

OIL CONSERVATION DIVISION
Deviation Tabulation Report

OK
EVB

UNION TEXAS PETROLEUM CORP.

Starr

Operator

Well Name

3M

No.

5

Sec.

36N

Twp.

8W

Rge.

DEPTH

DEVIATION

DEPTH

DEVIATION

180 0.75°
363 0.75°
623 0.75°
1010 0.75°
1497 1.00°
1724 0.74°
2270 1.00°
2475 0.75°
2886 0.75°
3455 0.50°
3944 1.25°
4125 2.00°
4346 2.00°
4440 2.00°

4535
4724
4819
5104
5199
5326
5421
5452
5493
5515
5600
5647
5679
5714

2.00°
1.50°
1.25°
2.50°
3.50°
3.50°
7.00°
7.75°
8.25°
11.00°
12.00°
13.00°
14.00°
12.00°

5742
5774
5086
5837
5860
5959
6050
6240
6335
6558
6860

11.00°
10.00°
10.00°
10.00°
10.00°
10.00°
11.50°
10.00°
8.00°
5.00°
MR

See attached directional survey

Robert C. Frank

STATE OF NEW MEXICO)

) ss

COUNTY OF SAN JUAN)

On this 28th day of March, 1988, before as personally
appeared Robert C. Frank, to me known to be the person described in and
to have executed the foregoing instrument and acknowledged that he executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have set my hand and seal of office on this 28th day
March, 19 88.

RECEIVED

APR 01 1988

OIL CON. DIV.
DIST. 3

Betty Jo Stuart
Notary Public in and for
San Juan County, New Mexico

Commission Expires:

Aug. 25, 1988

[illegible]

**REPORT
of
SUB-SURFACE
DIRECTIONAL
SURVEY**

RECEIVED
APR 01 1988
OIL CON. DIV.
DNT-3

UNION TEXAS PETROLEUM
COMPANY

STARR 3M
WELL NAME

SAN JUAN COUNTY, NEW MEXICO
LOCATION

JOB NUMBER

413-0382

TYPE OF SURVEY

SEEKER

DATE

7-JUL-87

SURVEY BY
DENNY COY

OFFICE
ROCKY MOUNTAIN

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**      **      **      **      **      **      **      **      **      **      **      **      **      **      **      **
** OPERATOR      : UNION TEXAS PETROLEUM
**
** WELL NAME     : STARR 3M
**
** LOCATION      : SAN JUAN COUNTY, NEW MEXICO
**
** JOB NUMBER    :
**
** RIG           :
**
** DECLINATION   : 0.00 E
**

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EC DISTRICT : ROCKY MOUNTAIN DIST.

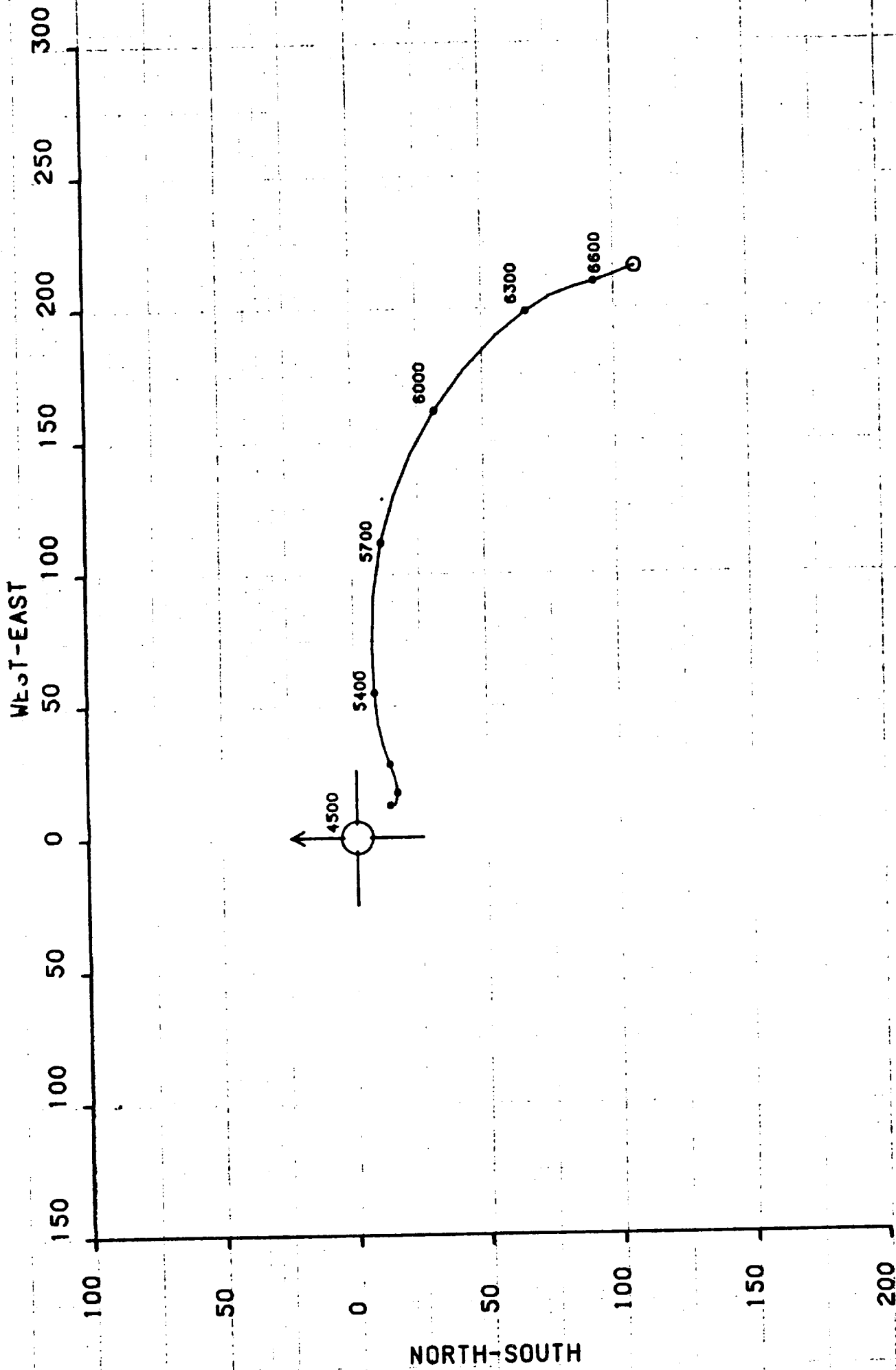
MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	R E C T A N G U L A R C O O R D I N A T E S	DOBLE SEVERITY
4500.00	1 48	S 45 0 W	0.00	4498.00	12.50 S 12.00 E	0.00
4600.00	1 0	S 62 0 E	100.00	4597.97	14.58 S 12.31 E	2.30
4700.00	1 21	S 82 28 E	100.00	4697.95	15.20 S 14.25 E	0.54
4800.00	1 28	N 87 50 E	100.00	4797.92	15.32 S 16.71 E	0.27
4900.00	1 46	N 79 54 E	100.00	4897.88	15.02 S 19.52 E	0.37
5000.00	2 6	N 72 42 E	100.00	4997.82	14.22 S 22.79 E	0.42
5100.00	3 23	N 68 7 E	100.00	5097.70	12.62 S 27.29 E	1.29
5200.00	4 23	N 73 31 E	100.00	5197.47	10.39 S 33.68 E	1.07
5300.00	5 51	N 80 44 E	100.00	5297.07	8.41 S 42.57 E	1.60
5400.00	8 1	N 86 48 E	100.00	5396.34	7.10 S 54.36 E	2.26
5500.00	10 58	N 89 3 E	100.00	5494.96	6.50 S 70.83 E	2.98
5600.00	12 15	S 85 26 E	100.00	5592.91	7.14 S 90.94 E	1.70
5700.00	11 13	S 76 46 E	100.00	5690.81	10.28 S 111.02 E	2.04
5800.00	9 56	S 71 4 E	100.00	5789.11	15.37 S 128.66 E	1.65
5900.00	10 25	S 64 22 E	100.00	5887.54	22.07 S 145.00 E	1.27
6000.00	10 43	S 56 36 E	100.00	5985.84	31.09 S 160.94 E	1.49
6100.00	11 28	S 49 34 E	100.00	6083.97	42.64 S 176.31 E	1.55
6200.00	9 20	S 42 5 E	100.00	6182.33	55.21 S 189.25 E	2.52
6300.00	6 57	S 35 45 E	100.00	6281.31	66.23 S 198.15 E	2.54
6400.00	5 46	S 27 52 E	100.00	6380.69	75.64 S 203.98 E	1.47
6500.00	4 40	S 13 28 E	100.00	6480.28	84.13 S 207.18 E	1.70
6600.00	4 38	S 17 43 E	100.00	6579.95	91.94 S 209.36 E	0.35
6700.00	5 8	S 21 22 E	100.00	6679.58	99.96 S 212.21 E	0.58
6800.00	4 3	S 20 5 E	100.00	6779.26	107.44 S 215.04 E	1.08

CLOSURE - DISTANCE : 240.39

DIRECTION : S 63 27 E

REPORT UNITS : Feet

SURVEY CALCULATION METHOD : Radius of curvature



UNION TEXAS PETROLEUM
STARR 3M
FINAL STATION:
DEPTH: 6800 MD, 6779.26 TVD
107.44 SOUTH, 215.04 EAST