

Results of Directional Survey

30-025-36280

**OCCIDENTAL PERMIAN LIMITED PARTNERSHIP
NORTH HOBBS G/SA UNIT # 546**

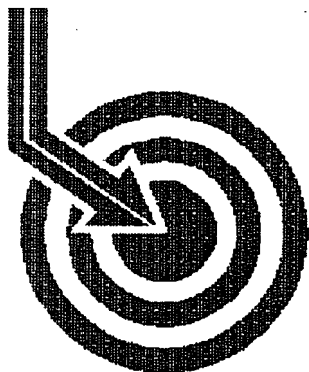
	MD	N/S	E/W	VD
	4050	109.40	0.10	4045.4
TOP PERFS/OH	4128	118.61	-0.40	4122.90
	4144	120.50	-0.50	4138.80
	4237	131.30	-1.20	4231.10
BOT PERFS/OH	4266	134.72	-1.35	4259.92
	4332	142.50	-1.70	4325.50

NEXT TO LAST	4332	142.50	-1.70	4325.50
LAST READING	4418	152.70	-1.70	4410.90
TD	4418	152.70	-1.70	4410.90

Surface Location	1657	FS	620	FE
Projected BHL	1810	FS	622	FE
Location of				
Top Perfs/OH	1776	FS	620	FE
Bottom Perfs/OH	1792	FS	621	FE

SUMMARY of Subsurface Locations

Surface Location	I-30-18S-38E	1657	FS	620	FE	Vert. Depth
Top Perfs/OH	I-30-18S-38E	1776	FS	620	FE	4122.90
Bottom Perfs/OH	I-30-18S-38E	1792	FS	621	FE	4259.92
Projected TD	I-30-18S-38E	1810	FS	622	FE	4410.90



Scientific Drilling

SUR: I-30-18s-38e, 1657/S & 620/E
BHL: I-30-18s-38e, 1810/S & 622/E
API # 30-025-36280

OCCIDENTAL PERMIAN LTD.

Field: North Hobbs
Site: Lea County, NM
Well: NHU #30-546
Wellpath: DH - Job #32D0502269
Survey: 05/31/03-06/05/03

This survey is correct to the best of my knowledge
and is supported by actual field data.

David Macey Company Representative

Notorized this date 8th of July, 2003.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas



KZ

Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD.	Date: 7/3/2003	Time: 10:03:43	Page: 1
Field: North Hobbs	Co-ordinate(NE) Reference:	Site: Lea County, NM, True North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: NHU #30-546	Section (VS) Reference:	Well (0.00N,0.00E,288.82Azi)	
Wellpath: VH - Job #32K0603272	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/01/03	Start Date:	6/1/2003
Company: Scientific Drilling	Engineer:	Ron Drake
Tool: Keeper, Keeper Surface Readout	Tied-to:	From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.0	0.00	360.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.75	273.58	100.0	0.6	0.0	-0.7	0.75	0.7	273.58
200.0	0.73	273.68	200.0	1.9	0.1	-1.9	0.02	1.9	273.61
300.0	0.66	276.97	300.0	3.1	0.2	-3.1	0.08	3.2	274.24
400.0	0.41	281.79	400.0	4.0	0.4	-4.1	0.25	4.1	275.28
500.0	0.35	278.49	500.0	4.6	0.5	-4.7	0.06	4.7	275.98
600.0	0.37	277.20	600.0	5.2	0.6	-5.3	0.02	5.4	276.19
700.0	0.44	288.19	700.0	5.9	0.7	-6.0	0.10	6.1	277.00
800.0	0.38	280.49	800.0	6.7	0.9	-6.7	0.08	6.8	277.80
900.0	0.40	281.62	900.0	7.3	1.1	-7.4	0.02	7.5	278.10
1000.0	0.43	291.74	1000.0	8.1	1.3	-8.1	0.08	8.2	278.87
1100.0	0.51	271.83	1100.0	8.9	1.4	-8.9	0.18	9.0	279.05
1200.0	0.40	276.64	1200.0	9.6	1.5	-9.7	0.12	9.8	278.64
1300.0	0.20	329.65	1300.0	10.1	1.7	-10.1	0.32	10.2	279.33
1400.0	0.23	306.12	1400.0	10.4	1.9	-10.4	0.09	10.5	280.55
1500.0	0.23	334.13	1500.0	10.8	2.2	-10.6	0.11	10.8	281.87
1600.0	0.20	281.86	1600.0	11.1	2.4	-10.9	0.19	11.1	282.68
1700.0	0.28	290.65	1700.0	11.5	2.6	-11.3	0.09	11.5	282.84
1800.0	0.36	287.46	1800.0	12.0	2.7	-11.8	0.08	12.1	283.12
1900.0	0.46	315.00	1899.9	12.7	3.1	-12.4	0.22	12.8	284.17
2000.0	0.43	346.59	1999.9	13.3	3.8	-12.7	0.24	13.3	286.50
2072.0	0.60	344.10	2071.9	13.6	4.4	-12.9	0.24	13.6	288.82

Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD.
Field: North Hobbs
Site: Lea County, NM
Well: NHU #30-546
Wellpath: DH - Job #32D0502269

Date: 7/3/2003 **Time:** 10:06:39 **Page:** 1
Co-ordinate(NE) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,359.37Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey: 05/31/03-06/05/03
 E-field 2120'-4418'
Company: Scientific Drilling
Tool: E-field, E-field

Start Date: 5/31/2003
Engineer: Brusenhan/Drake
Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
2072.0	0.60	344.10	2071.9	4.5	4.4	-12.9	0.00	13.6	288.82
2120.0	0.80	13.60	2119.9	5.1	5.0	-12.9	0.84	13.8	291.06
2215.0	1.10	40.50	2214.9	6.4	6.3	-12.1	0.56	13.7	297.42
2310.0	1.60	46.40	2309.9	8.0	7.9	-10.6	0.55	13.2	306.75
2404.0	2.00	42.50	2403.9	10.1	10.0	-8.5	0.44	13.2	319.58
2499.0	2.30	43.70	2498.8	12.7	12.6	-6.1	0.32	14.0	334.21
2593.0	2.60	39.30	2592.7	15.7	15.6	-3.4	0.38	16.0	347.57
2688.0	2.50	37.10	2687.6	19.0	19.0	-0.8	0.15	19.0	357.49
2782.0	2.00	40.50	2781.5	21.8	21.8	1.5	0.55	21.9	3.85
2877.0	2.10	40.00	2876.5	24.4	24.4	3.7	0.11	24.7	8.53
2971.0	1.60	41.50	2970.4	26.7	26.7	5.6	0.53	27.3	11.91
3066.0	1.50	57.50	3065.4	28.3	28.4	7.6	0.47	29.4	14.92
3137.0	1.60	59.70	3136.4	29.3	29.4	9.2	0.16	30.8	17.39
3231.0	3.20	8.50	3230.3	32.5	32.7	10.7	2.69	34.4	18.19
3295.0	4.00	1.50	3294.2	36.5	36.7	11.1	1.42	38.3	16.78
3389.0	5.20	344.20	3387.9	43.9	44.0	10.0	1.94	45.1	12.77
3484.0	4.70	343.70	3482.5	51.8	51.9	7.7	0.53	52.5	8.45
3546.0	4.60	346.40	3544.3	56.7	56.8	6.4	0.39	57.1	6.45
3641.0	5.00	349.10	3639.0	64.5	64.5	4.7	0.48	64.7	4.20
3704.0	5.90	348.90	3701.7	70.4	70.4	3.6	1.43	70.5	2.92
3798.0	5.70	351.80	3795.2	79.7	79.8	2.0	0.38	79.8	1.44
3892.0	7.20	356.80	3888.6	90.3	90.3	1.0	1.70	90.3	0.64
3955.0	6.90	357.50	3951.1	98.0	98.0	0.6	0.50	98.0	0.36
4050.0	6.90	357.20	4045.4	109.4	109.4	0.1	0.04	109.4	0.05
4144.0	6.70	356.60	4138.8	120.5	120.5	-0.5	0.23	120.5	359.76
4237.0	6.70	355.80	4231.1	131.3	131.3	-1.2	0.10	131.3	359.46
4332.0	6.80	359.80	4325.5	142.5	142.5	-1.7	0.51	142.5	359.33
4418.0	6.80	359.80	4410.9	152.7	152.7	-1.7	0.00	152.7	359.37



Scientific
Drilling

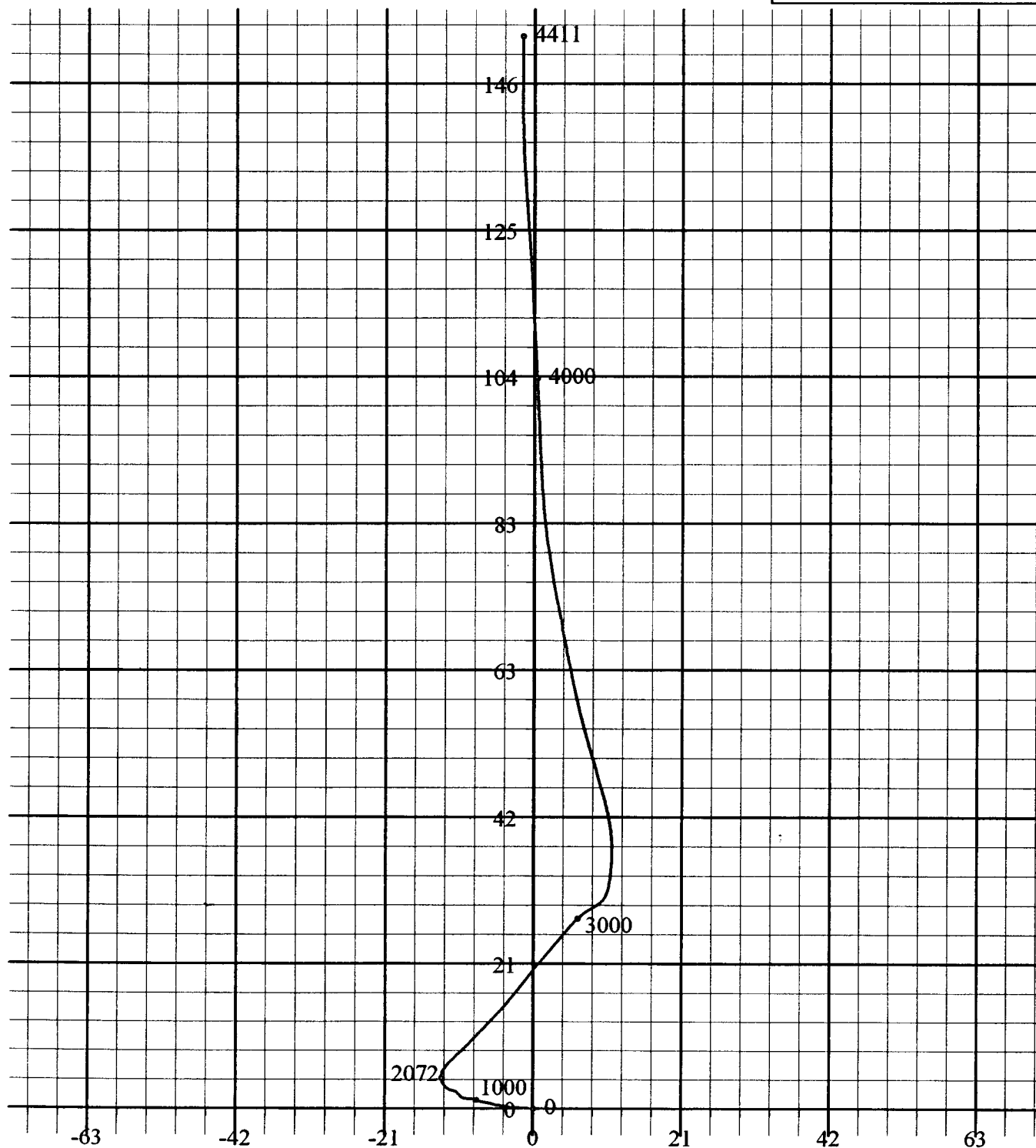
Field: North Hobbs
Site: Lea County, NM
Well: NHU #30-546
Wellpath: DH - Job #32D0502269
Survey: 05/31/03-06/05/03



Azimuths to True North
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 7/3/2003
Model: Wmm_95

South(-)/North(+) [ft]



West(-)/East(+) [ft]