

**SUB-SURFACE
DIRECTIONAL
SURVEY
REPORT**

TEXACO, U. S. A.
COMPANY

M. B. WEIR "B" WELL NO. 11
WELL NAME

LEA COUNTY, NEW MEXICO
STATE AND COUNTY

CERTIFIED REPORT

CUSTOMER : TEXACO U.S.A.

WELL # : M.B. WEIR "B" NO.11
LOCATION : LEA COUNTY, NEW MEXICO
DATE : 12-22-84

JOB TYPE : GYROSCOPIC MULTISHOT
JOB # : GS-1525

SURVEYOR : ALAN HARRERT
DEPTHS : 0'-6450'
DECL. : 10 DEGREES EAST
ELEV. : 0'

FILE # : WT-010
METHOD : RADIUS OF CURVATURE
SECTION : 0

THIS SURVEY IS CORRECT TO THE
BEST OF MY KNOWLEDGE AND IS
SUPPORTED BY ACTUAL FIELD DATA.
DIG REPRESENTATIVE

INAL STATION DATA!

MEASURED	INCL.	HOLE	COURSE	TRUE	RECTANGULAR	C L O S U R E	DOG-LEG
DEPTH	ANGLE	DIRECTION	LENGTH	VERTICAL	COORDINATES	DISTANCE	SEVERITY
FEET	DEGS.	DEGS.	FEET	FEET	N/S	FEET	DEGS.
6450.00	.70	N 14.00 W	50.00	6448.24	55.97 S	7.49 W	56.47 at S 07.61 W
							.40

MEASURED	INCL.	HOLE	COURSE	TRUE	RECTANGULAR	C L O S U R E	DOG-LEG
DEPTH	ANGLE	DIRECTION	LENGTH	VERTICAL	CORDINATES	DISTANCE	SEVERITY
FEET	DEGS.	DEGS.	FEET	FEET	N/S feet E/W	FEET	DG/100FT
0.00	0.00	N 00.00 E	0.00	0.00	0.00 N	0.00at N 00.00 E	0.00
100.00	.30	N 63.00 W	100.00	100.00	.12 N	.26at N 63.00 W	.30
200.00	1.00	S 47.00 W	100.00	199.99	.03 S	1.29at S 88.69 W	.94
300.00	1.20	S 46.00 W	100.00	299.97	1.35 S	3.00at S 63.25 W	.20
400.00	1.10	S 46.00 W	100.00	399.95	2.75 S	4.95at S 56.35 W	.10
500.00	1.10	S 21.00 W	100.00	499.94	4.33 S	6.75at S 50.06 W	.48
600.00	1.10	S 04.00 W	100.00	599.92	6.20 S	8.35at S 42.03 W	.33
700.00	1.20	S 07.00 W	100.00	699.90	8.20 S	10.03at S 35.19 W	.12
800.00	1.30	S 11.00 W	100.00	799.87	10.35 S	12.03at S 30.60 W	.13
900.00	1.50	S 05.00 W	100.00	899.84	12.77 S	14.31at S 26.84 W	.25
1000.00	1.90	S 11.00 W	100.00	999.80	15.71 S	17.15at S 23.64 W	.44
1100.00	2.60	S 05.00 W	100.00	1099.72	19.59 S	20.95at S 20.74 W	.74
1200.00	3.70	S 02.00 W	100.00	1199.57	25.08 S	26.25at S 17.18 W	1.11
1300.00	3.90	S 01.00 W	100.00	1299.35	31.70 S	32.60at S 14.04 W	.21
1400.00	4.00	S 03.00 W	100.00	1399.11	38.59 S	39.44at S 11.95 W	.17
1500.00	3.20	S 04.00 W	100.00	1498.91	44.85 S	45.66at S 10.79 W	.80
1600.00	2.80	S 02.00 W	100.00	1598.78	50.08 S	50.85at S 09.99 W	.41
1700.00	2.70	S 01.00 W	100.00	1698.66	54.88 S	55.60at S 09.26 W	.11
1800.00	2.20	S 04.00 W	100.00	1798.57	59.15 S	59.85at S 08.78 W	.52
1900.00	1.70	S 02.00 W	100.00	1898.51	62.54 S	63.23at S 08.47 W	.50
2000.00	1.40	S 00.00 E	100.00	1998.47	65.25 S	65.92at S 08.16 W	.30
2100.00	.90	S 11.00 E	100.00	2098.45	67.24 S	67.87at S 07.76 W	.54
2200.00	.90	S 05.00 E	100.00	2198.44	68.80 S	69.38at S 07.41 W	.09
2300.00	.90	S 03.00 E	100.00	2298.43	70.36 S	70.92at S 07.16 W	.03
2400.00	.70	S 07.00 E	100.00	2398.42	71.75 S	72.28at S 06.93 W	.21

MEASURED DEPTH FEET	INCL. ANGLE DEGS.	HOLE DIRECTION DEGS.	COURSE LENGTH FEET	VERTICAL DEPTH FEET	TRUE VERTICAL DEPTH FEET	RECTANGULAR COORDINATES N/S	E/W	C L U S U R E DISTANCE FEET	DIRECTION DEGS.	DOG-LEG SEVERITY DG/100FT
2500.00	.80	S 07.00 E	100.00	2498.41	2498.41	73.05 S	8.56 W	73.55at S	06.68 W	.10
2600.00	.50	S 10.00 E	100.00	2598.40	2598.40	74.18 S	8.40 W	74.65at S	06.45 W	.30
2700.00	.40	S 06.00 W	100.00	2698.40	2698.40	74.96 S	8.37 W	75.42at S	06.37 W	.16
2800.00	.20	S 30.00 W	100.00	2798.40	2798.40	75.45 S	8.53 W	75.93at S	06.44 W	.23
2900.00	.20	N 67.00 W	100.00	2898.40	2898.40	75.55 S	8.83 W	76.07at S	06.66 W	.27
3000.00	.20	N 46.00 W	100.00	2998.40	2998.40	75.36 S	9.12 W	75.91at S	06.90 W	.07
3100.00	.30	N 79.00 W	100.00	3098.40	3098.40	75.16 S	9.50 W	75.76at S	07.20 W	.17
3200.00	.30	S 90.00 W	100.00	3198.40	3198.40	75.11 S	10.02 W	75.78at S	07.60 W	.06
3300.00	.30	N 58.00 W	100.00	3298.39	3298.39	74.97 S	10.52 W	75.71at S	07.98 W	.17
3400.00	.30	N 54.00 W	100.00	3398.39	3398.39	74.68 S	10.96 W	75.48at S	08.34 W	.02
3500.00	.40	N 56.00 W	100.00	3498.39	3498.39	74.33 S	11.46 W	75.21at S	08.76 W	.10
3600.00	.50	N 42.00 W	100.00	3598.39	3598.39	73.81 S	12.05 W	74.79at S	09.26 W	.15
3700.00	.70	N 56.00 W	100.00	3698.38	3698.38	73.13 S	12.83 W	74.25at S	09.95 W	.25
3800.00	.70	N 55.00 W	100.00	3798.38	3798.38	72.44 S	13.84 W	73.75at S	10.81 W	.01
3900.00	.50	N 54.00 W	100.00	3898.37	3898.37	71.83 S	14.69 W	73.32at S	11.56 W	.20
4000.00	.50	N 67.00 W	100.00	3998.37	3998.37	71.40 S	15.45 W	73.05at S	12.21 W	.11
4100.00	.30	N 60.00 W	100.00	4098.36	4098.36	71.07 S	16.06 W	72.88at S	12.74 W	.21
4200.00	.50	S 65.00 W	100.00	4198.36	4198.36	71.06 S	16.75 W	73.01at S	13.26 W	.41
4300.00	.30	S 53.00 W	100.00	4298.36	4298.36	71.42 S	17.34 W	73.49at S	13.65 W	.22
4400.00	.20	S 51.00 W	100.00	4398.36	4398.36	71.69 S	17.69 W	73.84at S	13.86 W	.10
4500.00	.10	S 37.00 W	100.00	4498.36	4498.36	71.87 S	17.87 W	74.06at S	13.96 W	.11
4600.00	.30	N 49.00 E	100.00	4598.36	4598.36	72.04 S	17.70 W	74.18at S	13.80 W	.40
4700.00	.50	N 38.00 E	100.00	4698.35	4698.35	71.53 S	17.22 W	73.57at S	13.53 W	.21
4800.00	.40	N 19.00 E	100.00	4798.35	4798.35	70.84 S	16.84 W	72.82at S	13.37 W	.18
4900.00	.40	N 27.00 E	100.00	4898.35	4898.35	70.20 S	16.57 W	72.13at S	13.28 W	.06

MEASURED INCL. HOLE RECTANGULAR CLOSURE DOG-LEG
DEPTH ANGLE DIRECTION COURSE LENGTH DEPTH DEPTH DISTANCE DIRECTION SEVERITY
FEET DEGS. DEGS. FEET FEET N/S feet E/W FEET DEGS. DG/100FT

5000.00	.50	N 39.00 E	100.00	4998.35	69.54 S	16.14 W	71.32at S	13.06 W	.14
5100.00	.60	N 41.00 E	100.00	5098.34	68.81 S	15.53 W	70.54at S	12.71 W	.10
5200.00	.80	N 50.00 E	100.00	5198.33	67.95 S	14.66 W	69.52at S	12.17 W	.23
5300.00	.70	N 36.00 E	100.00	5298.32	67.00 S	13.77 W	68.40at S	11.61 W	.21
5400.00	.60	N 52.00 E	100.00	5398.32	66.18 S	12.98 W	67.45at S	11.09 W	.21
5500.00	.70	N 37.00 E	100.00	5498.31	65.38 S	12.19 W	66.50at S	10.56 W	.20
5600.00	.80	N 54.00 E	100.00	5598.30	64.46 S	11.26 W	65.44at S	09.90 W	.24
5700.00	.90	N 34.00 E	100.00	5698.29	63.40 S	10.23 W	64.22at S	09.16 W	.31
5800.00	.70	N 31.00 E	100.00	5798.28	62.22 S	9.48 W	62.94at S	08.66 W	.20
5900.00	.80	N 37.00 E	100.00	5898.27	61.14 S	8.75 W	61.76at S	08.14 W	.13
6000.00	.60	N 33.00 E	100.00	5998.27	60.14 S	8.05 W	60.68at S	07.62 W	.21
6100.00	.60	N 28.00 E	100.00	6098.26	59.24 S	7.52 W	59.71at S	07.23 W	.05
6200.00	.60	N 13.00 E	100.00	6198.26	58.26 S	7.15 W	58.70at S	07.00 W	.16
6300.00	.50	N 05.00 W	100.00	6298.25	57.31 S	7.09 W	57.74at S	07.04 W	.20
6400.00	.50	N 25.00 W	100.00	6398.25	56.47 S	7.31 W	56.94at S	07.37 W	.17
6450.00	.70	N 14.00 W	50.00	6448.24	55.97 S	7.49 W	56.47at S	07.61 W	.46

CLOSURE DISTANCE = 56.47 FEET.
CLOSURE DIRECTION = S 7.62 W

TEXACO U. S. A.

WELL # :
M.B. WEIR "B" NO. 11

LOCATION :
LEA COUNTY, NEW MEXICO

DATE :
12-22-84

JOB TYPE :
GYROSCOPIC MULTISHOT

JOB # :
GS-1525

SURVEYOR :
ALAN HARBERT

DEPTHS :
0' - 6450'

DECL. :
10 DEGREES EAST

ELEV. :
0'

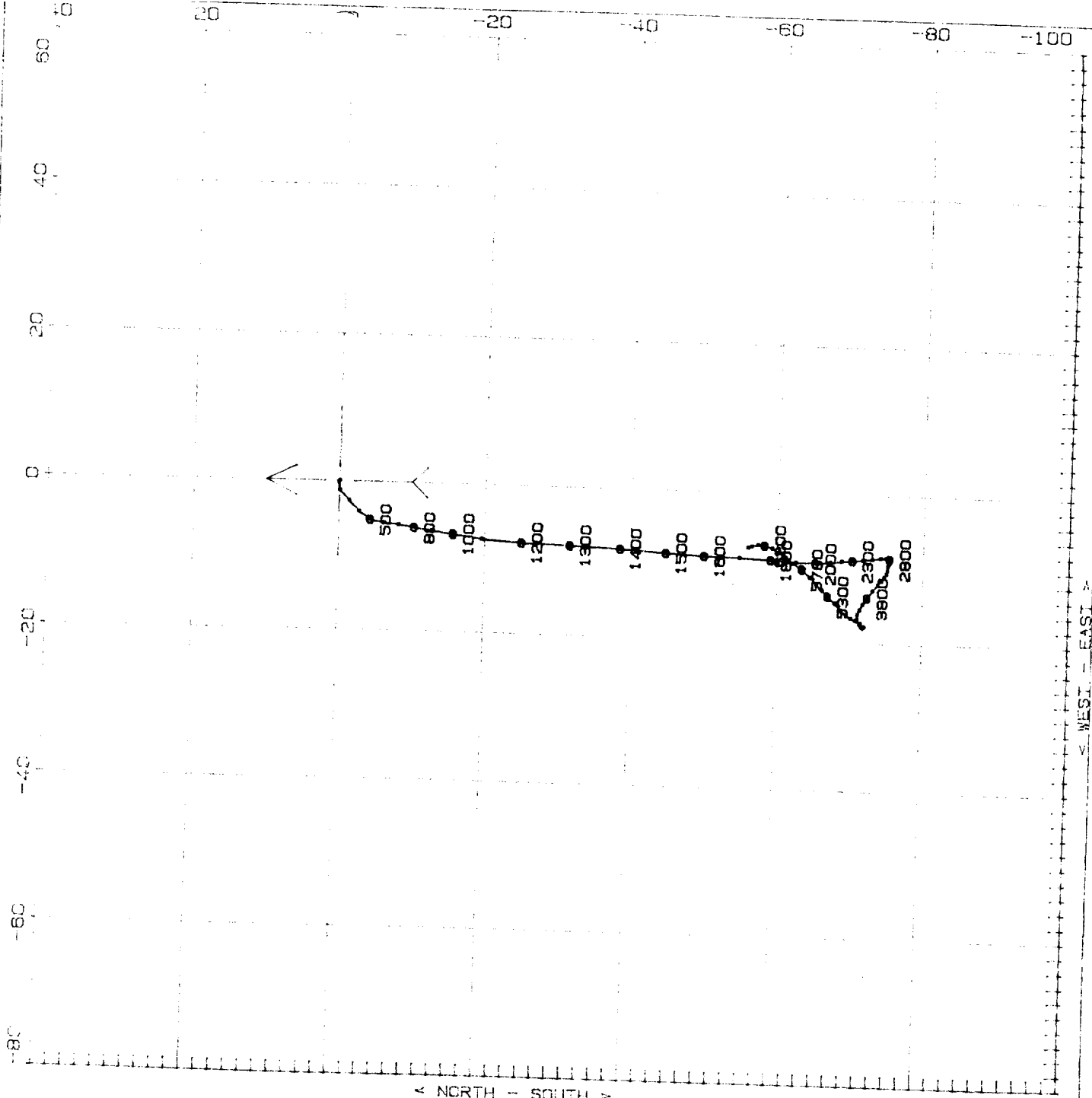
FILE # :
WT-010

FINAL STATION DATA:

MD. 6450.00
TVD. 6448.24
N/S -55.97
E/W -7.49

CLOSURE DISTANCE
56.47 FEET
CLOSURE DIRECTION
S 7.62 W

1 IN. = 20 FT.



SURVEY CERTIFICATION

STATE TEXAS

COUNTY OF MIDLAND

I, D. A. Harbert, in the employ of D.I.G., Inc., did on the days of December 22, 19 84 through December 22, 19 84 conduct or supervise the taking of a Gyroscopic Multishot survey by the method of magnetic orientation from a depth of 0' feet to 6450' feet, with recordings of inclination being obtained at approximate intervals of 100' feet.

This survey was conducted at the request of Texaco, U.S.A. for their M. B. Weir "B" No. 11, Lea County, State of New Mexico in the field.

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

D. A. Harbert

The data for this survey has been examined by me and conforms to the principles and procedures as set forth by D.I.G., Inc.

Larry Massey