

DD-192. 4md

February 2, 1998

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

Attention: Pamela W. Staley

AMENDED Administrative Order DD-192(NSBHL)

Dear Ms. Staley:

By Division Administrative Order DD-192, dated July 23, 1997, authorization was given Amoco Production Company ("Amoco") to directionally drill its Wallace Gas Com Well No. 1 (API No. 30-045-10150) from a standard surface gas well location 1640 feet from the North line and 790 feet from the East line (Unit H) of Section 35, Township 31 North, Range 11 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" comprising the NE/4 of said Section 35 that is no closer than 790 feet to the quarter section lines.

Reference is now made to: (I) your letter with attachments dated December 18, 1997; (ii) our meeting in Santa Fe on _____ day, January ___, 1998; and, your message faxed on January 29, 1998: whereby an amendment should be issued in this order to reflect the possible bottom-hole location of this wellbore.

The Division Director Finds That:

- (1) This application was originally approved under the provisions of General Rule 111.D _____ reference to old Rule 111 here _____ and Rule 2(c) of the "*General Rules For The Prorated Gas Pools of New Mexico/Special Rules and Regulations For The Blanco-Mesaverde Pool*", as promulgated by Division _____;
- (2) This amendment has been duly filed under the provisions of Division General Rules 111.D and 111.E _____ and said Special Rule 2(c); and,
- (3) Amoco owns all affected offsetting 320-acre, more or less, tracts to the captioned well, no notification was therefore required.

LOG OF ADMINISTRATIVE ORDERS
MONTH OF _____, 198__

APP TYPE	OPERATOR	WELL, LOCATION	REC'D DATE	RELEASE DATE	ORDER NO.	COMMENTS
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Issued

NSP	Bridges Oil USA Inc.	Lot 1, 2, 7, 8, 9, 10, 15 & 16 Fed. 4 Com #1: 4-215-27E	Oct. 30, 1989	Nov. 30, 1989		
(NSP/HL) DD	Yates Petroleum Corp.	11+14 Zia "25" Federal Com #1: 205-29E	Aug 31, 1989	Dec. 1, 1989		
(DD) NSL	Chevron USA Inc.	1900' FUL - 660' FUL WB Ramsey, NCT-A #24: 14-34-215-36E	Nov. 6, 1989	Dec. 4, 1989		
NSP	John H. Hendrix Corp.	5 1/2 SW 1/4 - 80' FUL Hinton #3 12-225-37E	Nov. 13, 1989	Dec. 4, 1989	12/6/89 NSP-1589	
NSL	Massachusetts Resources Inc.	600' FUL - 1550' FUL Corrales Unit II B #15: 11-32N-4W	Sept. 21, 1989	Dec. 4, 1989	12/6/89 NSL-2724	
NSL	Hal J. Rasmussen Dev.	H-E State "A" A/C-1 # 67-99: 11-235-36E	Nov. 13, 1989	Dec. 5, 1989	NSL-2723	
NSL	Hal J. Rasmussen Operating, Inc.	O-L State "A" A/C-1 # 50+107: 24-295-36E	Nov. 13, 1989	Dec. 5, 1989	NSL-2722	
NSL	Petrus Oil Comp. LP	1300' FUL & 56 Langley/Hillia Queen Unit #41 B-15-255-37E	Dec. 6, 1989	Dec. 6, 1989	12/6/89 NSL-2725	
NSL	Granville Petr. Corp.	1283' FUL - 2527' FUL Loringdon SA Unit #60 N-31-165-37E	Dec 6, 1989	Dec. 6, 1989	12/6/89 NSL-2726	
NSL	Hal J. Rasmussen	1980' FUL & 146 State A/C-1 #88: K-10-23-36	Nov. 20, 1989	Dec 6, 1989	12/7/89 NSL-2727	
NSL	Hal J. Rasmussen	660' FUL & 146 State A/C-1 #71: M-13-23-36	Nov. 13, 1989	Dec 6, 1989	12/7/89 NSL-2728	
NSL	Hal J. Rasmussen	660' FUL & 146 State A/C-1 #49: D-10-23-36	Nov. 13, 1989	Dec 6, 1989	12/7/89 NSL-2729	
NSL	Hal J. Rasmussen	660' FUL - 1980' FUL State A/C-1 #82: B-15-23-36	Nov. 13, 1989	Dec 6, 1989	12/7/89 NSL-2730	
NSL	Hal J. Rasmussen	660' FUL & 146 State A/C-1 #89: N-10-23-36	Nov. 13, 1989	Dec 6, 1989	12/7/89 NSL-2731	
NSL	Southland Royalty Meridian Oil Inc.	790' FUL & 146 Hagard #7: P-34-29N-13W	Nov. 13, 1989	Dec 7, 1989	12/6/89 NSL-2732	
NSL	Green Hill Petr. Corp.	Loringdon SA Unit #61 2545' FUL - 100' FUL 75-6-175-37E	Dec. 6, 1989	Dec. 7, 1989	12/8/89 NSL-2733	
NSL	Meridian Oil Inc.	1550' FUL - 910' FUL Ka Souse #1 I-25-26N-4W	Nov. 22, 1989	Dec. 8, 1989	12/8/89 NSL-2734	
Amended NSL	Meridian Oil Inc.	680' FUL - 2200' FUL Bloomfield #3: O-17-29N-11W	Nov 27, 1989	Dec. 18, 1989		

11/30/89 - 12/18/89

AMENDED Administrative Order DD-136(NSBHL)

Amoco Production Company

February 2, 1998

Page No. 2

IT IS THEREFORE ORDERED THAT:

(1) Division Administrative Order DD-136 is hereby amended to properly reflect the actual bottomhole location for said Atlantic A "LS" Well No. 3 within the Blanco-Mesaverde Pool to be, more or less, 682 feet from the South line and 1534 feet from the West line (Lot 14/Unit N) of Section 28, Township 31 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) All other provisions of said Order DD-136, dated March 27, 1996, 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

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
File: DD-136

Stogner, Michael

From: Stogner, Michael
Sent: Thursday, February 05, 1998 6:13 PM
To: 'Pamela Staley'
Subject: Wallace Gas Com Well No. 1

Per our telephone conversation today concerning this well. It is my understanding that Amoco will notify Aztec Oil and Gas Corporation and Great Western Drilling Company of this well's possible unintended encroachment towards their respective acreage's. Please send me a copy of this notification and upon receipt I'll begin the approval process. Thank you for clarifying this matter with me.

dd-136.9m9

February 2, 1998

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

Attention: J. W. Hawkins

AMENDED Administrative Order DD-136(NSBHL)

Dear Mr. Hawkins:

By Division Administrative Order DD-136, dated March 27, 1996, authorization was given Amoco Production Company ("Amoco") to directionally drill its Atlantic A "LS" Well No. 3 (API No. 30-045-10242) from a standard surface gas well location 790 feet from the South line and 990 feet from the West line (Lot 13/Unit M) of said Section 28, Township 31 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" comprising the SW/4 equivalent of said Section 28 that is no closer than 790 feet to the quarter section lines.

Reference is now made to your letter with attachments dated July 1, 1996, whereby an amendment should be issued in this order to accurately reflect the actual bottom-hole location of this wellbore.

The Division Director Finds That:

- (1) This application was originally approved under the provisions of General Rule 111.D and Rule 2(c) 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(c); and,
- (3) Amoco owns all affected offsetting 320-acre, more or less, tracts to the captioned well, no notification was therefore required.

Employee Signature

AMENDED Administrative Order DD-136(NSBHL)

Amoco Production Company

February 2, 1998

Page No. 2

IT IS THEREFORE ORDERED THAT:

(1) Division Administrative Order DD-136 is hereby amended to properly reflect the actual bottomhole location for said Atlantic A "LS" Well No. 3 within the Blanco-Mesaverde Pool to be, more or less, 682 feet from the South line and 1534 feet from the West line (Lot 14/Unit N) of Section 28, Township 31 North, Range 10 West, NMPM, San Juan County, New Mexico.

(2) All other provisions of said Order DD-136, dated March 27, 1996, 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

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
File: DD-136

LOG OF ADMINISTRATIVE ORDERS
MONTH OF _____, 198__

P TYPE	OPERATOR	WELL, LOCATION	REC'D DATE	RELEASE DATE	ORDER NO.	COMMENTS
*****	*****	*****	*****	*****	*****	*****
NSL	Phillips Pet. Co.	Vacuum Blower Section 27, 28, 29, 32, 33 East Unit : T-175-R35E	12/16/93	12/17/93	NSL-3337	
NSL	Texas E.P. Inc.	West Dollar Six Wells Drinkard Unit : T24/25S-R38E	12/23/93	12/27/93	12/28/93 NSL-3338	
Amended NSL	BLO, Inc.	Federal "B" #13 : 1195' FSL-405' FEL P-22-27N-9W	12/7/93	12/27/93	Amended NSL-3183	Location change
NSL	Southland Royalty Co. Meridian Oil Inc.	Hanks #18-M : 1610' FSL-1070' FEL E-5-27N-9W	12/8/93	12/28/93	12/28/93 NSL-3379	
NSL(SD)	Amerada Hess Corp.	J.R. Phillips Gas Com #4 : 1090' FSL-1330' FEL D-1-20S-36E	12/17/93	1-6-94	1-11-94 NSL-3340(SD)	
NSP	Meeks & Garner	Coquina State #1 : 40 acres SE 1/4 NE 1/4 H-19-21S-35E	10/24/93	1-7-94	1-11-94 NSP-1681	
NSP	Plains Pet. Oper. Co.	Bjurr SA Unit #6 : NW 1/4 13-T8S-R37E	12/20/93	1-19-94	NSP-1683	
NSP	"	" 15 : SE 1/4 13-T8S-R37E	12/20/93	1-19-94	NSP-1684	
NSL(SD)	Chevron USA	W.A. Ramsay (NCT-R) #29 : 610' FSL-660' FEL P-27-21S-36E	1/4/94	1/24/94	NSL-30000(SD)	
NSL	Amerada Hess Corp.	N. Monument Oil & Gas Unit 18 #28 : 2622' FSL-1338' FEL G-2-20S-36E	1/24/94	1/25/94	1/25/94 NSL-3341	
NSL(SD)	BALCO Oil & Gas Co.	Frederick H. Curry NW 1/4 "A" No. 5 : 660' FSL M-1-24S-36E	1/7/94	1/27/94	1-31-94 NSL-3342(SD)	
NSL(SD)	Chevron USA Prod. Co.	B.V. Culp (NCT-R) #4 : 330' FSL-990' FEL P-31-19S-31E	1/10/94	1/31/94	1-31-94 NSL-3346(SD)	
NSL	Meridian Oil, Inc.	Thompson "C" #6 : 1650' FSL-990' FEL I-10-27N-12W	1/11/94	1/31/94	NSL-3345	
NSL	BTA Oil Producers	State 2-8016-SU-P Comm #2 : 1980' FSL-990' FEL L-2-23S-34E	1/10/94	1/31/94	1-31-94 NSL-3177-A	in an existing 320-ac unit - now-prod. pool
NSL(P)	American Hunter	Phoenix #1 : 240' FSL-1080' FEL K-28-27N-1E	1/10/94	1/31/94	NSL-3347(NSP)	on 11/2 on a 24.01
NSL	Santa Fe Energy Oper.	North Pole Gold "A" Fed. #5 : 1140' FSL-990' FEL P-9-25S-31E	1/26/94	1/31/94	NSL-3348	in the potash area
NSL	Newbourne Oil Co.	Federal V #2 : 660' FSL-2210' FEL B-8-20S-38E	1-18-94	2-1-94	NSL-3349	re-classification from oil to gas in an Assoc. pool
SD	Marathon Oil Co.	Elliot State #4 & #6 : SE-30-19S-37E	1-10-94	2-1-94	2-3-94 SD-94-3	
*****	*****	*****	*****	*****	*****	*****

February 2, 1998

Phillips Petroleum Company
5525 Highway 64 - NBU 3004
Farmington, New Mexico 87401

Attention: S. Scott Prather

AMENDED Administrative Order DD-194(NSBHL)

Dear Mr. Prather:

By Division Administrative Order DD-194, dated July 28, 1997, authorization was given Phillips Petroleum Company ("Phillips") to directionally drill its San Juan "32-7" Unit Well No. 240 (API No. 30-045-29469), at a surface location 1326 feet from the North line and 231 feet from the West line (Lot 2/Unit E) of Section 20, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico, and directionally drill in a west-southwesterly direction in such a manner as to bottom said well within the Basin-Fruitland Coal (Gas) Pool at a standard subsurface coal gas well location within the SE/4 NE/4 (Unit H) of Section 19, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico, that is no closer than 790 feet to the quarter section line to the east, nor closer than 10 to any internal quarter-quarter section lines to the north, west, or south.

Reference is now made to your letter with attachments dated August 7, 1997, whereby an amendment should be issued in this order to accurately reflect the actual bottom-hole location of this wellbore which is unorthodox pursuant to Rule 7 of the "*Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool*", as promulgated by Division Order No. R-8768, as amended.

The Division Director Finds That:

- (1) This application was originally approved under the provisions of Rule 111.D 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 (being applicable at that time);
- (2) This amendment has been duly filed under the provisions of Division General Rule 104.F, the current Rule 111.C(2), and Rule 8 of said special pool rules; and,
- (3) Phillips owns all affected offsetting 320-acre tracts to the captioned well, no notification was therefore required.

It Is Further Ordered That :

(4) The application of Buss Enterprises Production Company in Case 11758 for an exception to Division General Rule 104.D(3) so as to allow the ^{continuous} ~~continuous~~ and concurrent production of ^{gas attributed to the} North Turkey Track - Marrow Gas Pool from its Turkey Track "Z" State Com Well No. 1 (API No 30-075-28481), located at a standard gas well location 2180 feet from the North line and 660 feet from the East line (Unit H) of Section 2, Township 19 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, and from the proposed Turkey Track "Z" State Com Well No. 2 to be drilled at a standard gas well location within the existing 321.40-acre gas spacing and production unit comprising Lots 1 and 2, the $\frac{1}{2}$ NE $\frac{1}{4}$, and the SE $\frac{1}{4}$ (E $\frac{1}{2}$ equivalent) of said Section 2 is hereby denied.

(5) Buss Enterprises Production Company's request to drill its Turkey Track "Z" State Com Well No. 2 at a location considered to be anything other than standard pursuant to Division General Rule 104.C(2)(a) is also denied.

IT IS THEREFORE ORDERED THAT:

(1) Division Administrative Order DD-194 is hereby amended to properly reflect the actual bottomhole location for the above-described San Juan "32-7" Unit Well No. 240 (API No. 30-045-29469) within the Blanco-Fruitland Coal (Gas) Pool to be, more or less, 1892 feet from the North line and 335 feet from the East line (Unit H) of Section 19, Township 32 North, Range 7 West, NMPM, San Juan County, New Mexico.

(2) All other provisions of said Order DD-194, dated July 28, 1997, 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

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
File: DD-194

The combined
The geological evidence presented in this manner
indicates that the Morrow

The combined geological and engineering evidence and testimony presented by ~~the State of California~~ Bass and Newbourn indicate that:

- 1) the Marrow Formation is a channel sand deposit
- 2) the Marrow channel in the immediate area of said Sections 35 and 2 does not trend in a east-southeasterly / west-northwesterly direction as ~~is~~ mapped by Newbourn for its administrative application but, instead, in a north-northwesterly / south-southeasterly direction
- 3)

Amoco Production Company

FAXDate: 01/15/98Number of pages including cover sheet: 1**To:**Mr. Michael E. StognerPhone: 505-827-8185Fax phone: 505-827-8177CC:**From:**Pamela W StaleyPhone: 303-830-5344Fax phone: 303-830-4264**REMARKS:**☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

Mike,

Thanks for spending time with me and working through these issues. I have attached the vertical wellbore readings for each of the wells and as you can see, they are very straight holes. I hope this will address any concerns you may have about deviation in the original drilling. Also, I have included the reasons for exceeding our original bottomhole locations. Please let me know if you need additional information. We turned on the Atlantic well, but are awaiting your discussion with Ernie to turn on the Wallace. Since this well tested in excess of 2.4MMCFD, we are anxious to get your "go ahead".

Thanks,

Pam

RESENT 1/29

WALLACE GAS COM #1
ORIGINAL DRILLING DEVIATION
DRILLED IN 1957

<u>DEPTH</u>	<u>DEVIATION</u>
130	1/4 DEGREES
250	1/4 DEGREES
746	3/4 DEGREES
1725	3/4 DEGREES
2217	1 1/4 DEGREES
3252	1 DEGREES
3757	1 1/4 DEGREES

Essentially this is a vertical well to the kickoff point.

Surface Location is 1640' FNL & 790' FEL

Well kicked off at 3428' and total vertical depth was 4985'. The bottom of the Mesaverde is at 4809'. As you can see in the attached survey, at the top of the Mancos shale, the well exceeded the allowable distance from the North line by 41 feet. Since the bottom of our perforated interval (4775') is 34 feet above the bottom of the Mesaverde, we feel that this will have no measurable effect on the offset and request we be allowed to produce the well.

ATLANTIC B LS #4

ORIGINAL DRILLING DEVIATION
DRILLED IN 1952

<u>DEPTH</u>	<u>DEVIATION</u>
500	1/2 DEGREES
1450	1/4 DEGREES
2372	1/2 DEGREES
3000	1/2 DEGREES
3650	3/4 DEGREES

Original Deviation records show this to be a very straight hole.

Surface location is 1650' FSL & 1450' FWL.

Total horizontal displacement of the wellbore is 282'.

$$1650' + 282' = 1932'$$

$$1932' - 1850' = 82' \text{ possible maximum displacement across the 790' setback to the north.}$$

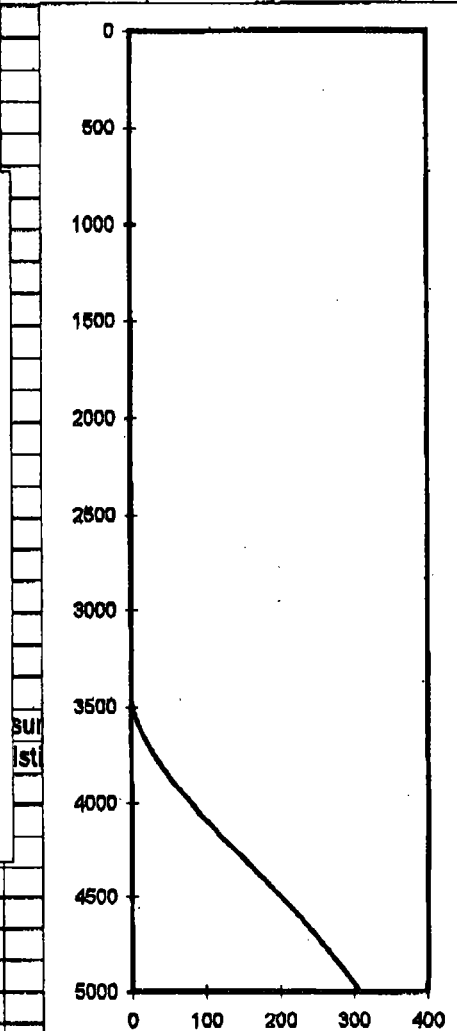
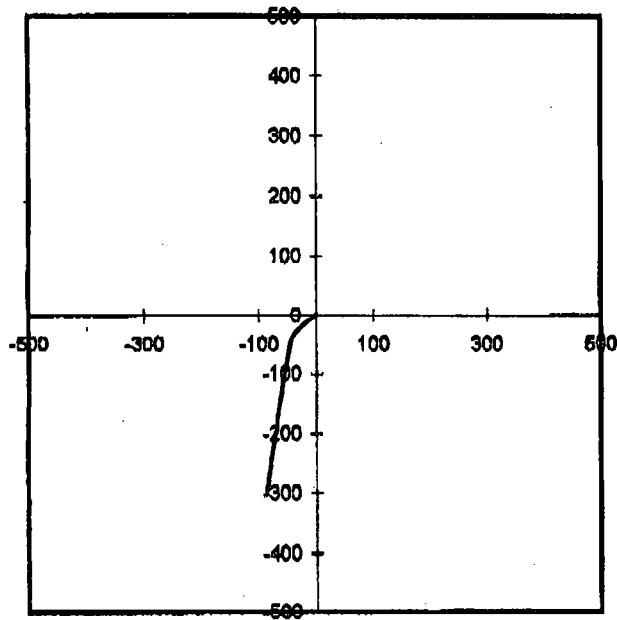
Amoco drilled this well in an indeterminate direction. When we realized we were close to TD and knew that we had potentially departed the old wellbore by as much as 282 feet, Mark Rothenberg of our office contacted Frank Chavez (September 18, 1997). We told Frank that the maximum horizontal displacement of 282' could potentially, but not necessarily, place this well in an unorthodox location and that the lease to the north was operated by Amoco. We discussed the possibility of running a gyro while the rig was still on location, but Frank agreed that the additional cost to determine the exact bottomhole location was not necessary. The 320 acres to the north is located on the same Federal lease (SF-080917) so there is no difference in ownership.

Formation tops:
Cliffhouse 4430'
Menefee 4637'
Point Lookout 5053'
Mancos Shale 5180'



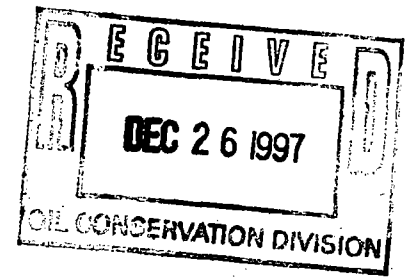
Wallace Gas Com 1

md	angle	azimuth	hz disp	tv	east disp	north disp	FEL	FNL		
0	0.0	0	0	0	0	0	790	1840		
3428	0.0	0	0	3428	0	0	790	1840		
3578	5.50	240	7	3578	-6	-4	798	1844		
3735	9.50	232	28	3733	-22	-18	812	1858		
3889	12.00	221	56	3885	-41	-38	831	1878		
4047	13.75	195	88	4039	-50	-72	840	1712		
4170	14.75	190	116	4158	-58	-102	848	1742		
4333	14.75	190	156	4318	-63	-143	853	1783		
4480	14.00	187	191	4458	-67	-179	857	1819		
4652	13.25	189	231	4625	-74	-219	864	1859		
4809	11.00	189	263	4779	-79	-251	869	1891	TOP MANCOS	
5020	11.00	189	305	4985	-85	-293	875	1933		





December 18, 1997



Mr. Michael E. Stogner
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

VIA Facsimile

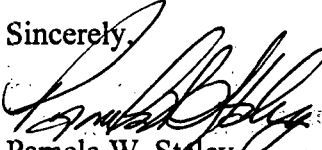
Request to Produce
Deviated Wellbore DD-192
Wallace Gas Com #1
Unit H Section 35-T31N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico

On June 5, 1997 Amoco submitted an administrative application to the Santa Fe office of the NMOCD requesting approval to directionally drill this well under the then existing Rule 111.C. Amoco received approval to directionally drill this well via letter dated July 23, 1997 (NMOCD administrative order DD-192). The NMOCD revised Division General Rule 111 on July 14, 1997 providing for a 50-foot tolerance when a producing interval encroaches on the outer boundary of a project area. In drilling this well, Amoco exceeded the south setback by 42 feet (1892 FSL) as indicated on the attachment.

We respectfully request that we be allowed to commence producing this well immediately since it meets the requirements of the current rule. Please advise Mike McMahan at our Farmington Operations Center at (505) 326-9231 if you concur with this request so we can get this well producing to the benefit of all parties as soon as possible. I am asking that you contact Mike as he will be in charge of this well during our holiday schedule.

Thank you for your assistance. Should you need to contact me during the holidays, I may be reached at my home at (303) 694-0847.

Sincerely,


Pamela W. Staley
Regulatory Affairs Engineer

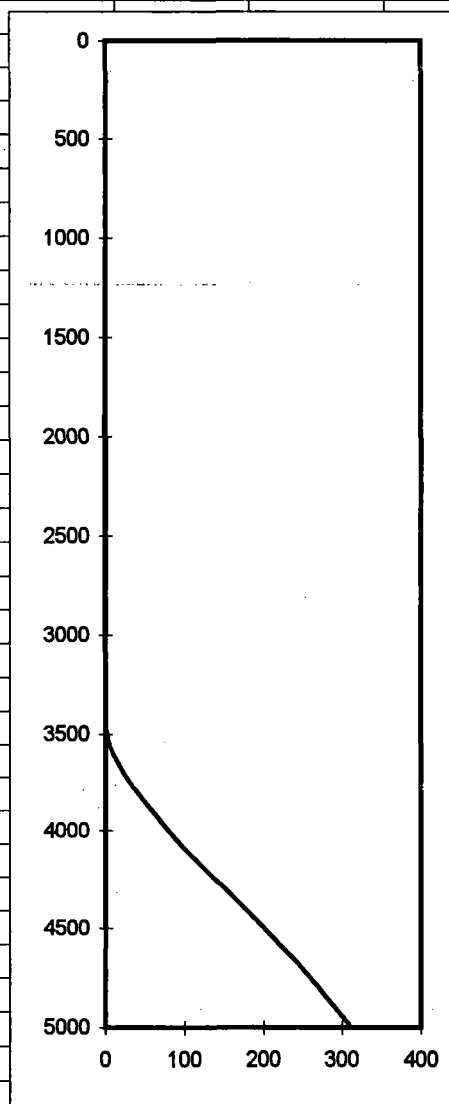
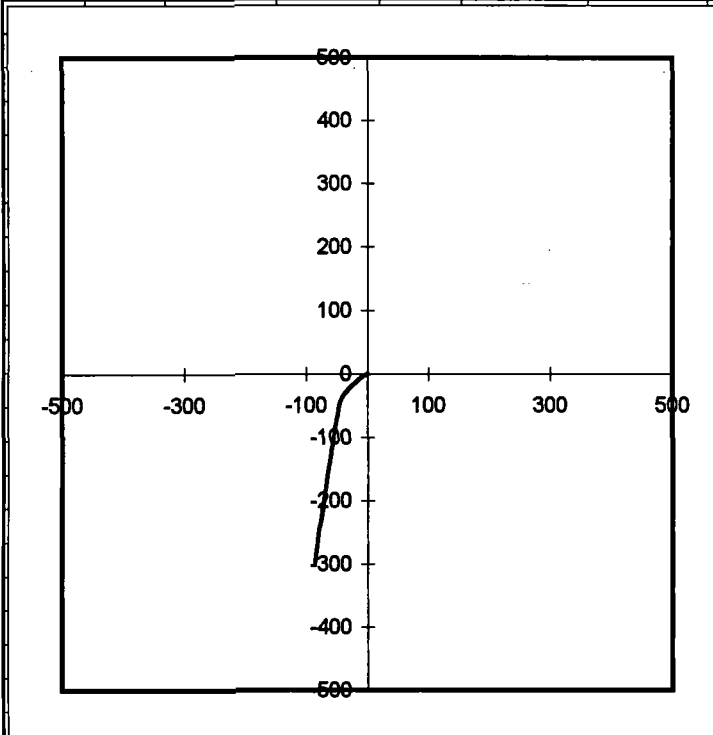
Attachment

cc: Mark Rothenberg - Denver
Baynard V. Duke - Farmington
Mike McMahan - Farmington

Mr. Ernie Bush
NMOCD District III
1000 Rio Brazos Road
P. O. Box 6429
Aztec, NM 87410

Wallace Gas Com 1

md	angle	azimuth	hz disp	tvd	east disp	nrth disp	ft FEL	ft FNL		
0	0.0	0	0	0	0	0	790	1640		
3428	0.0	0	0	3428	0	0	790	1640		
3578	5.50	240	7	3578	-6	-4	796	1644		
3735	9.50	232	28	3733	-22	-16	812	1656		
3889	12.00	221	56	3885	-41	-38	831	1678		
4047	13.75	195	88	4039	-50	-72	840	1712		
4170	14.75	190	116	4158	-56	-102	846	1742		
4333	14.75	190	156	4316	-63	-143	853	1783		
4480	14.00	187	191	4458	-67	-179	857	1819		
4652	13.25	189	231	4625	-74	-219	864	1859		
4697	12.97	190	241	4669	-75	-229	865	1869	TOP PERF	
4806	12.31	191	265	4775	-80	-252	870	1892	BOTTOM PERF	
5020	11.00	189	309	4985	-86	-297	876	1937		



***Survey tool was damage following survey at 4652'.
 Last survey was inclination only. It was
 assumed that azimuth did not change
 (this seems to be realistic considering the azimuth had
 not changed significantly in over 600').

***Surveys at perforations are estimates only.

AMOCO PRODUCTION COMPANY**P.O. Box 800****Denver, CO 80201****FAX**Date: 12/18/97Number of pages including cover sheet: 4**To:**Mr. Michael E. StognerNMOCDSanta Fe, NMPhone: 505-827-8185Fax phone: 505-827-8177CC:**From:**Pamela W. StaleyAmoco Production Co.Denver, COPhone: 303-830-5344Fax phone: 303-830-4777**REMARKS:**☐ Urgent☐ For your review☒ Reply ASAP☐ Please comment



December 18, 1997

Mr. Michael E. Stogner
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

VIA Facsimile

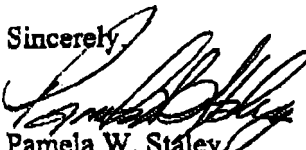
**Request to Produce
Deviated Wellbore DD-192
Wallace Gas Com #1
Unit H Section 35-T31N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico**

On June 5, 1997 Amoco submitted an administrative application to the Santa Fe office of the NMOCD requesting approval to directionally drill this well under the then existing Rule 111.C. Amoco received approval to directionally drill this well via letter dated July 23, 1997 (NMOCD administrative order DD-192). The NMOCD revised Division General Rule 111 on July 14, 1997 providing for a 50-foot tolerance when a producing interval encroaches on the outer boundary of a project area. In drilling this well, Amoco exceeded the south setback by 42 feet (1892 FSL) as indicated on the attachment.

We respectfully request that we be allowed to commence producing this well immediately since it meets the requirements of the current rule. Please advise Mike McMahan at our Farmington Operations Center at (505) 326-9231 if you concur with this request so we can get this well producing to the benefit of all parties as soon as possible. I am asking that you contact Mike as he will be in charge of this well during our holiday schedule.

Thank you for your assistance. Should you need to contact me during the holidays, I may be reached at my home at (303) 694-0847.

Sincerely,


Pamela W. Staley
Regulatory Affairs Engineer

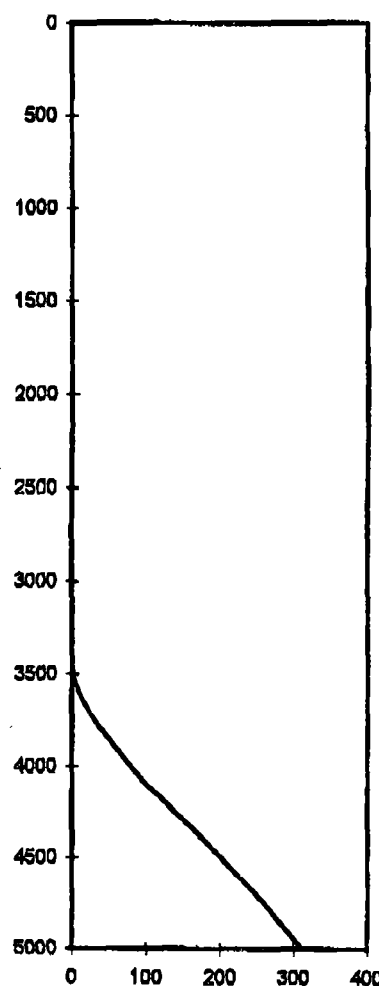
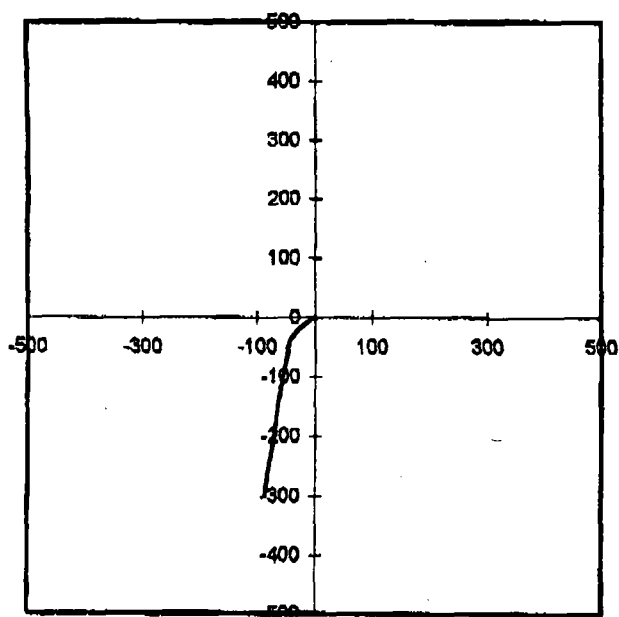
Attachment

cc: Mark Rothenberg - Denver
Baynard V. Duke - Farmington
Mike McMahan - Farmington

Mr. Ernie Bush
NMOCD District III
1000 Rio Brazos Road
P. O. Box 6429
Aztec, NM 87410

Wallace Gas Com 1

md	angle	azimuth	hz disp	lvd	east disp	nrrh disp	ft FEL	ft FNL		
0	0.0	0	0	0	0	0	790	1640		
3428	0.0	0	0	3428	0	0	790	1640		
3578	5.50	240	7	3578	-8	-4	796	1644		
3735	9.50	232	28	3733	-22	-16	812	1656		
3889	12.00	221	56	3885	-41	-38	831	1678		
4047	13.75	195	86	4039	-50	-72	840	1712		
4170	14.75	190	116	4158	-56	-102	848	1742		
4333	14.75	190	156	4316	-63	-143	853	1783		
4480	14.00	187	191	4458	-67	-179	857	1819		
4652	13.25	189	231	4625	-74	-219	864	1859		
4897	12.97	190	241	4869	-76	-229	865	1869	TOP PERF	
4806	12.31	191	265	4776	-80	-252	870	1892	BOTTOM PERF	
5020	11.00	189	308	4985	-86	-297	878	1937		



***Survey tool was damage following survey at 4652'.

Last survey was inclination only. It was assumed that azimuth did not change

(this seems to be realistic considering the azimuth had not changed significantly in over 600').

***Surveys at perforations are estimates only.



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 23, 1997

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

Administrative Order DD-192

Dear Ms. Staley:

Reference is made to Amoco Production Company's application dated June 5, 1997 for authorization to recomplete the existing Wallace Gas Com Well No. 1 (API No. 30-045-10150) 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 non-standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 35, Township 31 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;
- (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 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 Wallace Gas Com Well No. 1, located at a standard gas well location 1640 feet from the North line and 790 feet from the East line (Unit H) of said Section 35, was originally drilled and completed in 1957 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 320-acre GPU;
- (4) A high angle slant hole drilled off of the existing vertical wellbore in the Wallace Gas Com

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;

- (5) The applicant/operator proposes to kick-off from vertical at a depth of approximately 3,500 feet by milling a window in the existing 7-inch production casing, kick-off in an easterly direction, build to an angle of approximately 44 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 770 feet;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 of said Section 35 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 recomplete its existing Wallace Gas Com Well No. 1 (API No. 30-045-10150), located at a standard gas well location 1640 feet from the North line and 790 feet from the East line (Unit H) of Section 35, Township 31 North, Range 11 West, NMPM, San Juan County, New Mexico, by milling a window in the existing 7-inch production casing at a depth of approximately 3,500 feet, kick-off from vertical in an easterly direction, build to an angle of approximately 44 degrees 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 770 feet) within a drilling window or "producing area" comprising the NE/4 of said Section 35 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 said Wallace Gas Com Well No. 1 shall be attributed to the existing standard 320-acre gas spacing and proration unit ("GPU") comprising the N/2 of said Section 35.

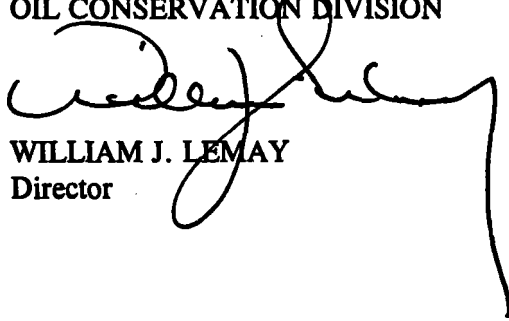
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F and Order No. R-8170, as amended.

(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

Mike Stogner

From: Frank Chavez
To: Mike Stogner
Subject: 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:
- (5) Florance #1-R (30--045-25307) in the W/2 of Sec. 11-T30N-R9W, Blanco-Mesaverde Pool:

DD-AMOC. 14

July 23, 1997

Rec: 6-11-97

Susp: 7-1-97

Released 7-23-97

~~Amoco Production Company~~

~~Southern Rockies Business Unit~~

P. O. Box 800

Denver, Colorado 80201

San Juan

Attention: Pamela Staley

192
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 Wallace Gas Com Well No. 1 (API No. 30-045-10150) by side tracking off of the vertical portion of the wellbore and drill a high angle slant hole to a pre-determined bottomhole location in order to further develop the Blanco-Mesaverde Pool underlying its existing 320-acre non-standard gas spacing and proration unit ("GPU") comprising the N/2 of Section 35, Township 31 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 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) The Wallace Gas Com Well No. 1, located at a standard gas well location 1640 feet from the North line and 790 feet from the East line (Unit H) of said Section 35, was

originally drilled and completed in 1957 as an initial Blanco-Mesaverde gas well, and was assigned the above-described 320-acre GPU;

- (4) A high angle slant hole drilled off of the existing vertical wellbore in the Wallace Gas Com 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;
- (5) The applicant/operator proposes to kick-off from vertical at a depth of approximately 3,500 feet by milling a window in the existing 7-inch production casing, kick-off in an easterly direction, build to an angle of approximately 44 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 770 feet;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 of said Section 35 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 recomplete its existing Wallace Gas Com Well No. 1 (API No. 30-045-10150), located at a standard gas well location 1640 feet from the North line and 790 feet from the East line (Unit H) of Section 35, Township 31 North, Range 11 West, NMPM, San Juan County, New Mexico, by milling a window in the existing 7-inch production casing at a depth of approximately 3,500 feet, kick-off from vertical in an easterly direction, build to an angle of approximately 44 degrees 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 770 feet) within a drilling window or "producing area" comprising the NE/4 of said Section 35 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 said Wallace Gas Com Well No. 1 shall be attributed to the existing standard 320-acre gas spacing and proration unit ("GPU") comprising the N/2 of said Section 35.

(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

6/11/97 - 7/1/97 - MS - M - DD

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

Wallace GC #1

ADMINISTRATIVE APPLICATION COVERSHEET

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

Application Acronyms:

[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]

[1] TYPE OF APPLICATION - Check Those Which Apply for

- [A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☒ DD ☐ SD

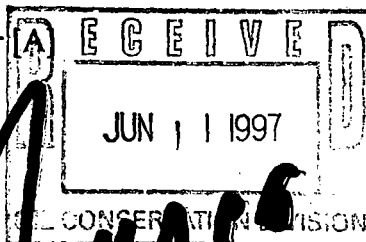
Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☒ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☒ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
[B] ☒ Offset Operators, Leaseholders or Surface Owner
[C] ☐ Application is One Which Requires Published Legal Notice
[D] ☐ Notification and/or Concurrent Approval by BLM 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

[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

6/5/97
Date

39011
11111111



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

**Amoco Production Company
San Juan Business Unit**

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

**Application For Deviated Wellbore - Rule 111.C.
Wallace Gas Com #1
Unit H Section 35-T31N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico**

Amoco Production Company hereby requests administrative approval to enter the existing wellbore in the Wallace Gas Com #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. The main reason that we are directionally drilling this well is to ensure that we move west to stay at an orthodox bottomhole location. Currently the well is located at the farthest east point in the drilling window. We are requesting the Project Area for this well to be the Blanco Mesaverde gas proration unit consisting of N/2 Section 35-T31N-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.

Sincerely,

Pamela W. Staley

Attachments

cc: Mark Rothenberg, Amoco
Pat Archuleta, Amoco
Wellfile
Proration Files

DATA SUMMARY SHEET

WELLNAME

Wallace Gas Com #1

API

30-045-10150

LOCATION

Unit H Section 35-T31N-R11W

ACREAGE IN SPACING UNIT

N/2 SPACING UNIT - 320 ACRES

LOCATION FOOTAGES

1640 FNL X 790 FEL

STANDARD LOCATION?

YES

OTHER WELL(S) PRODUCING IN SPACING UNIT IN MESAVERDE POOL

NO

REASON FOR DEVIATION OR DIRECTIONAL DRILLING

SIDETRACK TO GET AWAY FROM DAMAGED WELLBORE AND INTERCEPT NATURAL FRACTURES. SINCE CURRENT BOTTOMHOLE LOCATION IS AT THE FURTHEST POINT IN THE DRILLING WINDOW (790 FEL) IT IS OUR INTENT TO DEVIATE THIS WELLBORE ONLY TO ENSURE BEING AT AN ORTHODOX BOTTOMHOLE LOCATION

KICKOFF POINT

3500'

DIRECTION TO BE DRILLED

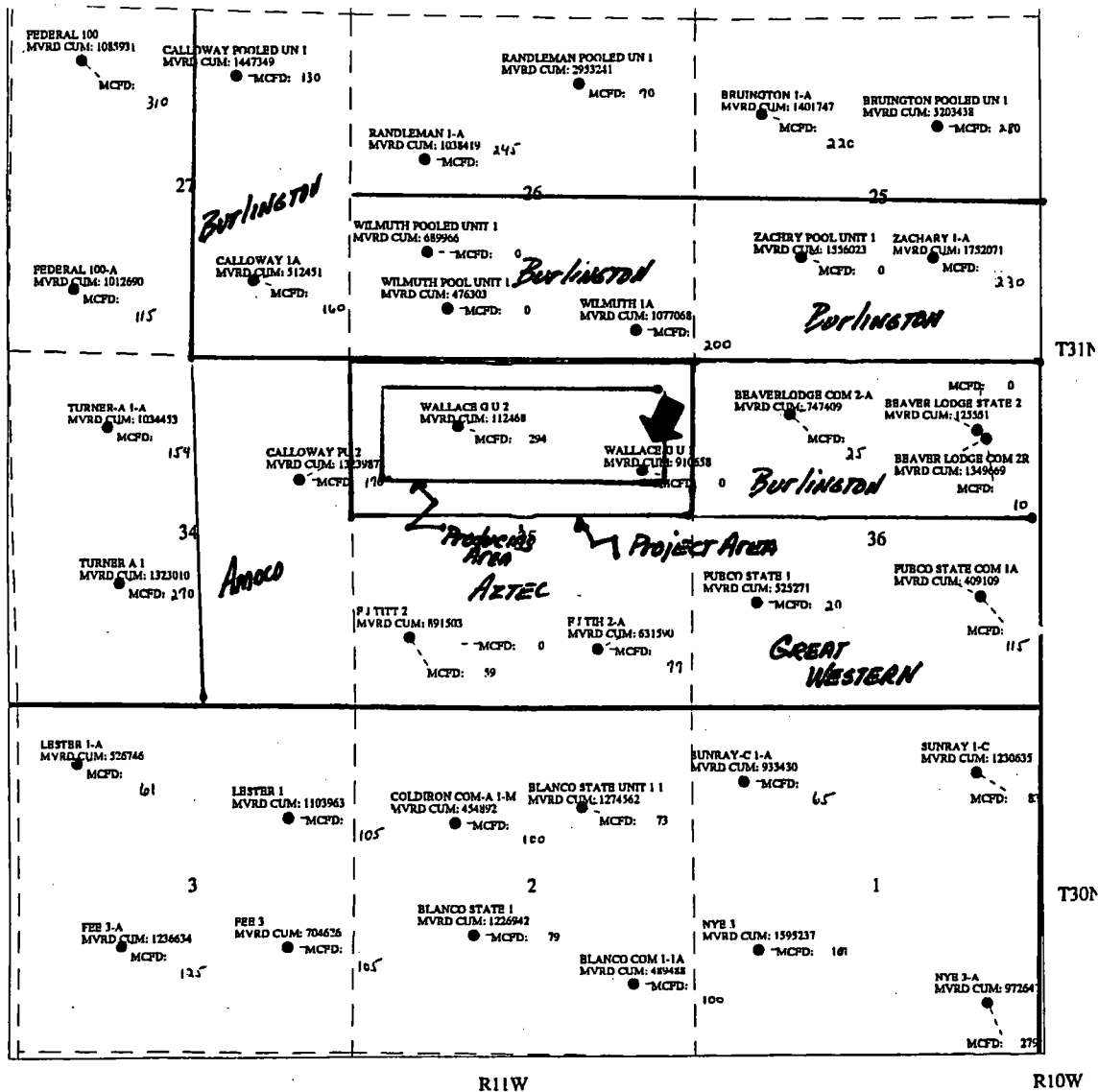
WEST

TYPE CURVE

HIGH ANGLE

LATERAL DISTANCE FROM VERTICAL OR ORIGINAL WELLBORE

ESTIMATE 766' AT 270 DEGREES TO STAY AT AN ORTHODOX BOTTOMHOLE LOCATION



AMOCO PRODUCTION COMPANY

Type of Map:	Nine-Section Plat
Series:	MV
Sheet(s)/Block(s):	
Area/Country:	SW 40th B20N, NEY 02105 License:
Interpreter(s):	Date: April 18, 1997
Scale = 1:7500	Contour Interval:
COMMENTS: SECTION MAP WITH CURRENT AND CUMULATIVE PRODUCTION LISTED BY WELLS SW-15-1518-0118	
File No.:	Drawn by: E. Kuchinski

OFFSET OPERATOR LIST

Wallace Gas Com #1

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

Aztec Oil and Gas Corporation
6658 Village Drive
Casper, Wyoming 82604-3606

Great Western Drilling Company
P.O. Box 1659
Midland, Texas 79702

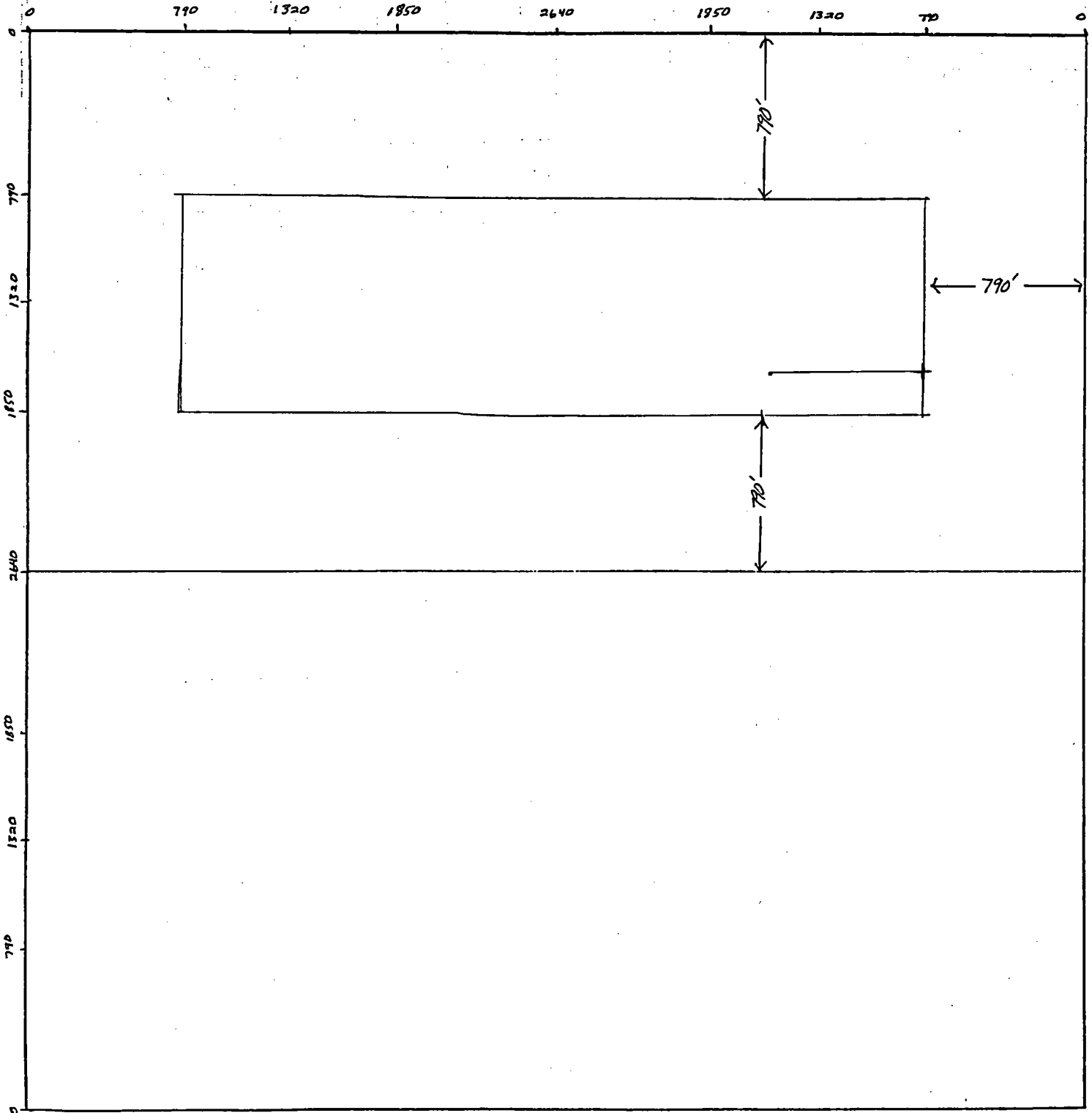
Amoco Production Company

ENGINEERING CHART

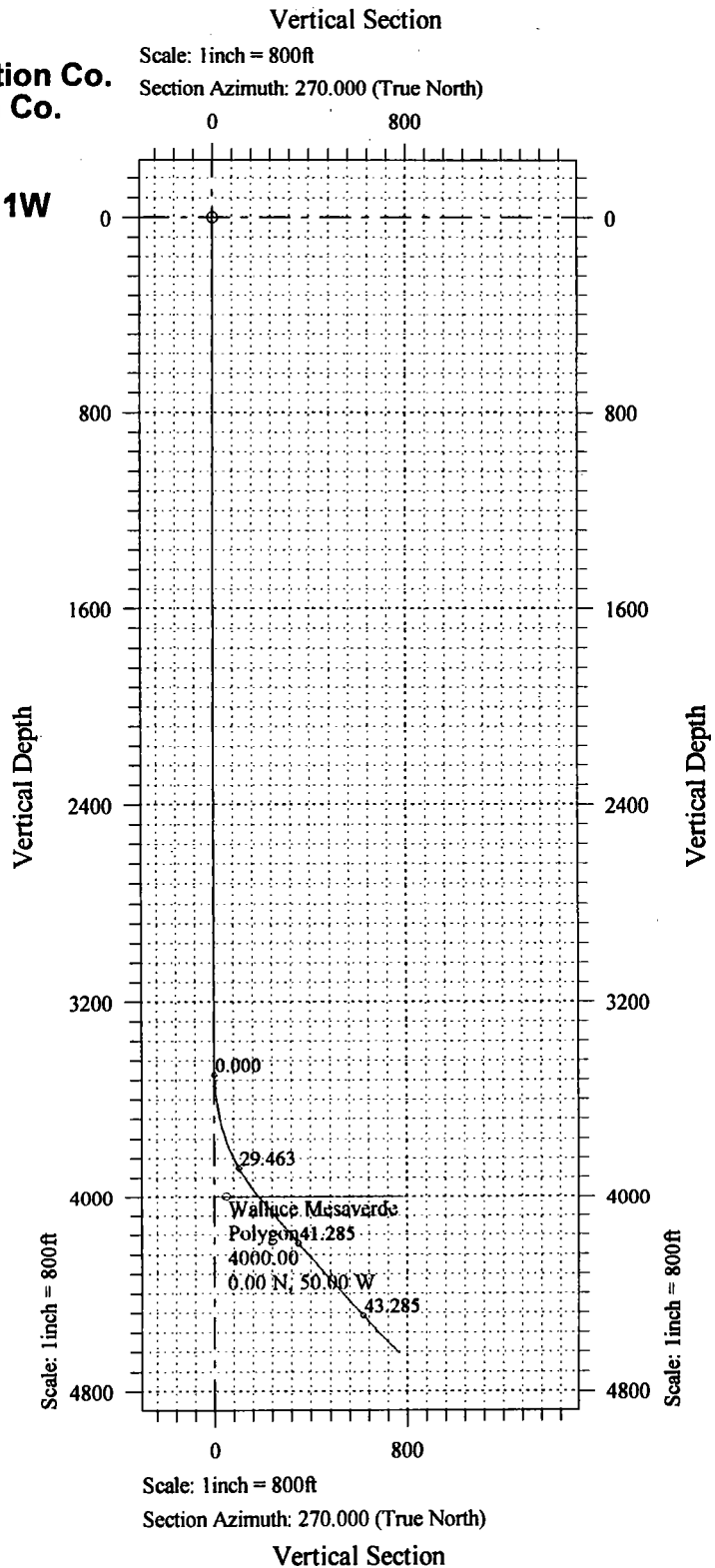
SUBJECT Wallace Gas Com 1 - 3004510150

1640' FNL X 790' FEL SECTION 35-31N-11W

Sheet No _____ of _____
 File _____
 Appn _____
 Date _____
 By _____

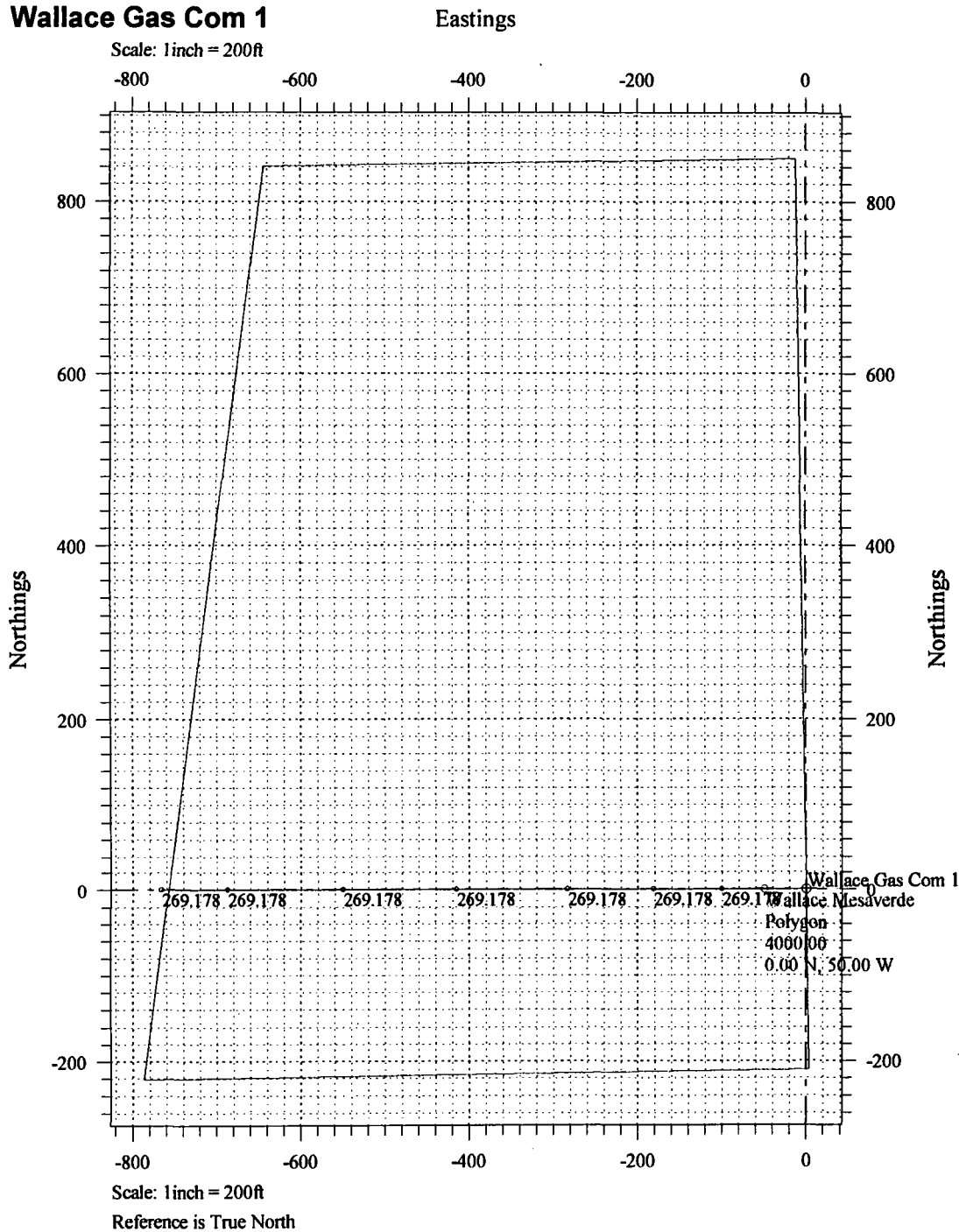


Customer: Amoco Production Co.
Folder: Amoco Production Co.
Field: New Mexico
Project: Re-Entry Wells
Structure: Sec 35-T31N-R11W
Well: Wallace Gas Com 1



Prepared:	Checked:	Approved:
-----------	----------	-----------

Customer: Amoco Production Co.
Folder: Amoco Production Co.
Field: New Mexico
Project: Re-Entry Wells
Structure: Sec 35-T31N-R11W
Well: Wallace Gas Com 1



Prepared:	Checked:	Approved:
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Sperry-Sun Drilling Services

Proposal Report for Wallace Gas Com 1 - Re-Entry Well



**Amoco Production Co.
New Mexico**

**Re-Entry Wells
Sec 35-T31N-R11W**

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
3500.00	0.000	0.000	3500.00	0.00 N	0.00 E	0.00	0.000
4043.05	40.000	270.000	4000.00	0.00 N	181.99 W	181.99	7.366
4913.61	44.353	270.000	4645.00	0.00 N	766.35 W	766.35	0.500

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

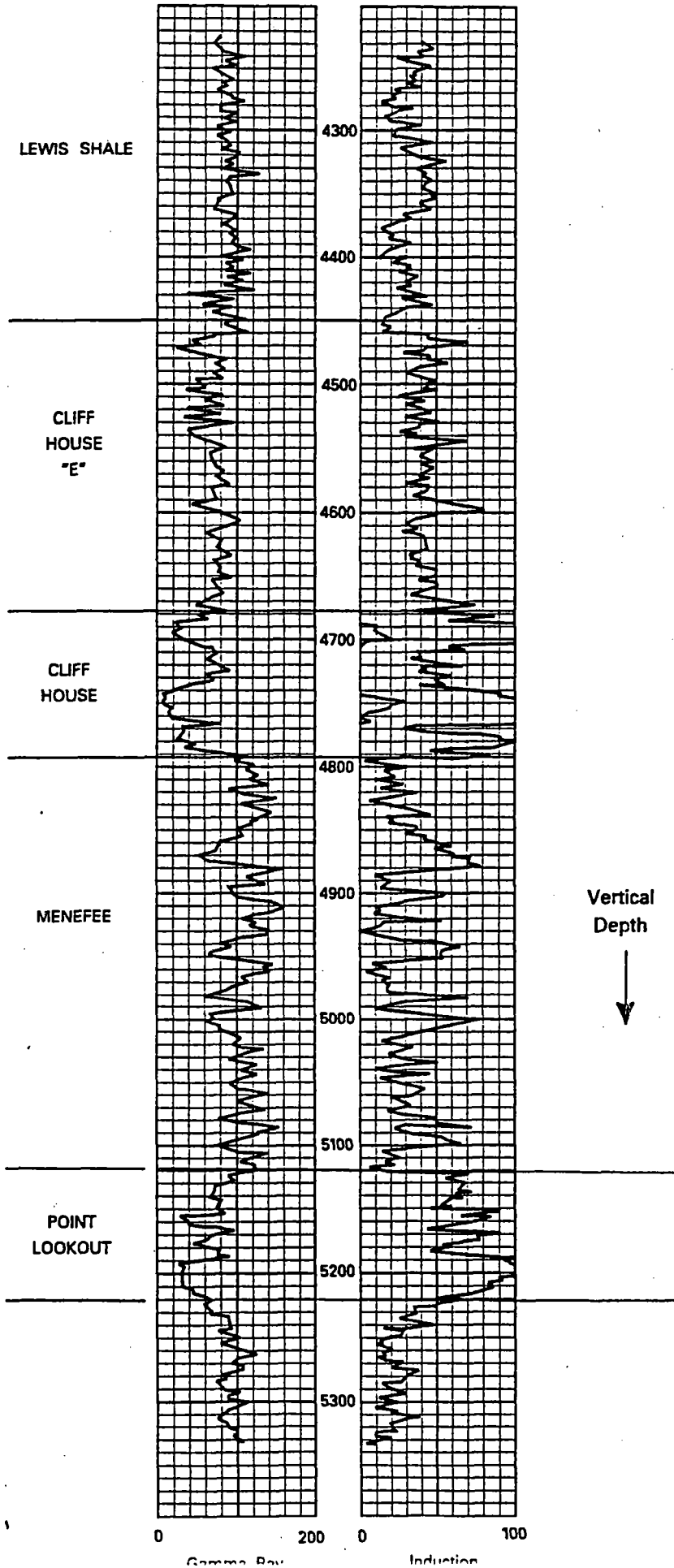
The Dogleg Severity is in Degrees per 100ft.

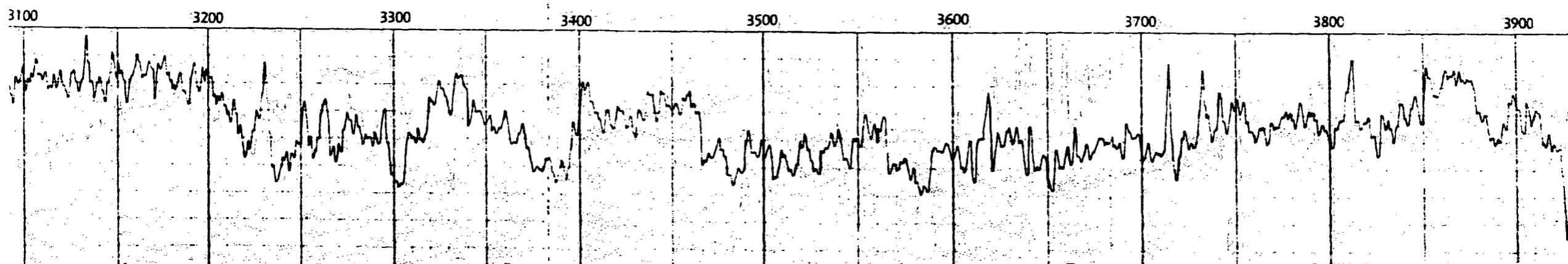
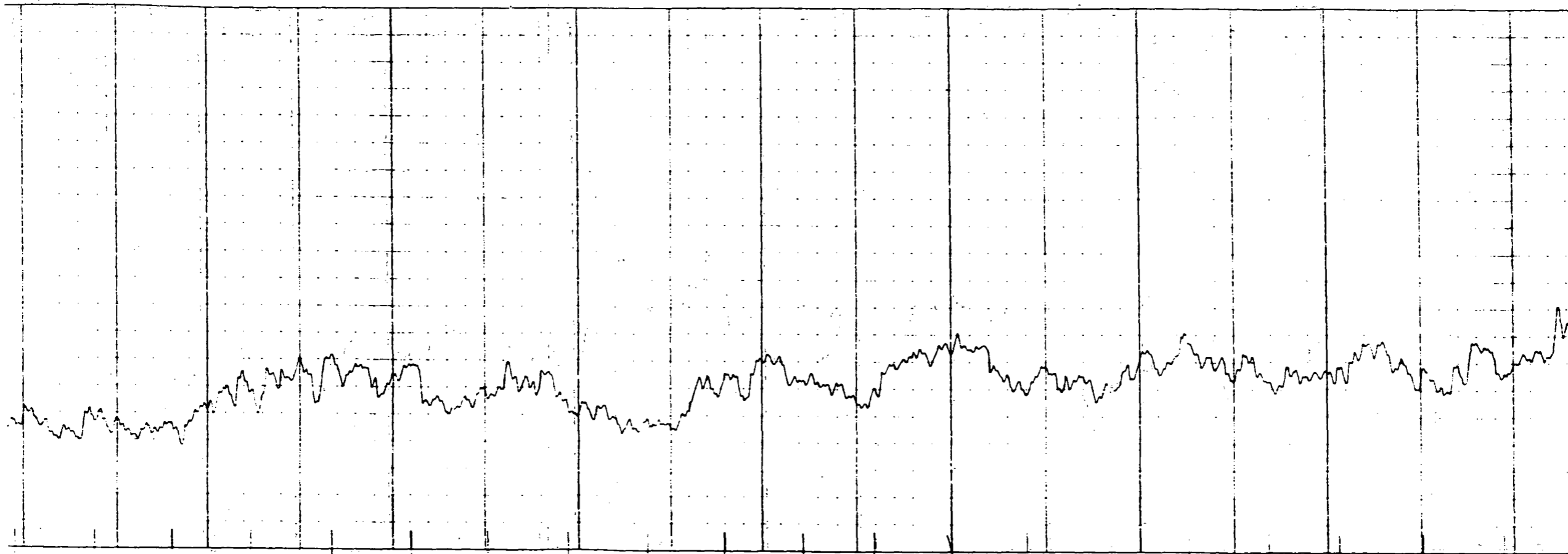
Vertical Section is from Well and calculated along an Azimuth of 270.000° (True).

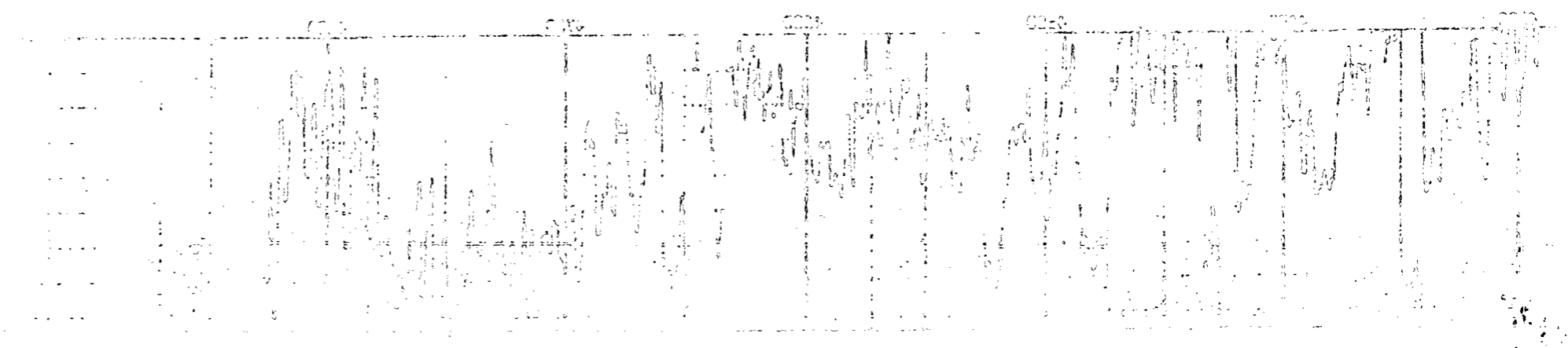
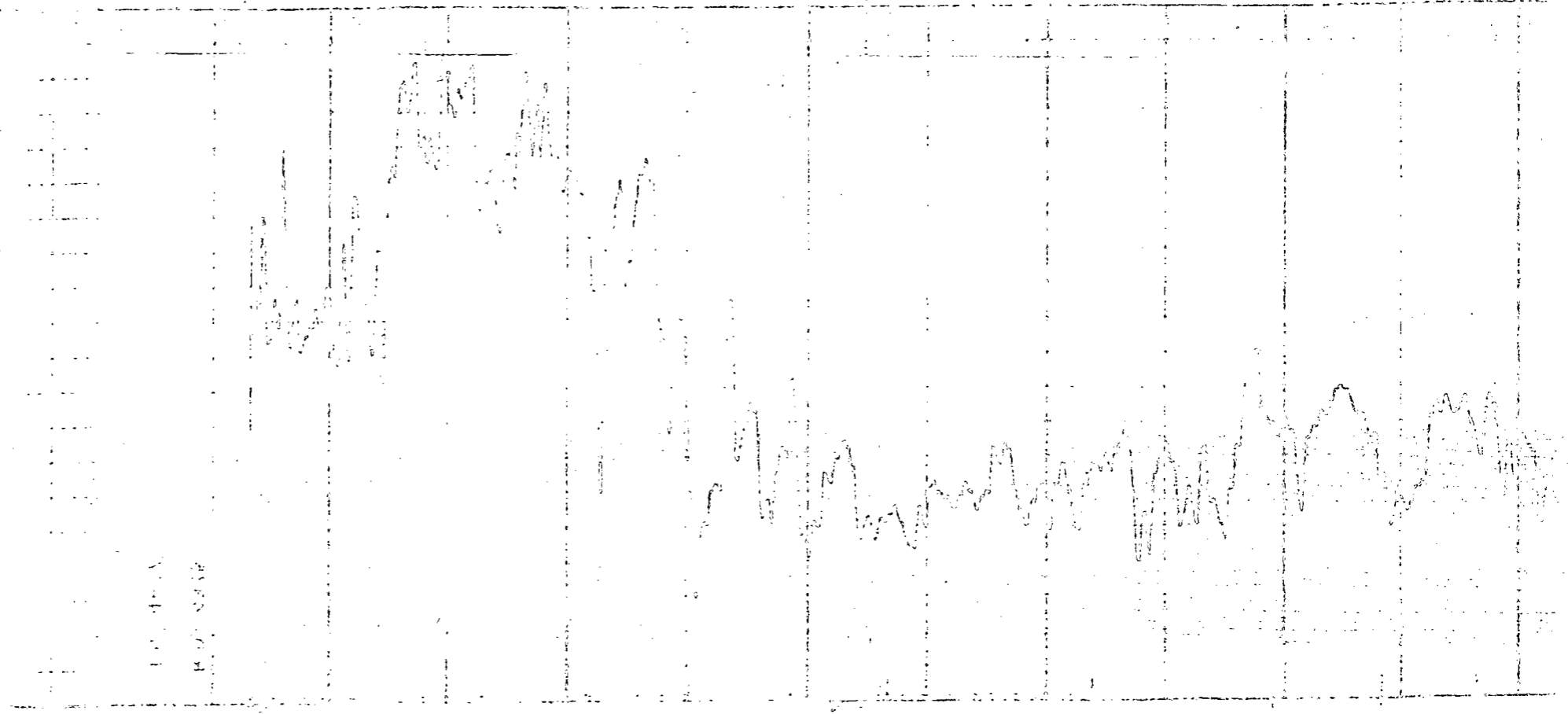
Coordinate System is NM-W. Grid Convergence at Surface is -0.822°.

Based Upon Minimum Curvature type calculations, at a Measured Depth of 4913.61ft.,
The Bottom Hole Displacement is 766.35ft., in the Direction of 270.000° (True).

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







DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

311 South First, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87505

Form C-102

Revised October 18, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3004510150	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 001208	Property Name Wallace Gas Com	Well Number 1
OGRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY	Elevation 1640

Surface Location

UL or lot no. UNIT H	Section 35	Township 31N	Range 11W	Lot. Idn	Feet from the 1640	North/South Line NORTH	Feet from the 790	East/West Line EAST	County San Juan
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Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
Dedicated Acreage:		Joint or Infill	Consolidation Code		Order No.				

**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

	OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>	
	Signature	
	Printed Name Pat Archuleta	
	Position Staff Assistant	
Date		SURVEY CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</i>
		<div style="border: 1px solid black; padding: 5px; text-align: center;">02/15/1957</div>
Date of Survey		Signature & Seal of Professional Surveyor <div style="border: 1px solid black; padding: 10px; text-align: center; margin-top: 10px;">James P. Leese</div>
Certificate No.		1463

NEW MEXICO
OIL CONSERVATION COMMISSION

Form C-128

WELL LOCATION AND/OR GAS PRORATION PLAT

DATE February 22, 1957

OPERATOR PAN AMERICAN PETROLEUM CORP. LEASE WALLACE GAS UNIT

WELL NO. 1 SECTION 35 TOWNSHIP 31 NORTH RANGE 11 WEST NMPM

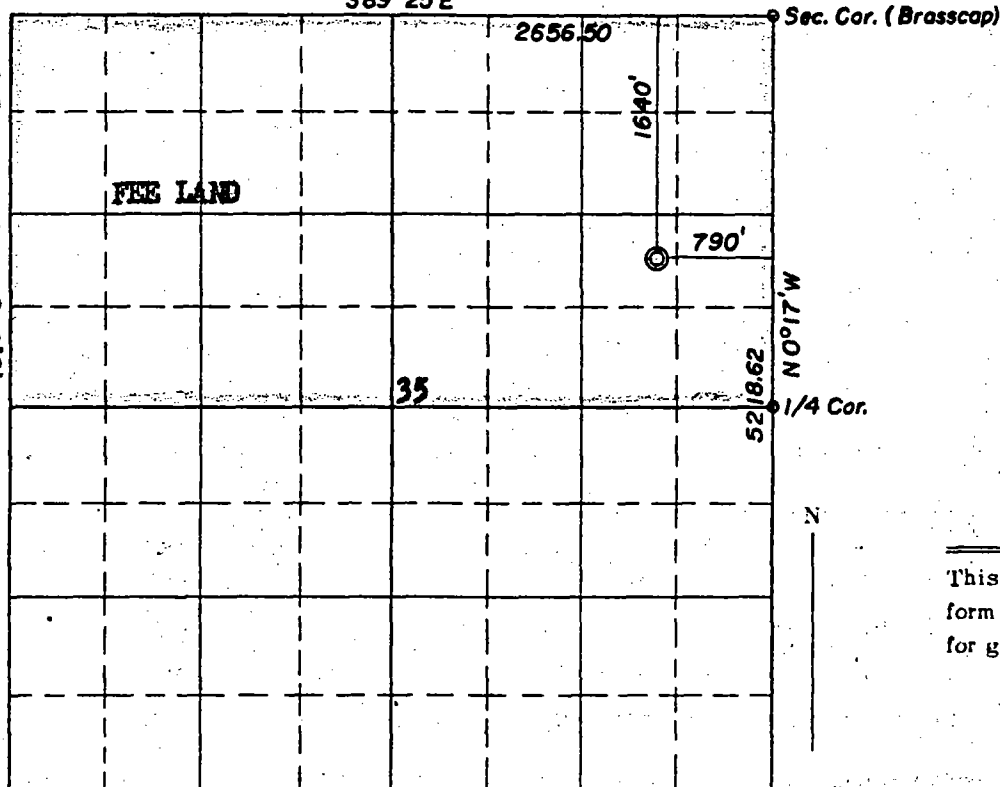
LOCATED 1640 FEET FROM the NORTH LINE 790 FEET FROM the EAST LINE
SAN JUAN COUNTY, NEW MEXICO G.L. ELEVATION to be reported later

NAME OF PRODUCING FORMATION Mesaverde POOL Blanco- DEDICATED ACREAGE 319.82

Acres

Note: All distances must be from outer boundaries of section.
S89°25 E

Robert M. Stinson-10
Charlie Riecke 36.23
Hyde R. Wallace 81.60
Marian F. Hill 30
Earl G. Calloway 14
Leslie E. Mock 20
Melba Uptegrove 8.97
Helen Saline 80
Leo F. Bruington 30.76
L. P. Carr 8.26
319.82



Scale 4 inches equal 1 mile

NOTE

This section of form is to be used for gas wells only

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed 15 FEBRUARY 1957

James P. Luese
Registered Professional Engineer and/or Land Surveyor
JAMES P. LUESE
N. MEX. REG. NO. 1463

1. Is this well a Dual Comp.

Yes _____ No X

2. If the answer to Question 1 is yes, are there any otherdually completed wells within the dedicated acreage.

Yes _____

Name R. M. Bauer, Jr.

Position Field Engineer

Pan American Petroleum Corporation
Representing _____

Box 487, Farmington, New Mexico
Address _____

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

Wallace GC #1

ADMINISTRATIVE APPLICATION COVERSHEET

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

Application Acronyms:

[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]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☒ DD ☐ SD

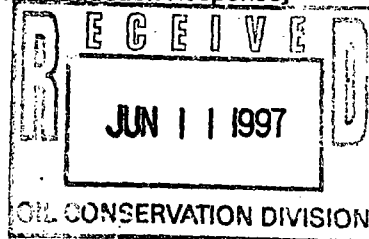
Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM 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

[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

Date

6/5/97



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

**Amoco Production Company
San Juan Business Unit**

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

**Application For Deviated Wellbore - Rule 111.C.
Wallace Gas Com #1
Unit H Section 35-T31N-R11W
Blanco Mesaverde Pool
San Juan County, New Mexico**

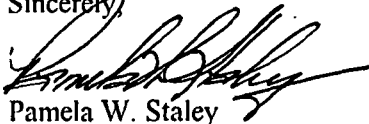
Amoco Production Company hereby requests administrative approval to enter the existing wellbore in the Wallace Gas Com #1 well referenced above and directionally drill the well in the Blanco Mesaverde Pool. The well is currently completed as a marginal producing well in the Blanco Mesaverde Pool. Directionally 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. The main reason that we are directionally drilling this well is to ensure that we move west to stay at an orthodox bottomhole location. Currently the well is located at the farthest east point in the drilling window. We are requesting the Project Area for this well to be the Blanco Mesaverde gas proration unit consisting of N/2 Section 35-T31N-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.

Sincerely,



Pamela W. Staley

Attachments

cc: Mark Rothenberg, Amoco
Pat Archuleta, Amoco
Wellfile
Proration Files

DATA SUMMARY SHEET

WELLNAME

Wallace Gas Com #1

API

30-045-10150

LOCATION

Unit H Section 35-T31N-R11W

ACREAGE IN SPACING UNIT

N/2 SPACING UNIT - 320 ACRES

LOCATION FOOTAGES

1640 FNL X 790 FEL

STANDARD LOCATION?

YES

OTHER WELL(S) PRODUCING IN SPACING UNIT IN MESAVERDE POOL

NO

REASON FOR DEVIATION OR DIRECTIONAL DRILLING

SIDETRACK TO GET AWAY FROM DAMAGED WELLBORE AND INTERCEPT NATURAL FRACTURES. SINCE CURRENT BOTTOMHOLE LOCATION IS AT THE FURTHEST POINT IN THE DRILLING WINDOW (790 FEL) IT IS OUR INTENT TO DEVIATE THIS WELLBORE ONLY TO ENSURE BEING AT AN ORTHODOX BOTTOMHOLE LOCATION

KICKOFF POINT

3500'

DIRECTION TO BE DRILLED

WEST

TYPE CURVE

HIGH ANGLE

LATERAL DISTANCE FROM VERTICAL OR ORIGINAL WELLBORE

ESTIMATE 766' AT 270 DEGREES TO STAY AT AN ORTHODOX BOTTOMHOLE LOCATION

OFFSET OPERATOR LIST

Wallace Gas Com #1

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

Aztec Oil and Gas Corporation
6658 Village Drive
Casper, Wyoming 82604-3606

Great Western Drilling Company
P.O. Box 1659
Midland, Texas 79702

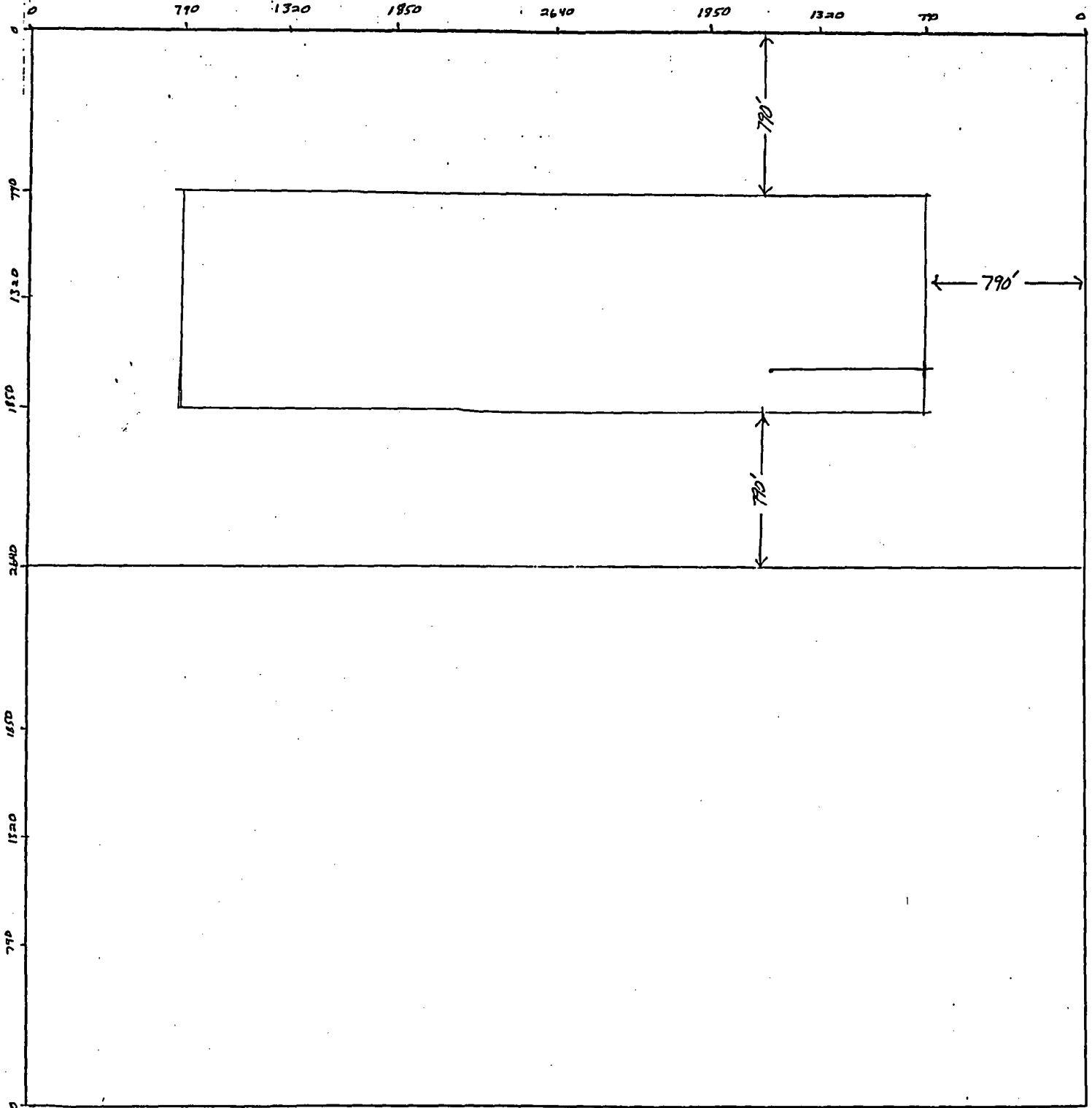
ENGINEERING CHART

SUBJECT Wallace Gas Com 1 - 30045101501640' FNL x 790' FEL SECTION 35 - 31N-11W

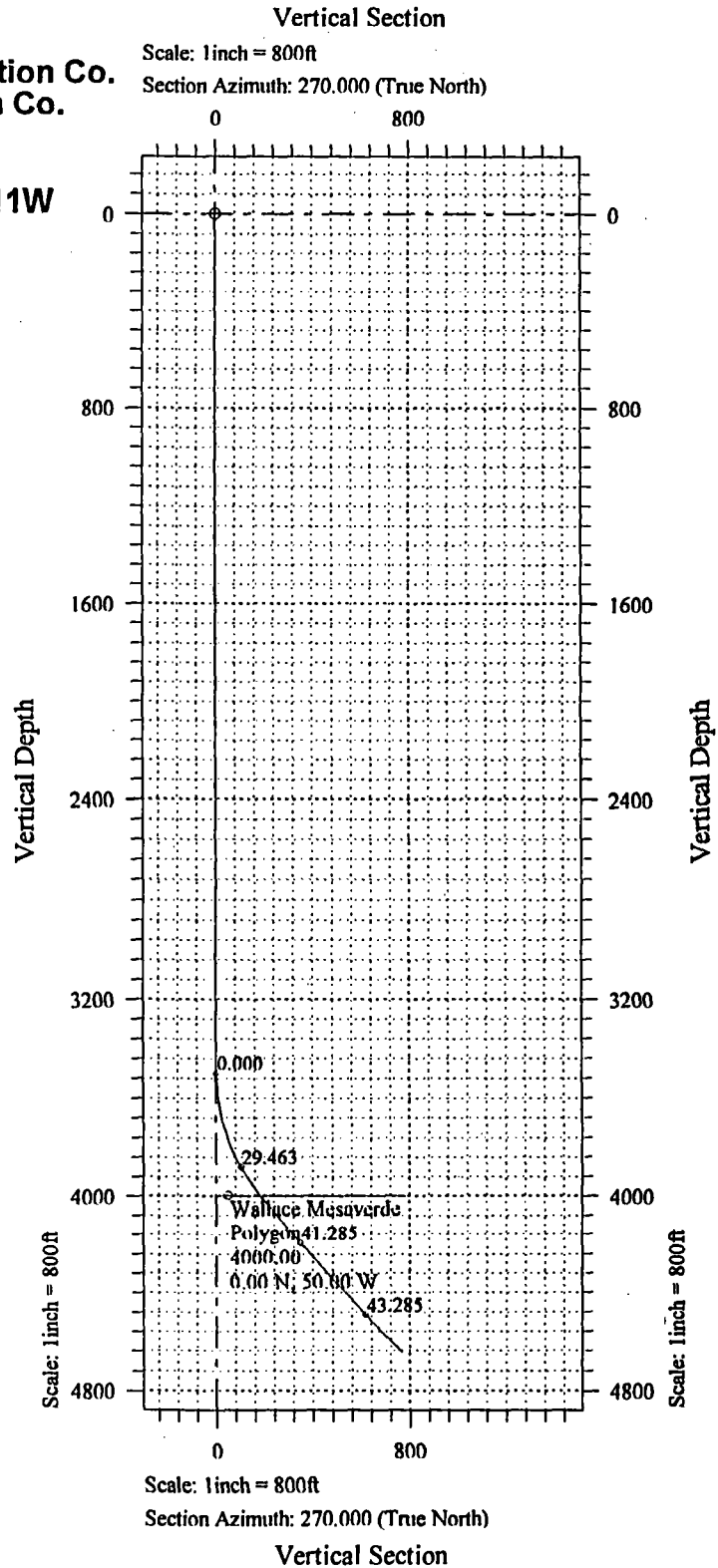
Appn _____

Date _____

By _____



Customer: Amoco Production Co.
Folder: Amoco Production Co.
Field: New Mexico
Project: Re-Entry Wells
Structure: Sec 35-T31N-R11W
Well: Wallace Gas Com 1

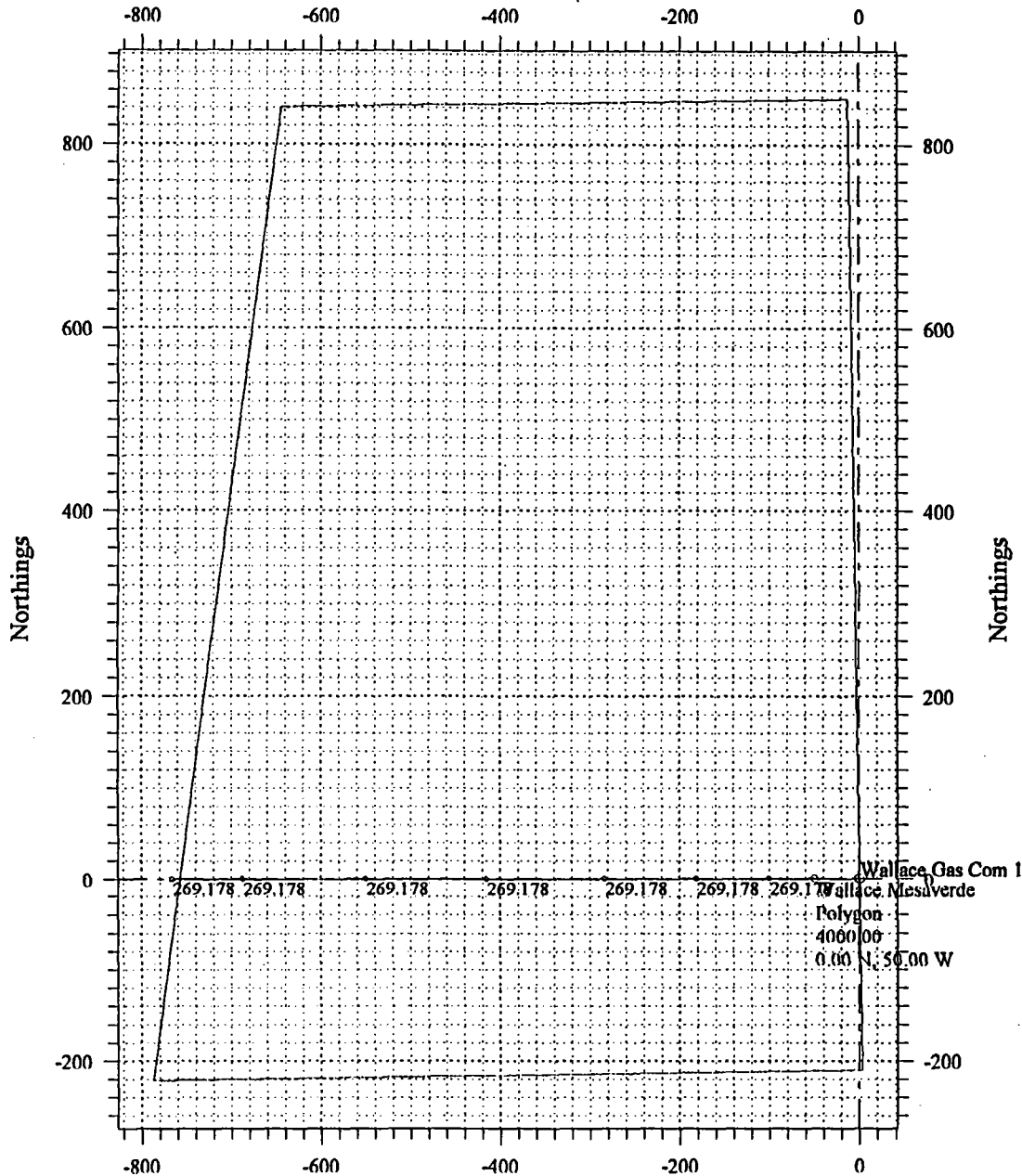


Prepared:	Checked:	Approved:
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Customer: Amoco Production Co.
Folder: Amoco Production Co.
Field: New Mexico
Project: Re-Entry Wells
Structure: Sec 35-T31N-R11W
Well: Wallace Gas Com 1

Eastings

Scale: 1 inch = 200ft



Scale: 1 inch = 200ft

Reference is True North

Eastings

Prepared:

Checked:

Approved:

Sperry-Sun Drilling Services

Proposal Report for Wallace Gas Com 1 - Re-Entry Well



Amoco Production Co.
New Mexico

Re-Entry Wells
Sec 35-T31N-R11W

Measured Depth (ft)	Incl.	Azlm.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
3500.00	0.000	0.000	3500.00	0.00 N	0.00 E	0.00	0.000
4043.05	40.000	270.000	4000.00	0.00 N	181.99 W	181.99	7.366
4913.81	44.353	270.000	4645.00	0.00 N	766.35 W	766.35	0.500

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

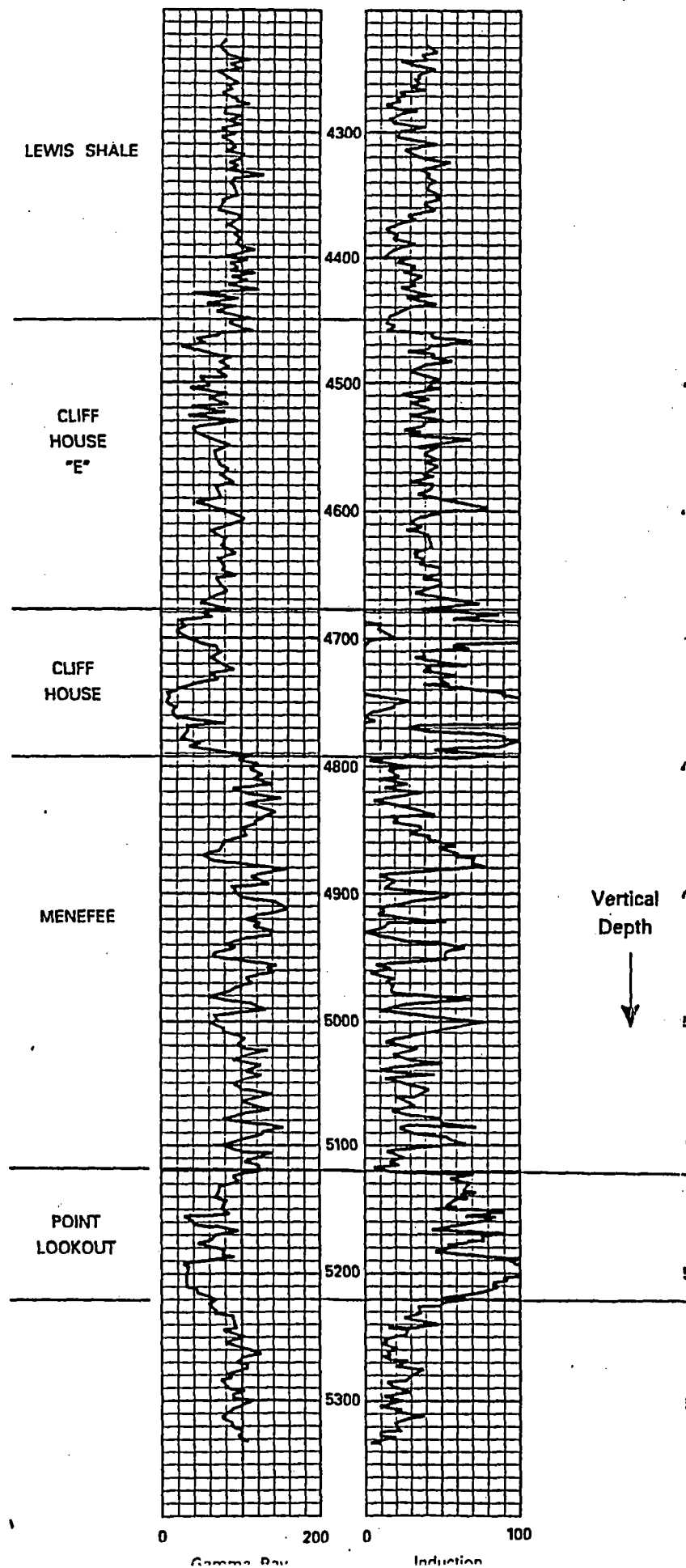
The Dogleg Severity is in Degrees per 100ft.

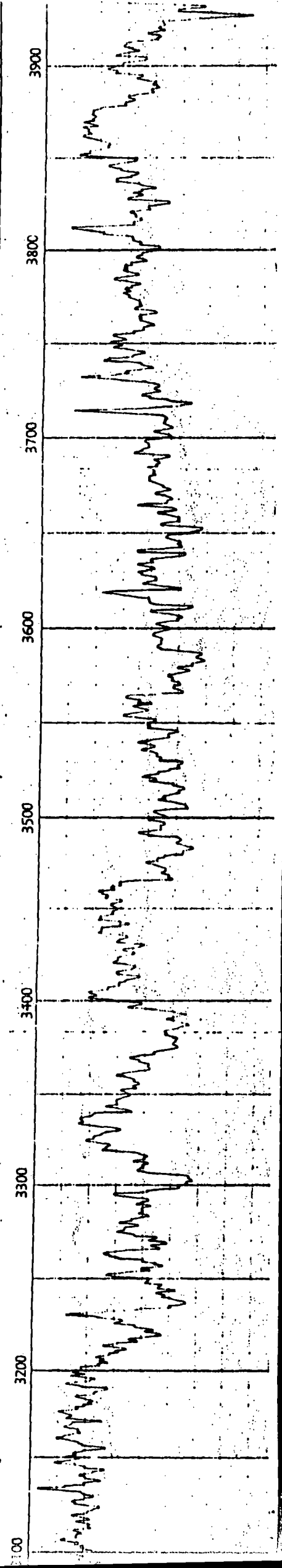
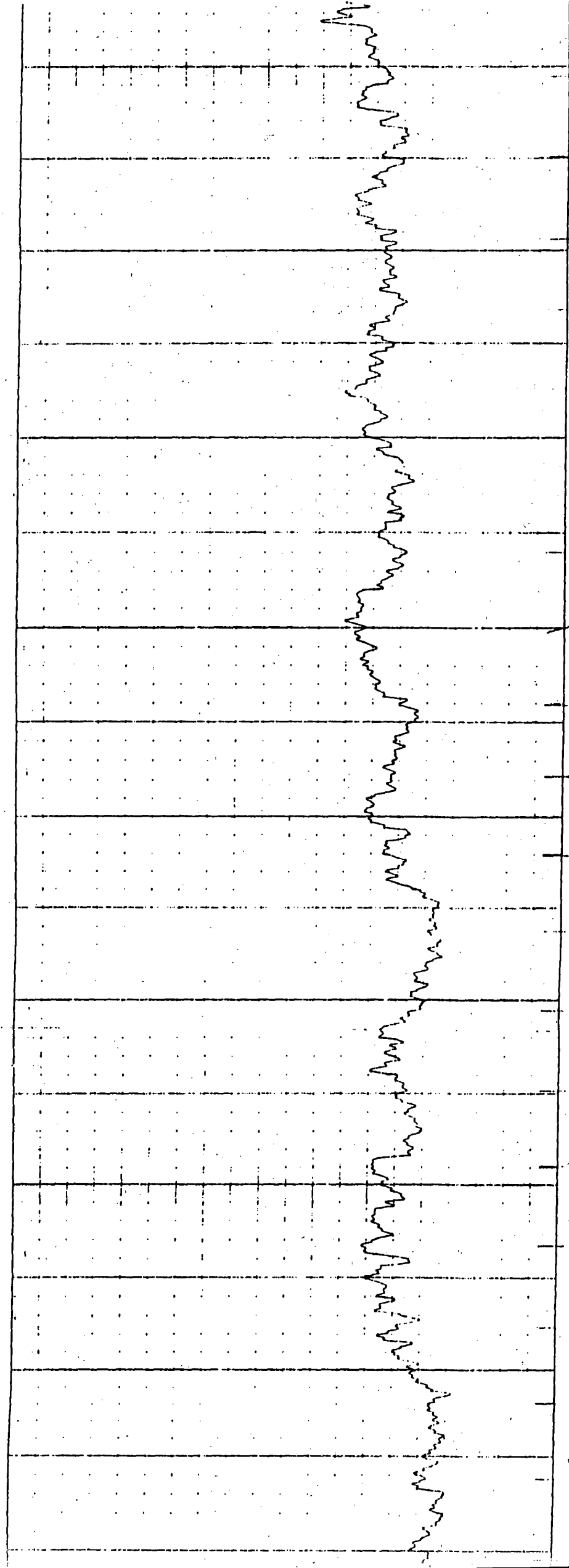
Vertical Section is from Well and calculated along an Azimuth of 270.000° (True).

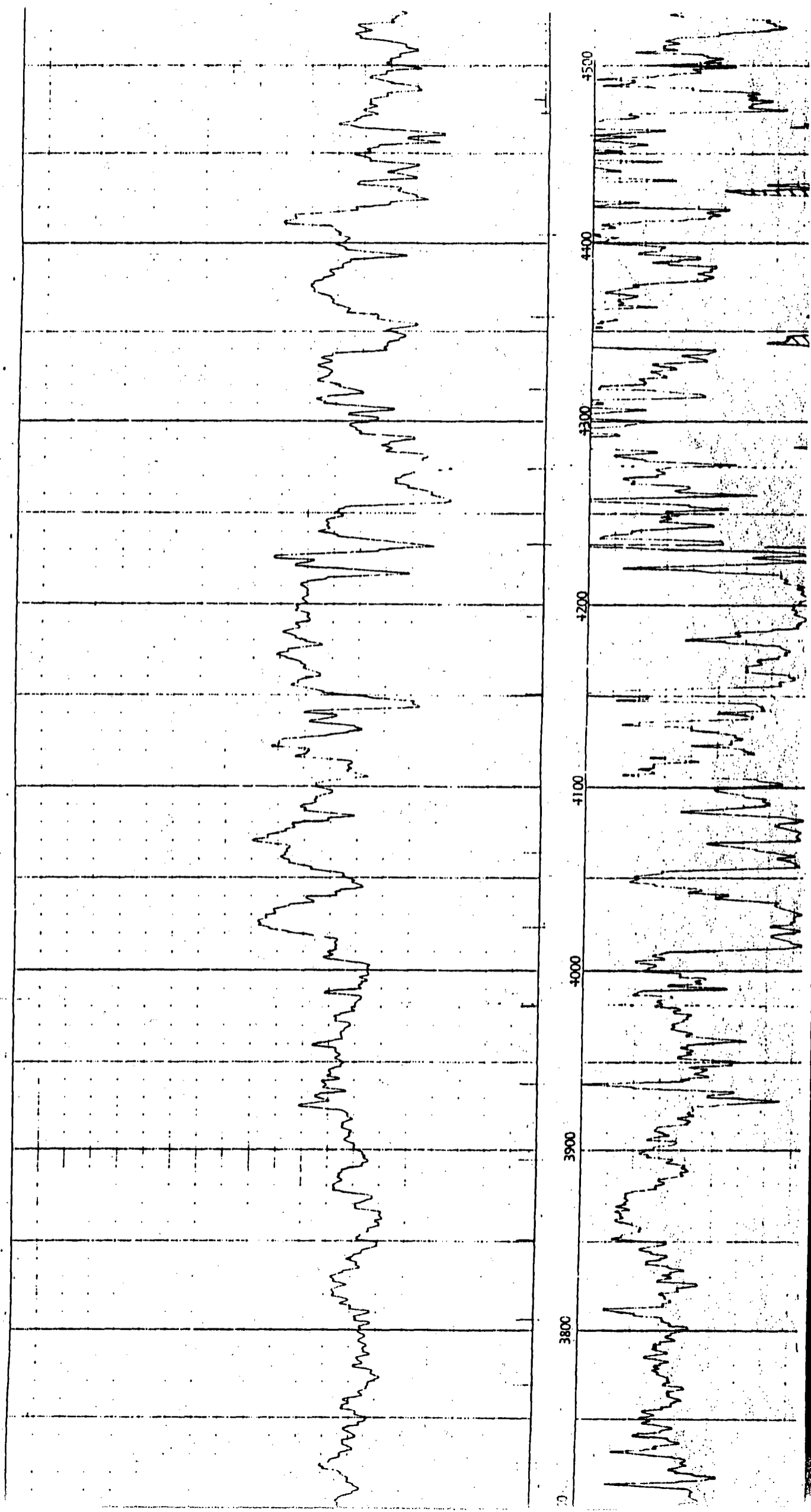
Coordinate System is NM-W. Grid Convergence at Surface is -0.822°.

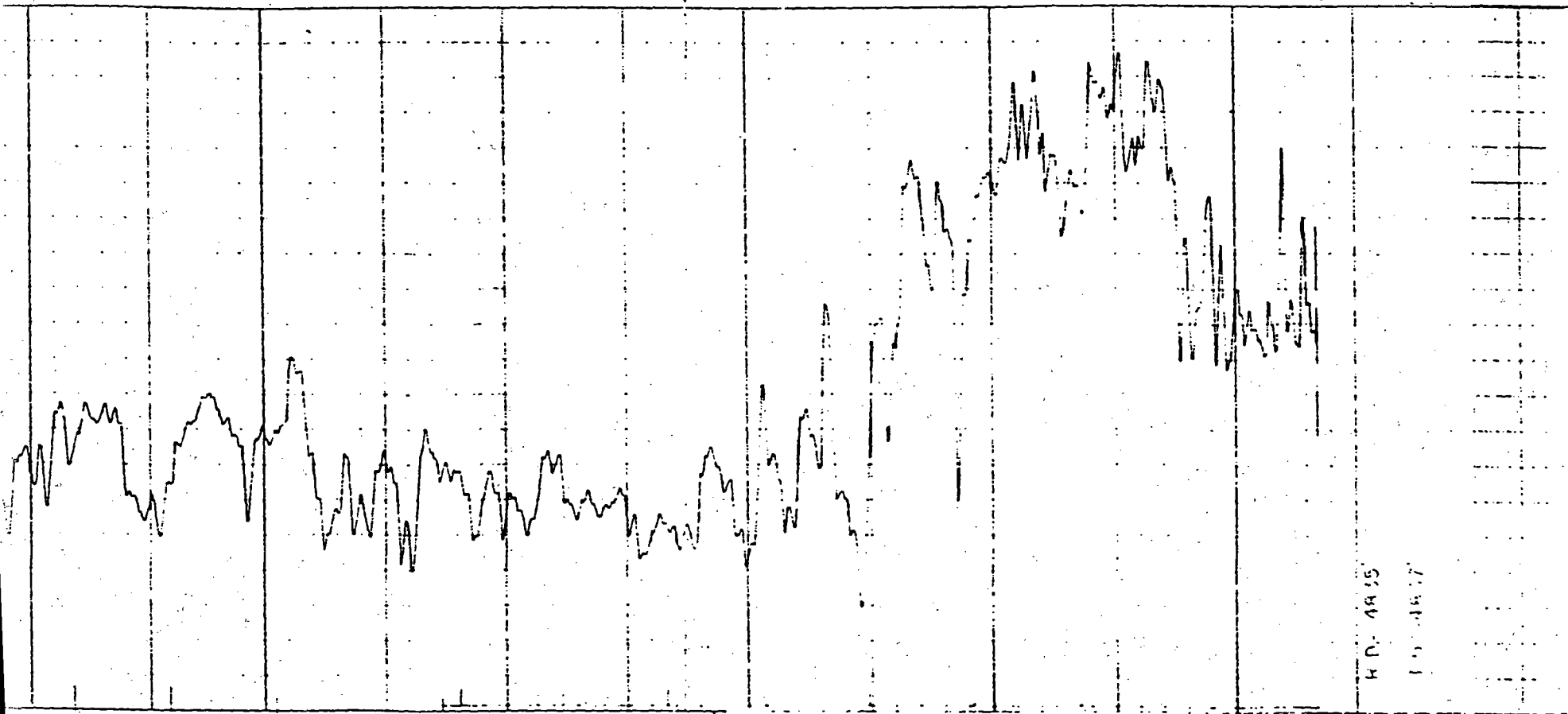
Based Upon Minimum Curvature type calculations, at a Measured Depth of 4913.61ft.,
The Bottom Hole Displacement is 766.35ft., in the Direction of 270.000° (True).

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



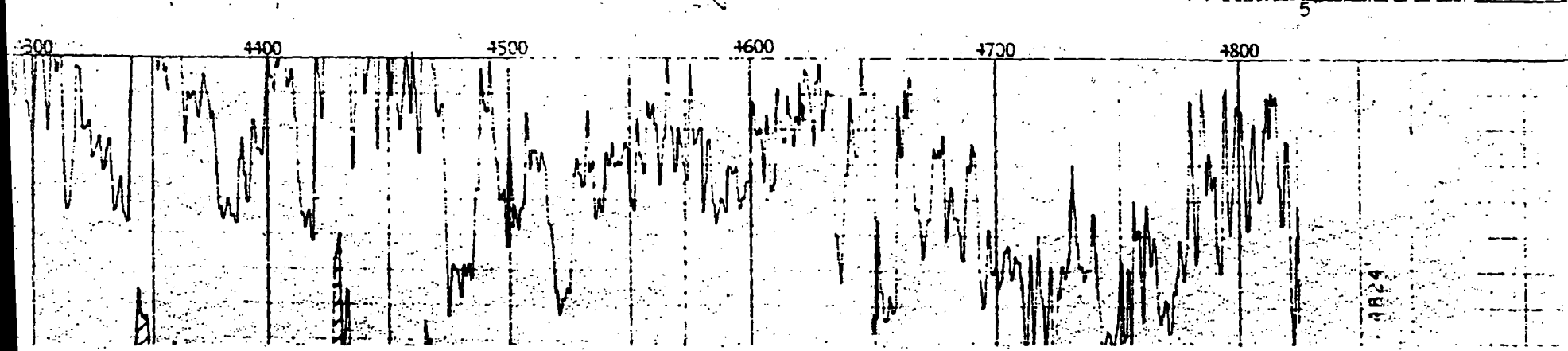






40-4935

10-4617



4824

4300 4400 4500 4600 4700 4800

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

311 South First,, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

Form C-102

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3004510150	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 001208	Property Name Wallace Gas Com	Well Number 1
OGRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY	Elevation 1640

Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
UNIT H	35	31N	11W		1640	NORTH	790	EAST	San Juan

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West Line	County

Dedicated Acreage:	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>	
	Signature	
	Printed Name Pat Archuleta	
	Position Staff Assistant	
Date		SURVEY CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</i>
Date of Survey 02/15/1957		Signature & Seal of Professional Surveyor James P. Leese
Certificate No. 1463		

WELL LOCATION AND/OR GAS PRORATION PLAT

DATE February 22, 1957

OPERATOR PAN AMERICAN PETROLEUM CORP. LEASE WALLACE GAS UNIT

WELL NO. 1 SECTION 35 TOWNSHIP 31 NORTH RANGE 11 WEST NMPM

LOCATED 1640 FEET FROM the NORTH LINE 790 FEET FROM the EAST LINE

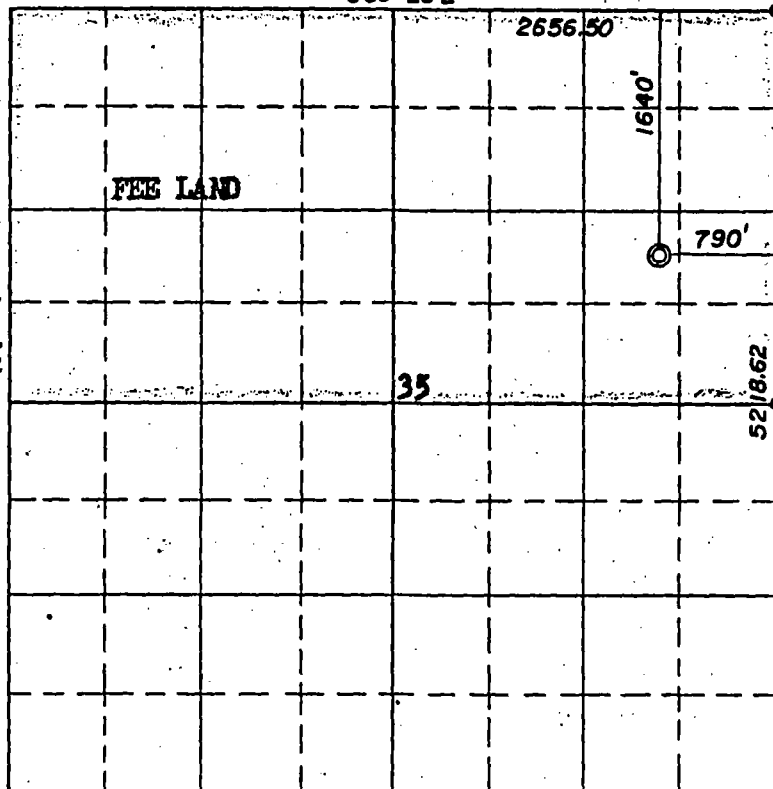
SAN JUAN COUNTY, NEW MEXICO G.L. ELEVATION to be reported later

NAME OF PRODUCING FORMATION Mesaverde POOL Blanco-- DEDICATED ACREAGE 319.82

Acres

Note: All distances must be from outer boundaries of section.
589°25'E

Robert M. Stinson-10
Charlie Riecke 36.23
Hlyde R. Wallace 81.60
Marion F. Hill 30
Earl G. Calloway 14
Leslie E. Mock 20
Melba Uptegrove 8.97
Helen Saline 80
Geo. F. Bruington 30.76
L. P. Carr 8.26
319.82



Sec. Cor. (Brasscap)

N 0°17' W

1/4 Cor.

N

NOTE

This section of form is to be used for gas wells only

Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed 15 FEBRUARY 1957

James P. Lease
Registered Professional Engineer and/or Land Surveyor
JAMES P. LEASE
N. MEX. REG. NO. 1463

1. Is this well a Dual Comp.
Yes _____ No X

2. If the answer to Question 1 is yes, are there any other dually completed wells within the dedicated acreage.

Yes R. M. Bauer, Jr.
Name R. M. Bauer, Jr.

Position Field Engineer

Pan American Petroleum Corporation
Representing _____

Box 487, Farmington, New Mexico
Address _____

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

07/21/97 18:39:45
OGOMES -EMFJ
PAGE NO: 1

Sec : 35 Twp : 31N Rng : 11W Section Type : NORMAL

D 40.00 Fee owned	C 40.00 Fee owned A A	B 40.00 Fee owned	A 40.00 Fee owned
E 40.00 Fee owned	F 40.00 Fee owned	G 40.00 Fee owned	H 40.00 Fee owned A A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

07/21/97 18:39:49
OGOMES -EMFJ
PAGE NO: 2

Sec : 35 Twp : 31N Rng : 11W Section Type : NORMAL

L 40.00 Fee owned	K 40.00 Fee owned	J 40.00 Fee owned	I 40.00 Fee owned
M 40.00 Fee owned	N 40.00 Fee owned	O 40.00 Federal owned	P 40.00 Federal owned
A	A	A	

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

Mike Stogner

From: Ernie Busch
To: Mike Stogner
Subject: RE: Rule 111: Directional Drilling
Date: Thursday, July 17, 1997 1:15PM
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:

- | | | |
|-----|--|----------------------|
| (1) | Phillips Petroleum Company
San Juan "32-7" Unit Well No. 240
Sections 19/20, T32N, R7W
Basin Fruitland Coal Gas Pool; | (Recommend Approval) |
| (2) | Amoco Production Company
Nye "LS" Well No. 1-A
E/2 Sec. 23-T31N-R11W
Blanco-Mesaverde Pool; | (Recommend Approval) |
| (3) | Amoco Production Company
<u>Wallace Gas Com Well No. 1</u>
N/2 Sect. 35-T31N-R11W
Blanco-Mesaverde Pool; | (Recommend Approval) |
| (4) | Amoco Production Company
Schwerdtfeger "LS" Well No. 2-A
N/2 Sec. 27-T31N-R9W
Blanco-Meseaverde Pool; | (Recommend Approval) |
| (5) | Amoco Production Company
Prichard "A" Well No. 2-A
E/2 Sec. 1-T30N-R9W
Blanco-Mesaverde Pool; | (Recommend Approval) |
| (6) | Amoco Production Company
Florance Well No. 18-R
W/2 Sec. 11-T30N-R9W
Blanco-Mesaverde Pool; | (Recommend Approval) |
| (7) | Amoco Production Company
Fields "A" Well No. 1
N/2 Sec. 25-T32N-R11W
Blanco-Mesaverde Pool; and, | (Haven't Seen It) |
| (8) | Amoco Production Company
Lodewick Well No. 1
18-T27N-R9W
Basin-Fruitland Coal Gas Pool/Fulcher Kutz Pictured Cliffs Pool. | (Haven't Seen It) |