SEAL SEAL SO OF STATE OF STATE

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 24, 1997

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

Administrative Order DD-193

Dear Ms. Staley:

Reference is made to Amoco Production Company's application dated June 5, 1997 for authorization to recomplete the existing Fields "A" Well No. 1 (API No. 30-045-11271) by side tracking off of the vertical portion of the wellbore and drill a high angle slant hole to a predetermined bottomhole location in order to further develop the Blanco-Mesaverde Pool underlying its existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 25, Township 32 North, Range 11 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 11274 on June 13, 1995;
- 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 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) The Fields "A" Well No. 1, located at a standard gas well location 990 feet from the North and East lines (Unit A) of said Section 25, was originally drilled and completed in 1953 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 320-acre GPU;
- (4) Within this 320-acre GPU Amoco is also producing Blanco-Mesaverde gas from its Fields

- "A" Well No. 1-A (API No. 30-045-22398), located at a standard infill gas well location 980 feet from the North line and 1460 feet from the West line (Unit C) of said Section 25;
- (5) A high angle slant hole drilled off of the existing vertical wellbore in the Fields "A" Well No. 1 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 4,875 feet by milling a window in the existing 4 1/2-inch replacement production casing string, drill in a southeasterly direction, build to an angle of approximately 45 degrees in order to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said wellbore to be approximately 240 feet;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 of said Section 25 that is no closer than 790 feet to any 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 Fields "A" Well No. 1 (API No. 30-045-11271), located at a standard gas well location 990 feet from the North and East lines (Unit A) of Section 25, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico, by milling a window in the existing 4 1/2-inch replacement production casing string at a depth of approximately 4,875 feet, kick-off from vertical in a southeasterly direction, build to an angle of approximately 45 degrees in order to bottom back into the Blanco-Mesaverde Pool (total horizontal displacement of said wellbore to be approximately 240 feet) within a drilling window or "producing area" comprising the NE/4 equivalent of said Section 25 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) Blanco-Mesaverde gas production from both the existing Fields "A" Well No. 1-A (API No. 30-045-22398), located at a standard infill gas well location 980 feet from the North line and 1460 feet from the West line (Unit C) of said Section 25, and Fields "A" Well No. 1, as described above, shall be attributed to the existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of said Section 25.
- (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

U. S. Bureau of Land Management - Farmington

Mike Stogner

From: To:

Frank Chavez

Subject:

Mike Stogner RE: Amoco Dir. Drlg. Ords.

Date:

Monday, July 28, 1997 9:09AM

These look OK.

From:

Mike Stogner

Sent:

Wednesday, July 23, 1997 10:05 AM

To:

Kathy Valdes

Cc:

Ernie Busch; Frank Chavez

Subject:

Amoco Dir. Drlg. Ords.

Draft Administrative DD Orders for Amoco's:

(1) Fields "A" #1 (30-045-11271) in the N/2 of Sec. 25-T32N-R11W, Blanco-Mesaverde Pool:

(2) Wallace Gas Com #1 (30-045-10150) in the N/2 of Sec. 35-T31N-R11W, Blanco-Mesaverde Pool:

(3)Schwerdtfeger "LS" #2-A (30-045-22425) in the N/2 equivalent of Sec. 27-T31N-R9W, Blanco-Mesaverde Pool:

(4) Pritchard "A" #2-A (30-045-22020) in the E/2 equivalent) of Sec. 1-T30N-R9W, Blanco-mesaverde Pool:

Florance #1-R (30--045-25307) in the W/2 of Sec. 11-T30N-R9W, Blanco-Mesaverde Pool: (5)



Amoco Production Company San Juan Business Unit

October 3, 1997

Frank Chavez, Supervisor NMOCD District III 1000 Rio Brazos Road Aztec, NM 87410 1670 Broadway Post Office Box 800 Denver, Colorado 80201 303-830-4040

DD-193

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

Additional Data
Fields A #1
Unit A Section 25-T32N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico

As per the requirements of NMOCD Administrative Order No. DD-193, I am providing a copy enclosed herein of the wellbore surveys taken during operations on this well to both the Aztec District Office and the Santa Fe Office of the Division. Should you have questions, please do not hesitate to call me at (303)830-5344.

Sincerely,

Pamela W. Staley

Enclosure



A DRESSER INDUSTRIES, INC. COMPANY

Amoco Production Co.

New Mexico
Re-Entry Wells
Sec 25-T32N-R11W
Fields A 1 - Electro Magnetic Surveys - GeoService

SURVEY REPORT

22 September, 1997

Sperry-Sun Drilling Services



Survey Report for Fields A 1 - Electro Magnetic Surveys - GeoService

Amoco Production Co. New Mexico Re-Entry Wells Sec 25-T32N-R11W

Measured Depth	inci.	Azim,	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
(ft)			(ft)	(ft)	(ft)	(ft)	(°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
3144.00	0.000	0.000	3144.00	0.00 N	0.00 E	0.00	0.000
3190.00	2.130	328.820	3189.99	0.73 N	0.44 W	-0.83	4.630
3283.00	2.940	303.200	3282.90	3.52 N	3.33 W	-4.84	1,477
3376.00	4.130	301.450	3375.72	6.57 N	8.19 W	-10.43	1.285
3467.00	5.500	300.950	3466.40	10.52 N	14.72 W	-17.85	1.506
3562.00	7.310	302.700	3560.80	16.13 N	23,71 W	-28.17	1.916
3656.00	9.060	307.450	3653.84	23.86 N	34.62 W	-41.35	1.994
3750.00	8.880	313.450	3746.69	33.35 N	45.76 W	-55.94	1.013
3841.00	8.130	318.700	-3836.69	43.02 N	55.11 W	-69.39	1.185
3935.00	7.560	322.570	3929.81	52.92 N	63.26 W	-82.15	0.826
4028.00	8.810	325.700	4021.87	63.66 N	70.99 W	-95.21	1.426
4123.00	7.750	330.200	4115.88	75.23 N	78.27 W	-108.54	1.307
4215.00	6.630	332.320	4207.15	85.32 N	83.82 W	-119.60	° .251
4308.00	6.560	332.000	4299.54	94.76 N	88.81 W	-129.80	U.085
4400.00	5.560	328.820	4391.02	103.21 N	93.58 W	-139.16	1.146
4491.00	4.940	336.000	4481.64	110.57 N	97.46 W	-147.10	0.991
4586.00	4.560	334.950	4576.31	117.72 N	100.72 W	-154.47	0.410
4680.00	3.940	328.700	4670.05	123.87 N	103.98 W	-161.12	U.822
4741.00	3.810	333.320	4730.91	127.47 N	105.98 W	-165,08	(J.354
4772.00	3.810	333.720	4761.85	129.31 N	106.90 W	-167.03	ი.ა86
4804.00	4.060	337.070	4793.77	131.31 N	107.81 W	-169.09	1.061
4835.00	3.060	358.320	4824.71	133.15 N	108.26 W	-170.70	5.288
4866.00	1.900	72.200	4855.69	134,13 N	107.80 W	-171.07	10,068
4896.00	4.440	118.900	4885.64	133.72 N	106.31 W	-169.73	11,425
4926.00	6.440	125.900	4915.51	132.18 N	103.93 W	~166.95	7.012
4958.00	8.810	134.100	4947.22	129,42 N	100.71 W	-162.73	8.131
4989.00	14.200	123.000	4977.59	125.69 N	95.82 W	-156.63	16.719
5019.00	18.300	121.700	5006.39	121.21 N	88.72 W	-148.44	13.720
5051.00	22.810	122.690	5036.34	115.22 N	79.22 W	-137.49	14.135
5081.00	24,810	130.600	5063.80	107.98 N	69.54 W	-125.53	12.546
5143.00	25.810	144.200	5119.89	88.55 N	51.76 W	-99.21	9.496
5174.00	25.690	139.320	5147.82	77.98 N	43.43 W	-85.85	6.848
5204.00	28.880	139.070	5174,48	67.57 N	34,44 W	-72.13	10.640
5235.00	30.690	135.820	5201.38	56.24 N	24.02 W	-56.75	7.822
5266.00	35.280	136.070	5227.38	44.11 N	12.29 W	-39.88	14.813 10.584
5297.00	38.560	136.200	5252.16	30.69 N	0.61 E	-21.27	
5327.00	42.800	136.700	5274.90	16.52 N	14.08 E	-1.72 42.22	14.175
5389.00	47.600	137,500	5318.58	15.71 \$	44.01 E	42.23	7.796
5450.00	46,400	137.700	5360.18	48.65 S	74.09 E	86.79	1.982
5512.00	45.100	139.100	5403.44	81.86 S	103.58 E	131.12	2.648
5573.00	43,900	139.600	5446.95	114,29 \$	131.43 E	173.75	2.049
5603.00	43.100	140.100	5468.71	130.08 S	144.75 E	194.33	2.903

Continued...

Sperry-Sun Drilling Services



Survey Report for Fields A 1 - Electro Magnetic Surveys - GeoService

Amoco Production Co. New Mexico

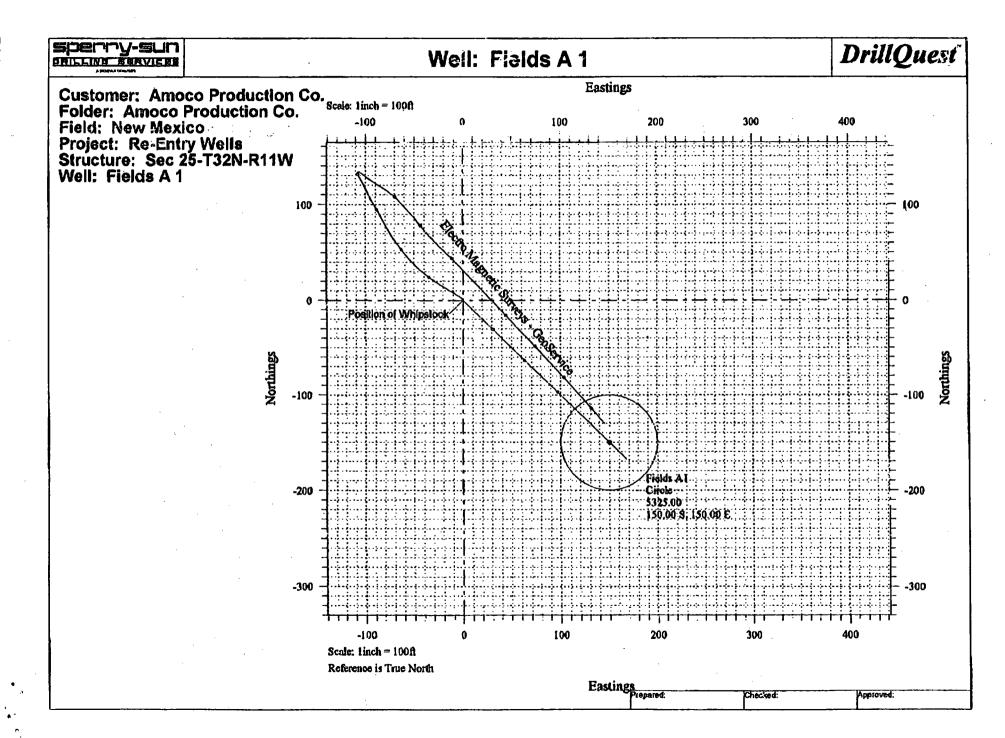
Re-Entry Wells Sec 25-T32N-R11W

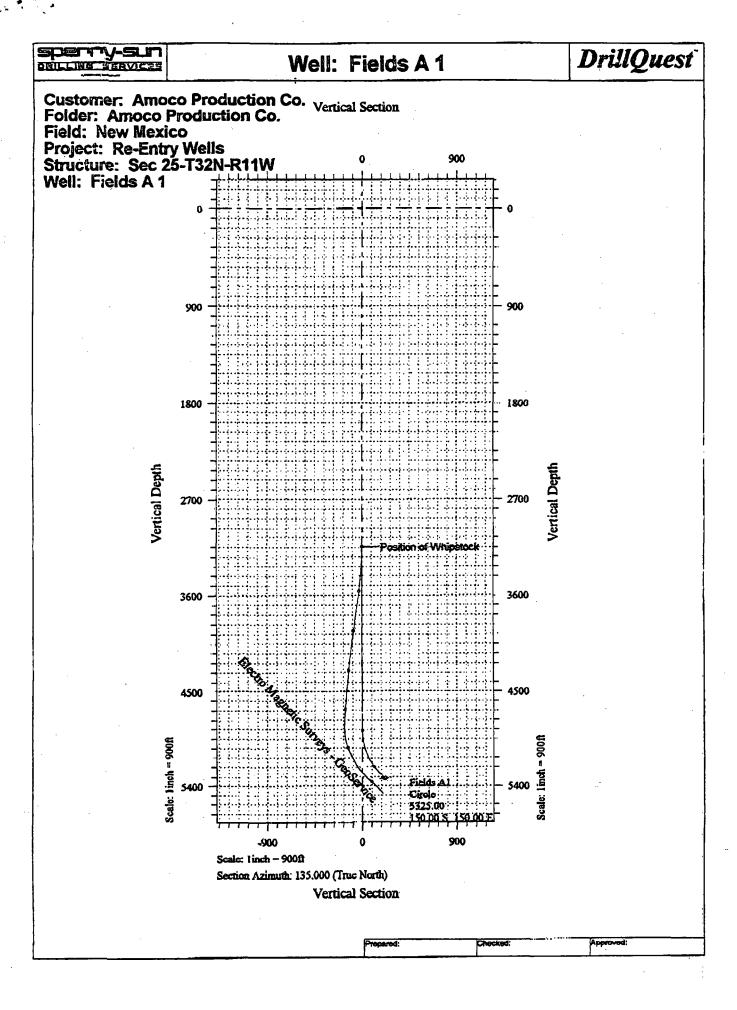
All data is in feet unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100ft.

Vertical Section is from Well and calculated along an Azimuth of 135.000° (True).

Based upon Minimum Curvature type calculations, at a Measured Depth of 5603.00fL, The Bottom Hole Displacement is 194.61fL, in the Direction of 131.945° (True).





DD- BMOC.13

July 23, 1997

Rec: 6-11-97 Susp: 7-1-97 Neleased: 7-23-97

Amoco Production Company

Southern Rockies Business Unit Son Juan

P. O. Box 800

Denver, Colorado 80201

Attention: Pamela W. Staley

Administrative Order DD

Dear Ms. Staley:

Reference is made to Amoco Production Company's application dated June 5, 1997 for authorization to recomplete the existing Fields "A" Well No. 1 (API No. 30-045-11271) by side tracking off of the vertical portion of the wellbore and drill a high angle slant hole to a predetermined bottomhole location in order to further develop the Blanco-Mesaverde Pool underlying its existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 25, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico.

The Division Director Finds That:

- The application has been duly filed under the provisions of Rule 111.D and E of **(1)** 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;
- The Fields "A" Well No. 1, located at a standard gas well location 990 feet from (3) the North and East lines (Unit A) of said Section 25, was originally drilled and completed in 1953 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 320-acre GPU:

- (4) Within this 320-acre GPU Amoco is also producing Blanco-Mesaverde gas from its Fields "A" Well No. 1-A (API No. 30-045-22398), located at a standard infill gas well location 980 feet from the North line and 1460 feet from the West line (Unit C) of said Section 25;
- (5) A high angle slant hole drilled off of the existing vertical wellbore in the Fields "A" Well No. 1 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 4,875 feet by milling a window in the existing 4/1/2- inch replacement production casing string, drill in a southeasterly direction, build to an angle of approximately 45 degrees in order to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said wellbore to be approximately 240 feet;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 of said Section 25 that is no closer than 790 feet to any 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 Fields "A" Well No. 1 (API No. 30-045-11271), located at a standard gas well location 990 feet from the North and East lines (Unit A) of Section 25, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico, by milling a window in the existing 4\1/2\text{Teplacement production casing string at a depth of approximately 4,875 feet, kick-off from vertical in a southeasterly direction, build to an angle of approximately 45 degrees in order to bottom back into the Blanco-Mesaverde Pool (total horizontal displacement of said wellbore to be approximately 240 feet) within a drilling window or "producing area" comprising the NE/4 equivalent of said Section 25 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.

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 Fields "A" Well No. 1-A (API No. 30-045-22398), located at a standard infill gas well location 980 feet from the North line and 1460 feet from the West line (Unit C) of said Section 25, and Fields "A" Well No. 1, as described above, shall be attributed to the existing 320-acre standard gas spacing and proration unit ("GPU") comprising the N/2 of said Section 25.
- (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

U. S. Bureau of Land Management - Farmington

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

Fields AN

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Appl			

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

TYPE OF A	PPLICATION - Check Those Which Apply for [A]
[A]	Location - Spacing Unit - Directional Drilling
	□NSL □NSP ØDD □SD JUN I 1997
Check	One Only for [B] or [C]
[B]	Commingling - Storage - Measurement
	DHC DCTB DPLC DPC DOLS DOLM
[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
	WFX PMX SWD DIPI DEOR DPPR
NOTIFICAT	TION REQUIRED TO: - Check Those Wich Apply, or Does Not Apply
[A]	Working, Royalty or Overriding Royalty Interest Owners
[B]	Offset Operators, Leaseholders or Surface (Care
[~]	
[C]	Application is One Which Requires Reblix ed Legal Notice
•	
[D]	☐ Notification and/or Concurrent Approval by BEM or SLO
•	U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[E]	☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
[F]	☐ Waivers are Attached
t- J	
	[A] Check [B] [C] NOTIFICAT [A] [B] [C] [D]

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an Individual with supervisory capacity.

PAMELA W. STALEY
Print or Type Name

Signature

REGULATORY AFFAIRS ENGR.

Title

Object 197



Teel ! 1 nm



June 5, 1997

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

Application For Deviated Wellbore - Rule 111.C. Fields A #1
Unit A Section 25-T32N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico

Amoco Production Company San Juan Business Unit

1670 Broadway Post Office Box 800 Denver, Colorado 80201 303-830-4040

Amoco Production Company hereby requests administrative approval to enter the existing wellbore in the Fields A #1 well referenced above and directionally drill the well in the Blanco Mesaverde Pool. The well is currently completed as a marginal producing well in the Blanco Mesaverde Pool. Directionally drilling the well will help place the wellbore away from the original openhole completion and provide an 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 the N/2 Section 25-T32N-R11W 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 (20) days of the date notice was sent.

Sincerety.

Pamela W. Staley

Attachments

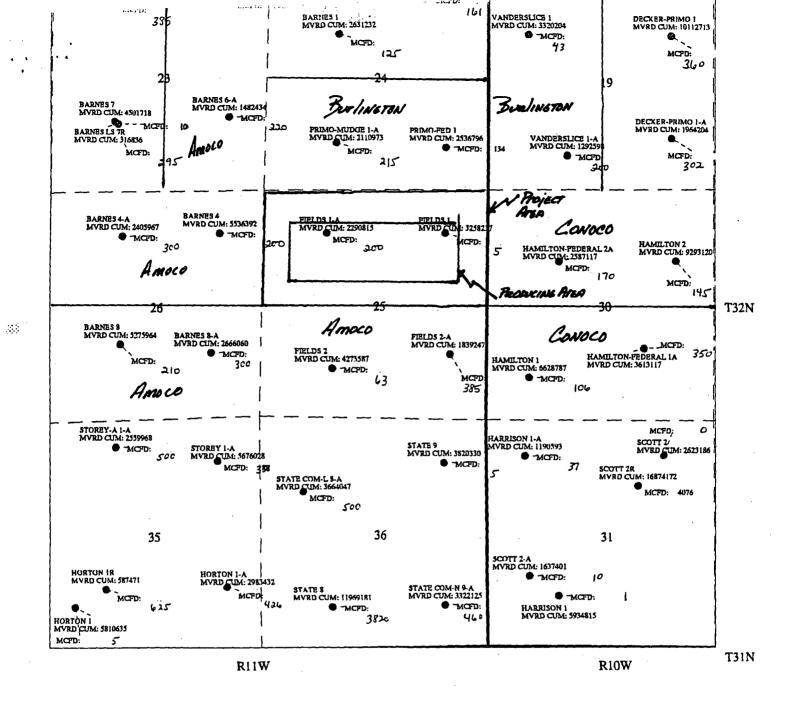
cc:

Mark Rothenberg, Amoco

Pat Archuleta, Amoco

Wellfile

Proration File



AMOCO PRODUCTION COMPANY

ippe of Rep: Nine-S	Section	Plat
Bacillon: MV		
Black(s)/Grid(s):		
Area/Country: SAN JOUR BASIN, WEN WEXTON	tlene:	
latesproter(s):	Bate: April 25,1997	
Scale = 1:27000	Contour Interrait:	
Remaine: Herizon war with dissent and compative perdi Offset by bells Sec.25-1720-8118	CTION	
film filo fa.:		Grett by: R. Ruchrolabi

DATA SUMMARY SHEET

WELLNAME Fields A #1

API 30-045-11271

LOCATION
Unit A Section 25-T32N-R11W

ACREAGE IN SPACING UNIT N/2 SPACING UNIT - 320 ACRES

LOCATION FOOTAGES 990 FNL X 990 FEL

STANDARD LOCATION? YES

OTHER WELL(S) PRODUCING IN SPACING UNIT IN MESAVERDE POOL Fields A #1A (UNIT C) 30-045-22398

REASON FOR DEVIATION OR DIRECTIONAL DRILLING SIDETRACK TOTOWARDS FRACTURED FEATURE TO ENHANCE PRODUCTION

KICKOFF POINT 4875'

DIRECTION TO BE DRILLED SOUTHEAST

TYPE CURVE HIGH ANGLE

LATERAL DISTANCE FROM VERTICAL OR ORIGINAL WELLBORE APPROXIMATELY 237' @ 135 DEGREES TO STAY AT AN ORTHODOX BOTTOMHOLE LOCATION

OFFSET OPERATOR LIST Fields A #1

Burlington Resources Oil and Gas Co. P.O. Box 4289 Farmington, NM 87499

Conoco, Inc. 10 Desta Drive West Midland, Texas 79705

DrillQuest Well: Fields A 1 Customer: Amoco Production Co. Folder: Amoco Production Co. Field: New Mexico Project: Re-Entry Wells Structure: Sec 25-T32N-R11W Well: Fields A 1 Vertical Section Scale: linch = 900ft Section Azimuth: 135,000 (True North) 900 3600 Vertical Depth 4500 150,00 \$ 150,00 E -900 Scale: linch = 900ft Section Azimuth: 135.000 (True North) **Vertical Section**

DrillQuest Well: Fields A 1 Customer: Amoco Production Co. Folder: Amoco Production Co. Field: New Mexico Project: Re-Entry Wells Structure: Sec 25-T32N-R11W Well: Fields A 1 **Eastings** Scale: linch - 100ft 100 200 -100 Circle 5325.00 150.00 S, 150.00 E 200 300 Scale: linch = 100ft Reference is True North **Eastings**

Sperry-Sun Drilling Services



Proposal Report for Fields A 1 - Alternate Fields A 1

Amoco Production Co. New Mexico Re-Entry Wells Sec 25-T32N-R11W

Measured Depth (ft)	inci.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.0G0	0.000	0.00	0.00 N	0.00 E	0.00	
3000.00	0.000	0.000	3000,00	0.00 N	0.00 E	0.00	: 0.000
4875.00	0.000	0.000	4875.00	0.00 N	0.00 E	0.00	0.000
5321.61	44.661	135.000	5277.74	116.98 S	116.98 E	165.43	10.000
5388.06	44.661	135.000	5325.60	150.00 S	150.00 E	212.13	0.000
5423.21	44.661	135.000	5350.00	167.47 S	167.47 E	236.84	0.000

All data is in feet unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100ft.

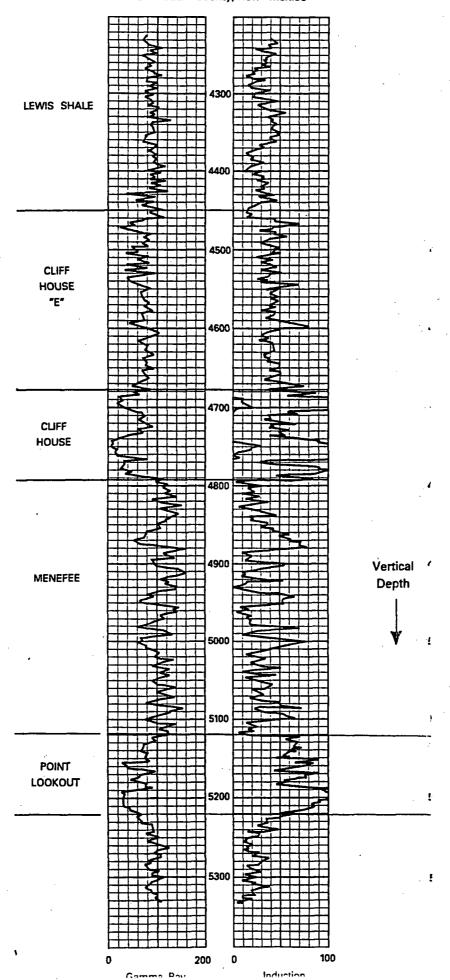
Vertical Section is from Well and calculated along an Azimuth of 135.000° (True).

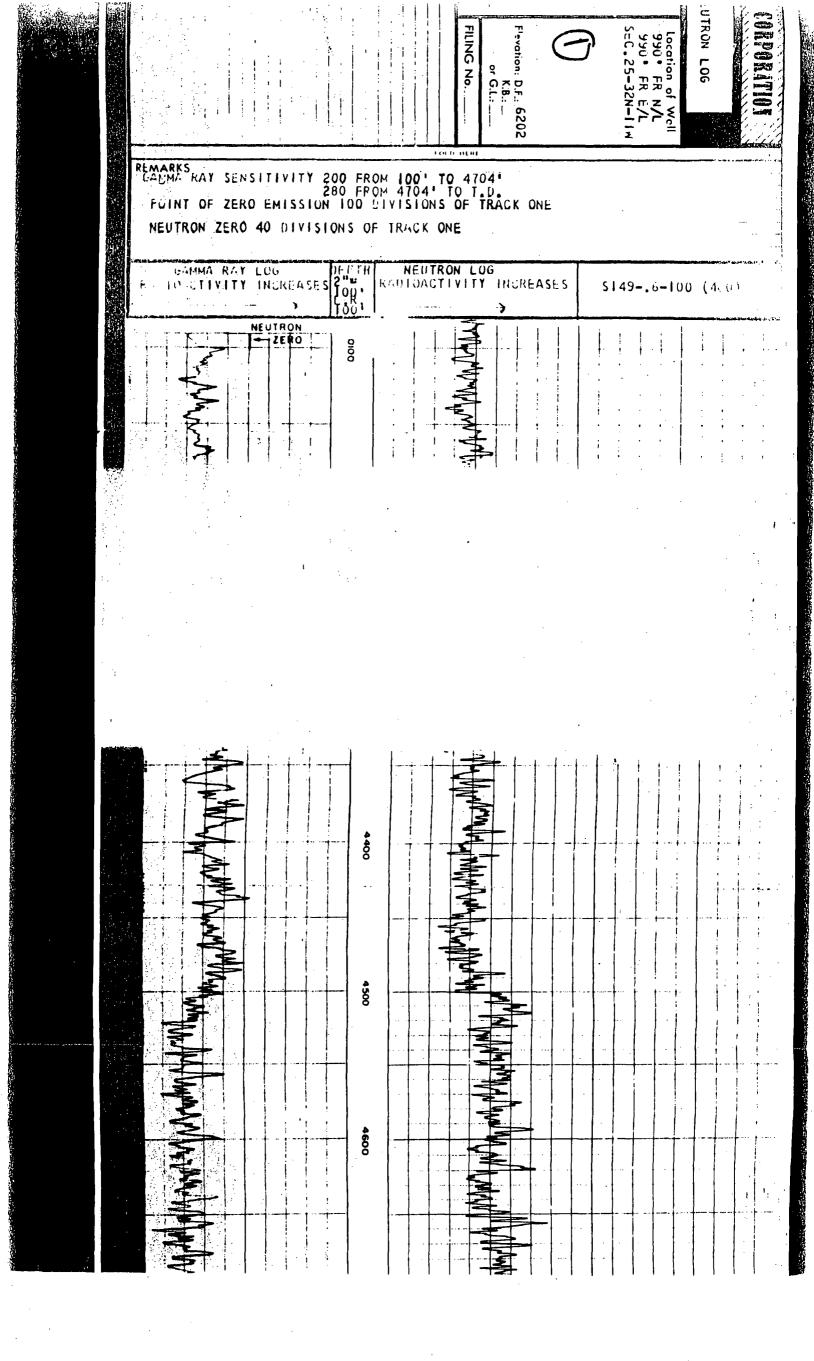
Coordinate System is NM-W. Grid Convergence at Surface is -0.822°.

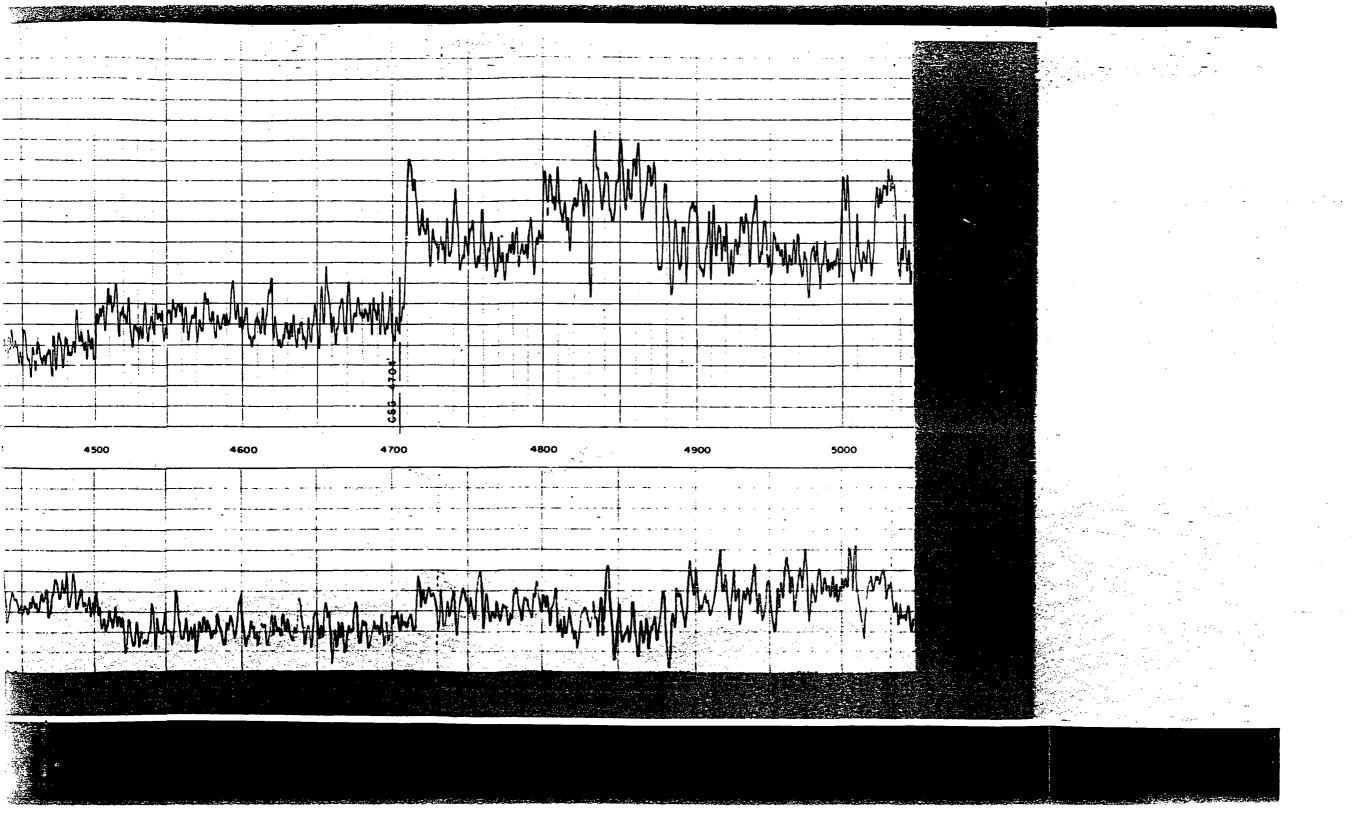
Based Upon Minimum Curvature type calculations, at a Measured Depth of 5423.21ft, The Bottom Hole Displacement is 236.84ft., in the Direction of 135.000° (True).

Amoco Production Company ENGINEERING CHART SUBJECT Fields Al - 3004511271 990' FNL x 990' FEL Sec. 25 32N-11W 1320 1850 2640 1850 2581

Typical M.V. Log T32N, R10W San Juan County, New Mexico







P.O. Box 1980, Hobbs, NM 88240 DISTRICT II 311 South First,, Artesia, NM 88210 DISTRICTIII 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 18, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87505

DISTRICT IV
2040 South Pacheco, Sante Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

			L LUCA	ATION AN	D ACKEAU	SE DEDICA	IION PLAT			
API Number	300451	1271	Pool Co	ode 72319	Pool N	ame	Blanco Mes	averde		
Property Code Property Name 000511				Fields A				Well Number #1		nber #1
OGRID No. Operator Name 000778 AMOCO PRODUCTION COMPANY								Elevation		
				Sı	urface Loc	ation			<u> </u>	
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/\	West Line	County
UNIT A	25	32N	11W		990	NORTH	990	E	AST	San Juan
	-	Bott	om Hol	e Locatio	n If Differe	nt From Su	face			
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/V	Vest Line	County
Dedicated Acreage	:	Joint or Infill	Con	solidation Code	Order No.	<u>Ll</u>		<u> </u>		-
NO ALLOV	VABLE	WILL BE ASSIC				FIL ALL INTER			CONSO	LIDATED
						1	OPERA	TOR C	ERTIFIC	CATION
					280		I hereby certify true and compl belief			ntained herein is nowledge and
						823	Signature			
				•		BHL	Printed Nam		Archuleta	a
							Position	Staff	f Assistar	nt
							Date			
					•		SURVE	EY CEI	RTIFICA	TION
				·			1 1	m field not pervision, a	es of actual s and that the s	
							Date of Su	rvey		
							Signature &	Seal of	f Professio	onal Surveyor
							Certificate I	No.		

NEW MEXICO

Gas Well Plat

OIL	CONSERV	ATION	COMMISSION	I

Operator		Lease			Well	No.
e of Producing	g Formatio	n Hess Ve	CE S	Pool.	B	ianco
acres Dedicat			- Yezere	L		·
CTION	25	rownship		12	RANGE	11W
		UM 010989				
	9000 (Y O					

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name	The second secon
Position RIGINAL	CHEMIC SURFICIENT WIN
Representing	ही दिवक शक्तामधी (१ 3 Co.
Address	Farmington, New Mixleo

CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION

07/21/97 18:08:23

OGOMES -EMFJ PAGE NO: 1

Sec : 25 Twp : 32N Rng : 11W Section Type : NORMAL

D	C	В	A
40.00	40.00	40.00	40.00
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Federal owned	Federal owned	Federal owned	Federal owned
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40.00	40.00	40.00	40.00
Federal owned	 Federal owned	 Federal owned	
rederal Owned	rederal Owned	rederal Owned	Federal owned
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			1
PF01 HELP PF02	PF03 EXIT	PF04 GoTo PF05	PF06
PF07 BKWD PF08 F	WD PF09 PRINT	PF10 SDIV PF11	PF12

CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION

07/21/97 18:08:30 OGOMES -EMFJ

PAGE NO: 2

Sec : 25 Twp : 32N Rng : 11W Section Type : NORMAL

			·
L	, K	J	I
40.00	40.00	40.00	40.00
Federal owned	Federal owned	Federal owned	Federal owned
A			A
· M	_	0	P
40.00	40.00	40.00	40.00
Federal owned	 Federal owned	 Federal owned	 Federal owned
redetat owned	rederat owned	rederat Owned	rederat Owned
	A A		
PF01 HELP PF02		PF04 GoTo PF05	PF06
PF07 BKWD PF08 FV	ND PF09 PRINT I	PF10 SDIV PF11	PF12

Mike Stogner

From:

Ernie Busch

To:

Mike Stogner

Subject:

RE: Rule 111: Directional Drilling Thursday, July 17, 1997 1:15PM

Date: **Priority:**

High

Mike, Here are some recommendations for the wells that you sent me the otherday, but there are still 2 I haven't seen. Ernie

From:

Mike Stogner

Sent:

Monday, July 14, 1997 11:03 AM

To:

Frank Chavez

Cc:

William Lemay; Ernie Busch

Subject: Rule 111: Directional Drilling

In addition to my earlier fax transmission this morning, the following is a list of pending administrative applications effecting District III:

Phillips Petroleum Company

(Recommend Approval)

San Juan "32-7" Unit Well No. 240 Sections 19/20, T32N, R7W Basin Fruitland Coal Gas Pool;

(2)

Amoco Production Company

(Recommend Approval)

Nve "LS" Well No. 1-A E/2 Sec. 23-T31N-R11W Blanco-Mesaverde Pool:

Amoco Production Company

(Recommend Approval)

Wallace Gas Com Well No. 1 N/2 Sect. 35-T31N-R11W Blanco-Mesaverde Pool;

Amoco Production Company

(Recommend Approval)

Schwerdtfeger "LS" Well No. 2-A N/2 Sec. 27-T31N-R9W

Blanco-Meseaverde Pool:

Amoco Production Company

(Recommend Approval)

Prichard "A" Well No. 2-A E/2 Sec. 1-T30N-R9W Blanco-Mesaverde Pool;

Amoco Production Company

(Recommend Approval)

Florance Well No. 18-R W/2 Sec. 11-T30N-R9W Blanco-Mesaverde Pool;

Amoco Production Company

(Haven't Seen It)

Fields "A" Well No. 1 N/2 Sec. 25-T32N-R11W Blanco-Mesaverde Pool; and,

Amoco Production Company

(Haven't Seen It)

Lodewick Well No. 1

18-T27N-R9W

Basin-Fruitland Coal Gas Pool/Fulcher Kutz Pictured Cliffs Pool.