



**REPORT
of
SUB-SURFACE
DIRECTIONAL
SURVEY**

Mobil Production Texas and New Mexico
COMPANY

Bridges Estate Well No. 185
WELL NAME

Lea County, New Mexico
LOCATION

JOB NUMBER

WT1283-G0201
WT1283-S0200

TYPE OF SURVEY

Gyroscopic Multi Shot
Magnetic Multi Shot

DATE

12/16/83
12/16/83

SURVEY BY

Gary DeSpain

OFFICE

West Texas

MOBIL PRODUCING TEXAS AND NEW MEXICO
BRIDGES ESTATE WELL NO. 185
LEA COUNTY, NEW MEXICO BD1-183
DECEMBER 16, 1983

EASTMAN WHIPSTOCK, INC.
GYROSCOPIC MULTI SHOT SURVEY WT1283-S0201
SURVEYOR: GARY DESPAIN (0-1670')
MAGNETIC MULTI SHOT SURVEY WT1283-S0200
SURVEYOR: GARY DESPAIN (1670'-4894')

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	DOGLEG SEVERITY DG/100FT
0.	0 0	0	0.	0.00	0.00	0.00
100.	0 15	S 67 E	100.	100.00	0.08 S	0.25
200.	0 15	S 59 E	100.	200.00	0.28 S	0.03
300.	0 15	S 85 E	100.	300.00	0.42 S	0.11
400.	0 30	S 89 E	100.	400.00	0.45 S	0.25
500.	0 30	S 17 E	100.	499.99	0.94 S	0.59
600.	0 30	S 12 E	100.	599.99	1.79 S	0.04
700.	0 30	S 8 E	100.	699.98	2.65 S	0.03
800.	0 45	S 5 W	100.	799.93	3.73 S	0.29
900.	0 30	S 12 W	100.	899.97	4.81 S	0.26
1000.	0 45	S 2 E	100.	999.97	5.89 S	0.29
1100.	0 45	S 0 E	100.	1099.96	7.20 S	0.03
1200.	1 0	S 24 E	100.	1199.95	8.68 S	0.44
1300.	0 45	S 17 E	100.	1299.93	10.11 S	0.27
1400.	1 0	S 33 E	100.	1399.92	11.49 S	0.35
1500.	1 0	S 42 E	100.	1499.91	12.87 S	0.16
1600.	1 0	S 16 E	100.	1599.89	14.39 S	0.45
1670.	1 15	S 18 E	70.	1669.88	15.70 S	0.36
1750.	1 0	S 16 E	80.	1749.86	17.21 S	0.32
1800.	0 45	S 21 E	50.	1799.86	17.93 S	0.52
1900.	0 45	S 0 E	100.	1899.85	19.21 S	0.27
2000.	1 0	S 7 W	100.	1999.84	20.73 S	0.27
2100.	0 45	S 12 E	100.	2099.82	22.25 S	0.38
2200.	0 30	S 20 E	100.	2199.82	23.29 S	0.26
2300.	0 30	S 11 E	100.	2299.81	24.13 S	0.08
2400.	1 0	S 62 E	100.	2399.81	25.15 S	0.79
2500.	0 45	S 73 E	100.	2499.79	25.74 S	0.30
2600.	2 45	N 86 E	100.	2599.74	26.08 S	2.07
2700.	3 30	N 86 E	100.	2699.59	25.70 S	0.75
2800.	2 45	N 79 E	100.	2799.44	24.99 S	0.84
					23.73 E	

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	DOGLEG SEVERITY DG/100FT
2900.	2 45	N 85 E	100.	2899.33	24.32 S 28.48 E	0.29
3000.	2 0	S 85 E	100.	2999.24	24.32 S 32.62 E	0.85
3100.	1 45	S 78 E	100.	3099.19	24.80 S 35.85 E	0.34
3200.	1 30	S 81 E	100.	3199.15	25.32 S 38.64 E	0.26
3300.	1 15	S 88 E	100.	3299.12	25.55 S 41.03 E	0.30
3400.	1 0	S 72 E	100.	3399.10	25.89 S 42.95 E	0.40
3500.	1 0	S 66 E	100.	3499.08	26.52 S 44.58 E	0.10
3600.	1 0	S 57 E	100.	3599.07	27.35 S 46.11 E	0.16
3700.	1 0	S 65 E	100.	3699.05	28.19 S 47.64 E	0.14
3800.	1 0	S 46 E	100.	3799.04	29.18 S 49.07 E	0.33
3900.	1 0	S 53 E	100.	3899.02	30.31 S 50.40 E	0.12
4000.	1 30	S 67 E	100.	3999.00	31.40 S 52.28 E	0.58
4100.	1 45	S 62 E	100.	4098.96	32.62 S 54.84 E	0.29
4200.	1 30	S 60 E	100.	4198.92	33.99 S 57.32 E	0.26
4300.	1 45	S 63 E	100.	4298.88	35.35 S 59.81 E	0.26
4400.	1 30	S 72 E	100.	4398.84	36.43 S 62.43 E	0.36
4500.	1 45	S 77 E	100.	4498.80	37.19 S 65.16 E	0.29
4600.	2 0	S 85 E	100.	4598.74	37.70 S 68.39 E	0.36
4800.	2 15	N 89 E	200.	4798.61	37.96 S 75.80 E	0.17
4894.	2 0	S 90 E	94.	4892.54	37.93 S 79.29 E	0.27

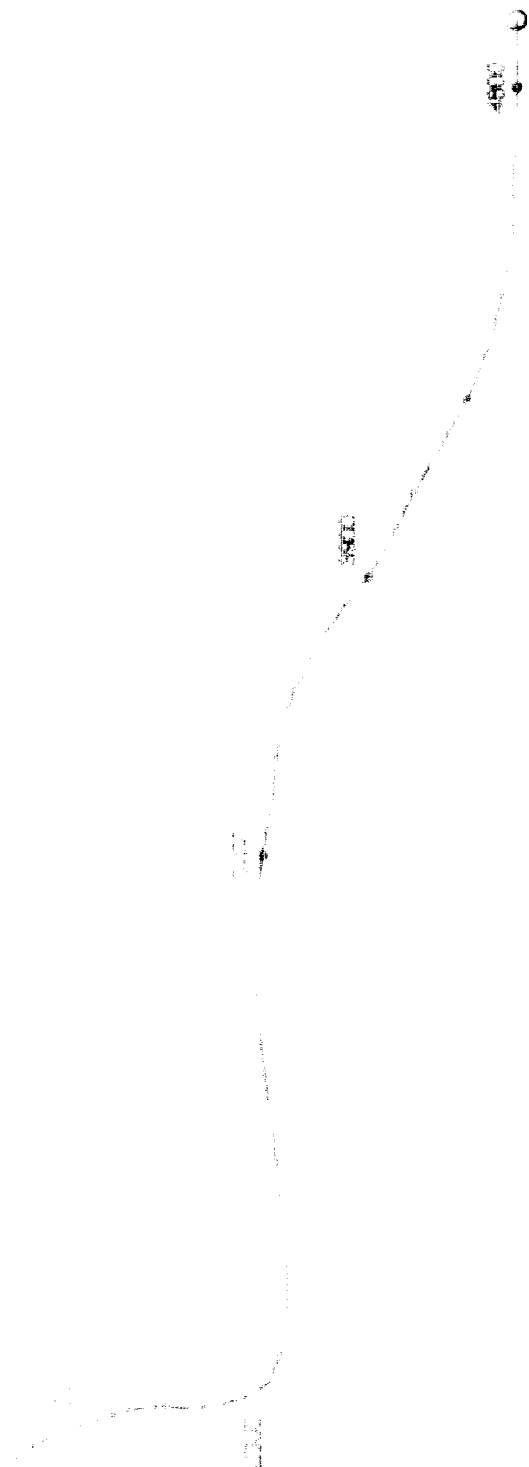
FINAL CLOSURE - DIRECTION: S 64 DEGS 26 MINS E
DISTANCE: 87.89 FEET

MOBIL PRODUCING TEXAS AND NEW MEXICO
 BRIDGES ESTATE WELL NO. 185
 LEA COUNTY, NEW MEXICO

HORIZONTAL PROJECTION
 SCALE 1 IN. = 10 FEET
 DEPTH (IN FEET) 40

BRIDGE ESTATE WELL NO. 185

801-185



FINAL STATION:
 DEPTH 4894 MD. 4892.54 TWD
 SMITH 27.02 EAST 76.58
 CLOSURE 67.89 S 64.26 E



P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Gary DeSpain, in the employ of Eastman Whipstock, Inc., did on the days of December 16, 1983 thru December 16, 1983 conduct or supervise the taking of a Gyroscopic Multi Shot survey by the method of magnetic orientation from a depth of 0 feet to 1670 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Mobil Producing Texas & New Mexico for their Bridges Estate Well # 185, Lea County, State of New Mexico, in the _____ field.

This data for this survey and the calculation 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.

Gary DeSpain
Directional Supervisor / Surveyor

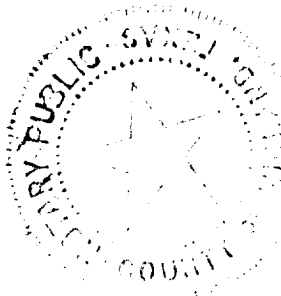
The data for this survey has been examined by me and conforms to principles and procedures set forth by Eastman Whipstock, Inc.

Tim Stephens

Before me, the undersigned authority, on this day personally appeared Gary DeSpain, 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 2ND day of FEB, 1984

Ray A. Allen
Notary Public in and for the
County of Midland, Texas
My commission expires 7/9/85





P. O. Box 5577/Midland, Texas 79704/(915) 563-0511

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Gary DeSpain, in the employ of Eastman Whipstock, Inc., did on the days of December 16, 19 83 thru December 16, 19 83 conduct or supervise the taking of a Magnetic Multi Shot survey by the method of magnetic orientation from a depth of 1670 feet to 4984 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Mobil Producing Texas & New Mexico for their Bridges Estate Well #185, County, State of New Mexico, in the field.

This data for this survey and the calculation 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.

Gary DeSpain
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.

Tim Stephens

Before me, the undersigned authority, on this day personally appeared Gary DeSpain, 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 2nd day of Feb., 19 84

Gary A. Stunk
Notary Public in and for the
County of Midland, Texas, 7/9/85
My commission expires

