 4900'/700 sx	Perf. 3360-3367', 3487-3515', 3570-3576' A/10000 gal., Frac 10000 gal. wtr. + 9000 gal. Meth + 70000 gal. N_2 Foam + 91000#
Stonewall WM State #6 30-20S-28E 1650' FSL & 990' FWL	11-04-83	12-27-83	Oil Producer	4,860'	20" 40'/set 13 3/8" 535'/550 sx 8 5/8" 2410'/800 sx 5 1/2" 4860'/800 sx	Perf. 3349-3527', A/8500 gal. SWF 60000 gal. + 78000#

WELL NAME & LOCATION	SPUD DATE	COMPLETION DATE	TYPE	TD	CONSTRUCTION	COMPLETION RECORD
Stonewall EP State Com #1 30-20S-28E 1980' FNL & 1980' FWL	7-17-75	9-25-75	Gas Producer	11,478'	13 3/8" 612'/550 sx 8 5/8" 2799'/1650 sx 5 1/2" 11,380'/1300 sx	Perf. 11250-11258', Natural 9/75 Perf. 8880-8908' 9/75 Perf. 11054-11226', A/4000 gal. Sqz. 8880-8908' 7/82
Stonewall EP State Com #4 30-20S-28E 1980' FNL & 660' FEL	5-28-78	7-20-78 R/C 10-19-81	Gas Producer	11,572'	13 3/8" 626'/500 sx 8 5/8" 2800'/1840 sx 5 1/2" 11,525'/475 sx	Perf. 11136-11181', Natural Perf. 10553-10575'
Stonewall EP State #5 30-20S-28E 2310' FNL & 990' FWL	11-20-83	3-14-84	Oil Shut-In	4,870'	13 3/8" 553'/500 sx 8 5/8" 2420'/1600 sx 5 1/2" 4870'/800 sx	Perf. 4336-4346', A/1500 gal. Perf. 4252-4304', A/4000 gal. Perf. 4142-4183', A/3500 gal. Frac 70000 gal. 70% Foam + 97500# Perf. 3361-3730', A/10000 gal. Frac 160000 gal. 75% Foam + 222000#
Stonewall EP State #8 30-20S-28E 2310' FNL & 1980' FWL	2-26-84	4-04-84	Oil Producer	5,300'	13 3/8" 540'/425 sx 8 5/8" 2404'/950 sx 5 1/2" 5303'/750 sx	Perf. 3384-3688', A/6700 gal. Frac 60000 gal. 75% Foam + 195000#
Yates Federal C #1 31-20S-28E 660' FNL & 1980' FWL	3-25-82	6-19-82	Gas Producer	11,470'	13 3/8" 584'/950 sx 9 5/8" 3154'/985 sx 7" 10,395'/550 sx 5" 9901-11,467'/160 sx	Perf. 11040-11110', Natural
Yates Federal C #3 31-20S-28E 660' FNL & 1980' FEL	9-21-82	10-20-82	Oil Producer	4,702'	8 5/8" 605'/425 sx 5 1/2" 4702'/1050 sx	Perf. 3400-3608', A/6000 gal. SWF 23000 gal. + 106000#, CIBP @ 3350' w/ 30' cmt. Perf. 2546-2626', Frac 64000 gal. 75% Foam + 68000# Sqz. 2546-2626', CO to 3900' Prod. thru 3400-3608'
Yates Federal C #4 31-20S-28E 660' FNL & 660' FEL	12-01-82	1-06-83	Oil Producer	4,701'	8 5/8" 618'/400 sx 5 1/2" 4701'/1050 sx	Perf. 2574-2818' SWF 78000 gal. + 102000#

WELL NAME & LOCATION	SPUD DATE	COMPLETION DATE	TYPE	TD	CONSTRUCTION	COMPLETION RECORD
Yates Federal C #17 31-20S-28E 760' FNL & 1980' FWL	8-28-83	9-19-83	Oil Producer	3,897'	13 3/8" 606'/1050 sx 8 5/8" 2482'/930 sx 5 1/2" 3887'/775 sx	Perf. 3562-3626', A/2500 gal., SWF 32000 gal. + 34000# CIBP @ 3500' w/30' cmt. Perf. 2568-2605', A/2500 gal., Frac 32000 gal. 75% Foam + 34000#

FORM C-108 SUPPLEMENT
STONEWALL "YE" STATE #1

VII. Proposed Operation.

This application is for the conversion of the Stonewall "YE" State well No. 1 from a producer to an injection well for the purpose of pressure maintenance in the Avalon Delaware pool.

Data on the proposed operation include:

(1) The average injection rate will be approximately 400 BWPD and the maximum rate will be 1000 BWPD. The total volume of injected water is approximately 2,000,000 bbl.

(2) A closed water system will be used.

(3) The maximum injection pressure will be ~~735~~ 520 psi (.2 psi/ft.). Higher pressures will be utilized if necessary, contingent upon the NMOCD's acceptance of step-rate injectivity tests.

(4) The proposed injection water is produced formation water from the Delaware formation. A water analysis is attached (see Attachment 1).

(5) Not applicable.

VIII. Geological Data on the Injection Zone.

Water will be injected into two porous intervals of the Delaware formation which are productive of oil and gas. The Delaware formation in the Avalon pool is approximately 2300 feet thick and the top of the Delaware sand is at approximately 2550' (≃ 700 feet SEA LEVEL elevation). The Delaware formation is primarily a light ~~gray~~ to tan, very fine grained, and loosely consolidated sandstone.

Underground Sources of Drinking Water.

The only known source of fresh water in the area of concern occurs in the Rustler formation at depths up to approximately 250'.

IX. No stimulation program is proposed.

X. Well logs have been filed with the Division district office in Artesia.

XI. The only fresh water well in the area, located in Sec.29-20S-28E, 990' FSL & 330' FWL, is not producing.

Attachment 1

Phone (505) 746-6100

P. O. Box 423
Artesia, N. M. 88210

WATER ANALYSIS REPORT

Company Yates Petroleum Corp. Date 4-26-83

Field Delaware County Eddy State N.M.

Lease and Well No. Stonewall WM #1 Prod. Formation

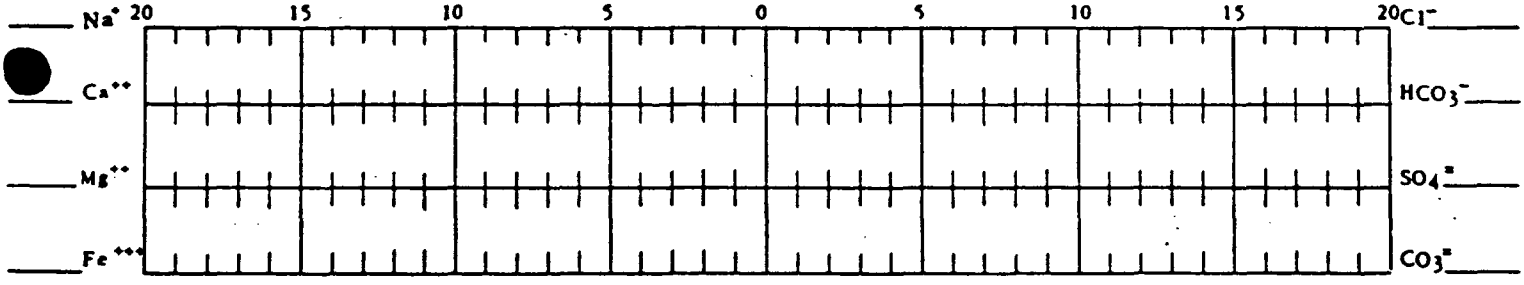
Source of Sample wellhead

Sample of Prod. Water XX Inj. Water ☐ Other ☐

Date Collected 4-26-83 Analyst N. Weed

WATER ANALYSIS PATTERN

(NUMBER BESIDE ION SYMBOL INDICATES me/l* SCALE UNIT)



Dissolved Solids Constituent	MG/L (PPM)	EPM	
Calcium	21,920 mg/l	1096	ph 8.0
Magnesium	58,080 mg/l	4761	Sp. Gravity
Sodium	-		
Iron	-		
Chloride	107,000 mg/l	3014	
Bicarbonate	-		
Carbonate	408 mg/l	14	
Sulfate	1,550 mg/l	32	
Total Hardness	80,000 mg/l		
Total Dissolved Solids	188,958 mg/l		
Hydrogen Sulfide	0		
Oxygen	0		

Remarks:

KCL = 0

10

XII. Yates petroleum Corporation has examined available geologic and engineering data and finds no evidence that there is any hydrologic connection between the Delaware zone and any fresh water aquifer in the area.

PART XIII C-108

IN THE MATTER OF THE APPLICATION OF :
YATES PETROLEUM CORPORATION FOR :
AUTHORIZATION TO INJECT FOR PRESSURE :
MAINTENANCE IN THE AVALON DELWARE :
FIELD, EDDY COUNTY, NEW MEXICO :
:

AFFIDAVIT OF MAILING

STATE OF NEW MEXICO)
:
COUNTY OF EDDY)

The undersigned, being first duly sworn, upon oath, states that on the 13th day of December, 1985, the undersigned did mail in the United States Post Office at Artesia, New Mexico, a true copy of the Application for Authorization to Inject, to the following named surface owner and offset operators within a one-half mile radius of the subject well, in a securely sealed, certified mail, return receipt requested, postage prepaid envelope addressed to the following named parties:

State of New Mexico
Commissioner of Public Lands
P. O. Box 1148
Santa Fe, NM 87504-1148

Exxon Co., U.S.A.
Box 1700
Midland, TX 79702

Mesa Petroleum Co.
Box 1432
Amarillo, TX 79101

David L. Lanning

SUBSCRIBED AND SWORN TO before me this 13th day of December, 1985.

My Commission expires:
1/31/89

C. Gay Bannister
Notary Public