

Dockets Nos. 38-86 and 1-87 are tentatively set for December 17, 1986, and January 7, 1987. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - DECEMBER 3, 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 8983: (Continued from November 5, 1986, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Oil Processing Inc., the Travelers, and all other parties to appear and show cause why Oil Processing's authority under Division Order No. R-6053 to operate an oil treating plant located in the NE/4 SE/4 of Section 8, Township 20 South, Range 37 East, Lea County, should not be cancelled and why the site of such plant should not be reclaimed in a timely manner and to specifications authorized by the OCD.

CASE 9051: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Petro-Thermo Corporation 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 9041: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Casa Petroleum, Inc., U.S. Insurance Group, and all other interested parties to appear and show cause why the Peterson Well No. 1 located 1980 feet from the North and West lines (Unit F) of Section 17, Township 4 South, Range 33 East, Roosevelt County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 9042: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Fannie Lee Mitchell and all other interested parties to appear and show cause why the Caudill SWD Well No. G-32 located 1980 feet from the North line and 1830 feet from the East line (Unit G) of Section 32, Township 15 South, Range 36 East, Lea County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 9031: (Continued from November 5, 1986, Examiner Hearing)

Application of Yates Petroleum Corporation for hardship gas well classification, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a determination that its Mescal "SE" Federal Well No. 1 located 660 feet from the North line and 1750 feet from the West line (Unit C) of Section 18, Township 21 South, Range 22 East, Little Box Canyon-Morrow Gas Pool, is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 9043: Application of Apollo Oil Company for N.G.P.A. Wellhead Price Ceiling Category Determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that its State "E" Tract 17 Well No. 5 located 990 feet from the South line and 660 feet from the East line (Unit P) of Section 1, Township 17 South, Range 36 East, Lovington-Queen Pool, is producing natural gas from a new onshore reservoir and should therefore be designated as such under Section 102 of the Natural Gas Policy Act of 1978 and Division Order No. R-5878-B, as amended.

CASE 9044: Application of Santa Fe Energy Operating Partners, L.P. 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 base of the Morrow formation underlying the N/2 of Section 23, Township 22 South, Range 27 East, to form a standard 320-acre spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing, said 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 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 9045: Application of Santa Fe Energy Operating Partners, L.P. 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 base of the Morrow formation underlying the E/2 of Section 24, Township 22 South, Range 27 East, to form a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing, said 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 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 9046: Application of Santa Fe Energy Operating Partners, L.P. for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to a depth of 9,700 feet or the base of the Bone Spring formation underlying the SE/4 NW/4 of Section 26, Township 18 South, Range 32 East, forming a standard 40-acre oil 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 9047: Application of Santa Fe Energy Operating Partners, L.P. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 990 feet from the South line and 1980 feet from the West line of Section 2, Township 22 South, Range 27 East, Undesignated East Carlsbad-Strawn Gas Pool, the W/2 of said Section 2 to be dedicated to the well.

CASE 9048: Application of Benson-Montin-Greer Drilling Corporation for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the West Puerto Chiquito-Mancos Oil Pool underlying all of Section 20, Township 25 North, Range 1 West, to form a standard 640-acre spacing and proration 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 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 8849: (Continued from November 5, 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 Spring 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 9026: (Readvertised)

Application of Oklahoma Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the following three 160-acre non-standard gas spacing and proration units in the Basin-Dakota Pool:

- 1) the NE/4 of Section 19, Township 27 North, Range 11 West, to be dedicated to its Federal Well No. 1 located 1850 feet from the North and East lines (Unit G) of said Section 19;
- 2) the NE/4 of Section 5, Township 30 North, Range 13 West, to be dedicated to its Knight Well No. 1 located 925 feet from the North line and 920 feet from the East line (Unit A) of said Section 5; and,
- 3) the SW/4 of Section 21, Township 31 North, Range 13 West, to be dedicated to its Johnson Well No. 1 located 885 feet from the South line and 800 feet from the West line (Unit M) of said Section 21.

Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable for said units.

CASE 9027: (Readvertised)

Application of P-R-O Management, Inc. for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the following three 160-acre non-standard gas spacing and proration units in the Basin-Dakota Pool:

- 1) the NW/4 of Section 19, Township 27 North, Range 11 West, to be dedicated to its Federal Well No. 1E located at a previously approved non-standard gas well location (Administrative Order NSL-1156) 1120 feet from the North line and 2300 feet from the West line (Unit C) of said Section 19;
- 2) the SE/4 of Section 5, Township 30 North, Range 13 West, to be dedicated to its Knight Well No. 1E located 1820 feet from the South line and 690 feet from the East line (Unit I) of said Section 5; and,
- 3) the SE/4 of Section 21, Township 31 North, Range 13 West, to be dedicated to its Johnson Well No. 1E located 1120 feet from the South and East lines (Unit P) of said Section 21.

Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable for said unit.

CASE 9035: (Continued from November 5, 1986, Examiner Hearing)

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 Gavilan-Mancos and Gavilan Greenhorn-Graneros Dakota Oil Pools underlying the E/2 of Section 20, Township 25 North, Range 2 West, forming a standard 320-acre spacing and proration 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 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 9028: (Readvertised)

Application of Oklahoma Oil Company for a non-standard gas proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas spacing and proration unit comprising the SW/4 of Section 11, Township 31 North Range 13 West, Blanco-Mesaverde and Basin-Dakota Pools, to be dedicated to the applicant's Nickles Well No. 1 located 1450 feet from the South line and 1730 feet from the West line (Unit K) of said Section 11. Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable in both pools for said unit.

CASE 9029: (Readvertised)

Application of P-R-O Management, Inc. for a non-standard gas proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas spacing and proration unit comprising the SE/4 of Section 11, Township 21 North, Range 13 West, Blanco-Mesaverde and Basin-Dakota Pools, to be dedicated to the applicant's Nickles Well No. 1M located 800 feet from the South line and 1570 feet from the East line (Unit O) of said Section 11. Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable in both pools for said unit.

CASE 9049: Application of Foran Oil Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the S/2 of Section 30, Township 15 South, Range 28 East, forming a standard 320-acre gas spacing and proration 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 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 8586: (Reopened)

Application of the Oil Conservation Division on its own motion to reopen Case No. 8586. Applicant seeks to reopen said Case for rescission of Division Order No. R-333, as amended, and to amend and recodify San Juan Basin gas well test procedures. Applicant further seeks an extension of the 1986 deliverability test period and suspension of 1987 deliverability flow test requirement.

CASE 9050: Application of the Oil Conservation Division on its own motion to amend Order No. R-8170. Applicant seeks to amend the General Rules for Prorated Gas Pools to include a definition of retest (deliverability).

CASE 9038: (Continued from November 19, 1986, Examiner Hearing)

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

- (a) CREATE a new pool in Chaves County, New Mexico, classified as a gas pool for Atoka production and designated as the Carson-Atoka Gas Pool. The discovery well is the Robert N. Enfield Carson Federal Well No. 1 located in Unit L of Section 3, Township 9 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 9 SOUTH, RANGE 31 EAST, NMPM
Section 3: W/2

- (b) CREATE a new pool in Lea County, New Mexico classified as a gas pool for Atoka production and designated as the North Lovington-Atoka Gas Pool. The discovery well is the North American Royalties Inc. Hudgens Well No. 1 located in Unit J of Section 11, Township 16 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM
Section 11: S/2

- (c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the West Pitchfork Ranch-Wolfcamp Gas Pool. The discovery well is the HNG Oil Company Madera Ridge 25 Fed Com Well No. 1 located in Unit L of Section 25, Township 24 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 33 EAST, NMPM
Section 25: W/2

- (d) EXTEND the Bronco Siluro-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 38 EAST, NMPM
Section 15: NE/4

- (e) EXTEND the Central Corbin-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM
Section 9: SW/4

- (f) EXTEND the South Gladiola-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 38 EAST, NMPM
Section 7: NW/4

- (g) EXTEND the vertical limits of the Lovington-San Andres Pool in Lea County, New Mexico, to include the Grayburg formation and redesignate said pool as the Lovington Grayburg-San Andres Pool.

- (h) EXTEND the North Lusk-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 32: NE/4

- (i) EXTEND the East Morton-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 35 EAST, NMPM
Section 33: NE/4

- (j) EXTEND the Pitchfork Ranch-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM
Section 33: S/2

TOWNSHIP 25 SOUTH, RANGE 34 EAST, NMPM
Section 4: NW/4
Section 5: N/2

- (k) EXTEND the Northwest Shoe Bar-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM
Section 15: N/2

- (l) EXTEND the North Young-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 12: NW/4

The OCD further seeks this order to be made effective December 1, 1986.

Dockets Nos. 35-86 and 36-86 are tentatively set for November 19 and December 3, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 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 Michael E. Stogner, Examiner, or David R. Catanach, Alternate Examiner:

CASE 8983: (Continued from October 8, 1986, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Oil Processing Inc., the Travelers, and all other parties to appear and show cause why Oil Processing's authority under Division Order No. R-6053 to operate an oil treating plant located in the NE/4 SE/4 of Section 8, Township 20 South, Range 37 East, Lea County, should not be cancelled and why the site of such plant should not be reclaimed in a timely manner and to specifications authorized by the OCD.

CASE 9020: Application of Merrion Oil & Gas Corporation for a unit agreement, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Huffman Ranch Deep Unit Area comprising 2982.4 acres, more or less, of Federal and Patented lands in Townships 25 and 26 North, Range 2 West.

CASE 8998: (Continued from October 8, 1986, Examiner Hearing)

Application of Amoco Production Company for a unit agreement, Rio Arriba County, New Mexico. Applicant in the above-styled cause, seeks approval of the Bear Canyon Unit Area comprising 4,800.00 acres, more or less of Federal and Fee lands in Township 26 North, Range 2 West.

CASE 9021: Application of Santa Fe Energy Operating Partners, L.P. for Hardship Gas Well Classification, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a determination that its Walker Well No. 1 located 1980 feet from the South line and 990 feet from the East line (Unit I) of Section 21, Township 22 South, Range 27 East, South Carlsbad-Morrow Gas Pool, is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 9022: Application of Pennzoil 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 Waldron Well No. 2 to be drilled 1300 feet from the North line and 1980 feet from the West line, Section 3, Township 17 South, Range 37 East, Undesignated Shipp-Strawn Pool, the E/2 NW/4 of said Section 3 to be dedicated to the well forming a standard 80-acre oil spacing and proration unit for said pool.

CASE 8999: (Continued from October 8, 1986, Examiner Hearing)

Application of V. H. Westbrook for Hardship Gas Well Classification, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks a determination that his Kinahan Federal Well No. 1 located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 20, Township 15 South, Range 30 East, West Cedar Point-Wolfcamp Gas Pool is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 9023: Application of Benson-Montin-Greer Drilling Corporation for an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location 1700 feet from the North line and 2310 feet from the East line of Section 5, Township 24 North, Range 1 West, West Puerto Chiquito-Mancos Oil Pool, all of said Section 5 to be dedicated to the well.

CASE 9024: Application of Benson-Montin-Greer Drilling Corporation for compulsory pooling and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the West Puerto Chiquito-Mancos Oil Pool underlying all of Section 20, Township 25 North, Range 1 West, to be dedicated to a well to be drilled at an unorthodox oil well location 1200 feet from the North line and 415 feet from the East line of said Section 20. 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 9025: Application of Benson-Montin-Greer Drilling Corporation for an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location 1200 feet from the North line and 300 feet from the West line of Section 17, Township 25 North, Range 1 West, West Puerto Chiquito-Mancos Oil Pool, all of said Section 17 to be dedicated to the well.

CASE 8849: (Continued from October 22, 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 Spring 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 9026: Application of Oklahoma Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the following three 160-acre non-standard gas spacing and proration units in the Basin-Dakota Pool:

- 1) the NW/4 of Section 19, Township 27 North, Range 11 West, to be dedicated to its Federal Well No. 1E located at a previously approved non-standard gas well location (Administrative Order NSL-1156) 1120 feet from the North line and 2300 feet from the West line (Unit C) of said Section 19;
- 2) the NE/4 of Section 5, Township 30 North, Range 13 West, to be dedicated to its Knight Well No. 1 located 925 feet from the North line and 920 feet from the East line (Unit A) of said Section 5; and,
- 3) the SW/4 of Section 21, Township 31 North, Range 13 West, to be dedicated to its Johnson Well No. 1 located 885 feet from the South line and 800 feet from the West line (Unit M) of said Section 21.

CASE 9027: Application of P-R-O Management, Inc. for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the following three 160-acre non-standard gas spacing and proration units in the Basin-Dakota Pool:

- 1) the NE/4 of Section 19, Township 27 North, Range 11 West, to be dedicated to its Federal Well No. 1 located 1850 feet from the North and East lines (Unit G) of said Section 19;
- 2) the SE/4 of Section 5, Township 30 North, Range 13 West, to be dedicated to its Knight Well No. 1E located 1820 feet from the South line and 690 feet from the East line (Unit I) of said Section 5; and,
- 3) the SE/4 of Section 21, Township 31 North, Range 13 West, to be dedicated to its Johnson Well No. 1E located 1120 feet from the South and East lines (Unit P) of said Section 21.

CASE 9028: Application of Oklahoma Oil Company for a non-standard gas proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas spacing and proration unit comprising the SW/4 of Section 11, Township 31 North, Range 13 West, Blanco-Mesaverde and Basin-Dakota Pools, to be dedicated to the applicant's Nickles Well No. 1 located 1450 feet from the South line and 1730 feet from the West line (Unit K) of said Section 11.

CASE 9029: Application of P-R-O Management, Inc. for a non-standard gas proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas spacing and proration unit comprising the SE/4 of Section 11, Township 31 North, Range 13 West, Blanco-Mesaverde and Basin-Dakota Pools, to be dedicated to the applicant's Nickles Well No. 1M located 800 feet from the South line and 1570 feet from the East line (Unit O) of said Section 11.

Docket No. 34-86

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 12, 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:

- ALLOWABLE:
- (1) Consideration of the allowable production of gas for December, 1986, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for December, 1986, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

Dockets Nos. 31-86 and 32-86 are tentatively set for October 22 and November 5, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 8, 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:

- ALLOWABLE: (1) Consideration of the allowable production of gas for November, 1986, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for November, 1986, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 8983: (Continued from September 17, 1986, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Oil Processing Inc., the Travelers, and all other interested parties to appear and show cause why Oil Processing's authority under Division Order No. R-6053 to operate an oil treating plant located in the NE/4 SE/4 of Section 8, Township 20 South, Range 37 East, Lea County, should not be cancelled and why the site of such plant should not be reclaimed in a timely manner and to specifications authorized by the OCD.

CASE 8997: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Oilfield Services and all other interested parties to appear and show cause why Oilfield Services' authority under Division Order No. R-8237 to operate an oil treating plant located in the SE/4 NW/4 of Section 33, Township 29 North, Range 11 West, San Juan County, should not be cancelled and why the site of such plant should not be reclaimed in a timely manner and to specifications authorized by the OCD.

CASE 8998: Application of Amoco Production Company for a unit agreement, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Bear Canyon Unit Area comprising 4,800.00 acres, more or less, of Federal and Fee lands in Township 26 North, Range 2 West.

CASE 8999: Application of V. H. Westbrook for Hardship Gas Well Classification, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks a determination that his Kinahan Federal Well No. 1 located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 20, Township 15 South, Range 30 East, West Cedar Point-Wolfcamp Gas Pool is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.

CASE 8984: (Continued from September 17, 1986, Examiner Hearing)

Application of H. E. Prince Construction and Petroleum for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Linda-San Andres Pool in the open-hole interval from approximately 1019 feet to 1071 feet in its Federal Well No. 11 located 1650 feet from the South line and 2310 feet from the West line (Unit K) of Section 33, Township 6 South, Range 26 East.

CASE 9000: Application of Lynx Petroleum Company for a non-standard oil proration unit and an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 40-acre non-standard oil spacing and proration unit comprising the NE/4 SE/4 (Unit I) of Section 20, Township 17 South, Range 35 East, North Vacuum-Abo Pool, to be dedicated to a well to be drilled at an unorthodox oil well location 1980 feet from the South line and 660 feet from the East line.

CASE 9001: 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 in the Malaga-Atoka Pool and the Strawn formation underlying the S/2 of Section 7, Township 24 South, Range 29 East, forming a standard 320-acre gas spacing and proration 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 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 8993: (Continued from September 17, 1986, Examiner Hearing)

Application of Texaco, Inc. 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 Lovington Lumpkin 20 Well No. 2 to be drilled 1470 feet from the South line and 150 feet from the East line of Section 20, Township 16 South, Range 37 East, Northeast Lovington-Pennsylvanian Pool, the N/2 SE/4 of said Section 20 to be dedicated to the well.

CASE 9002: Application of Zia Energy, Inc. for a non-standard gas proration unit, unorthodox gas well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 240-acre non-standard gas spacing and proration unit comprising the E/2 NW/4, SW/4 NW/4, N/2 SW/4, and SE/4 SW/4 of Section 20, Township 22 South, Range 36 East, Jalmat Gas Pool, to be simultaneously dedicated to its Cities Federal Well No. 3 located at an unorthodox gas well location 330 feet from the North line and 2310 from the West line (Unit C) of said Section 20 and to its Cities Federal Well No. 4 located at a standard location 1650 feet from the North line and 2310 feet from the West line (Unit F) of said Section 20.

CASE 9003: Application of Pennzoil Company for an unorthodox oil well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location 150 feet from the South line and 1980 feet from the East line of Section 4, Township 17 South, Range 37 East, Shipp-Strawn Pool, and the simultaneous dedication of the W/2 SE/4 of said Section 4 to the well and to the existing Vierson Well No. 2 located in Unit O.

CASE 9004: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating and extending certain pools in Eddy County, New Mexico:

- (a) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for San Andres production and designated as the Espuela-San Andres Pool. The discovery well is the RPM Energy, Inc., State Well No. 1, located in Unit I of Section 16, Township 16 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 26 EAST, NMPM
Section 16: SE/4
Section 21: N/2 and SW/4

- (b) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the East Palmillo-Bone Spring Pool. The discovery well is the Moroilco, Inc., Hamon State Well No. 1, located in Unit L of Section 5, Township 19 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM
Section 5: SW/4

- (c) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Rustler Bluff-Atoka Gas Pool. The discovery well is the HNG Oil Co., Gulf Federal Well No. 1, located in Unit H of Section 5, Township 25 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 29 EAST, NMPM
Section 5: E/2

- (d) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Strawn production and designated as the North Turkey Track-Strawn Pool. The discovery well is the Hondo Drilling Co., Alcott Federal Well No. 3, located in Unit O of Section 31, Township 18 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
Section 31: SE/4

- (e) EXTEND the South Loving-Delaware Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 20: N/2

- (f) EXTEND the Owen Mesa-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 29 EAST, NMPM
Section 25: W/2

- (g) EXTEND the Salt Draw-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NMPM
Section 27: All

- (h) EXTEND the Sheep Draw-Strawn Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 25 EAST, NMPM
Section 11: All

Dockets Nos. 30-86 and 31-86 are tentatively set for October 8 and October 22, 1986. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 17, 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.

- ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1986, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for October, 1986, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 8983: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Oil Processing Inc., the Travelers, and all other interested parties to appear and show cause why Oil Processing's authority under Division Order No. R-6053 to operate an oil treating plant located in the NE/4 SE/4 of Section 8, Township 20 South, Range 37 East, Lea County, should not be cancelled and why the site of such plant should not be reclaimed in a timely manner and to specifications authorized by the OCD.

CASE 8984: (Continued from September 3, 1986, Examiner Hearing)

Application of H. E. Prince Construction and Petroleum for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Linda-San Andres Pool in the open-hole interval from approximately 1019 feet to 1071 feet in its Federal Well No. 11 located 1650 feet from the South line and 2310 feet from the West line (Unit K) of Section 33, Township 6 South, Range 26 East.

CASE 8987: Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Red Bluff State Unit Area comprising 8960 acres, more or less, of State and Federal lands in Townships 6 and 7 South, Range 24 East.

CASE 8939: (Continued from August 20, 1986, Examiner Hearing)

Application of Yates Petroleum 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 Queen formation in the perforated interval from approximately 3750 feet to 3790 feet in the Sinclair Oil and Gas Company State 197 Well No. 3 located 1980 feet from the North line and 1762.5 feet from the West line (Unit F) of Section 6, Township 17 South, Range 34 East.

CASE 8940: (Continued from August 20, 1986, Examiner Hearing)

Application of Yates Petroleum 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 Queen formation in the perforated interval from approximately 3770 feet to 3810 feet in the H. L. Brown, Jr. State "B" Well No. 2 located 990 feet from the South line and 330 feet from the West line (Unit M) of Section 6, Township 17 South, Range 34 East.

CASE 8305: (Reopened) (Continued from September 3, 1986, Examiner Hearing)

In the matter of Case 8305 being reopened pursuant to the provisions of Order No. R-7660, which order promulgated temporary special rules and regulations for the North Chaveroo Permo-Pennsylvanian Pool in Roosevelt County, including a provision for 160-acre spacing units. Operators in said pool may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 8988: Application of TXO Production Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location 990 feet from the North line and 1980 feet from the West line of Section 12, Township 22 South, Range 27 East, East Carlsbad Wolfcamp Gas Pool, the W/2 of said Section 12 to be dedicated to the well.

- CASE 8989: Application of Merrion Oil and Gas Corporation for directional drilling and an unorthodox bottom-hole oil well location, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to plug back, side track, and directionally drill their Federal "21" Well No. 1, located at a standard surface location 2310 feet from the South and West lines of Section 21, Township 20 North, Range 5 West, Ojo Encino-Entrada Oil Pool, to a new unorthodox bottom-hole location within 100 feet of a point 2310 feet from the South line and 2610 feet from the West line of said Section 21, the NE/4 SW/4 (Unit K) of said Section 21 to remain as the dedicated acreage to the well.
- CASE 8971: (Readvertised)
- Application of Cinco, Ltd. for a non-standard gas proration unit and for an exception to Division Order No. R-8170, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas spacing and proration unit comprising the NW/4 of Section 32, Township 30 North, Range 7 West, Blanco-Mesaverde Pool, to be dedicated to a well to be drilled at a standard gas well location thereon. Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable for said unit.
- CASE 8972: (Readvertised)
- Application of the Estate of Edward Gerber and Iris Gerber Danson for a non-standard gas proration unit and an exception to Division Order No. R-8170, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas spacing and proration unit comprising the SW/4 of Section 32, Township 30 North, Range 7 West, Blanco-Mesaverde Pool, to be dedicated to its existing Ired State Well No. 1 located at a standard gas well location 790 feet from the South line and 1630 feet from the West line (Unit N) of said Section 32. Applicant further seeks an exception to the General Rules for Prorated Gas Pools in northwest New Mexico as promulgated by Division Order No. R-8170 permitting the application of a full deliverability factor in the formula utilized in determining the allowable for said unit.
- CASE 8990: Application of A. L. Dawsey, Jr. for an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location for its proposed El Vado Well No. 2 to be drilled 1770 feet from the South line and 970 feet from the East line of Section 11, Township 27 North, Range 1 East, Undesignated East Puerto Chiquito-Mancos Oil Pool, the SE/4 of said Section 11 to be dedicated to the well.
- CASE 8991: 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 Meyers Well No. 2 to be drilled 1150 feet from the South line and 1750 feet from the West line of Section 33, Township 16 South, Range 37 East, West Casey-Strawn Pool, the E/2 SW/4 of said Section 33 to be dedicated to the well.
- CASE 8992: Application of Amoco Production Company for the amendment of Division Order No. R-7267, Lea County, New Mexico. Division Order No. R-7267, dated April 23, 1983, issued in Case No. 7835, compulsorily pooled all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the W/2 of Section 24, Township 20 South, Range 35 East, forming a standard 320-acre gas spacing and proration unit. Applicant, in the above-styled cause, now seeks the amendment of said Order No. R-7267 to include a provision pooling all mineral interests in the Wolfcamp formation underlying the SW/4 NW/4 (Unit E) of said Section 24 forming a standard 40-acre oil spacing and proration unit if the subject well covered in the original Order is completed as an oil producing well in the Wolfcamp formation. Applicant further requests that all other provisions in said Order No. R-7267 remain in full force and effect.
- CASE 8958: (Continued from August 6, 1986, Examiner Hearing)
- Application of Amoco Production Company for Hardship Gas Well Classification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a determination that its State FQ Gas Com Well No. 1 located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 26, Township 23 South, Range 34 East, Antelope Ridge-Morrow Gas Pool, is a hardship gas well which should be granted priority access to pipeline takes in order to avoid waste.
- CASE 8993: Application of Texaco, Inc. 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 Lovington Lumpkin 20 Well No. 2 to be drilled 1470 feet from the South line and 150 feet from the East line of Section 20, Township 16 South, Range 37 East, Northeast Lovington-Pennsylvanian Pool, the N/2 SE/4 of said Section 20 to be dedicated to the well.

CASE 8994: Application of Union Texas Petroleum Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of production from the B.S. Mesa-Gallup, Basin-Dakota, and Blanco-Mesaverde Gas Pools in the wellbore of its Jicarilla G Well No. 9 located 990 feet from the North Line and 1650 feet from the East Line of Section 1, Township 26 North, Range 5 West.

Docket No. 29-86

DOCKET: COMMISSION HEARING - THURSDAY - SEPTEMBER 18, 1986
OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 8960: (De Novo)

Application of Marathon Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Siluro-Devonian formation underlying the SE/4 SE/4 of Section 14, Township 16 South, Range 38 East, to form a standard 40-acre spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing, said 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 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. Upon application of Marathon Oil Company, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 8781: (Rehearing)

Application of Petro-Thermo Corporation for an exception to Division Order No. R-3221 and for authorization to dispose of associated waste hydrocarbons and other solids, obtained in conjunction with the drilling and production of oil and gas into a disposal site on the surface, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the provisions of Division Order No. R-3221, as amended, to permit the disposal of produced salt water onto the surface in the E/2 NE/4 of Section 16, Township 20 South, Range 32 East. Applicant further seeks authorization to dispose of associated waste hydrocarbons and other related solids, obtained in conjunction with the drilling and production of oil and gas, onto the surface in said area. Laguna Plata, sometimes referred to as Laguna Grande is located within a portion of the above-described area. Upon the appeal of Snyder Ranches, Inc. and Pollution Control, Inc. for rehearing, this case will be heard pursuant to the provisions of Division General Rules 1220 and 1222.

CASE 8854: (De Novo)

Application of the Oil Conservation Division on its own motion for exceptions to the Special Rules for the Gavilan-Greenhorn-Graneros-Dakota and Gavilan Mancos Oil Pools as promulgated by Division Order Nos. R-7745 and R-7407, respectively, Rio Arriba County, New Mexico, the OCD seeks exceptions to the spacing and one well per proration unit limitation provisions of the Special Rules and Regulations governing the Gavilan-Greenhorn-Graneros-Dakota and Gavilan-Mancos Oil Pools as promulgated by Division Orders Nos. R-7745 and R-7407, authorizing the establishment of seven non-standard oil spacing and proration units for both pools in Township 25 North, Range 2 West, as described below:

- 1) Lots 3 and 4, S/2 NW/4, SW/4 of Section 5 and all of Section 6 consisting of 505.20 acres, more or less;
- 2) All of Section 7 and the W/2 of Section 8 consisting of 505.84 acres, more or less;
- 3) W/2 of Section 17 and all of Section 18 consisting of 506.36 acres, more or less;
- 4) All of Section 19 and the W/2 of Section 20 consisting of 506.76 acres, more or less;
- 5) N/2 of Section 29 and Lots 1 and 2 of Section 30 consisting of 413.59 acres, more or less;
- 6) S/2 of Section 29 and Lots 3 and 4 of Section 30 consisting of 413.73 acres, more or less, and
- 7) All of Section 31 and the W/2 of Section 32 consisting of 507.88 acres, more or less.

Said units would allow for the orderly development of both pools within the irregular sections along the western side of the subject township resulting from survey corrections in the United States Land Survey. The OCD proposes to allow two wells to be completed in both pools in each of the above-described units. Upon application of Mesa Grande Resources, Inc., this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 8995: Application of Mesa Grande Resources, Inc. for a non-standard oil proration unit and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 185.84-acre non-standard oil spacing and proration unit comprising Lots 1, 2, 3, and 4 of Section 7, Township 25 North, Range 2 West, Gavilan-Mancos and Gavilan Greenhorn-Graneros-Dakota Oil Pools, to be dedicated to a well to be drilled at an unorthodox oil well location 1700 feet from the North line and 600 feet from the East line of said Section 7.

CASE 8996: Application of Mesa Grande Resources, Inc. for a non-standard oil proration unit and an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 186.36-acre non-standard oil spacing and proration unit comprising Lots 1, 2, 3, and 4 of Section 18, Township 25 North, Range 2 West, Gavilan-Mancos and Gavilan Greenhorn-Graneros-Dakota Oil Pools to be dedicated to a well to be drilled at an unorthodox oil well location 1920 feet from the North line and 720 feet from the East line of said Section 18.

CASE 8951: (Continued from August 27, 1986, Commission Hearing)

Application of Benson-Montin-Greer Drilling Corporation for the amendment of Division Order No. R-8124, Rio Arriba County, New Mexico. The New Mexico Oil Conservation Division by Division Order No. R-8124, dated January 16, 1986, issued in Case 8745, authorized the applicant to conduct a long-term reservoir pressure test in the Mancos formation using certain wells in Rio Arriba County and further authorized the shut-in of certain wells and provided six months after completion of the test during which certain accumulated underproductions can be made up. Applicant, in the above-styled cause, now seeks the amendment of said Order No. R-8124 to provide for twelve months after completion of the reservoir pressure test during which to make up the accumulated underproduction of certain wells resulting from the test. Applicant further requests that all other provisions in said Order No. R-8124 remain in full force and effect.

CASE 8952: (Continued from August 27, 1986, Commission Hearing)

Application of Benson-Montin-Greer Drilling Corporation for statutory unitization, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order unitizing, for the purpose of continued pressure maintenance operations, all mineral interests in the West Puerto Chiquito-Mancos Oil Pool underlying the Canada Ojitos Unit Area, which encompasses 69,567.235 acres, more or less, being all or portions of the following lands in Rio Arriba County, New Mexico:

Sections 6 through 8 and 17 through 20, Township 24 North, Range 1 East;
 Sections 1 through 15 and 23 through 24, Township 24 North, Range 1 West;
 Sections 5 through 8, 17 through 20 and 29 through 31, Township 25 North,
 Range 1 East;
 Sections 1 through 36, Township 25 North, Range 1 West;
 Sections 19 and 20 and 29 through 32, Township 26 North, Range 1 East;
 Sections 1 through 36, Township 26 North, Range 1 West.

Among the matters to be considered at the hearing will be the necessity of unit operations, the designation of a unit operator; the determination of the horizontal and vertical limits of the unit area; the determination of a fair, reasonable and equitable allocation of production and costs of production, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in wells and equipment; and such other matters as may be necessary and appropriate for carrying on efficient unit operations, including, but not necessarily limited to, unit voting procedures, selection, removal, or substitution of unit operator, and time of commencement and termination of unit operations.