



December 6, 1995

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

Southern

Rockies

Business

Unit

29-32-10

DEC 11 1995
OIL CON. DIV.
DIST. 3

Notice of Change of Plans

Barnes LS #6A Well - NMOCD Administrative Order DD-125(H)

→ **Scott LS #3 Well - NMOCD Administrative Order DD-112(H)**

Blanco Mesaverde Pool

San Juan County, New Mexico

This letter is to notify you of a change in our plans for drilling two high angle/horizontal wells which have previously been approved by your office. Amoco Production Company is planning to drill the two above referenced wells as high angle (45 degree) directional wellbores as shown on the attached wellbore directional plats. The NMOCD orders referenced above approved these two wells as "horizontal" wellbores. This will require a change in the kick-off points and lateral length and angle that is set forth as condition (1) in the above referenced orders. All other conditions set forth in the orders regarding these wells will not be affected. It is our understanding that modifications of this nature are allowed by the division without requiring a new application filing or notice to offset operators.

We are providing information on each well for your files as follows:

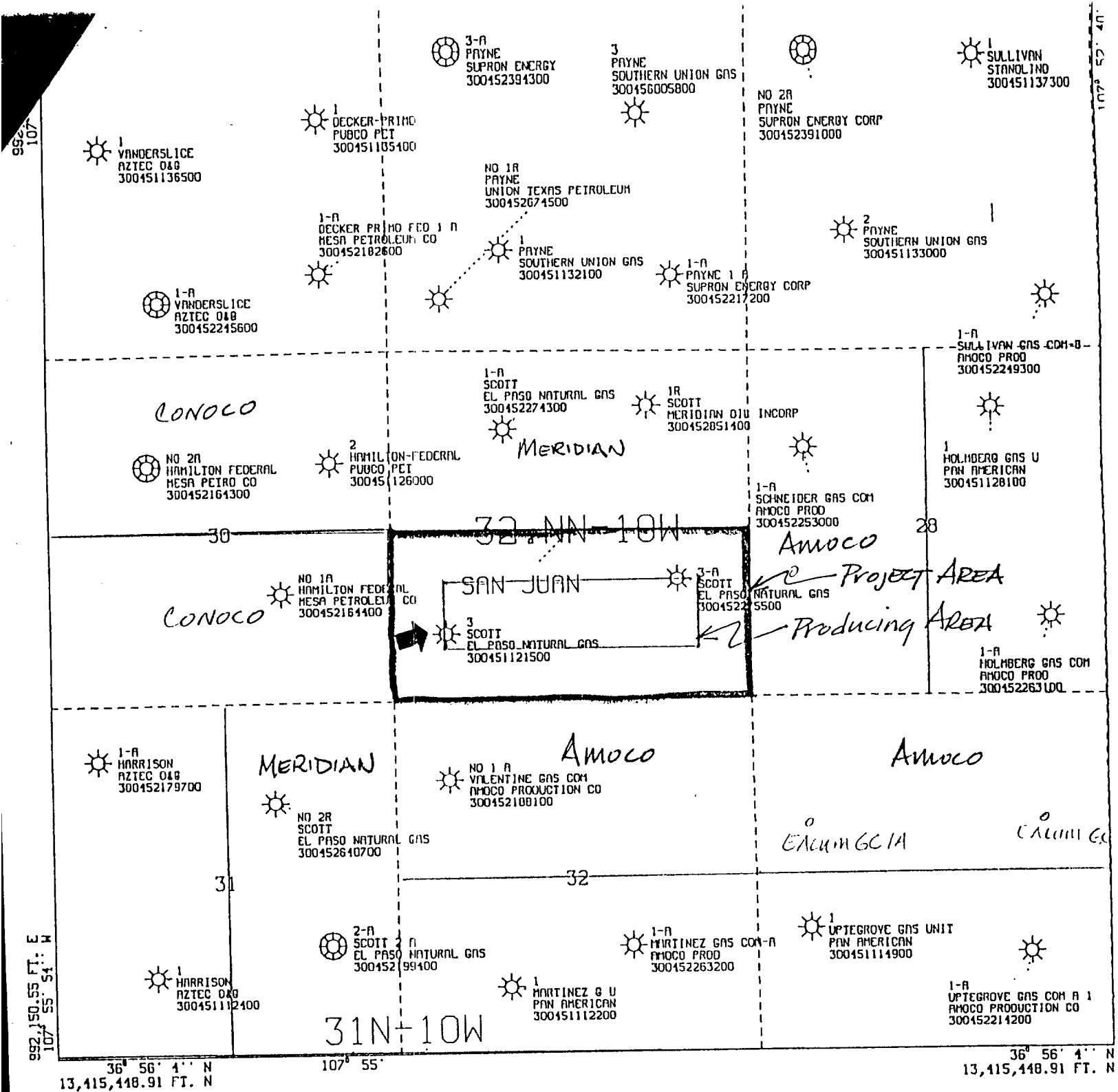
- 1) a plat showing the well location, project area and producing area for the project well and the offset spacing units, their wells and operators;
- 2) a plat showing the directional wellbore plan in both the horizontal and vertical plan view;
- 3) a proposed direction plan for the wellbore.

Sincerely,

JW Hawkins
J. W. Hawkins

cc: Jack St. John
Gail Jefferson

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



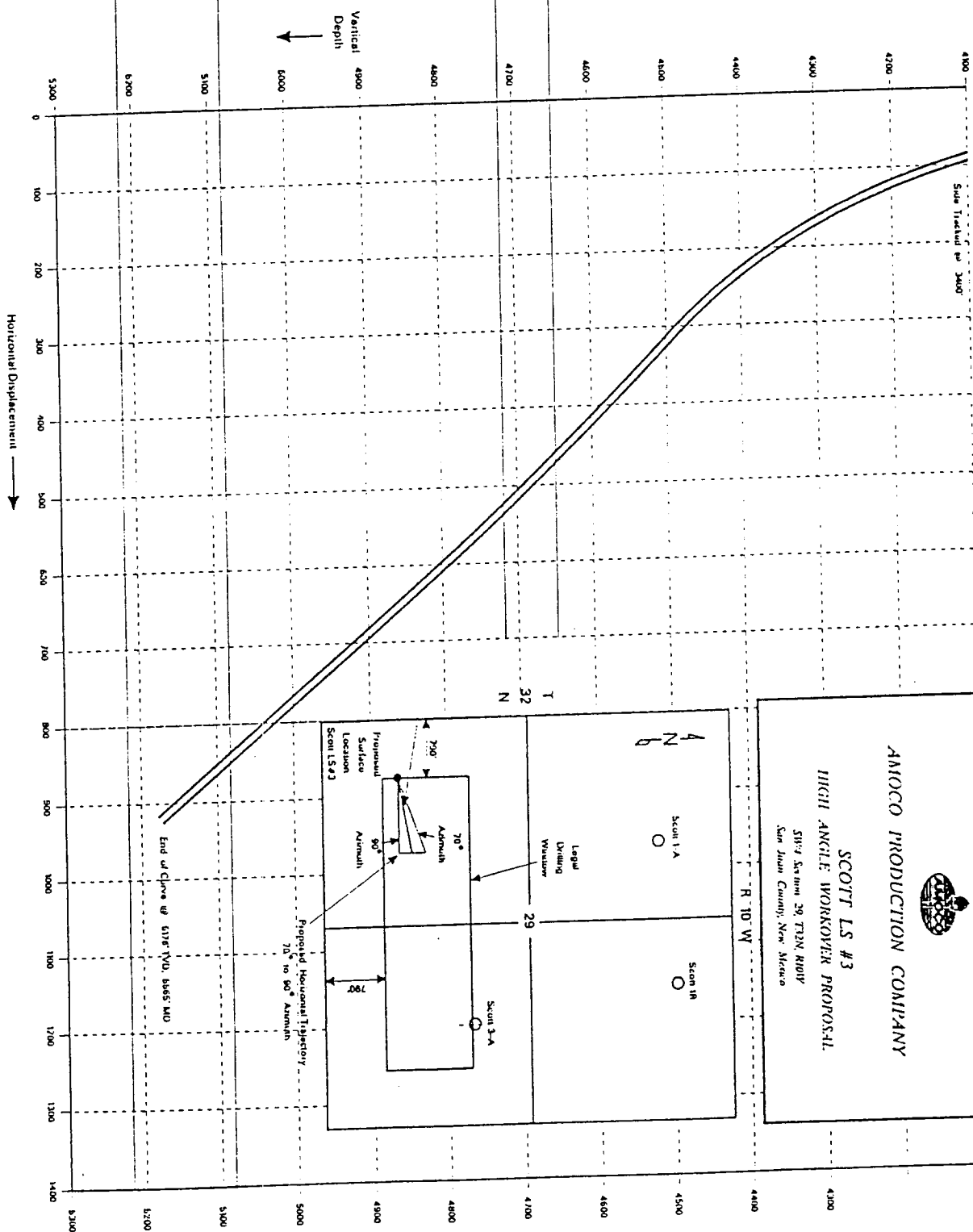
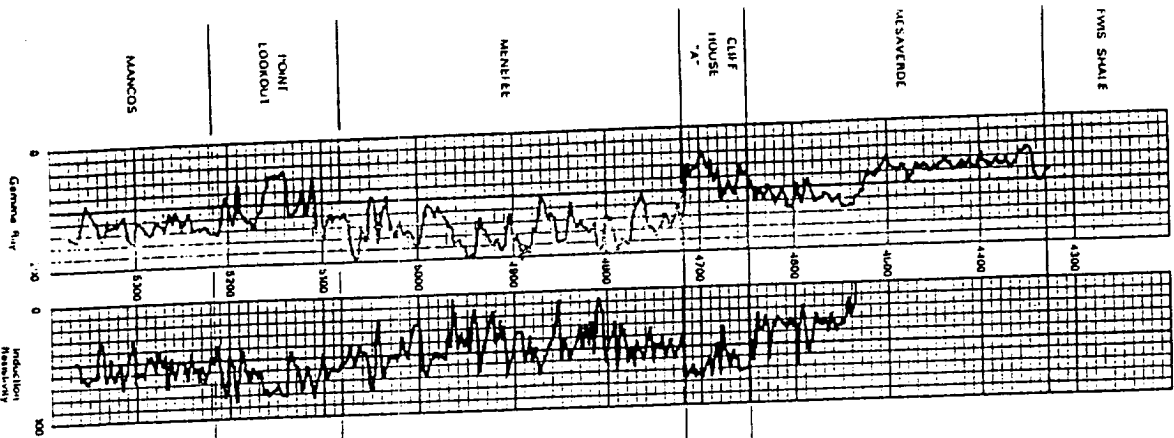
All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY
PLAT MAP
Scott LS 3
Offset Mesaverde Wells Only

SCALE 1 IN. = 2,000 FT. JUL 5, 1995

POLYCONIC CENTRAL MERIDIAN - 107° 51' 17" W LONG
SPHEROID - 61

SCOTT LS #3
SW 1/4, 29 T32N R10W
San Juan County, New Mexico

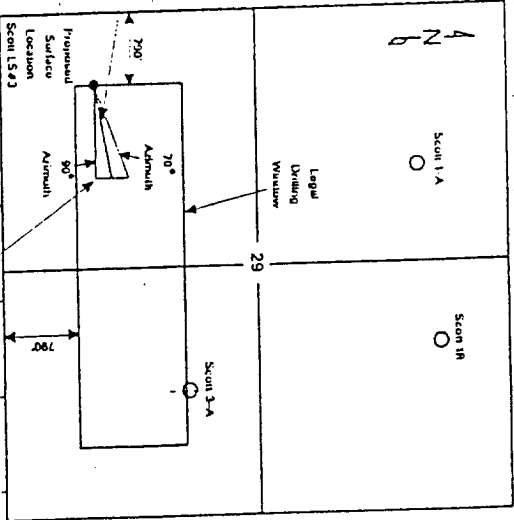


AMOCO PRODUCTION COMPANY

SCOTT LS #3

HIGH ANGLE WORKOVER PROPOSAL

SW 1/4, Section 29 T32N R10W
San Juan County, New Mexico



Units are FEET

Hi Angle
11/01/95 (13:35 hrs)
J

T I	Meas. Depth	Survey Incl Dir	Depth (TVD)	North -South	East -West	Vert. Section	Closure Dist Dir	Dog Leg
	.00	.00 20.00	.00	.00	.00	.00	0 0	.0
3400.00	.00	20.00	3400.00	.00	.00	.00	0 0	.0
3500.00	3.00	20.00	3499.95	2.46	.90	1.37	3 20	3.0
3600.00	7.00	20.00	3599.55	10.65	3.88	5.93	11 20	4.0
3700.00	12.00 11.00	20.00	3698.15	26.15	9.52	14.56	28 20	5.0
3800.00	15.00	20.00	3795.38	48.09	17.50	26.77	51 20	3.0
3900.00	18.00	20.00	3891.25	74.77	27.21	41.62	80 20	3.0
4000.00	21.00	20.00	3985.50	106.14	38.63	59.08	113 20	3.0
4100.00	24.00	20.00	4077.88	142.09	51.72	79.10	151 20	3.0
4200.00	27.00	30.00	4168.17	180.89	70.04	104.81	194 21	5.2
4300.00	30.00	40.00	4256.09	219.73	97.48	139.47	240 24	5.6
4400.00	35.00	50.00	4340.47	257.37	135.57	184.32	291 28	7.3
4500.00	40.00	60.00	4419.85	291.92	185.45	240.11	346 32	7.9
4600.00	45.00	70.00	4493.64	320.14	246.62	305.68	404 38	8.4
4700.00	45.00	80.00	4564.44	338.39	314.74	376.08	462 43	7.1
4800.00	45.00	90.00	4635.24	344.54	385.01	446.15	517 48	7.1
4821.00	45.00	92.00	4650.09	344.28	399.85	460.65	528 49	6.7
4900.00	45.00	100.00	4706.00	338.45	455.32	513.83	567 53	7.2
5000.00	45.00	110.00	4776.80	320.19	523.44	576.92	614 59	7.1
5100.00	45.00	110.00	4847.51	296.01	589.89	637.19	660 63	.0
5200.00	45.00	110.00	4918.22	271.83	656.34	697.45	710 68	.0
5300.00	45.00	110.00	4988.93	247.64	722.78	757.72	764 71	.0
5400.00	45.00	110.00	5059.64	223.46	789.23	817.98	820 74	.0
5500.00	45.00	110.00	5130.35	199.27	855.68	878.24	879 77	.0
5565.00	45.00	110.00	5176.31	183.55	898.87	917.42	917 78	.0

990' FSL
-184'
~~806'~~
+184'
1174' FSL

790' FWL
+ 899'
1689' FWL

179.522

2.179.5

174.522

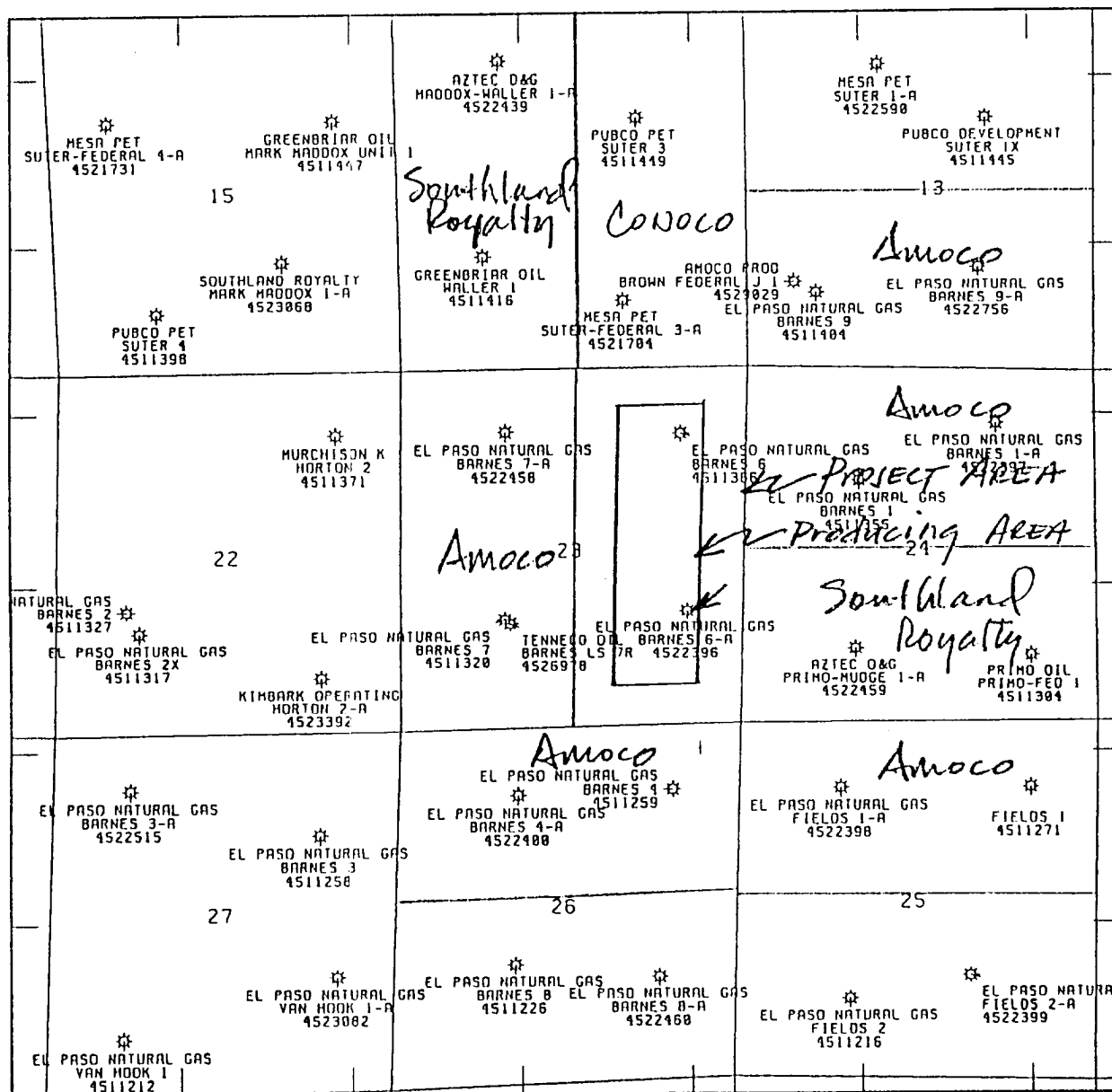
2.174.5

169.522

2.169.5

164.522

2.164.5



455.159

460.159

465.159

470.159



1:24000

STATUTE MILES 0 .5 STATUTE MILES

KILOMETERS 0 .5 1.0 KILOMETERS

AMOCO E&P SECTOR			
SOUTHERN ROCKIES BUSINESS UNIT			
SAN JUAN BASIN			
BARNES 6A			
T32N-R11W			
1:25000	N. LAMBERT	1:50000	



AMOCO PRODUCTION COMPANY

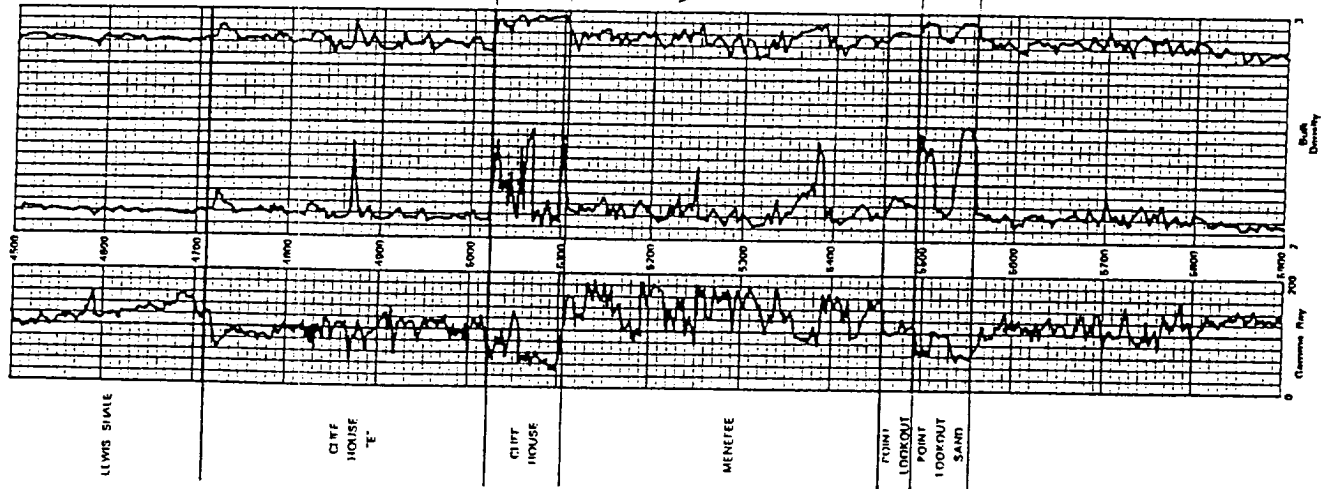
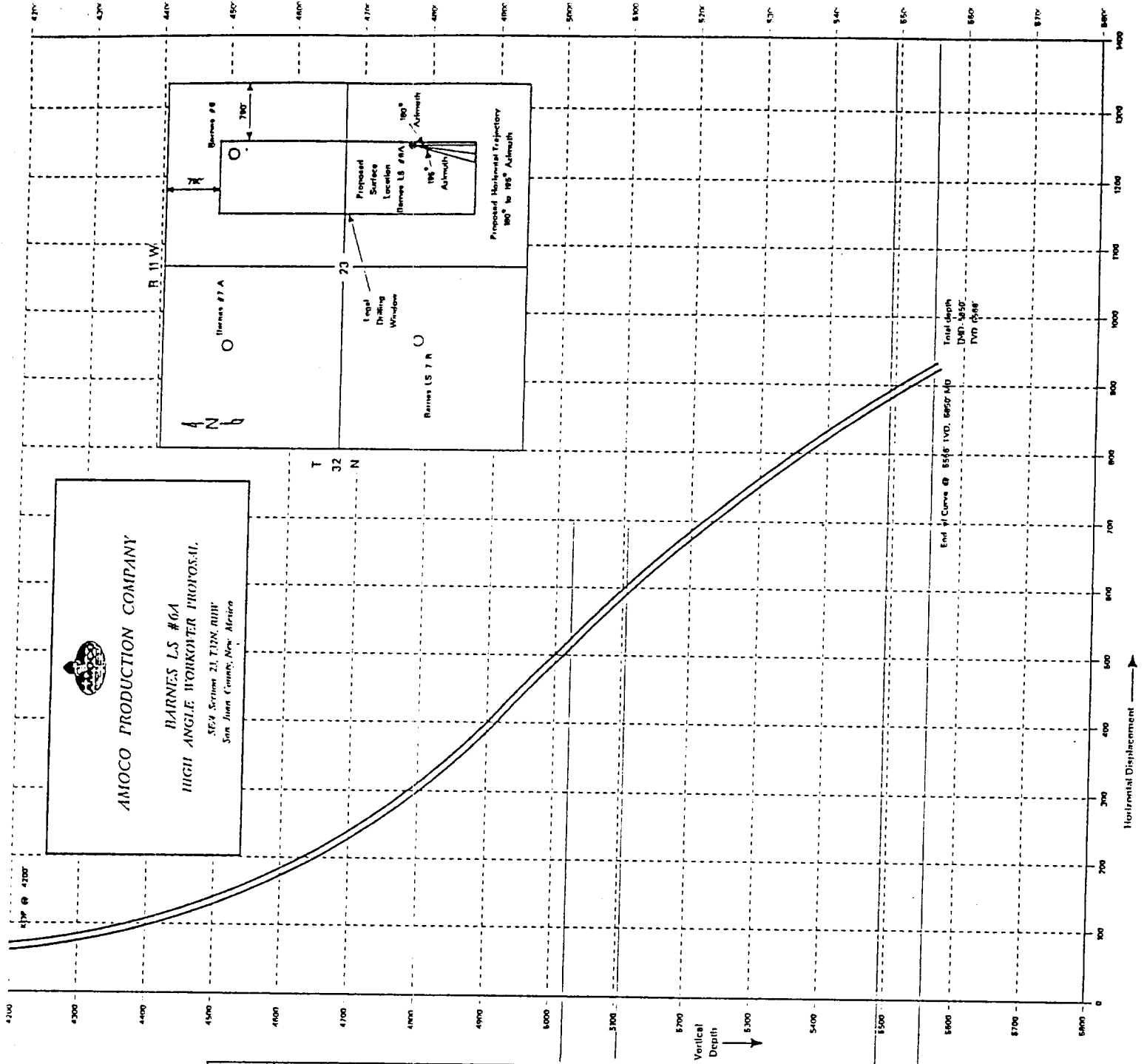
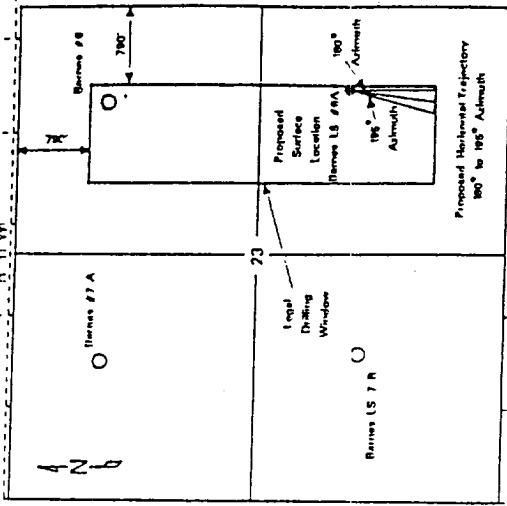
BARNES LS #6A
HIGH ANGLE WORKOVER PROPOSAL

SE4 Section 23, T12N, R11W
San Juan County, New Mexico

BARNES #6A
SE. 23-32N-11W
KB 6462
Cedar Hill Area

T 32 N

R 11 W



Units are FEET

001101 L U W 1.

11/03/95

J

T	Meas.	Survey		Depth	North	East	Vert.	Closure		Dog
I	Depth	Incl	Dir	(TVD)	-South	-West	Section	Dist	Dir	Leg
	.00	.00	180.00	.00	.00	.00	.00	0	0	.0
	3375.00	.00	180.00	3375.00	.00	.00	.00	0	0	.0
	3500.00	3.00	180.00	3499.94	-3.27	.00	3.27	3	180	2.4
	3600.00	4.00	180.00	3599.76	-9.38	.00	9.38	9	180	1.0
	3700.00	5.00	180.00	3699.45	-17.22	.00	17.22	17	180	1.0
	3800.00	5.00	180.00	3799.06	-25.94	.00	25.94	26	180	.0
	3900.00	5.00	180.00	3898.68	-34.65	.00	34.65	35	180	.0
	4000.00	5.00	180.00	3998.30	-43.37	.00	43.37	43	180	.0
	4200.00	5.00	180.00	4197.54	-60.80	.00	60.80	61	180	.0
	4300.00	10.00	180.00	4296.66	-73.85	.00	73.85	74	180	5.0
	4400.00	15.00	180.00	4394.25	-95.49	.00	95.49	95	180	5.0
	4500.00	20.00	180.00	4489.60	-125.55	.00	125.55	126	180	5.0
	4600.00	25.00	180.00	4581.95	-163.80	.00	163.80	164	180	5.0
	4700.00	30.00	180.00	4670.63	-209.96	.00	209.96	210	180	5.0
	4800.00	35.00	180.00	4754.94	-263.68	.00	263.68	264	180	5.0
	4900.00	40.00	180.00	4834.25	-324.53	.00	324.53	325	180	5.0
	5000.00	45.00	180.00	4907.95	-392.07	.00	392.07	392	180	5.0
	5100.00	45.00	180.00	4978.66	-462.78	.00	462.78	463	180	.0
	5150.00	45.00	180.00	5014.02	-498.14	.00	498.14	498	180	.0
	5165.00	45.00	180.00	5024.63	-508.74	.00	508.74	509	180	.0
	5175.00	45.00	180.00	5031.70	-515.81	.00	515.81	516	180	.0
	5200.00	45.00	180.00	5049.38	-533.49	.00	533.49	533	180	.0
	5300.00	43.00	180.00	5121.31	-602.95	.00	602.95	603	180	2.0
	5340.00	41.00	180.00	5151.03	-629.72	.00	629.72	630	180	5.0
	5440.00	39.00	180.00	5227.63	-693.99	.00	693.99	694	180	2.0
	5500.00	37.00	180.00	5274.91	-730.93	.00	730.93	731	180	3.3
	5600.00	35.00	180.00	5355.81	-789.71	.00	789.71	790	180	2.0
	5700.00	33.00	180.00	5438.71	-845.62	.00	845.62	846	180	2.0
	5800.00	31.00	180.00	5523.51	-898.61	.00	898.61	899	180	2.0
	5850.00	30.00	180.00	5566.59	-923.99	.00	923.99	924	180	2.0



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

March 11, 1996

RECEIVED
MAR 14 1996

OIL CON. DIV.
DIST. 3

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

AMENDED Administrative Order DD-112

Dear Mr. Hawkins:

By Division Administrative Order DD-112(H), dated August 18, 1995, authorization was given Amoco Production Company ("Amoco") to recompleat its existing Scott "LS" Well No. 3 (API No. 30-045-11215), located at a standard gas well location 990 feet from the South line and 790 feet from the West line (Lot 7/Unit M) of Section 29, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico, by milling a window in the existing production casing at a depth of approximately 5,071 feet, kick-off from vertical in an easterly direction with a short radius curve (64 degrees per 100 feet or 90 foot radius), and continue drilling horizontally within the Mesaverde formation a lateral distance of approximately 700 feet in order to further develop the Blanco-Mesaverde Pool underlying an existing 324.44-acre standard gas spacing and proration unit ("GPU") comprising Lots 5, 6, 7, and 8 and the E/2 SW/4 and the W/2 SE/4 (S/2 equivalent) of said Section 29.

Reference is now made to your application dated December 6, 1995, to amend said Order DD-112(H), for authorization to recompleat said well with a high-angle (45 degrees) directionally drilled wellbore instead.

The Division Director Finds That:

- (1) This amendment 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) It is our understanding that Amoco now intends to kick-off from vertical at a depth of approximately 3,400 feet by milling a window in the existing production casing,

drill in an easterly direction, build to an angle of approximately 45 degrees and continue to drill a slant hole in such a manner as to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said well to be approximately 917 feet;

- (3) A high angle wellbore as proposed should provide Amoco a better opportunity to encounter the naturally occurring fracture system in the Mesaverde formation, which should result in a higher production rate and an increased ultimate recovery of gas from this GPU;
- (4) The applicable drilling window or "producing area" for said wellbore will not change from that area prescribed in said original order DD-112(H), which includes that area within the SW/4 equivalent of said Section 29 that is no closer than 790 feet to any quarter section line; and,
- (5) 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) Decretory Paragraph (1) of Division Administrative Order DD-112(H) shall be amended to read in its entirety as follows:

"(1) The applicant, Amoco Production Company, is hereby authorized to recomplete its existing Scott "LS" Well No. 3 (**API No. 30-045-11215**), located at a standard gas well location 990 feet from the South line and 790 feet from the West line (Lot 7/Unit M) of Section 29, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico by milling a window in the existing production casing at a depth of approximately 3,400 feet, kick-off from vertical in an easterly direction, build to an angle of approximately 45 degrees and continue to drill a slant hole in such a manner as to bottom back into the Blanco-Mesaverde Pool, with total horizontal displacement of said well to be approximately 917 feet.

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.

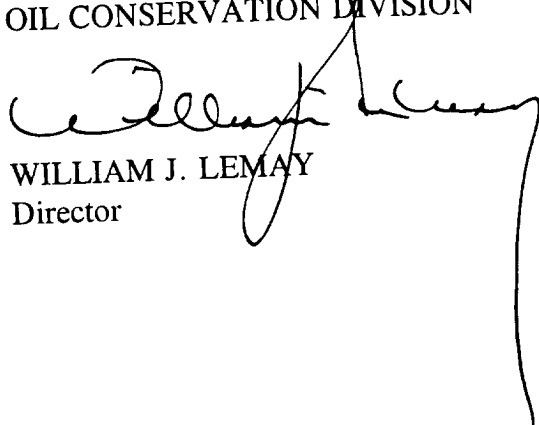
PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined."

(2) All other provisions of said Order DD-112(H), dated August 18, 1995, not in conflict with this change shall remain in full force and effect until further notice.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Aztec ✓
U. S. Bureau of Land Management - Farmington
File: DD-112(H)