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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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M.S.

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DL 6-1-89

NBH 6/1

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

CASE NO. 9671
ORDER NO. R-8344-A

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION TO AMEND DIVISION
ORDER NO. R-8344, RIO ARRIBA COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 10, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this _____ day of June, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) By Division Order No. R-8344, issued in Case No. 8952 and dated November 7, 1986, the New Mexico Oil Conservation Commission authorized statutory unitization, pursuant to the New Mexico Statutory Unitization Act (Sections 70-7-1 through 70-7-21, NMSA, 1978 Compilation), for the Canada Ojitos Unit Area in the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, as further described in Exhibit "A" attached hereto and made a part hereof.

(3) The applicant in the immediate case, Benson-Montin-Greer Drilling Corporation, now seeks the amendment of said Order No. R-8344 to include an additional 320 acres, comprising the E/2 of Section 12, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within the existing Canada Ojitos Unit Area.

(4) By Division Order No. R-2565-B, dated November 28, 1966, the Division created and defined the West Puerto Chiquito-Mancos Oil Pool for the production of oil from the Mancos formation, with ~~horizontal limits presently consisting of the following described area in Rio Arriba County, New Mexico:~~ *including all of the Canado Ogilvie Unit and other lands.*

W/2 of sec 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

- TOWNSHIP 23 NORTH, RANGE 1 WEST, NMPM,
Section 2: All
- TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM,
Sections 1 through 35: All
- TOWNSHIP 24 NORTH, RANGE 1 EAST, NMPM,
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Sections 18 and 19: All
Section 20: W/2
Section 30: All
- TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM,
Sections 1 through 36: All
- TOWNSHIP 25 NORTH, RANGE 1 EAST, NMPM,
Section 4: W/2
Section 5 through 8: All
Section 9: W/2
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All
- TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM,
Sections 1 through 36: All
- TOWNSHIP 26 NORTH, RANGE 1 EAST, NMPM,
Section 19: All
Section 20: W/2
Sections 29 through 32: All
Section 33: W/2
- TOWNSHIP 27 NORTH, RANGE 1 WEST, NMPM,
Section 1: W/2
Sections 2 through 11: All
Section 12: W/2
Section 13: W/2
Sections 14 through 23: All
Section 24: W/2
Section 25: W/2
Sections 26 through 30: All

ILLEGIBLE

(5) By Division Order No. R-7407, dated December 20, 1983 and made effective March 1, 1984, the Division created and defined the Gavilan-Mancos Oil Pool for the production of oil from the Niobrara member of the Mancos formation, with the horizontal limits presently consisting of the following described area in Rio Arriba County, New Mexico:

the county

~~TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM,
Sections 1 through 4: All
Section 5: E/2
Section 10: E/2
Sections 11 through 13: All~~

~~TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM,
Sections 1 through 30: All
Section 32: E/2
Sections 33 through 36: All~~

~~TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM,
Sections 8 through 11: All
Sections 14 through 16: All
Sections 21 through 23: All
Sections 25 through 28: All
Sections 33 through 36: All~~

ILLEGIBLE

(6) The E/2 of Section 12, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, is currently contained within the boundaries of the Gavilan-Mancos Oil Pool, and is immediately adjacent to *lies is entirely within the COU. to the west of SF*

(7) The West Puerto Chiquito-Mancos Oil Pool, within which lies the Canada Ojitos Unit Area, is located immediately to the east of the Gavilan-Mancos Oil Pool. Furthermore, the applicant, Benson-Montin-Greer Drilling Corporation, is the operator of said Unit, and presently conducts pressure maintenance operations as authorized by Division Order No. R-3401, as amended, within that unit.

(8) Appearing in support of this application were Dugan Production Corporation and Sun Exploration and Production Company. Appearing at the hearing in opposition to the subject matter were Amoco Production Company, Mobil Exploration and Producing, U.S., Inc., Mesa Grande, Ltd., Mallon Oil Company, and Hooper, Kimball and Williams, Inc.

(9) The federal lease comprising the E/2 of said Section 12 is currently scheduled to expire by its own terms in July, 1989.

(10) At the time of the hearing, 81.25% of the working interest owners in the proposed expansion area and 89% of the working interest owners in the existing unit have authorized expanding the Canada Ojitos Unit Area to include the E/2 of said Section 12.

(11) Testimony presented ^{primary} at the hearing indicates that approximately 1200 barrels of oil actually remain under the E/2 of said Section 12; however, the applicant proposes to allocate approximately 60,000 barrels of oil to the E/2 of Section 12 pursuant to the allocation of production provisions of the Canada Ojitos Unit Operating Agreement.

(12) According to the testimony presented at the hearing the applicant does not intend to drill a well for either producing or injection purposes in the proposed expansion area.

(13) The general purpose of the New Mexico Statutory Unitization Act is to allow secondary recovery operations such that greater ultimate recovery may be achieved, waste prevented, and correlative rights ~~will be~~ protected.

(14) The subject expansion of the Canada Ojitos Unit into the E/2 of said Section 12 pursuant to the authority of the New Mexico Statutory Unitization Act should not be ~~considered~~ at this time for the following reasons:

- (a) the evidence and testimony presented at the hearing failed to adequately show that the inclusion of the E/2 of said Section 12 into the Canada Ojitos Unit Area is reasonably necessary to effectively ~~conduct~~ pressure maintenance operations therein; *carry on*
- (b) the applicant failed to show that such expansion would prevent waste and would result with reasonable probability in the increased recovery of substantially more oil than would otherwise be recovered; *in this expansion*
- (c) the proposed participation formula ^{is} unfair and unjust; and,
- (d) the proposed expansion area is within another pool from that of the existing unit area and would be in violation of Section 70-7-6.A(1), NMSA, 1978 Compilation.

(15) This application should therefore be denied.

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Order No. R-8344-A
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IT IS THEREFORE ORDERED THAT:

(1) The application of Benson-Montin-Greer Drilling Corporation for the amendment of Division Order No. R-8344 to include an additional 320 acres comprising the E/2 of Section 12, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within the existing Canada Ojitos Unit Area, and pursuant to the authority of the New Mexico Statutory Unitization Act, is hereby denied.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

EXHIBIT "A"
CASE NO. 9671
ORDER NO. R-8344-A
CANADA OJITOS UNIT AREA
RIO ARriba COUNTY, NEW MEXICO

(As Approved by Division Order No. R-8344,
dated November 7, 1986)

TOWNSHIP 24 NORTH, RANGE 1 EAST, NMPM x
Sections 6 and 7: All
Section 8: W/2
Section 17: W/2
Section 18: All
Section 19: N/2
Section 20: NW/4

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM x
Sections 1 through 15: All
Section 23: N/2
Section 24: N/2

TOWNSHIP 25 NORTH, RANGE 1 EAST, NMPM x
Sections 5 through 8: All
Sections 17 through 20: All
Section 29: W/2
Sections 30 and 31: All

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM x
Sections 1 through 36: All

TOWNSHIP 26 NORTH, RANGE 1 EAST, NMPM x
Section 19: All
Section 20: W/2
Sections 29 through 32: All

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM x
Sections 1 through 36: All

Said unit comprising 69,567.235 acres, more or less, of State,
Federal and Fee lands.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

REOPENED CASES NOS. 7980,
8946 and 8950
ORDER NO. R-7407-F
ORDER NO. R-6469-F

REOPENING OF CASES 7980, 8946 and 8950 FOR
FURTHER TESTIMONY AS PROVIDED BY ORDER
R-7407-E IN REGARD TO THE GAVILAN-MANCOS OIL
POOL AND ORDER R-6469-D IN REGARD TO THE
WEST PUERTO CHIQUITO-MANCOS OIL POOL IN
RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on June 13, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Commission has jurisdiction of these causes and the subject matter thereof.
- (2) At the time of the hearing, Cases 7980 (reopened), 8946 (reopened), 8950 (reopened), 9111 (reopened) and 9412 were consolidated for purposes of testimony. Separate orders are being entered in Cases 9111 and 9412.
- (3) Case 7980 was called and reopened by the Commission to determine appropriate spacing and enter permanent orders establishing spacing and proration units in the Gavilan-Mancos Oil Pool (hereinafter "Gavilan") pursuant to Order R-7407-E (Rule 2a) which rule increased spacing from 320-acre to 640-acre spacing units.

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Case No. 7980
Order No. R-7407-F
Order No. R-6469-t

(4) Case 8946 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established in the Gavilan-Mancos Oil Pool to provide waste and protect correlative rights.

(5) Case 8950 was re-opened to determine what top oil allowable and limiting gas-oil ratio should be established for the West Puerto Chiquito Mancos Oil Pool (hereinafter "WPC").

(6) Orders R-7407-E and R-6469-C were entered by the Commission to direct operators within Gavilan and WPC, respectively, to conduct tests on wells within the pools to determine the optimal top allowable and limiting gas-oil ratio for each of the pools. Pursuant to those orders, the pools were produced with a top allowable of 1280 barrels of oil per day for a standard 640-acre proration unit with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil for the period July 1 until November 20, 1987, referred to as the "high rate test period" and were produced with a top oil allowable of 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 cubic feet of gas per barrel of oil from November 20, 1987 until February 20, 1988, referred to as the "low rate test period". Operators were directed to take bottomhole pressure surveys in selected wells within both pools at the start of and end of each test period. Subsequent to the test period, the top oil allowable remained at 800 barrels of oil per day for a 640-acre proration unit with a limiting gas-oil ratio of 600 to 1.

(7) Data collected by the operators during the test period pursuant to Orders R-7407-E and R-6469-C were submitted to the Division's Aztec district office and were available to all parties in this matter. At the request of the Commission, Petroleum Recovery Research Center at Socorro, New Mexico, made an independent evaluation of the data as a disinterested, unbiased expert and its report was entered into evidence by testimony and exhibit.

(8) Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing et al, collectively called "proponents", advocate return to special allowable of at least 1280 barrels of oil per day for 640-acre units with limiting gas-oil ratio of 2000 cubic feet per barrel whereas Benson-Montin-Greer Drilling Co., Sun Exploration and Production Company, Dugan Production Corporation et al, collectively called "opponents", advocate allowable and gas limits no higher than the current special allowable of 800 barrels of oil per day for 640-acre units and limiting gas-oil ratio of 600 cubic feet per barrel.

Case No. 7980
Order No. R-7407-F
Order No. R-6469-F

(9) Proponents presented testimony and exhibits intended to demonstrate:

- (a) Gavilan and WPC pools are separate sources of supply separated by a permeability barrier approximately two miles east of the line separating Range 1 West from Range 2 West which is the present common boundary between the two pools.
- (b) Insignificant oil has moved across the alleged barrier.
- (c) Gas-oil ratio limitations are unfair to Gavilan operators.
- (d) Wells were not shut in following the high rate testing period for sufficient time to permit accurate BHP measurement following the high rate testing period.
- (e) The high-rate/low-rate testing program prescribed by Order R-7407-E demonstrated that high producing rates prevented waste as evidenced by lower gas-oil ratios during that phase of the test period.
- (f) Irreversible imbibition of oil into the matrix during shut-in or low-rate production causes waste from reduced recovery of oil.
- (g) Pressure maintenance in Gavilan would recover no additional oil and would actually reduce ultimate recovery.
- (h) The most efficient method of production in Gavilan would be to remove all production restrictions in the pool.

(10) Opponents presented testimony and exhibits intended to demonstrate:

- (a) There is pressure communication throughout the Gavilan-WPC pools which actually comprise a single reservoir.
- (b) Directional permeability trending north-south with limited permeability east-west, together with gas reinjection, has worked to improve oil

Case No. 7980
Order No. R-7407-F
Order No. R-6469-r

recovery in the COU located wholly within the WPC pool.

- (c) Success of the pressure maintenance project is shown by the low gas-oil ratio performance of structurally low wells in the unit.
- (d) Oil has moved across the low permeability area east of the Proposed Pressure Maintenance Expansion Area to the Canada Ojitos Unit as pressure differentials have occurred due to fluid withdrawal or injection.
- (e) Although lower gas-oil ratios were observed during the high-rate production test period, reservoir pressure drop per barrel of oil recovered increased indicating lower efficiency.
- (f) Gravity segregation was responsible for the lower COR performance during high-rate production.
- (g) The effects of the pressure maintenance project were shown, not only in the expansion area but even into the Gavilan pool.
- (h) The reservoir performance during the test period shows pronounced effects of depletion.
- (i) The higher allowables advocated by proponents would severely violate correlative rights.

(11) Substantial evidence indicated, and all parties agreed, that 640 acres is the appropriate size spacing and proration unit for Gavilan.

(12) Eminent experts on both sides interpreted test data including gas-oil ratios, bottomhole pressures, and pressure build-up tests with widely differing interpretations and conclusions.

(13) The preponderance of the evidence demonstrates the Gavilan and WPC pools constitute a single source of supply which can continue to be regulated effectively as two separate pools with uniform rules for spacing and allowables.

(14) No well produced the top oil allowable during any month of the test period; no well produced the gas limit during the high rate test period; 30 wells produced the gas limit at the beginning of the low rate test period but eight wells produced that limit at the conclusion of the test period.

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Case No. 7980
Order No. R-7407-F
Order No. R-6469-F

(15) There is substantial evidence that lower gas-oil ratios observed during the high-rate test period are due to a number of factors including reduced oil re-imbibition, gravity segregation of fluids within the reservoir, and greater pressure differential between fractures and matrix reservoir rock.

(16) A preponderance of evidence shows that both Gavilan and WPC exhibit a very high degree of communication between wells, particularly in north-south directions, and as a result the 72-hour shut in prior to BHP tests may not have been sufficient to permit pressures to completely stabilize. However, such pressure measurements were adequate to provide useful data for reservoir evaluation.

(17) Substantial evidence shows that some wells demonstrated a reduced gas-oil ratio with a high rate of production and that increased production limits should prevent waste.

(18) Substantial evidence also demonstrated that high deliverability wells have intersected a high capacity fracture system and therefore drain distant tracts better than low deliverability wells which have been drilled on those distant tracts. The evidence also indicates that high production rates result in the reduced oil recovery per pound of pressure drop. As a result a top oil allowable and limiting gas-oil ratio is necessary to prevent waste and protect correlative rights.

(19) A top oil allowable of 800 barrels per day per 640 acres with a limiting gas-oil ratio of 2,000 to 1 will enable high productivity wells to produce at more efficient rates without significantly impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Rule 2 (a) of the temporary special rules and regulations for the Gavilan-Mancos Oil Pool as promulgated by Order R-7407 is hereby amended as follows:

Rule 2 (a). A standard proration unit shall consist of between 632 and 648 acres consisting of a governmental section with at least one and not more than two wells drilled or recompleted thereon; provided that if the second well is drilled or recompleted on a standard unit it shall not be located in the same quarter section, nor closer than 1650 feet to the first well drilled on the unit; and provided further that proration units formed prior to the date of this order are hereby approved as non-standard, provided however, that operators have the option to file Form C-102 to form standard units.

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Case No. 7980
Order No. R-7407-F
Order No. R-6469-r

(2) Effective August 1, 1988 the allowable for a standard 640-acre spacing and proration unit in the Gavilan-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(3) Effective August 1, 1988, the allowable for a standard 640-acre spacing and proration unit in the West Puerto Chiquito-Mancos Oil Pool shall be 800 barrels of oil per day and the limiting gas-oil ratio shall be 2000 cubic feet of gas per barrel of oil. Non-standard units shall receive allowables in the same proportion of 800 barrels of oil per day that the acreage in the spacing and proration unit bears to 640 acres.

(4) Jurisdiction of these causes is retained for entry of such further orders as the Commission deems necessary.

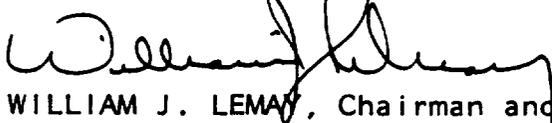
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member



WILLIAM J. LEMAY, Chairman and
Secretary

S E A L

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

REOPENED CASES NO. 7980, 8946 AND 8950
ORDER NO. R-7407-F-1
ORDER NO. R-6469-F-1

REOPENING CASES 7980, 8946 AND 8950
FOR FURTHER TESTIMONY AS PROVIDED BY
ORDER R-7407-E IN REGARD TO THE
GAVILAN-MANCOS OIL POOL AND ORDER R-6469-D
IN REGARD TO THE WEST PUERTO CHIQUITO-MANCOS
OIL POOL IN RIO ARRIBA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Oil Conservation Commission of New Mexico (Commission) that the combined order (Order Nos. R-7407-F and R-6469-F) issued in Reopened Case Nos. 7980, 8946 and 8950 and dated August 5, 1988, does not correctly state the intended order of the Commission;

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-7407-F being inadvertently issued twice, the first in Reopened Case 7980 heard before the Commission on March 17, 1988, and the second being erroneously issued in the immediate case as described above; therefore, all references to "Order No. R-7407-F" throughout said order issued in Reopened Case Nos. 7980, 8946 and 8950, dated August 5, 1988, are hereby amended to read "Order No. R-7407-G."

(2) The corrections set forth in this order be entered nunc pro tunc as of August 5, 1988.

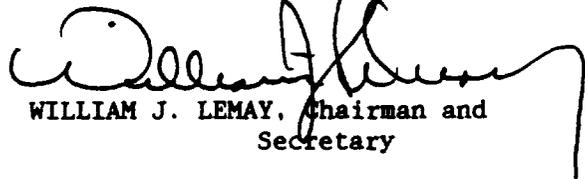
DONE at Santa Fe, New Mexico, on this 17th day of August, 1988.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member



WILLIAM J. LEMAY, Chairman and
Secretary

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 9111
Order No. R-3401-B

APPLICATION OF BENSON-MONTIN-GREER
DRILLING CORPORATION FOR EXPANSION OF
THE PROJECT AREA FOR ITS WEST PUERTO
CHIQUITO-MANCOS PRESSURE MAINTENANCE
PROJECT, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on March 18, 1988, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission." Decision on the case was deferred until possibly related testimony in Cases 7980, 8946, 8950 and 9412 was received at the hearing held June 13, 1988.

NOW, on this 5th day of August, 1988, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

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

(2) Applicant requests expansion of the West Puerto Chiquito-Mancos Pressure Maintenance Project area to include the below-described area which would make the project area coterminous with the Canada Ojito Unit area and the Mancos Participating Area of the unit:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5 through 8
Sections 17 through 20
Sections 29 through 32

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Case No. 9111
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TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17, and 20
Sections 6, 7, 18, 19, 29, 30, 31 and 32

All in Rio Arriba County, New Mexico

(3) The expanded project area would abut the Gavilan-Mancos Pool boundary at the West line of Range 1 West.

(4) Applicant was supported in its application by Sun Exploration and Production Company and was opposed by Mallon Oil Company, Mesa Grande Resources, Inc., Mobil Texas-New Mexico Producing, Koch Exploration and others.

(5) Critical to the case is the degree, if any, of pressure communication across a low permeability zone at or near the present western boundary of the project area which is approximately two miles east of the western boundary of the unit.

(6) The two westernmost rows of sections inside the unit area are in effective pressure communication with the Gavilan-Mancos pool as demonstrated by shut in pressure measurements.

(7) The unit area east of the proposed expansion of the area described above exhibits a significantly greater pressure than the proposed expansion area and the adjacent Gavilan area, as a result of gas injection at the structurally higher and more easterly portion of the unit.

(8) The pressure differential across the low-permeability area which resides in the third row of sections east of the western boundary of the unit is in the range of 350-400 psi, and thus indicates limited pressure communication between the injection wells and the proposed expansion area.

(9) Limited transmissibility across the low-permeability zone has been shown by (1) transmission of a pressure pulse from a hydraulically fractured well to wells across the low permeability zone, (2) failure to increase the average pressure east of the zone by overinjection of gas, and (3) the lower gas-oil ratio of wells in the proposed expansion area as compared to adjacent Gavilan-Mancos wells.

(10) The gas credit provided by Rule 7 of Order R-3401, as amended, in the project area provides a reduced COR penalty for wells in the project area because the pressure maintenance process results in a smaller reservoir voidage per barrel of oil produced than would occur if the gas were not reinjected.

(11) The permeability restriction described in Finding No. (5) limits the benefit which the proposed expansion area can receive from the pressure maintenance gas injection.

(12) There is evidence that wells within both the WPC and the Gavilan Pools are in communication with areas outside of those pools, particularly in a north-south direction. As a result there may be gas flow and repressurization from the pressure maintenance project in a northerly and southerly direction and that it may extend beyond the northern and southern boundaries of the pressure maintenance project.

(13) Because of Findings (11) and (12), giving full injection credit to those wells in the proposed expansion area would give those wells an advantage over the adjacent wells in the Gavilan-Mancos Pool and would impair the correlative rights of the owners in the Gavilan-Mancos Pool.

(14) Limited expansion of the project area, and reduced credit to wells in the expansion area for reinjected gas in the project area will encourage continued gas injection, will increase the ultimate recovery of oil in the West Puerto Chiquito-Mancos Oil Pool and will also protect correlative rights in the Gavilan- Mancos Pool wells offsetting the unit.

(15) The project area should be expanded only one tier of sections to the west leaving one tier of sections between the expansion area and Gavilan.

(16) The evidence is not conclusive as to the amount of injection credit which the wells in the expansion area of the project should receive, and pending further data evaluation, a 50% injected gas credit is reasonable.

(17) The gas credit amount in the expansion area granted by this order should be modified upon presentation of evidence that an advantage is gained by either pool over the other.

(18) The Aztec district office of the Division, in consultation with the operators in the two pools should determine the wells and procedures to be employed to obtain accurate, representative BHP's on either side of the common pool boundary on a semi-annual basis for detection and evaluation of any drainage across the said boundary and a basis for adjusting the gas injection credit assigned the wells in the expansion area.

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Case No. 9111
Order No. R-3401-B

IT IS THEREFORE ORDERED THAT:

(1) The Project Area of the West Puerto Chiquito-Mancos Pressure Maintenance Project is hereby expanded to include the following described area:

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Sections 5 and 8

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Sections 5, 8, 17, 20, 29 and 32

TOWNSHIP 26 NORTH, RANGE 1 WEST, NMPM
W/2 Sections 5, 8, 17 and 20 and all of
Sections 29 and 32

All in Rio Arriba County, New Mexico.

(2) Rule 6 and Rule 7 of the Special Rules for the West Puerto Chiquito-Mancos Pressure Maintenance Project established by Order No. R-3401, as amended, are hereby amended to read in their entirety as follows:

"Rule 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire."

"Rule 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or top unit allowable for the West Puerto Chiquito-Mancos Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the Canada Ojitos Unit Area producing from the same common source of supply shall not produce in excess of top unit allowable for the pool. Production of such well at a higher rate shall be authorized only after notice and hearing. Each producing well shall be subject to the limiting gas-oil

ratio for the West Puerto Chiquito-Mancos Oil Pool except that any well or wells within the project area producing with a gas-oil ratio in excess of the limiting gas oil ratio may be produced on a "net gas-oil ratio" basis, which shall be determined by applying credit for daily average gas injected, if any, into the West Puerto Chiquito-Mancos Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = TUA \times F_a \times \frac{GOR}{\frac{P_g - I_g}{P_o}}$$

where A_{adj} = the well's daily adjusted allowable.

TUA = top unit allowable for the pool.

F_a = the well's acreage factor (1.0 if one well on a 640 acre proration unit or 1/2 each if two wells on a 640 acre unit, and 1/2 for a well in a section along the Gavilan boundary which lies closer than 2310' from the Gavilan boundary).

P_g = average daily volume of gas produced by the well during the preceding month, cubic feet.

I_g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet.

P_o = average daily volume of oil produced by the well during the preceding month, barrels.

GOR = limiting gas-oil ratio for the West Puerto Chiquito-Mancos Oil Pool.

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_g - I_g}{P_o}$ to be less than the limiting gas-oil ratio for the West Puerto Chiquito Mancos Oil Pool.

Provided however, that wells located in the area described as: Sections 5 and 8, Township 24 North, Range 1

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Case No. 9111
Order No. R-3401-B

West; Sections 5, 8, 17, 20, 29 and 32,
Township 25 North, Range 1 West; Sections 29
and 32 and W/2 of Sections 5, 8, 17 and 20,
Township 26 North, Range 1 West

shall be limited to 50% of the allocated share of injection
gas in the l_g term of the formula above.

(3) The Aztec district office of the Division, with due
counselling and advice from pool operators, shall, by October
1, 1988, develop a program for semi-annual bottomhole pressure
surveys of wells in both pools located not less than 3/8 mile
and not more than 1 1/2 miles from the common pool boundary,
designed to measure accurately the pressure differential
across the pool boundary and to be used as a basis for
adjusting the gas injection credit to wells in the expansion
area. The program shall be presented for approval to the
Commission Conference on October 6, 1988.

(5) This order may be modified, after notice and hear-
ing, to offset any advantage gained by wells on either side of
the common boundary of the Gavilan and West Puerto Chiquito
Oil Pools, as a result of this order.

(6) Jurisdiction of this cause is retained for the entry
of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



WILLIAM R. HUMPHRIES, Member

ERLING A. BROSTUEN, Member



WILLIAM J. LEMAY, Chairman and
Secretary

S E A L

Dockets Nos. 16-89 and 17-89 are tentatively set for May 24 and June 7, 1989. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 10, 1989

**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, or Victor T. Lyon, Alternate Examiners:

- ALLOWABLE:** (1) Consideration of the allowable production of gas for June, 1989, from fourteen prorated gas pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for June, 1989, from four prorated gas pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 9853: (Readvertised)

Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Middle Creek State Unit Area comprising 15,680.73 acres, more or less, of State and Fee lands in a portion of Townships 8 and 9 South, Range 23 East. Said unit is located approximately 13 miles north-northwest of Roswell, New Mexico.

CASE 9654: (Readvertised) (This case will be dismissed.)

Application of Yates Petroleum Corporation for a unit agreement, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Todd Unit Area comprising 960 acres, more or less, of State and Federal lands in the E/2 of Section 17 and all of Section 16, Township 7 South, Range 35 East. Said unit is located approximately 5 miles north-northwest of Milnesand, New Mexico.

CASE 9292: (Continued & Readvertised) (This Case will be dismissed.)

Application of Mobil Producing Texas and New Mexico Inc. for the expansion of the West Lindrith Gallup-Dakota Oil Pool, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of the West Lindrith Gallup-Dakota Oil Pool to include all of Sections 6, 7, 8, and 9, Township 24 North, Range 2 West. Said area is approximately one-half mile north of Lindrith, New Mexico.

CASE 9663: Application of The Petroleum Corporation of Delaware for downhole commingling, the amendment of Division Order No. R-7269, and the amendment of Division Administrative Order NSP-1290, Eddy County, New Mexico. Applicant, in the above-styled cause, and as operator of the Superior Federal Well No. 6 located 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 6, Township 20 South, Range 29 East, seeks to downhole commingle production from the Undesignated East Burton Flat-Atoka Gas Pool and the East Burton Flat-Morrow Gas Pool. Applicant also seeks to permit such commingled production to be produced through tubing and the production of gas from the East Burton Flat-Strawn Gas Pool through the casing-tubing annulus of said well and that Division Order No. R-7269 be amended accordingly. Applicant further seeks to amend Division Administrative Order NSP-1290, dated April 28, 1982; which authorized a 299.84-acre, more or less, gas spacing and proration unit for the East Burton Flat-Strawn Gas Pool comprising Lots 6 and 7, the E/2 SW/4, and the SE/4 of said Section 6 for said well; to include both the Undesignated East Burton Flat-Atoka Gas Pool and the East Burton Flat-Morrow Gas Pool. Applicant also requests that any such order issued in this case be made effective retroactively to May 1987. Said well is located approximately 7.5 miles northwest of the junction of New Mexico Highway No. 31 North and U.S. Highway 82/180.

CASE 9664: Application of Bass Enterprises Production 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 Queen formation or to a depth of 4,600 feet, whichever is deeper, underlying the NW/4 SE/4 of Section 21, Township 18 South, Range 35 East, forming a standard statewide 40-acre spacing and proration unit, said unit to be dedicated to its Reeves 21 State Well No. 2 to be drilled at a standard oil well location 1980 feet from the South line and 1980 feet from the East line (Unit J) of said Section 21. 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. Said well location is approximately one quarter mile west of Milepost No. 3 on Old State Highway 8.

CASE 9665: Application of Bass Enterprises Production 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 Undesignated Reeves-Queen Pool or to a depth of 4,600 feet, whichever is deeper, underlying the NE/4 SE/4 of Section 21, Township 18 South, Range 35 East, forming a standard statewide 40-acre oil spacing and proration unit, said unit to be dedicated to its Reeves 21 State Well No. 3 to be drilled at a standard oil well location 1980 feet from the South line and 780 feet from the East line (Unit I) of said Section 21. 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. Said well location is approximately 100 feet east of Milepost No. 3 on Old State Highway No. 8.

CASE 9639: (Continued from April 26, 1989, Examiner Hearing.)

Application of Meridian Oil, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Basin-Fruitland Coal Gas Pool underlying the E/2 (equivalent) of Section 23, Township 31 North, Range 10 West, forming a standard 313.78-acre gas spacing and proration unit for said pool, to be dedicated to its Atlantic "D" Com Well No. 205 to be drilled at a standard coal gas well location in the NW/4 of said Section 23. 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. Said location is approximately 9 miles northeast of Aztec, New Mexico.

CASE 9641: (Continued from April 26, 1989, Examiner Hearing.)

Application of Meridian Oil, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Basin-Fruitland Coal Gas Pool underlying the W/2 (equivalent) of Section 23, Township 31 North, Range 10 West, forming a standard 315.75-acre gas spacing and proration unit for said pool, to be dedicated to its Atlantic "B" Com Well No. 205 to be drilled at a standard coal gas well location in the SW/4 of said Section 23. 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. Said location is approximately 9 miles northeast of Aztec, New Mexico.

CASE 9666: Application of Bill Fenn, Inc. for an unorthodox gas well location and dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete a well in the Indian Basin-Upper Pennsylvanian Gas Pool and the Undesignated Indian Basin-Morrow Gas Pool at an unorthodox gas well location 825 feet from the North line and 1650 feet from the East line (Unit B) of Section 7, Township 22 South, Range 24 East, all of said Irregular Section 7 to be dedicated to the well forming a 617.68-acre gas spacing and proration unit for both pools. Said well location is approximately 4.5 miles south-southeast of the Marathon Oil Company Indian Basin Gas Plant.

CASE 9667: Application of Midland Phoenix Corporation for unorthodox gas well location and compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Undesignated Pitchfork Ranch-Atoka Gas Pool and the Undesignated Pitchfork Ranch-Morrow Gas Pool underlying the E/2 of Section 34, Township 24 South, Range 34 East, to form a standard 320-acre gas spacing and proration unit for both pools, to be dedicated to a well to be drilled at an unorthodox gas well location 660 feet from the South line and 1980 feet from the East line (Unit O) of said Section 34. 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. Said unit is located approximately 3 miles west-southwest of the Junction of Old State Highway No. 128 and County Road No. 2.

CASE 9645: (Readvertised)

Application of BP Exploration, Inc., for compulsory pooling and directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the top of the Atoka formation underlying the SE/4 SW/4 of Section 30, Township 17 South, Range 38 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools within said vertical extent developed on 40-acre spacing (which presently includes but is not necessarily limited to the Undesignated Hobbs Channel-Bone Spring Pool, Undesignated Hobbs Channel-San Andres Pool, and the Undesignated Hobbs Channel-Wolfcamp Pool). Said unit is to be dedicated to a well to be directionally drilled from a surface location 1138 feet from the South line and 1633 feet from the West line of said Section 30 to a point within 100 feet of a standard bottomhole oil well location 660 feet from the South line and 1817 feet from the West line of said Section 30. 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. Said location is approximately 1.5 miles east of Humble City, New Mexico.

CASE 9668: Application of Nearburg Producing Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox oil well location 990 feet from the North line and 1500 feet from the West line (Unit C) of Section 12, Township 17 South, Range 37 East, Undesignated Shipp-Strawn Pool, the N/2 NW/4 of said Section 12 to be dedicated to the well forming a standard 80-acre oil spacing and proration unit. Said location is approximately 4 miles north of Humble City, New Mexico.

CASE 9669: Application of Enron Oil & Gas Company for compulsory pooling, unorthodox gas well location, and non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Undesignated Pitchfork Ranch-Morrow Gas Pool underlying the S/2 of Section 34, Township 24 South, Range 34 East, forming a standard 320-acre gas spacing and proration unit for said pool. Applicant further seeks an order pooling all mineral interests in the Undesignated Pitchfork Ranch-Atoka Gas Pool underlying the SE/4 of said Section 34, forming a non-standard 160-acre gas spacing and proration unit for said pool. Both aforementioned units are to be dedicated to a single well to be drilled

at a location which is standard for the Morrow zone and unorthodox for the Atoka zone, 660 feet from the South line and 1980 feet from the East line (Unit O) of said Section 34. 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. Said well location is approximately 3 miles west-southwest of the junction of Old State Highway No. 128 and County Road No. 2.

CASE 9670: Application of Stevens Operating Corporation to amend Division Order No. R-8917, directional drilling and an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks to amend Division Order No. R-8917 to allow for the re-entry of the currently plugged and abandoned Philtex Honolulu Federal Well No. 1 located 1980 feet from the South and West lines (Unit K) of Section 9, Township 14 South, Range 29 East, NMPM, North King Camp-Devonian Pool, in lieu of drilling a new well at the unorthodox location approved by said order. Applicant further seeks approval to directionally drill said Philtex Honolulu Federal Well No. 1 to a depth of approximately 9894 feet, and to bottom said well at an unorthodox bottomhole location within 500 feet west of a point 1980 feet from the South line and 2475 feet from the West line of said Section 9. A 160-acre non-standard proration unit consisting of the E/2 W/2 of said Section 9 (Approved By Order No. R-8917) is to be dedicated to the above described well. Said location is approximately 17 miles east of Hagerman, New Mexico.

CASE 9671: Application of Benson-Montin-Greer Drilling Corporation to amend Division Order No. R-8344, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-8344, which order statutorily unitized, 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 89,567.235 acres, more or less, of lands located in all or portions of Townships 24, 25, and 26 North, Ranges 1 East and 1 West, to include an additional 320 acres comprising the E/2 of Section 12, Township 25 North, Range 2 West, Gavilan-Mancos Oil Pool. Among the matters to be considered at the hearing will be the necessity of expansion of unit operations; the determination of a fair, reasonable and equitable allocation of production and costs of production to each of the various tracts in the expanded unit area; the determination of credits and charges to be made among the various owners in the expanded 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. Said expansion area is located approximately 16 miles north by west of Regina, New Mexico.

Docket 15-89

DOCKET: COMMISSION HEARING - THURSDAY - MAY 18, 1989

**9:00 A.M. - MORGAN HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO**

CASE 9672: Application of the Oil Conservation Division to consider amendments to Division Rules 8, 312, 313, and 711 to require appropriate measures be taken to prevent loss of migratory waterfowl resulting from contact with oily waste in oil field operations.