

Penetration Information
CORPORATION
A Division of U.S. Steel Corp.

TEMPORARY COMPLETION

COUNTY **LEA** FIELD **Langlie Mattix** STATE **NM**

OPR **AMOCO PRODUCTION CO.** API **30-025-21801**

NO **32** LEASE **Myers "B" Federal** MAP

Sec 9, T24S, R37E CO-ORD

330' FSL, 1980' FWL of Sec SPD **5-1-78** 9-1-82 NM

8 mi NE/Jal CMP **8-28-78**

CSC

8 5/8" at 1081' w/475 SX

5 1/2" at 3596' w/750 SX

WELL CLASS: INIT D FIN SUSELEV			
FORMATION	DATUM	FORMATION	DATE

TD **3596' (QUEEN)** PBD

SUSPENDED OPERATIONS

CONTR **Cactus #63** OPRS ELEV **3257' GL** PD **3600'**

F.R. 3-20-78
(Queen)
5-11-78 TD 3596'; Rng Logs
5-17-78 TD 3596'; Rng Tbg.
Perf (Queen) 3260-90', 3296-3300',
5-25-78 3309-35', 3339-61' w/2 SPF
TD 3596'; Tstg
Acid (3260-3361') 5000 gals (15%)
6-2-78 Frac (3260-3361') 40,000 gals + 45,000# sd
6-9-78 TD 3596'; Tstg
TD 3596'; WOSP
Flwd 660 MCFGPD thru 48/64" chk (3260-
8-28-78 3361')
9-2-78 TD 3596'; Suspended Operations
COMPLETION ISSUED

9-1-82 NM
IC 30-025-70106-78

LEA
AMOCO PRODUCTION CO.

Langlie Mattix
32 Myers "B" Federal
Sec 9, T24S, R37E

NM
Page 41

9-2-78
10-14-78

COMPLETION ISSUED
RE-ISSUE OF SUSPENDED COMPLETION & TO COM
TD: Formerly reported as 3596'

9-1-32 NM
IC 30-025-7010-7



**REPORT
of
SUB-SURFACE
DIRECTIONAL
SURVEY**

AMOCO PRODUCTION COMPANY
COMPANY

SOUTH MATTIX UNIT WELL NO. 32
WELL NAME

LEA COUNTY, NEW MEXICO
LOCATION

JOB NUMBER

WT178-G01143
WT178-G01142
WT578-G1713
WT578-S1714

TYPE OF SURVEY

GYROSCOPIC MULTI SHOT
MAGNETIC MULTI SHOT
GYROSCOPIC MULTI SHOT
MAGNETIC MULTI SHOT

DATE

JAN. 26, 1978
JAN. 26, 1978
May 3, 1978
May 3, 1978

SURVEY BY
LARRY MASSEY

OFFICE
WEST TEXAS

AMOCO PRODUCTION COMPANY
SOUTH MATIX WELL NO.32
LEA COUNTY, NEW MEXICO
EASTMAN WHIPSTOCK INC.

LARRY MASSEY-SURVEYOR
GYROSCOPIC MULTISHOT-WT178-S01143
MAGNETIC MULTISHOT- WT178-S01142
1-26-78

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

MEASURED DEPTH FEET	TRUE VERTICAL DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D M	R E C T A N G U L A R		C L O S U R E		DOG LEG SEVERITY DEG/100FT
				FEET	FEET	FEET	D M	
0.	0.00	0 0	0	0.00	0.00	0.00	0 0	0.0
100.	100.00	0 45	N 77 W	.15 N	.64 W	.65	N 77 0 W	.8
200.	199.99	0 30	N 69 E	.96 N	.69 W	1.19	N 35 47 W	1.2
300.	299.99	0 15	N 61 E	1.24 N	.10 W	1.24	N 4 42 W	.3
400.	399.99	0 15	S 9 E	1.08 N	.23 E	1.10	N 12 11 E	.4
500.	499.99	0 15	S 53 E	.71 N	.45 E	.84	N 32 23 E	.2
600.	599.99	0 15	S 38 E	.41 N	.76 E	.86	N 61 53 E	.1
700.	699.99	0 15	S 47 E	.09 N	1.06 E	1.06	N 85 21 E	.0
800.	799.98	0 15	S 27 E	.26 S	1.32 E	1.34	S 78 48 E	.1
900.	899.98	0 15	S 6 E	.68 S	1.44 E	1.59	S 64 51 E	.1
1000.	999.98	0 15	S 24 E	1.10 S	1.55 E	1.90	S 54 47 E	.1
1100.	1099.98	0 15	S 10 E	1.51 S	1.68 E	2.26	S 48 1 E	.1
1200.	1199.98	0 30	S 7 E	2.16 S	1.78 E	2.80	S 39 27 E	.3
1300.	1299.98	0 15	S 12 E	2.81 S	1.89 E	3.38	S 33 54 E	.3
1400.	1399.97	0 30	S 81 E	3.23 S	2.33 E	3.98	S 35 50 E	.5
1500.	1499.97	0 45	N 80 E	3.22 S	3.42 E	4.70	S 46 43 E	.3
1600.	1599.96	1 0	N 37 E	2.44 S	4.69 E	5.29	S 62 31 E	.7
1700.	1699.95	0 45	N 40 E	1.25 S	5.64 E	5.78	S 77 33 E	.3
1800.	1799.92	1 45	N 39 E	.44 N	7.03 E	7.04	N 86 26 E	1.0
1900.	1899.83	3 0	N 45 E	3.52 N	9.80 E	10.41	N 70 16 E	1.3
2000.	1999.64	4 0	N 42 E	7.94 N	14.00 E	16.10	N 60 26 E	1.0
2100.	2099.35	4 45	N 43 E	13.57 N	19.15 E	23.47	N 54 41 E	.8
2200.	2198.95	5 30	N 47 E	19.88 N	25.47 E	32.31	N 52 1 E	.8
2300.	2298.43	6 15	N 48 E	26.80 N	33.02 E	42.52	N 50 56 E	.8
2400.	2397.78	6 45	N 48 E	34.37 N	41.43 E	53.83	N 50 19 E	.5
2500.	2497.09	6 45	N 48 E	42.24 N	50.16 E	65.58	N 49 54 E	0.0
2600.	2596.49	5 45	N 45 E	49.73 N	58.06 E	76.45	N 49 25 E	1.1
2700.	2696.05	5 0	N 41 E	56.58 N	64.45 E	85.76	N 48 43 E	.8
2800.	2795.67	5 0	N 37 E	63.35 N	69.93 E	94.36	N 47 50 E	.3
2900.	2895.35	4 15	N 39 E	69.71 N	74.89 E	102.31	N 47 3 E	.8

MEASURED DEPTH FEET	DRIFT ANGLE D M	TRUE VERTICAL DEPTH FEET	DRIFT DIRECTION D	RECTANGULAR COORDINATES		CLOSURE DISTANCE FEET	S U R E DIRECTION D M		DOG LEG SEVERITY DEG/100FT
				FEET	FEET				
3000.	3 30	2995.12	N 36 E	75.07 N	79.01 E	108.98	N 46 28 E		.8✓
3100.	2 45	3094.97	N 36 E	79.48 N	82.21 E	114.35	N 45 58 E		.8
3200.	2 0	3194.88	N 33 E	82.89 N	84.56 E	118.41	N 45 34 E		.8
3300.	1 45	3294.83	N 32 E	85.65 N	86.32 E	121.60	N 45 13 E		.3
3400.	1 15	3394.79	N 31 E	87.88 N	87.68 E	124.15	N 44 56 E		.5
3500.	1 15	3494.77	N 24 E	89.82 N	88.69 E	126.23	N 44 38 E		.2✓
3600.	1 15	3594.75	N 22 E	91.82 N	89.54 E	128.26	N 44 17 E		.0
3700.	1 0	3694.73	N 20 E	93.66 N	90.25 E	130.06	N 43 56 E		.3
3800.	1 0	3794.71	N 29 E	95.24 N	90.97 E	131.71	N 43 41 E		.2
3900.	1 0	3894.70	N 21 E	96.82 N	91.71 E	133.36	N 43 27 E		.1
4000.	0 45	3994.68	N 44 E	98.10 N	92.52 E	134.85	N 43 19 E		.4✓
4100.	0 30	4094.68	N 11 E	99.06 N	93.02 E	135.89	N 43 12 E		.4
4200.	0 15	4194.68	N 24 E	99.68 N	93.22 E	136.47	N 43 5 E		.3
4300.	0 0	4294.68	0	99.88 N	93.30 E	136.68	N 43 3 E		.3
4400.	0 15	4394.68	N 74 E	99.94 N	93.51 E	136.87	N 43 6 E		.3
4500.	0 30	4494.67	S 83 E	99.99 N	94.16 E	137.35	N 43 17 E		.3
4600.	0 0	4594.67	0	99.94 N	94.60 E	137.61	N 43 26 E		.5
4700.	0 30	4694.67	S 88 E	99.92 N	95.03 E	137.90	N 43 34 E		.5
4800.	0 30	4794.67	S 50 E	99.62 N	95.83 E	138.23	N 43 53 E		.3✓
4900.	0 45	4894.66	S 69 E	99.06 N	96.77 E	138.48	N 44 20 E		.3
5000.	0 30	4994.65	S 73 E	98.71 N	97.80 E	138.95	N 44 44 E		.3
5100.	0 30	5094.65	S 55 E	98.33 N	98.58 E	139.23	N 45 4 E		.2
5200.	0 45	5194.64	S 56 E	97.71 N	99.48 E	139.44	N 45 31 E		.3
5300.	0 30	5294.64	S 51 E	97.06 N	100.35 E	139.61	N 45 57 E		.3✓
5400.	0 30	5394.63	S 58 E	96.56 N	101.06 E	139.78	N 46 18 E		.1
5500.	0 45	5494.63	S 75 E	96.12 N	102.06 E	140.20	N 46 43 E		.3
5600.	0 45	5594.62	S 37 E	95.40 N	103.13 E	140.49	N 47 14 E		.5
5700.	1 15	5694.60	S 58 E	94.23 N	104.41 E	140.64	N 47 56 E		.6
5800.	1 0	5794.59	S 38 E	92.92 N	105.86 E	140.86	N 48 43 E		.5✓
5900.	1 0	5894.57	S 32 E	91.50 N	106.86 E	140.68	N 49 26 E		.1

MEASURED DEPTH FEET	DRIFT ANGLE D M	TRUE VERTICAL DEPTH FEET	DRIFT DIRECTION D	RECTANGULAR COORDINATES		CLOSURE DISTANCE FEET		DOGS SEVERITY DEG/100FT	
				FEET	FEET	FEET	D M		
6000.	1 0	5994.55	S 38 E	90.07 N	107.86 E	140.52	N 50 8 E	.1	
6100.	1 15	6094.54	S 40 E	88.54 N	109.09 E	140.50	N 50 56 E	.3	✓
6200.	1 30	6194.51	S 35 E	86.64 N	110.55 E	140.46	N 51 55 E	.3	
6300.	2 30	6294.44	S 27 E	83.65 N	112.35 E	140.07	N 53 20 E	1.0	
6400.	2 15	6394.36	S 37 E	80.14 N	114.54 E	139.79	N 55 1 E	.5	
6500.	2 15	6494.28	S 43 E	77.13 N	117.07 E	140.19	N 56 37 E	.2	✓
6600.	3 0	6594.18	S 29 E	73.44 N	119.75 E	140.48	N 58 29 E	1.0	
6700.	3 0	6694.04	S 25 E	68.77 N	122.13 E	140.16	N 60 37 E	.2	✓
6800.	2 0	6793.94	S 30 E	64.91 N	124.14 E	140.08	N 62 24 E	1.0	
6900.	2 15	6893.87	S 22 E	61.58 N	125.76 E	140.03	N 63 55 E	.4	
7000.	1 30	6993.82	S 17 E	58.49 N	126.86 E	139.69	N 65 15 E	.8	✓
7100.	2 0	7093.77	S 15 W	55.48 N	126.91 E	138.51	N 66 23 E	1.1	
7200.	2 15	7193.70	S 26 W	52.01 N	125.61 E	135.95	N 67 30 E	.5	
7300.	2 30	7293.62	S 29 W	48.34 N	123.70 E	132.81	N 68 39 E	.3	✓
7400.	3 15	7393.49	S 29 W	43.95 N	121.27 E	128.99	N 70 5 E	.8	
7500.	3 15	7493.33	S 29 W	38.99 N	118.52 E	124.77	N 71 47 E	0.0	✓
7600.	3 15	7593.17	S 33 W	34.13 N	115.60 E	120.53	N 73 33 E	.2	
7700.	3 0	7693.02	S 36 W	29.64 N	112.51 E	116.35	N 75 14 E	.3	✓
7800.	3 0	7792.88	S 41 W	25.55 N	109.26 E	112.20	N 76 50 E	.3	
7900.	3 45	7892.71	S 47 W	21.31 N	105.17 E	107.31	N 78 33 E	.8	✓
7937.	4 45	7929.61	S 52 W	19.53 N	103.08 E	104.92	N 79 16 E	2.9	

FINAL CLOSURE - DIRECTION: N 79 DEGS 16 MINS 14 SECS E
 DISTANCE: 104.92 FEET

AMOCO PRODUCTION COMPANY
SOUTH MATIX WELL NO. 32
LEA COUNTY, NEW MEXICO
5-3-78

EASTMAN WHIPSTOCK INC.
GYROSCOPIC + MAGNETIC MULTISHOT
LARRY MASSEY - SURVEYOR
WT578-G1713 + WT578-S1714

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	TRUE		RECTANGULAR COORDINATES FEET	DOG LEG SEVERITY DEG/100FT
			VERTICAL DEPTH FEET	DEPTH FEET		
7937.	4 45	S 52 W	7929.61	19.53 N	103.08 E	0.0
8000.	5 0	S 53 W	7992.38	16.27 N	98.83 E	.4
8100.	4 45	S 55 W	8092.02	11.28 N	91.96 E	.3
8200.	4 45	S 54 W	8191.68	6.47 N	85.22 E	.1
8300.	5 0	S 52 W	8291.31	1.35 N	78.43 E	.3
8400.	5 15	S 50 W	8390.92	4.27 S	71.49 E	.3
8500.	5 30	S 51 W	8490.48	10.23 S	64.26 E	.3
8600.	5 45	S 53 W	8589.99	16.26 S	56.54 E	.3
8700.	6 15	S 52 W	8689.45	22.62 S	48.24 E	.5
8800.	6 0	S 53 W	8788.87	29.12 S	39.78 E	.3
8900.	5 0	S 53 W	8888.41	34.89 S	32.12 E	1.0
9000.	4 15	S 52 W	8988.09	39.80 S	25.73 E	.8
9100.	3 45	S 52 W	9087.84	44.09 S	20.23 E	.5
9200.	3 45	S 47 W	9187.63	48.34 S	15.26 E	.3
9300.	3 45	S 42 W	9287.41	53.00 S	10.68 E	.3
9400.	4 0	S 37 W	9387.19	58.21 S	6.38 E	.4
9500.	3 45	S 12 W	9486.96	64.31 S	3.60 E	1.7
9600.	3 45	S 2 W	9586.74	70.80 S	2.80 E	.7
9700.	4 0	S 6 W	9686.51	77.54 S	2.33 E	.4
9800.	4 15	S 21 W	9786.26	84.51 S	.66 E	1.1
9900.	3 45	S 11 W	9886.01	91.21 S	1.26 W	.9
10000.	4 0	S 10 E	9985.78	97.93 S	1.32 W	1.4
10100.	4 15	S 19 E	10085.52	104.89 S	.48 E	.7
10200.	2 45	S 47 E	10185.33	109.95 S	3.77 E	2.2

FINAL CLOSURE - DIRECTION: S 1 DEGS 57 MINS 47 SECS E
DISTANCE: 110.02 FEET

All distances must be from the outer boundaries of the Section

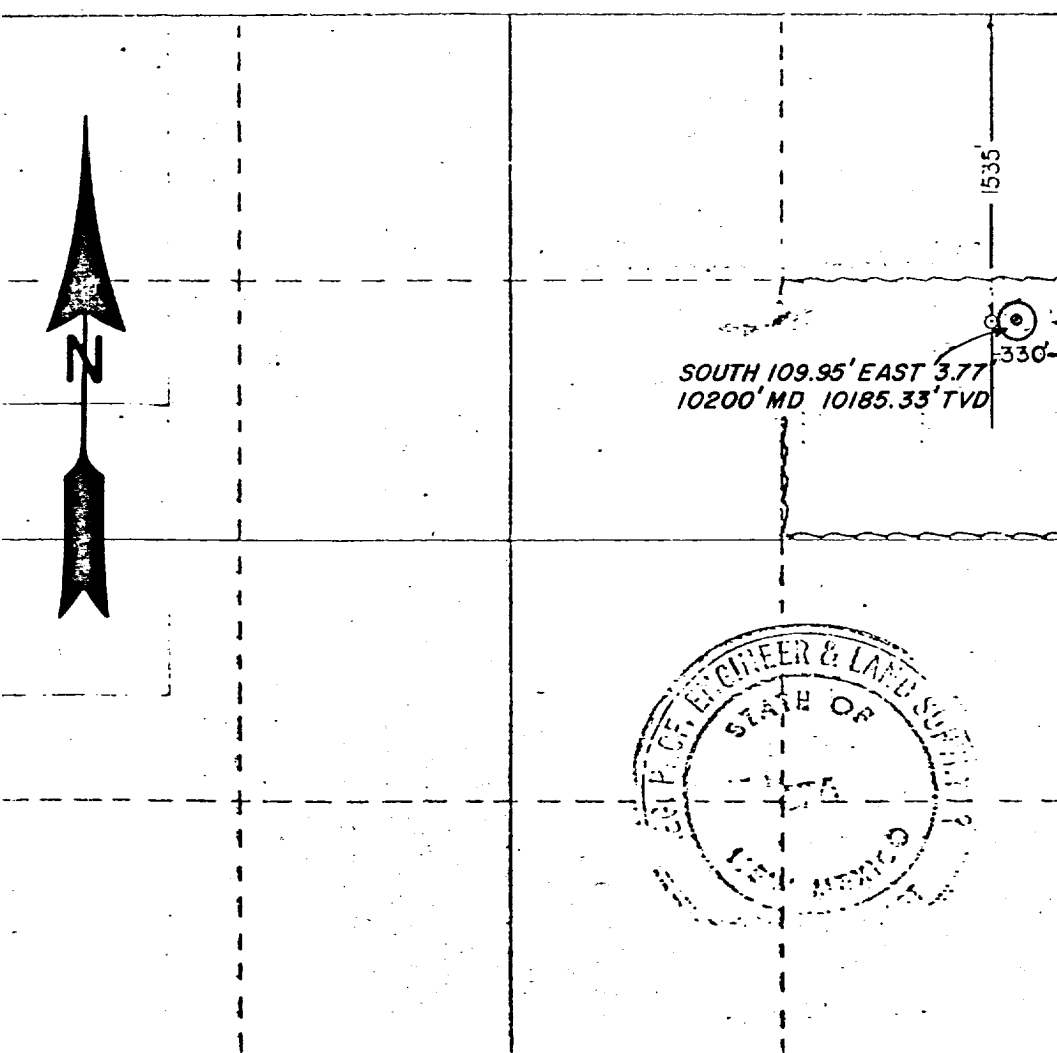
Owner Amoco Production Company		Unit South Mattix Unit		Well No. 32
Letter H	Section 22	Township 24 South	Range 37 East	County Lea
Well Location of Well:				
1535 feet from the North line and		330 feet from the East line		
Initial Well Elev. 3223.8	Producing Formation McKEE	Depth UNDESIGNATED McKEE	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
Randy Atkins
Position
STAFF ASSISTANT (SG)
Company
AMOCO PRODUCTION CO.
Date
11-14-77

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.

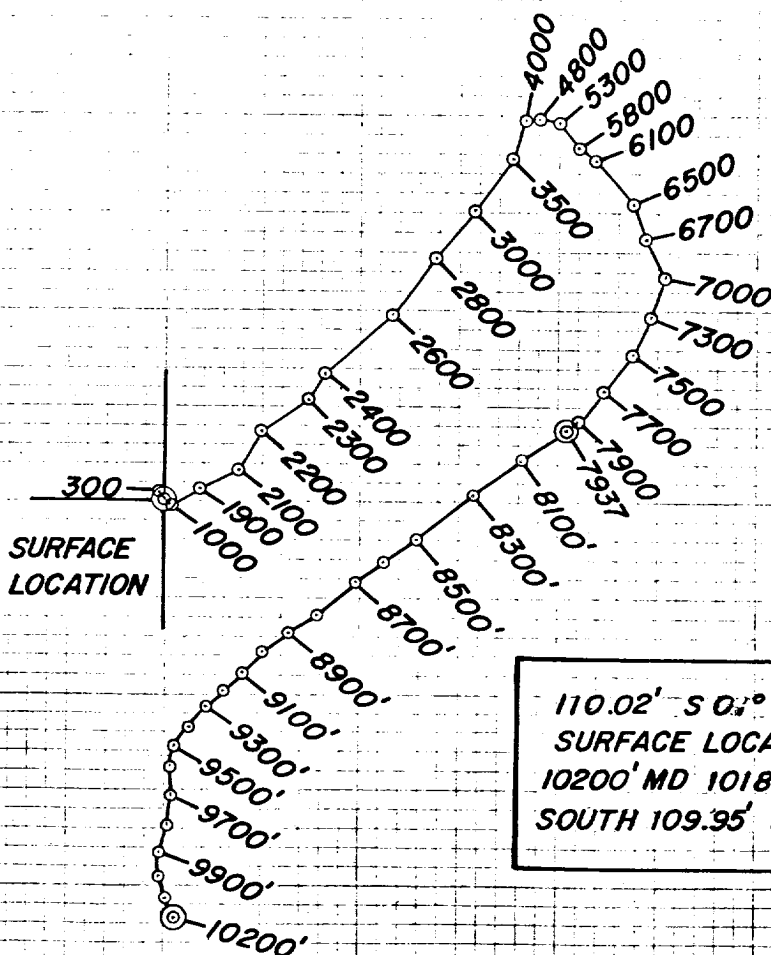
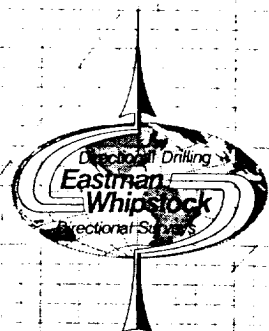
Date Surveyed
September 30, 1977

Registered Professional Engineer
and/or Land Surveyor

John W. West
Signature

AMOCO PRODUCTION COMPANY SOUTH MATTIX UNIT WELL NO. 32 LEA COUNTY, NEW MEXICO

SCALE: 1" = 50'





P. O. Box 5577/Midland, Texas 79701/(915) 563-0511
TWX 910-881-5066/Cable: EASTCO

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Larry Massey, in the employ of Eastman Whipstock, Inc., did on the days of January 27, 19 78 thru January 27, 19 78 conduct or supervise the taking of a Gyroscopic survey by the method of magnetic orientation from a depth of 0 feet to 4400 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Amoco Production Company for their South Mattix Unit #32, Lea County, State of New Mexico, in the _____ field.

The data for this survey and the calculations were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Larry Massey
Directional Supervisor/Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

James Blackledge

Before me, the undersigned authority, on this day personally appeared Larry Massey, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 27th day of January, 19 78.

Manda G. Howell
Notary Public in and for the County of
Midland, Texas
My commission expires 10/31/78



P. O. Box 5577 / Midland, Texas 79701 / (915) 563-0511
TWX 910-881-5066 / Cable: EASTCO

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Larry Massey, in the employ of Eastman Whipstock, Inc., did on the days of January 27, 19 78 thru January 27, 19 78 conduct or supervise the taking of a Magnetic Multi-Shot survey by the method of magnetic orientation from a depth of 4400 feet to 7937 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Amoco Production Company for their South Mattix Unit #32, Lea County, State of New Mexico, in the _____ field.

The data for this survey and the calculations were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Larry Massey
Directional Supervisor/Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

James Blackledge

Before me, the undersigned authority, on this day personally appeared Larry Massey, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 27th day of January, 19 78.

Wanda J. Howell
Notary Public in and for the County of
Midland, Texas
My commission expires 10/31/78



P. O. Box 5577/Midland, Texas 79701/(915) 563-0511
TWX 910-881-5066/Cable: EASTCO

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Larry Massey, in the employ of Eastman Whipstock, Inc., did on the days of May 5, 1978 thru May 5, 1978 conduct or supervise the taking of a Gyroscopic survey by the method of magnetic orientation from a depth of 7937 feet to 9700 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Amoco Production Company for their South Mattix Unit #32, Lea County, State of New Mexico, in the _____ field.

The data for this survey and the calculations were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Larry Massey
Directional Supervisor/Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

[Signature]

Before me, the undersigned authority, on this day personally appeared Larry Massey, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 11th day of May, 1978.

Wanda J. Howell
Notary Public in and for the County of
Midland, Texas
My commission expires 10-31-78



P. O. Box 5577/Midland, Texas 79701/(915) 563-0511
TWX 910-881-5066/Cable: EASTCO

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Larry Massey, in the employ of Eastman Whipstock, Inc., did on the days of May 5, 19 78 thru May 5, 19 78 conduct or supervise the taking of a Magnetic Multi-Shot survey by the method of magnetic orientation from a depth of 9700 feet to 10200 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Amoco Production Company for their South Mattix Unit #32, Lea County, State of New Mexico, in the _____ field.

The data for this survey and the calculations were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Larry Massey
Directional Supervisor/Surveyor

The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Larry Massey

Before me, the undersigned authority, on this day personally appeared Larry Massey, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this instrument is a true statement of facts therein recited.

Subscribed and sworn to before me on this 11th day of May, 19 78.

Notary Public in and for the County of
Midland, Texas
My commission expires 10-31-78