STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

November 29, 1995

Amoco Production Company P. O. Box 800 Denver, Colorado 80201 Attention: J. W. Hawkins

Administrative Order DD-126

Dear Mr. Hawkins:

Reference is made to Amoco Production Company's application dated November 6, 1995 for authorization to recomplete its existing Sheets "LS" Well No. 2 (API No. 30-045-10347) by side tracking off of the vertical wellbore and drill a high angle wellbore to a pre-determined bottom-hole location in order to further develop the Blanco-Mesaverde Pool underlying its existing 319.10-acre standard gas spacing and proration unit ("GPU") comprising Lot 1, the NE/4, the N/2 NW/4 and the SE/4 NW/4 (N/2 equivalent) of Section 28, Township 31 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 Rule 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 11,274 on June 13, 1995;
- (2) The Sheets "LS" Well No. 2, located at a standard gas well location 1650 feet from the North line and 1090 feet from the East line (Unit H) of said Section 28, was originally drilled and completed in 1953 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 319.10-acre GPU;
- (3) By Order No. R-8170, as amended, the Division promulgated the "General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool", which includes provisions for 320-acre gas spacing and proration units and well location requirements whereby the initial well drilled on a GPU shall be located be no closer than 790 feet to the outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary and the infill well drilled on an existing GPU shall be in the quarter section not containing a Mesaverde gas well and shall be located with respect to the restrictions as previously described;

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- (4) Within this GPU Amoco is also producing Blanco-Mesaverde gas from its Sheets "LS" Well No. 2-A (API No. 30-045-22449), located at a standard infill gas well location 875 feet from the North line and 950 feet from the West line (Unit D) of said Section 28;
- (5) A high angle wellbore as proposed should provide Amoco a better opportunity to encounter the naturally occurring fracture system in the Mesaverde formation, which should result in a higher production rate and an increased ultimate recovery of gas from this well;
- (6) The applicant/operator proposes to kick-off from vertical at a depth of approximately 3,400 feet by milling a window in the existing production casing, drill in a northwesterly direction, build to an angle of approximately 45 degrees and continue drilling in such a manner as to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said wellbore to be approximately 1550;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the N/2 equivalent of said Section 28 that is no closer than 790 feet to the outer boundary of the subject GPU; and,
- (8) 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 its existing Sheets "LS" Well No. 2 (API No. 30-045-10641), located at a standard gas well location 1650 feet from the North line and 1090 feet from the East line (Unit H) of Section 28, Township 31 North, Range 9 West, NMPM, San Juan County, New Mexico, by milling a window in the existing production casing at a depth of approximately 3,400 feet, kick-off from vertical in a northwesterly direction and continue drilling in such a manner as to bottom back into the Blanco-Mesaverde Pool (total horizontal displacement of said wellbore to be approximately 1550) within a drilling window or "producing area" in the N/2 equivalent of said Section 28 that is no closer than 790 feet to the outer boundary of the subject GPU.

<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.

Administrative Order DD-126 Amoco Production Company November 29, 1995 Page No. 3

<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) Blanco-Mesaverde gas production from both the existing Sheets "LS" Well No. 2-A (API No. 30-045-22449), located at a standard infill gas well location 875 feet from the North line and 950 feet from the West line (Unit D) of said Section 28, and Sheets "LS" Well No. 2, as described above, shall be attributed to the existing 319.10-acre standard gas spacing and proration unit ("GPU") comprising Lot 1, the NE/4, N/2 NW/4 and SE/4 NW/4 (N/2 equivalent) of Section 28.
- (4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F and Order No. R-8170, as amended.
- (5) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.
- (6) 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

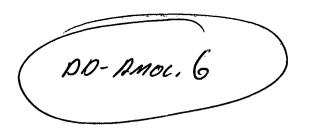
Director

SEAL

WJL/MES/kv

cc: Oil Conservation Division - Aztec

File: Case 11,274



Rue. 11/9/95 Susp. 11/29/95 Release Date: 11/29/75

November 13, 1995

Amoco Production Company P. O. Box 800 Denver, Colorado 80201

Attention: J. W. Hawkins

Administrative Order DD=*****

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- (8) 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:

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<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.

Administrative Order DD-****
Amoco Production Company
November 13, 1995
Page No. 3

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY Director

SEAL

WJL/MES/kv

cc: Oil Conservation Division - Aztec

File: Case 11,274



OIL CONSERVATION DIVISION RECEIVED

'95 NO≘ 9 PM 8⊸52

November 6, 1995

Mr. William J. LeMay, Director **New Mexico Oil Conservation Division** 2040 S. Pacheco Street P.O. Box 6429 Santa Fe, NM 87505

Application to Drill a Directional Well Rule 111 as Amended by Order No. R-10388 Sheets LS #2 Well 1650' FNL, 1090' FEL, Section 28-T31N-R9W **Blanco Mesaverde Pool** San Juan County, New Mexico

Amoco Production Company hereby requests administrative approval to enter the existing wellbore in the Sheets LS #2 well referenced above and directionally drill the well as a high angle / horizontal well in the Blanco Mesaverde Pool. The well is currently completed as a producing well in the Blanco Mesaverde Pool, however Amoco believes that directionally drilling the well will provide a better opportunity to encounter the naturally occurring fracture system in the Mesaverde formation which will increase the producing rate and ultimate recovery of gas for this well. We are requesting the Project Area for this well to be the Blanco Mesaverde gas proration unit consisting of N/2 Section 28, T31N-R9W with the Producing Area for the well to consist of a rectangle inside the gas proration unit that is not closer than 790' from the outer boundaries of the gas proration unit.

In accordance with Rule 111-D.(2), attached to aid in your review are:

- 1) a plat showing the well location, project area and producing area for the project well and the offset spacing units, their wells and operators;
- 2) a vertically oriented plan view for the project well showing top and bottom of the pool, degree of angle to be built, kickoff point, penetration point and lateral length;
- 3) a horizontal plan view for the project well showing the project area, producing area, estimated azimuth and maximum length of the lateral;
- 4) a type log section identifying the top and bottom of the pool.

As notification, a copy of this application will be sent by certified mail return receipt requested to the offset operators shown on the attached list advising them that if they have any objection, it must be filed in writing within twenty (20) days of the date notice was sent.

J. W. Hawkins

Sincerely

Jack St. John Gail Jefferson Frank Chavez, Supervisor **NMOCD District III** 1000 Rio Brazos Road Aztec, NM 87410

Amoco 1670 Broadway Post Office Box 800

Denver, Colorado 80201

Southern

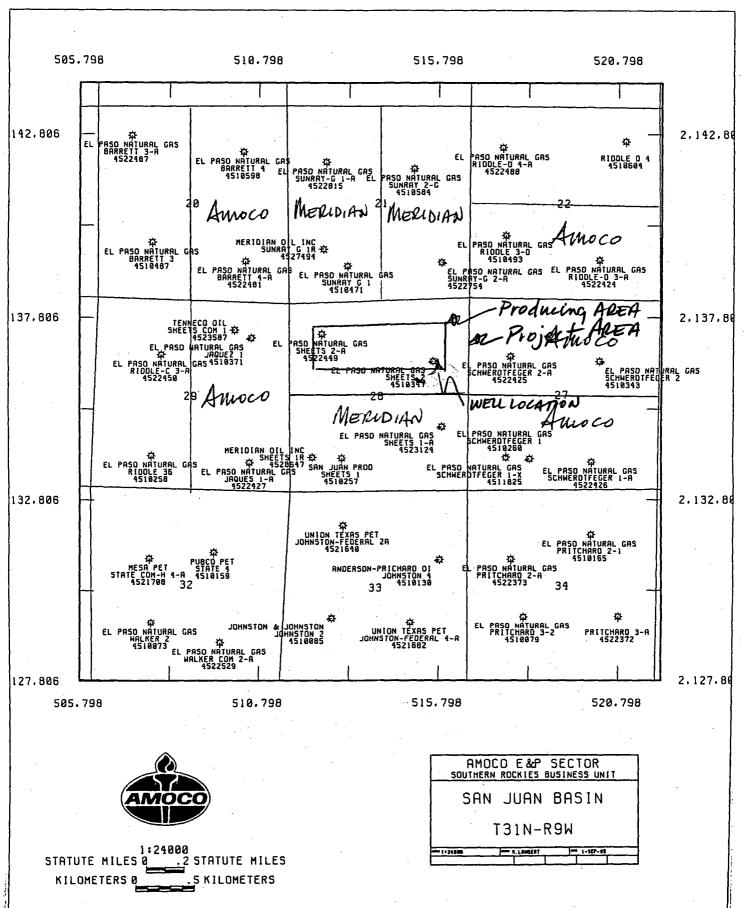
Rockies

Business

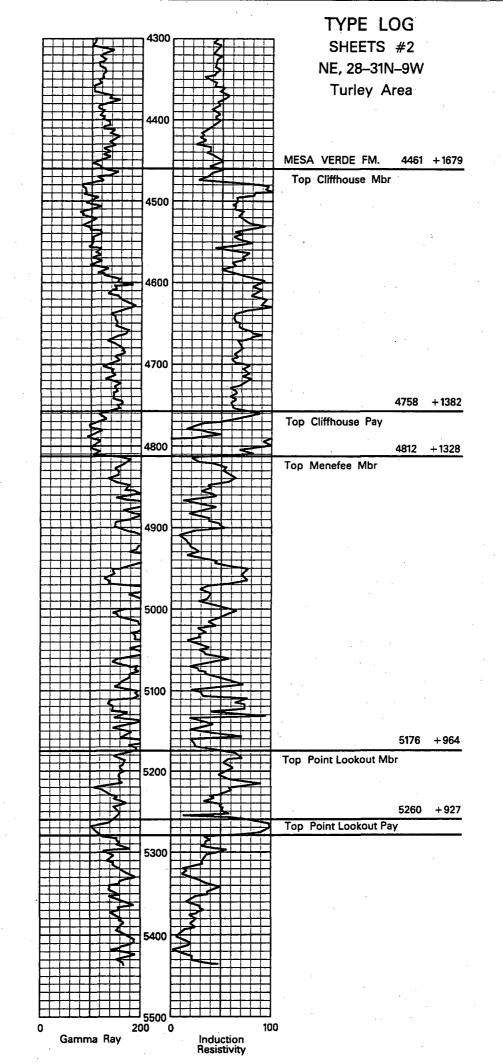
Unit

OFFSET OWNERS

Meridian Oil Inc. PO Box 4289 Farmington NM 87499



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CMD : OG5SECT ONGARD
INQUIRE LAND BY SECTION

11/13/95 13:16:11 OGOMES -EMDX PAGE NO: 1

Sec : 28 Twp : 31N Rng : 09W Section Type : NORMAL

			•
D 40.00	C 40.00	B 40.00	A 40.00
Fee owned	Fee owned	Fee owned	Fee owned
A			A
1 39.10	F 40.00	G 40.00	H 40.00
Federal owned	Federal owned	Federal owned	Federal owned
	A A	A	A A
PF01 HELP PF02 PF07 BKWD PF08 FW		PF04 GoTo PF05 PF10 SDIV PF11	PF06 PF12

CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION

11/13/95 13:16:17 OGOMES -EMDX PAGE NO: 2

Sec : 28 Twp : 31N Rng : 09W Section Type : NORMAL

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39.20	K 40.00	J 40.00	40.00
Federal owned	Federal owned	Federal owned	Federal owned
A M	N N	3	- A 4
40.00	40.00	39.39	39.43
Federal owned	Federal owned A A	Federal owned	Federal owned
PF01 HELP PF02 PF07 BKWD PF08 F		F04 GoTo PF05 F10 SDIV PF11	PF06 PF12