

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

July 31, 1997

Amoco Production Company San Juan Business Unit P. O. Box 800 Denver, Colorado 80201 Attention: Pamela W. Staley

> Administrative Order DD-196 and AMENDED Administrative Order NSL-3068

Dear Ms. Staley:

Reference is made to the following: (i) your application to William J. LeMay, Division Director, dated September 10, 1996; (ii) your letter to Mr. Frank Chaves, Supervisor of the Division's District office in Aztec dated September 12, 1996; (iii) the Division's initial response to said applications by letter from Mr. Michael E. Stogner dated November 25, 1996; (iv) your response by letter dated December 2, 1996; and, (v) to the records of the Division in Santa Fe: all of which concern Amoco Production Company's request to recomplete the existing Lodewick Well No. 1 (API No. 30-045-06463) by intentionally deviating from the vertical wellbore with an intentional azimuth in order to avoid formation damage to both the Pictured Cliffs and Basin-Fruitland Coal Gas intervals generated from earlier completion techniques and methods within the SE/4 of Section 18, Township 27 North, Range 9 West, NMPM, San Juan County, New Mexico.

The Division Director Finds That:

- (1) The application has been duly filed under the provisions of Rules 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division") revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11274 on June 13, 1995;
- (2) The Lodewick Well No. 1, located 990 feet from the South and East lines (Unit P) of said Section 18, was originally drilled in 1951, completed in the Fulcher Kutz-Pictured Cliffs Pool, and had dedicated thereon a standard 160-acre gas spacing and proration unit for said pool comprising the SE/4 of said Section 18;

Administrative Order DD-196/Amended Administrative Order NSL-3068 Amoco Production Company July 31, 1997 Page 2

- (3) By Division Administrative Order NSL-3068, dated October 23, 1991, Amoco was authorized to abandon the Pictured Cliffs interval in the Lodewick Well No. 1 and recomplete up-hole into the Basin-Fruitland Coal (Gas) Pool whereby the 321.08 acres comprising Lots 3 and 4, the E/2 SW/4, and the SE/4 (S/2 equivalent) of said Section 18 was to have been dedicated to said well in order to form a standard "lay-down" gas spacing and proration unit for coal gas production. However, in September, 1992 when the well was actually recompleted the E/2 of said Section 18, being a standard "stand-up" 320-acre gas spacing and proration unit was therein dedicated instead; moreover, said Division Order No. R-3068 was never amended to reflect this acreage rededication;
- (4) The Fulcher Kutz-Pictured Cliffs Pool is subject to the statewide rules and regulations for shallow gas wells above the Dakota formation in Northwest New Mexico, as promulgated by Rule 104.C(3)(a), which provides for 160-acre gas spacing and proration units, or drilling units, and requires that wells be located no closer than 790 feet to the outer boundary of a standard 160-acre unit nor closer than 130 feet to any quarter-quarter section or subdivision inner boundary thereon;
- (5) The Basin-Fruitland Coal (Gas) Pool is subject to the "Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool", as promulgated by Division Order No. R-8768, as amended, which includes provisions for 320-acre gas spacing and proration units and wells to be located within either the NE/4 or SW/4 of the section and not closer than 790 feet from any outer boundary of the spacing unit nor closer than 130 feet from any quarter section line nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary;
- (6) The applicant/operator proposes to kick-off from vertical at a depth of approximately 1,600 feet by milling a window in the existing 5-1/2 inch production casing string, directionally drill in a northwesterly direction in such a manner as to penetrate the Basin-Fruitland Coal (Gas) Pool and bottom said well within the Fulcher Kutz-Pictured Cliffs Pool;
- (7) To satisfy the provisions of both rules and regulations governing both the Pictured Cliffs and Fruitland Coal Gas intervals the applicable drilling window or "producing area" for said wellbore should include that area within the SE/4 of said Section 18 that is no closer than 790 feet to any quarter section line;
- (8) Production from both intervals are to be downhole commingled under the authority of Division Administrative Order DHC-1379, dated October 17, 1996;

Administrative Order DD-196/Amended Administrative Order NSL-3068 Amoco Production Company July 31, 1997 Page 3

- (9) At this time Division Administrative Order NSL-3068 should be amended to reflect the 320 acres comprising the E/2 of said Section 18 as the dedicated acreage for Basin-Fruitland coal gas production from this well; and,
- (10) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Amoco Production Company, is hereby authorized to recomplete the existing Lodewick Well No. 1 (API No. 30-045-06463), located 990 feet from the South and East lines (Unit P) of said Section 18, Township 27 North, Range 9 West, NMPM, San Juan County, New Mexico, by milling a window in the existing 5-1/2 inch production casing string at a depth of approximately 1,600 feet, kick-off from vertical, and directionally drill in a northwesterly direction in such a manner as to (i) penetrate the Basin-Fruitland Coal (Gas) Pool; and, (ii) bottom said well within the Fulcher Kutz-Pictured Cliffs Pool: within an applicable drilling window or "producing area" which includes an area within the SE/4 of said Section 18 that is no closer than 790 feet to any quarter section line;

<u>PROVIDED HOWEVER THAT</u> prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

<u>PROVIDED FURTHER THAT</u> during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

- (2) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.
- (3) The existing standard 320 acre gas spacing and proration unit in the Basin-Fruitland Coal (Gas) Pool comprising the E/2 of said Section 18 and the SE/4 of said Section 18 being a standard 160-acre gas spacing and proration unit for the Fulcher-Kutz Pictured Cliffs Pool are to be dedicated to said well.

Administrative Order DD-196/Amended Administrative Order NSL-3068 Amoco Production Company July 31, 1997 Page 4

- Division Administrative Order NSL-3068, dated October 23, 1991, shall be (4) amended to show the above-described 320-acre stand-up gas spacing and proration unit comprising the E/2 of said Section 18 as the dedicated acreage for the Basin-Fruitland Coal gas production from the Lodewick Well No. 1. This change to said administrative order shall be made retroactive as of October 23, 1991.
- The operator shall comply with all requirements and conditions set forth in (5) Division General Rule 111.E(2) and any applicable requirements in 111.D and F.
- Form C-105 shall be filed in accordance with Division Rule 1105 and the operator (6) shall indicate thereon true vertical depth in addition to measured depths.
- Jurisdiction of this cause is retained for the entry of such further orders as the **(7)** 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. LÉMAY

Director

SEAL

WJL/MES/kv

Oil Conservation Division - Aztec cc:

U. S. Bureau of Land Management - Farmington

File: NSL-3068 DHC-1379 /