STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

March 11, 1996

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

AMENDED Administrative Order DD-124(NSBHL)

Dear Mr. Hawkins:

By Division Administrative Order DD-124, dated November 13, 1995, authorization was given Amoco Production Company ("Amoco") to directionally drill its Ealum Gas Com Well No. 1-R from a standard surface gas well location, being 1630 feet from the North line and 1130 feet from the East line (Unit H) of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico, to a standard bottom-hole gas well location in the Blanco-Mesaverde Pool within a drilling window or "producing area" in the NE/4 of said Section 33 that is no closer than 790 feet to the quarter section lines.

Reference is now made to your letter with attachments dated December 6, 1995, whereby an amendment should be issued in this order to accurately reflect the actual bottom-hole location of this wellbore as being unorthodox.

The Division Director Finds That:

- (1) This application was originally approved under the provisions of General Rule 111.D and Rule 2(b) of the "General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool",;
- (2) This amendment has been duly filed under the provisions of Division General Rules 111.D and 111.E and said Special Rule 2(d); and,
- (3) Amoco owns and operates wells in all affected offsetting 320-acre tracts to the captioned well, no notification was therefore required.

AMENDED Administrative Order DD-124(NSBHL) Amoco Production Company March 11, 1996 Page No. 2

IT IS THEREFORE ORDERED THAT:

- (1) Division Administrative Order DD-124 is hereby amended to properly reflect the actual **unorthodox** bottomhole location for said Ealum Gas Com Well No. 1-R within the Blanco-Mesaverde Pool to be, more or less, 1890 feet from the North line and 594 feet from the East line (Unit H) of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.
- (2) All other provisions of said Order DD-124, dated November 13, 1995, not in conflict with this change shall remain in full force and effect until further notice.
- (3) 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. LE**M**AY

Director

SEAL

WJL/MES/kv

cc: Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

File: DD-124

Rec. 12-11-95 Susp. NA Released 3-8-96

DD-124.1MD

March 8, 1996

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

Attention: J. W. Hawkins

AMENDED Administrative Order DD-124(NSBHL)

Dear Mr. Hawkins:

By Division Administrative Order DD-124, dated November 13, 1995, authorization was given Amoco Production Company ("Amoco") to directionally drill its Ealum Gas Com Well No. 1-R from a standard surface gas well location, being 1630 feet from the North line and 1130 feet from the East line (Unit H) of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico, to a **standard** bottom-hole gas well location in the Blanco-Mesaverde Pool within a drilling window or "producing area" in the NE/4 of said Section 33 that is no closer than 790 feet to the quarter section lines.

Reference is now made to your letter with attachments dated December 6, 1995, whereby an amendment should be issued in this order to accurately reflect the actual bottom-hole location of this wellbore as being **unorthodox**.

The Division Director Finds That:

- 2(6)
- (1) This application was originally approved under the provisions of General Rule 111.D and Rule (a) of the "General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool",;
- (2) This amendment has been duly filed under the provisions of Division General Rules 111.D and 111.E and said Special Rule 2(d); and,
- (3) Amoco owns and operates wells in all affected offsetting 320-acre tracts to the captioned well, no notification was therefore required.

AMENDED Administrative Order DD-124(NSBHL) Amoco Production Company March 8, 1996 Page No. 2

IT IS THEREFORE ORDERED THAT:

- (1) Division Administrative Order DD-124 is hereby amended to properly reflect the actual **unorthodox** bottomhole location for said Ealum Gas Com Well No. 1-R within the Blanco-Mesaverde Pool to be, more or less, 1890 feet from the North line and 594 feet from the East line (Unit H) of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.
- (2) All other provisions of said Order DD-124, dated November 13, 1995, not in conflict with this change shall remain in full force and effect until further notice.
- (3) 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

U. S. Bureau of Land Management - Farmington

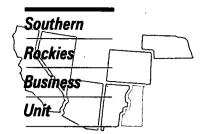
File: DD-124



REGISTED

195 DE 111 AM 8 52

OIL CONSERVATION DIVISION



December 6, 1995

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

Application for Unorthodox Location Ealum Gas Com #1R Well N/2 Section 33-T32N-R10W Blanco Mesaverde Pool San Juan County, New Mexico

Amoco Production Company hereby requests administrative approval for an unorthodox location for the Ealum Gas Com #1R well. This well was recently drilled as a high angle / horizontal well in the Blanco Mesaverde Pool as approved under NMOCD Administrative Order DD-124. The Ealum Gas Com #1 well was drilled from a surface location of 1630' FNL and 1130' FEL of Section 33, T32N-R10W to a bottomhole location of 1890'FNL and 594' FEL. The Project Area for this well is the Blanco Mesaverde gas proration unit consisting of N/2 Section 33, T32N-R10W 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. Since the bottom portion of the wellbore is closer than 790' to the exterior boundary of the spacing unit, approval for the unorthodox location is required.

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 form C-102 showing surface and bottomhole locations of the well;
- 3) a direction survey for the wellbore.

Amoco is the only affected offset operator, therefore, no additional notice will be required.

Sincerely,

J. W. Hawkins

cc: Jac

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

3004522438888 300451128088 来 300451128088 来 PRYNE 11 EYES CON-R 1-R PRYNE 5 300452851400 300451120100 # 3004 KEYES COH-R 1-R 300452274300 IOLHBERG GAS U 1 100452253000 SCOTT 1-A 300451126200 SCOTT SCHNEIDER GAS CON 1-A KEYS GASTCOM-A 2 28 Amoco 300452275500 SCOTT 3-A 300151122300 KEYES GAS UNIT 300452263100 30045221730 SCHWE LUER THE HILL I 800451121500 PRYNE 5-A HOLMBERG GAS CON 1-A Amoco Project AREA SCHNEIDER GAS CON 1 Producing AREA
300452713400
THEPER ORS COM 1-R # 3004 WELL LOSK 300452851900
WELL LOSK 30045251000 \$ SCOTT SR
JAQUEZ GAS COM-F 300451110300 00452188100 VALENTINE GAS UNIT 1 300152213300 300451115900 ERLUM GAS DOM 1-ALUM GAS UNIT 1 AMOCO 300452263200 800451114900 B3200 * 3004522

UPTEGROVE GAS UNIT 1 3004522

HARTINEZ GAS COM-A UPTEGROVE GAS COM 1-A 300452254700 300452214200 800451114200 SCOTT 5-A LEEPER GAS UNIT 1 MARTINEZ GAS UNIT 1 Amoco 309452220600 300451109400 300451108000 SCOTT 7 300451106700 水 USELMAN CRS UNIT 1 300452200500 HARCOTTE L **
USSELMAN GAS COM 1-A 300452196700 SCOTT 7-A 300452250300 300452250200 300452861600 300452200600 SCOTT 6-R LUCERNE-R 3-R HEBB GAS COM 1 HARCOTTE GAS CON 1-A 300451099400 #300451099000 BEAVER LODGE CORP 1 LUCERNE 3R



STATUTE MILES 0 .2 STATUTE MILES

KILOMETERS 0 .5 KILOMETERS

AMOC	0 E	&P	SEC	ΤO	R
SOUTHERN	ROCK	IES	BUSINE	55	UNIT

SAN JUAN BASIN

EALUM GAS COM #1 R

TWP 31N & 32N, R10W

TAL 1124000 STAN N. LANBERT STATE 16-001-95

Diarlet f
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Henzox Rd., Axtee, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

		WE	LL LO	CATION	AND AC	CREAGE DEDIC	CATION PL	.AT		
1,	111 Numb	:r	70040				Pool Na	ille		
	045-	29300		72319 Blanco Mesaverde						
1 Property	Code	EALL	IM GA	1 GAS UNIT				Well Number # 1 R		
OCIUD	· · · ·	4340	CO DD	ODLIC		or Name			Elevation	
000778		AMO	CO PR	Obuc	TION CC		· · · · · · · · · · · · · · · · · · ·			5987
					10 Surfac	e Location				
UL or lot no.	Section 33	Tawnship 32 N	Range 10 W	Lot Idn	Feet from the	North/South line NORTH	Feet from the	East/Wer EAS		SAN JUAN
			11 Bott	on Hol	e Location	If Disserent From	m Surface	•		
UI, or lut no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t line	County
II	33	32N	10W	· .	1807	North	790	East		San Juan
" Dedicated Acr	talol "	or Inful " C	Consolidation	n Code " C	Order Na.					
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16 Ac;	tuol B.	44-59		2, 1890	OSTOR COL	0 130 - 790 · 594 ·	17 OPEI I hereby cert Irue and com Signature Gai i Printed Nan Sr. A Title 11/3 Date	RATOR Ty that the tr plete to the l 1 M. J ne dmin.	out of my L. S effer Staff	Asst.
					DECL Nov - OHL CO DIM	7 1595 DIV。	I hereby cert wiss plotted fi or under my correct to the Date of Surv	thy that the warm field now supervision, best of my to CLODE!	rell location of active and that is bellef. 23, 1	Approxit

The attached plat and deviation survey of the Ealum Gas Unit #1R, Section 33 Towhship 32N and Range 10W, San Juan County, New Mexico, are correct to the best of my knowledge and belief.

Bradley D. Bilyeu

Amoco Exploration and Production Sector

STATE OF COLORADO

CITY AND :

COUNTY OF DENVER

SS.

On this the 1st day of December, 19 95, the undersigned, personnally appeared, Bradley D. Bilyeu, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that he/she executed the same for the purposes therein contained. In witness whereof, I hereunto set my hand and official seal.

Notary Public

My Commission expires:

August 17, 1997

APRIL L. CASS NOTARY PUBLIC STATE OF COLORAGO AMOCO PRODUCTION COMPANY SEC.33-T32N-R10W

> EALUM GU #1R SLOT #1 SAN JUAN COUNTY NEW MEXICO.

SURVEY LISTING

Baker Hughes Inteq

Your ref : GEOSERVICE MWD
Our ref : svy3517

License:

Date printed: 28-Nov-95 Date created: 22-Nov-95 Last revised: 28-Nov-95

Field is centred on n36 30 0.000,w107 40 0 Structure is centred on n36 56 31.214,w107 52 30.015

Slot location is n36 56 15.097,w107 52 43.933 Slot Grid coordinates are N 2160528.987, E 486691.628 Slot local coordinates are 1630.00 S 1130.00 W Reference North is True North

AMOCO PRODUCTION COMPANY SEC.33-T32N-R10W,EALUM GU #1R SAN JUAN COUNTY,NEW MEXICO.

SURVEY LISTING Page 1
Your ref: GEOSERVICE MWD
Last revised: 28-Nov-95

Measured Depth		Azimuth Degrees	True Vert. Depth	R E C T A N C O O R D I			Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
264.00	0.00	0.00	264.00	0.00 N	0.00 E	0.00	0.00
749.00	1.25	193.70	748.96	5.14 S	1.25 W	0.26	1.27
1246.00	0.75	211.70	1245.88	13.17 S	4.25 W	0.12	2.34
1619.00	1.00	236.70	1618.84	17.04 S	8.25 W	0.12	0.58
1968.00	0.75	226.70	1967.80	20.28 s	12.46 W	0.08	-1.64
2361.00	1.25	303.30	2360.76	19.69 s	17.91 W	0.33	-6.75
2860.00	1.50	46.70	2859.67	12.22 s	17.71 W	0.43	-10.03
3315.00	1.19	58.00	3314.54	5.63 s	9.37 W	0.09	-5.69
3750.00	1.56	79.70	3749.42	2.18 s	0.29 E	0.14	1.26
4105.00 4133.00 4165.00 4196.00 4227.00	2.69 2.44 3.50 6.06 8.94	48.30 44.30 67.30 81.80 90.10	4104.18 4132.15 4164.11 4195.00 4225.74	4.23 N 5.09 N 5.96 N 6.55 N 6.78 N	11.26 E 12.17 E 13.55 E 16.04 E 20.07 E	1.10 4.92	8.02 8.43 9.25 11.18 14.64
4258.00	10.00	93.20	4256.31	6.63 N	25.17 E	3.79	19.23
4290.00	9.88	92.90	4287.83	6.34 N	30.68 E	0.41	24.26
4320.00	9.75	92.80	4317.39	6.08 N	35.79 E	0.44	28.90
4351.00	9.94	102.90	4347.94	5.36 N	41.02 E	5.60	33.87
4383.00	11.81	114.40	4379.37	3.38 N	46.70 E	8.92	39.81
4414.00	14.63	121.90	4409.54	0.01 N	52.91 E		46.89
4446.00	17.56	124.90	4440.29	4.89 S	60.30 E		55.71
4477.00	18.75	125.30	4469.74	10.45 S	68.20 E		65.28
4508.00	20.06	124.20	4498.98	16.32 S	76.67 E		75.50
4537.00	20.94	123.80	4526.14	21.99 S	85.09 E		85.60
4569.00	21.06	122.10	4556.02	28.23 S	94.71 E	1.94	97.01
4601.00	22.00	119.70	4585.79	34.26 S	104.79 E	4.02	108.73
4632.00	22.38	119.70	4614.49	40.06 S	114.96 E	1.22	120.43
4664.00	22.38	119.10	4644.08	46.04 S	125.57 E	0.71	132.61
4695.00	22.44	119.80	4672.74	51.85 S	135.86 E	0.88	144.42
4726.00	24.06	118.40	4701.22	57.79 S	146.56 E	5.88	156.66
4756.00	25.38	118.80	4728.47	63.80 S	157.57 E		169.20
4789.00	26.44	118.90	4758.15	70.76 S	170.20 E		183.61
4820.00	28.25	119.40	4785.69	77.70 S	182.64 E		197.85
4852.00	29.63	119.80	4813.69	85.34 S	196.10 E		213.32
4883.00 4914.00 4945.00 4977.00 5007.00	33.06 34.69	120.20 119.60 119.80 118.60 117.80	4840.42 4866.66 4892.40 4918.39 4942.20	93.20 s 101.42 s 109.98 s 119.08 s 127.71 s	209.70 E 224.00 E 239.01 E 255.31 E 271.39 E	5.93 5.27	229.01 245.50 262.76 281.42 299.67
5038.00	39.81	117.20	4966.28	136.72 S	288.71 E	5.18	319.19
5069.00	41.63	116.40	4989.77	145.83 S	306.76 E	6.11	339.41
5101.00	43.13	116.60	5013.41	155.46 S	326.06 E	4.71	360.98
5132.00	44.88	116.60	5035.71	165.10 S	345.32 E	5.64	382.51
5163.00	44.56	117.10	5057.74	174.95 S	364.78 E	1.53	404.32
5194.00	44.38	116.20	5079.86	184.69 S	384.19 E	2.12	426.04
5226.00	45.31	115.90	5102.54	194.60 S	404.46 E	2.98	448.59
5258.00	46.06	116.40	5124.90	204.70 S	425.01 E	2.60	471.48
5288.00	46.44	116.60	5145.65	214.36 S	444.41 E	1.36	493.15
5350.00	46.06	116.20	5188.52	234.28 S	484.52 E	0.77	537.92

All data is in feet unless otherwise stated

Coordinates from SLOT #1 and TVD from RKB (5989.00 Ft above mean sea level).

Vertical section is from wellhead on azimuth 117.60 degrees.

Declination is 11.72 degrees, Convergence is -0.02 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes Inteq

AMOCO PRODUCTION COMPANY SEC.33-T32N-R10W, EALUM GU #1R SAN JUAN COUNTY, NEW MEXICO.

SURVEY LISTING Page 2 Your ref : GEOSERVICE MWD Last revised: 28-Nov-95

Measured Inclin. Azimuth True Vert. RECTANGULAR Dogleg Depth Degrees Degrees Depth COORDINATES Deg/100Ft Sect

5385.00 45.69 5430.00 45.69 116.40 116.40 245.41 S 259.73 S 507.04 E 535.89 E 5212.89

5244.32 0.00 595.24 Projected Survey

> All data is in feet unless otherwise stated Coordinates from SLOT #1 and TVD from RKB (5989.00 Ft above mean sea level).
>
> Vertical section is from wellhead on azimuth 117.60 degrees. Declination is 11.72 degrees, Convergence is -0.02 degrees.
>
> Calculation uses the minimum curvature method. Presented by Baker Hughes Inteq

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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 13, 1995

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

Attention: J. W. Hawkins

Administrative Order DD-124

Dear Mr. Hawkins:

Reference is made to Amoco Production Company's application dated October 27, 1995 for authorization to directional drill a high-angle well to a pre-determined bottom-hole location in order to further develop the Blanco-Mesaverde Pool underlying an existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 33, Township 32 North, Range 10 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) 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;
- (3) Initial development of Blanco-Mesaverde gas pool production within the subject 320-acre GPU occurred with the Ealum Gas Com Well No. 1 (API No. 30-045-11169) being drilled in 1953 at a standard gas well location 1650 feet from the North line and 1140 feet from the East line (Unit H) of said Section 33. The Ealum Gas Com Well No. 1-A (API No. 30-045-22133) was drilled in 1976 as an "infill well" at a standard gas well location 1450 feet from the North line and 1030 feet from the West line (Unit E) of said Section 33. It is our understanding that the Ealum Gas Com Well No. 1 was plugged and abandoned in 1990;

- (4) The applicant/operator proposes to drill its Ealum Gas Com Well No. 1-R (API No. 30-045-29300) as a replacement well for the Ealum Gas Com Well No. 1 from a standard gas well location 1630 feet from the North line and 1130 feet from the East line (Unit G) of said Section 33, kick-off of vertical at a depth of approximately 3735 feet in a southeasterly direction, build to an angle of approximately 45 degrees and continue to drill in such a manner as to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said well to be approximately 400 feet;
- (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 GPU;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 equivalent of said Section 33 that is no closer than 790 feet to the quarter section lines; and,
- (7) 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 directionally drill its proposed Ealum Gas Com Well No. 1-R (API No. 30-045-29300) as a replacement well for the above-described Ealum Gas Com Well No. 1 from a standard gas well location 1630 feet from the North line and 1130 feet from the East line (Unit G) of said Section 33, by kicking-off from vertical at a depth of approximately 3735 feet in a southeasterly 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 (total horizontal displacement of said well to be approximately 400 feet) within a drilling window or "producing area" the NE/4 equivalent of said Section 28 that is no closer than 790 feet to the quarter section lines.

PROVIDED HOWEVER THAT 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) Blanco-Mesaverde gas production from both the existing Ealum Gas Com Well No. 1-A (API No. 30-045-22133), located at a standard infill gas well location 1450 feet from the North line and 1030 feet from the West line (Unit E) of said Section 33, and the proposed Ealum Gas Com Well No. 1-R, as described above, shall be attributed to the existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 33.
- (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

DD- AMOC, 5

Ru. 10/31/15 Svs.p. N.A Blund 11/13/95

November 13, 1995

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

Attention: J. W. Hawkins

Administrative Order DD- 124

Dear Mr. Hawkins:

Reference is made to Amoco Production Company's application dated October 27, 1995 for authorization to directional drill a high-angle well to a pre-determined bottom-hole location in order to further develop the Blanco-Mesaverde Pool underlying an existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

The Division Director Finds That:

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- (3) Initial development of Blanco-Mesaverde gas pool production within the subject 320-acre GPU occurred with the Ealum Gas Com Well No. 1 (API No. 30-045-11169) being drilled in 1953 at a standard gas well location 1650 feet from the

North line and 1140 feet from the East line (Unit H) of said Section 33. The Ealum Gas Com Well No. 1-A (API No. 30-045-22133) was drilled in 1976 as an "infill well" at a standard gas well location 1450 feet from the North line and 1030 feet from the West line (Unit E) of said Section 33. It is our understanding that the Ealum Gas Com Well No. 1 was plugged and abandoned in 1990;

- (4) The applicant/operator proposes to drill its Ealum Gas Com Well No. 1-R (API No. 30-045-29300) as a replacement well for the Ealum Gas Com Well No. 1 from a standard gas well location 1630 feet from the North line and 1130 feet from the East line (Unit G) of said Section 33, kick-off of vertical at a depth of approximately 3735 feet in a southeasterly direction, build to an angle of approximately 45 degrees and continue to drill in such a manner as to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said well to be approximately 400 feet;
- (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 GPU;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 equivalent of said Section 33 that is no closer than 790 feet to the quarter section lines; and,
- (7) 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 directionally drill its proposed Ealum Gas Com Well No. 1-R (API No. 30-045-29300) as a replacement well for the above-described Ealum Gas Com Well No. 1 from a standard gas well location 1630 feet from the North line and 1130 feet from the East line (Unit G) of said Section 33, by kicking-off from vertical at a depth of approximately 3735 feet in a southeasterly 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 (total horizontal displacement of said well to be approximately 400 feet) within a drilling window or "producing area" the NE/4 equivalent of said Section 28 that is no closer than 790 feet to the quarter section lines.

Administrative Order DD-****
Amoco Production Company
November 13, 1995
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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.

<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 Ealum Gas Com Well No. 1-A (API No. 30-045-22133), located at a standard infill gas well location 1450 feet from the North line and 1030 feet from the West line (Unit E) of said Section 33, and the proposed Ealum Gas Com Well No. 1-R, as described above, shall be attributed to the existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 33.
- (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

Administrative Order DD-****
Amoco Production Company
November 13, 1995
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cc: Oil Conservation Division - Aztec

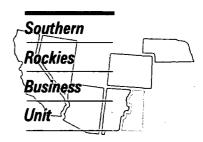
File: Case 11,274



October 27, 1995

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

Application to Drill a Directional Well Rule 111 as Amended by Order No. R-10388 Ealum Gas Com #1R Well 1630' FNL 1130' FEL, Section 33-T32N-R10W Blanco Mesaverde Pool San Juan County, New Mexico



Dec. 10/31/95

Amoco Production Company hereby requests administrative approval to directionally drill a replacement well for the Ealum Gas Unit #1 well as a high angle / horizontal well in the Blanco Mesaverde Pool. The Ealum Gas Unit #1 well was previously completed as a producing well in the Blanco Mesaverde Pool but has been plugged and abandoned. Amoco believes that directionally drilling the replacement 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. The surface location for the replacement well will be on the same well pad as the old wellbore. We are requesting the Project Area for this well to be the Blanco Mesaverde gas proration unit consisting of N/2 Section 33, T32N-R10W 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.

Amoco is the only affected offset operator, therefore, no additional notice will be required.

Sincerely,

W. Hawkins

Jack St. John

Gail Jefferson

Frank Chavez, Supervisor **NMOCD District III**

1000 Rio Brazos Road

Aztec, NM 87410

300452243800 * PRYNE 11 300452851400 300451128100 KEYES COM-A 1-A 300452274300 380451126200 300452253000 HOLMBERG GAS U 1 SCOTT 1-A 300452482500 SCOTT 1 SCHNEIDER GAS COM 1-A KEYS GAS COM-A 2 28 Amoco 300452275500 SCOTT 3-R 300452263100 300452217300 00451121500 HOLMBERG GAS CON 1-A PAYNE 5-A Amoco SCHNEIDER GAS CON 1 Project AREA Producing AREA
300452713400

THEPER CAS COM 1-A # 300452851900

WELL LO # 300452858400 # SCOTT SR 300451118300 00452188100 VALENTINE GAS UNIT 1 300452213300 300451115900 JAQUEZ GAS COM-F 300451117200 Amoco EALUM GAS COM 1-EALUM GAS <u>UNIT</u> I Amoco3 B00451114900 AMOCO 300452263200 300452254700 B3200

UPTEGROVE GAS UNIT 1

MARTINEZ GAS COM-A LATEGROVE GAS COM 1-A 300452214200 SCOTT 5-A LEEPER GAS UNIT 1 MARTINEZ GAS UNIT 1 Amoco 300452220600 300451109400 300451108000 SCOTT 7 300451106700 USELMAN CAS UNIT 1 300452280500 USSELMAN GAS COM 1-A 300452196700 5 300452250300 300452250200 300452280600 SCOTT 6-A LUCERNE-A 3-A HEBB GAS CON 1 MARCOTTE GAS CON 1-A 300451099400 #300451099000 BEAVER LODGE CORP 1



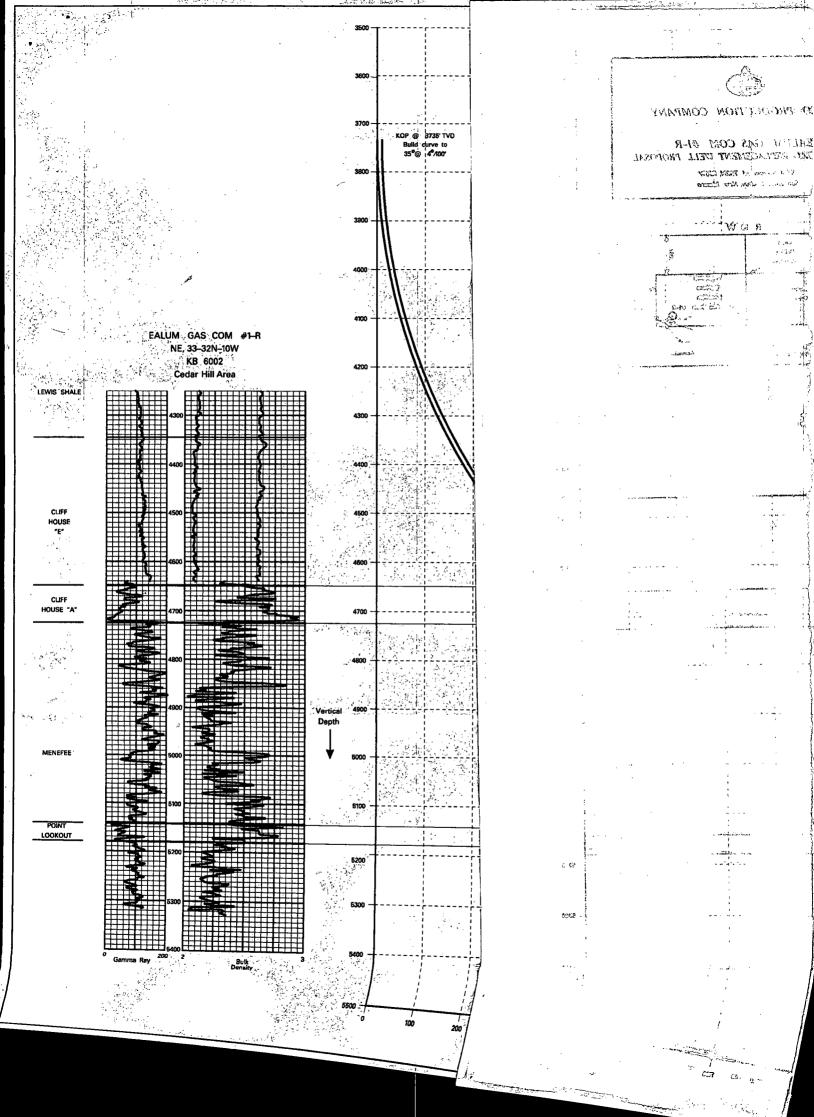
STATUTE MILES 0 .2 STATUTE MILES KILOMETERS 0 .5 KILOMETERS

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EALUM GAS COM #1 R

TWP 31N & 32N, R10W



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NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

778 AMOCO PRODUCTION CO OGRID Identifier

Prop Identifier 436 EALUM GAS COM

API Well Identifier: 30 45 29300 Well No :

Surface Locn - UL : H Sec : 33 Twp : 32N Range : 10W Lot Idn :

Multple comp (S/M/C): N TVD Depth (Feet): MVD Depth (Feet):

Spud Date P/A Date :

Casing/Linear Record:

Size Grade Weight Depth(ft) Depth(ft) Hole Size Cement --- TOC ---- (inches) (lb/ft) Top-Liner Bot-Liner (inches) (Sacks) (feet) Code

E0004: No matching record found. Enter data to create.

PF02 PF03 EXIT PF04 GoTo PF01 HELP PF05 PF06 CONFIRM

PF07 PF08 PF09 COMMENT PF10 TLOG PF11 CMD*: OG5SECT

ONGARD INQUIRE LAND BY SECTION

11/13/95 09:15:43 OGOMES -EMDX PAGE NO: 1

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E		F	G	H
40.00		40.00	40.00	40.00
Fee owned		Fee owned	Federal owned	Fee owned
A		A	A	A
F01 HELP	PF02	PF03 EXIT	PF04 GoTo PF05	PF06
F07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV PF11	PF12

CMD[▼]: OG5SECT

ONGARD INQUIRE LAND BY SECTION

11/13/95 09:15:51 OGOMES -EMDX PAGE NO: 2

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A A				A
M 40.00		N 40.00	O 40.00	P 40.00
Fee owned		Fee owned	Fee owned	Fee owned
PF01 HELP PF07 BKWD	PF02 PF08 FWI	PF03 EXIT PF09 PRINT	PF04 GoTo PF05 PF10 SDIV PF11	PF06 PF12