



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

October 16, 1995

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

**Attention: J. W. Hawkins**

*Administrative Order DD-123*

Dear Mr. Hawkins:

Reference is made to Amoco Production Company's application dated September 15, 1995 for authorization to recomplete its existing Barrett "LS" Well No. 2 (API No. 30-045-10641) 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 315.08-acre standard gas spacing and proration unit ("GPU") comprising Lots 5, 6, 11, 12, 13, 14, 19, and 20 (E/2 equivalent) of Section 19, 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 Barrett "LS" Well No. 2, located at a standard gas well location 790 feet from the North line and 1750 feet from the East line (Lot 6/Unit B) of said Section 19, was originally drilled and completed in 1954 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 315.08-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;

- (4) Within this GPU Amoco is also producing Blanco-Mesaverde gas from its Barrett "LS" Well No. 2-A (API No. 30-045-22486), located at a standard infill gas well location 1500 feet from the South line and 920 feet from the East line (Lot 13/Unit I) of said Section 19;
- (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 4,050 feet by milling a window in the existing production casing, drill 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, with total horizontal displacement of said wellbore to be approximately 1300;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 equivalent of said Section 19 that is no closer than 790 feet to the quarter section line; 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 Barrett "LS" Well No. 2 (API No. 30-045-10641), located at a standard gas well location 790 feet from the North line and 1750 feet from the East line (Lot 6/Unit B) of Section 19, 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 4,050 feet, kick-off from vertical in a southeasterly 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 1300) within a drilling window or "producing area" in the NE/4 equivalent of said Section 19 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.

**PROVIDED FURTHER THAT** 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 Barrett "LS" Well No. 2-A (API No. 30-045-22686), located at a standard infill gas well location 11500 feet from the South line and 920 feet from the East line (Lot 13/Unit I) of said Section 19, and the proposed well as described above, shall be attributed to the existing 315.08-acre standard gas spacing and proration unit ("GPU") comprising Lots 5, 6, 11, 12, 13, 14, 19, and 20 (E/2 equivalent) of Section 19.

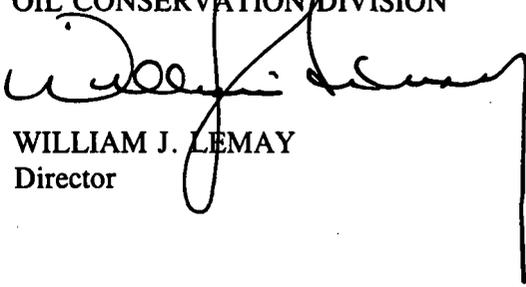
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F and Order No. R-8170, as amended.

(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

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Aztec  
U. S. Bureau of Land Management - Farmington  
File: Case 11,274

DD-AMOC. 4

Rec. 9/22/95  
Susp. 10/12/95  
Released: 10/16/95

October 16, 1995

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

Attention: J. W. Hawkins

123  
**Administrative Order DD-\*\*\*\*\***

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- (4) Within this GPU Amoco is also producing Blanco-Mesaverde gas from its Barrett "LS" Well No. 2-A (API No. 30-045-22486), located at a standard infill gas well location 1500 feet from the South line and 920 feet from the East line (Lot 13/Unit I) of said Section 19;
- (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 4,050 feet by milling a window in the existing production casing, drill 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, with total horizontal displacement of said wellbore to be approximately 1300;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 equivalent of said Section 19 that is no closer than 790 feet to the quarter section line; 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 Barrett "LS" Well No. 2 (API No. 30-045-10641), located at a standard gas well location 790 feet from the North line and 1750 feet from the East line (Lot 6/Unit B) of Section 19, 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 4,050 feet, kick-off from vertical in a southeasterly 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 1300) within a drilling window or "producing area" in the NE/4 equivalent of said Section 19 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.

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(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.

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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

S E A L

*Administrative Order DD-\*\*\*\**

*Amoco Production Company*

*October 16, 1995*

*Page No. 4*

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WJL/MES/kv

cc: Oil Conservation Division - Aztec  
U. S. Bureau of Land Management - Farmington  
File: Case 11,274

Sec : 19 Twp : 31N Rng : 09W Section Type : NORMAL

8 10.99  Federal owned	7 38.99  Federal owned A A	6 38.94  Federal owned A	5 39.06  Federal owned
9 11.35  Federal owned	10 39.54  Federal owned	11 39.16  Federal owned A	12 39.28  Federal owned

PF01 HELP    PF02    PF03 EXIT    PF04 GoTo    PF05    PF06  
PF07 BKWD   PF08 FWD    PF09 PRINT   PF10 SDIV    PF11    PF12

78.10

78.34

156.44

Sec : 19 Twp : 31N Rng : 09W Section Type : NORMAL

16 11.71  Federal owned	15 40.05  Federal owned A A	14 39.55  Federal owned	13 39.55  Federal owned A A
17 11.88  Federal owned	18 39.95  Federal owned	19 39.77  Federal owned	20 39.77  Federal owned

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

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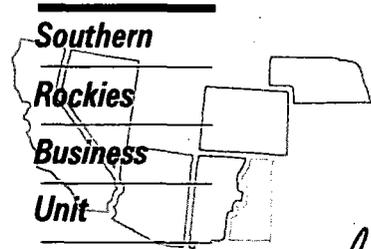
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156.44  

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315.08



OIL CONSERVATION DIVISION  
RECEIVED  
'95 SEP 22 AM 8 52



September 15, 1995

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

*original permit well  
to drill a high  
angle*

**Application to Drill a Directional Well  
Rule 111 as Amended by Order No. R-10388  
Barrett LS #2 Well  
790' FNL, 1750' FEL, Section 19-T31N-R9W  
Blanco Mesaverde Pool  
San Juan County, New Mexico**

Amoco Production Company hereby requests administrative approval to enter the existing wellbore in the Barrett 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 E/2 Section 19, 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.

Sincerely,

*J. W. Hawkins*  
J. W. Hawkins

cc: Jack St. John  
Gail Jefferson

Frank Chavez, Supervisor  
NMOCD District III  
1000 Rio Brazos Road  
Aztec, NM 87410

**OFFSET OWNERS**

Meridian Oil Inc.  
PO Box 4289  
Farmington NM 87499

497.135

502.135

507.135

147.860

2.147.

142.860

2.142.

137.860

2.137.

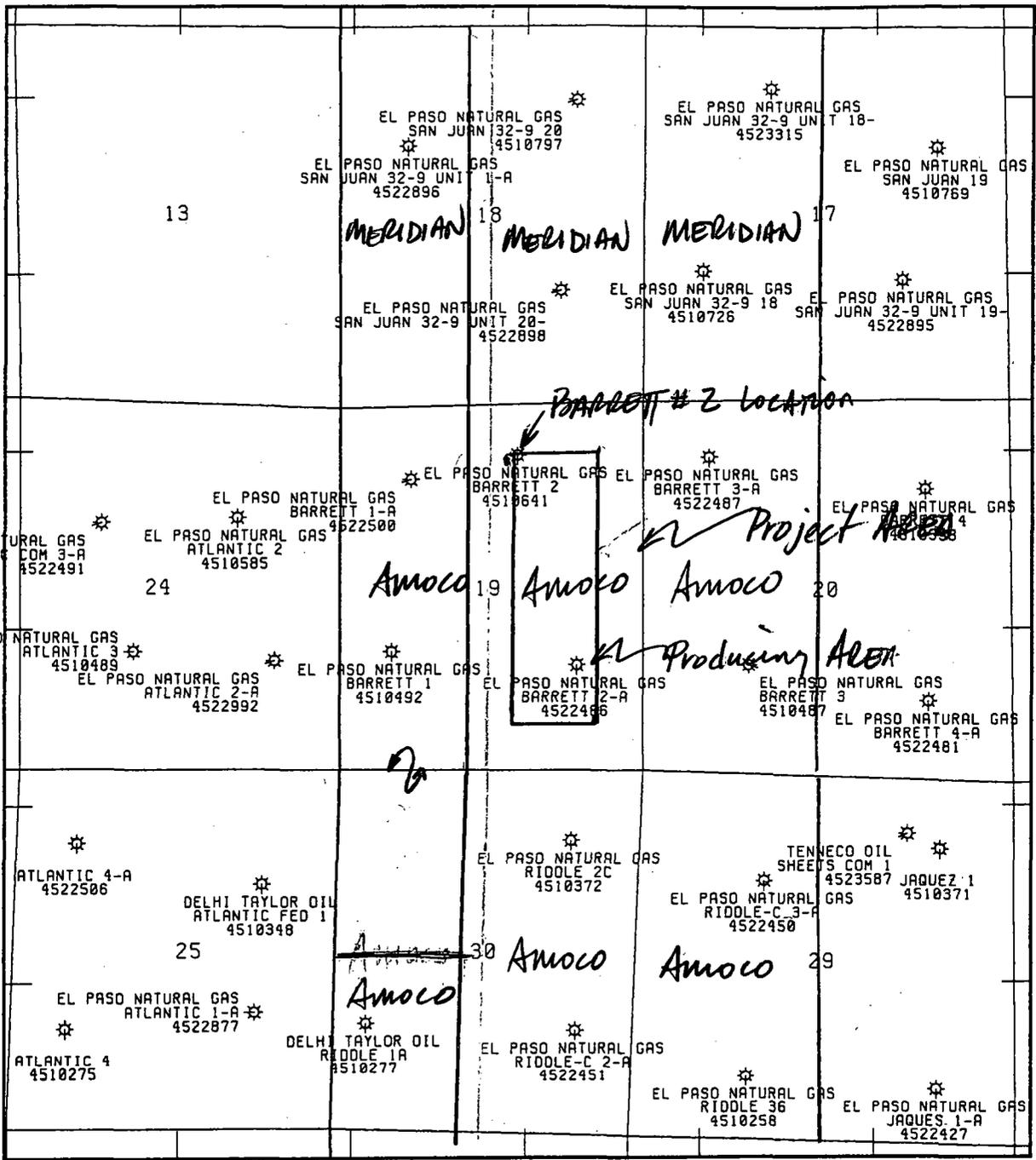
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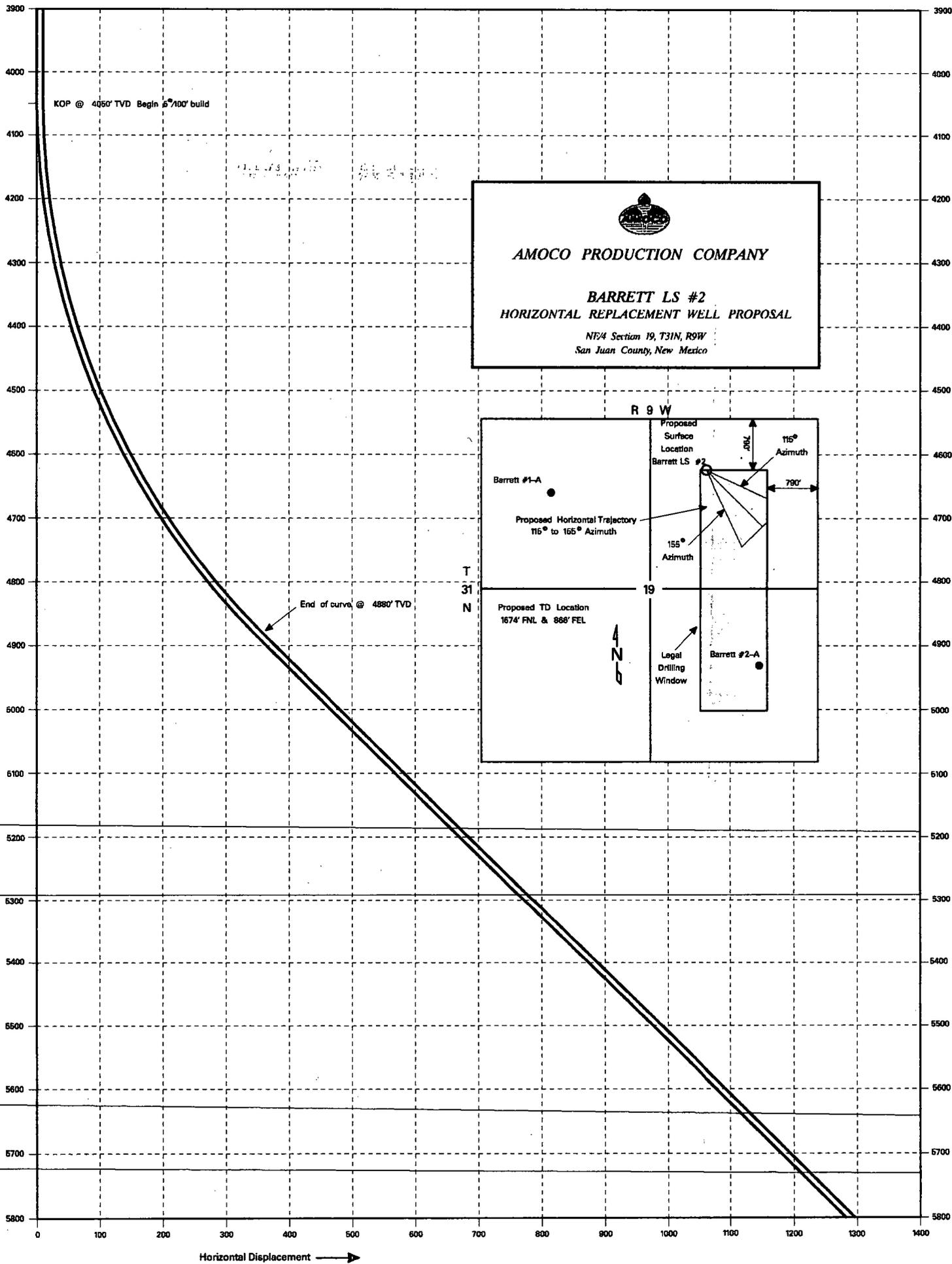
STATUTE MILES 0 .5 STATUTE MILES

KILOMETERS 0 .5 1.0 KILOMETERS



AMOCO E&P SECTOR		
SOUTHERN ROCKIES BUSINESS UNIT		
SAN JUAN BASIN		
T31N, R9W & R10W		
1:24000	K. LAMBERT	1-SEP-95





  
**AMOCO PRODUCTION COMPANY**  
**BARRETT LS #2**  
**HORIZONTAL REPLACEMENT WELL PROPOSAL**  
 NE/4 Section 19, T31N, R9W  
 San Juan County, New Mexico

Typical M.V. Log  
T31N, R9W  
San Juan County, New Mexico

