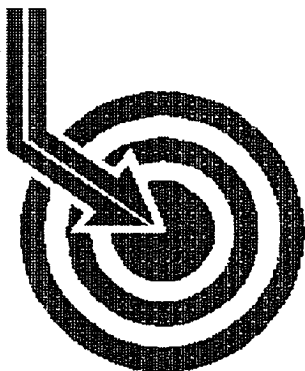




Scientific Drilling

SUR: P-30-18s-38e, 641/S & 2419/E

BHL: P-30-18s-38e, 483/S & 2568/E

API # 30-025-36286

OCCIDENTAL PERMIAN LTD.

Field: North Hobbs

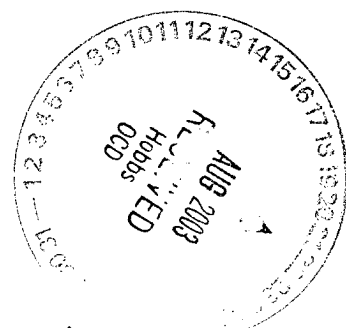
Site: Lea County, NM

Well: NHU #30-536

Wellpath: DH - Job #32D0603317

Survey: 06/19/03-06/24/03

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

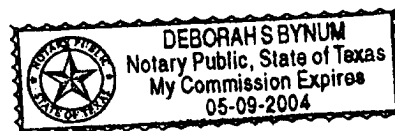


David M. Moseley Company Representative

Notorized this date 11th of July, 2003.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas



Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD.	Date: 7/3/2003	Time: 10:22:02	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 #30-536	Section (VS) Reference:	Well (0.00N,0.00E,295.88Azi)	
Wellpath: VH - Job #32K0603318	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 06/20/03 KSRG 0'-2355'	Start Date: 6/20/2003
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	359.39	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.62	269.07	100.0	0.5	0.0	-0.5	0.62	0.5	269.07
200.0	0.73	252.12	200.0	1.4	-0.2	-1.7	0.23	1.7	262.80
300.0	1.28	265.48	300.0	2.8	-0.5	-3.4	0.59	3.4	261.71
400.0	0.67	238.34	400.0	4.1	-0.9	-5.0	0.75	5.1	259.93
500.0	0.51	253.95	500.0	4.8	-1.3	-5.9	0.23	6.1	257.47
600.0	0.41	252.37	600.0	5.4	-1.6	-6.7	0.10	6.9	256.97
700.0	0.31	233.46	700.0	5.7	-1.8	-7.3	0.15	7.5	255.93
800.0	0.31	238.92	799.9	6.0	-2.1	-7.7	0.03	8.0	254.62
900.0	0.35	248.01	899.9	6.4	-2.4	-8.2	0.07	8.6	253.90
1000.0	0.38	242.68	999.9	6.8	-2.6	-8.8	0.05	9.2	253.30
1100.0	0.36	239.28	1099.9	7.1	-3.0	-9.4	0.03	9.8	252.50
1200.0	0.36	226.16	1199.9	7.4	-3.3	-9.9	0.08	10.4	251.34
1300.0	0.30	238.91	1299.9	7.7	-3.7	-10.3	0.09	11.0	250.35
1400.0	0.15	231.01	1399.9	7.9	-3.9	-10.7	0.15	11.3	249.87
1500.0	0.09	282.61	1499.9	8.0	-4.0	-10.8	0.12	11.5	249.87
1600.0	0.34	310.03	1599.9	8.4	-3.8	-11.1	0.26	11.8	251.33
1700.0	0.55	303.33	1699.9	9.1	-3.3	-11.8	0.22	12.2	254.29
1800.0	0.54	309.11	1799.9	10.1	-2.7	-12.5	0.06	12.8	257.63
1900.0	0.52	306.30	1899.9	11.0	-2.2	-13.3	0.03	13.4	260.66
2000.0	0.59	340.52	1999.9	11.8	-1.4	-13.8	0.33	13.9	264.10
2100.0	0.83	8.55	2099.9	12.4	-0.2	-13.9	0.42	13.9	269.07
2200.0	1.22	25.35	2199.9	12.6	1.5	-13.3	0.49	13.4	276.24
2300.0	1.82	38.11	2299.9	12.3	3.7	-11.9	0.69	12.4	287.17
2355.0	2.21	40.46	2354.8	11.8	5.2	-10.6	0.72	11.8	295.88

Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD. Field: North Hobbs Site: Lea County, NM Well: NHU #30-536 Wellpath: DH - Job #32D0603317	Date: 7/3/2003 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 10:25:14 Site: Lea County, NM, True North SITE 0.0 Well (0.00N,0.00E,223.64Azi) Minimum Curvature	Page: 1 Db: Sybase
--	---	--	-------------------------------------

Survey: 06/19/03-06/24/03 E-field 2443'-4427'	Start Date: 6/19/2003	Engineer: Brusenhan/Drake Tied-to: From: Definitive Path
Company: Scientific Drilling Tool: E-field, E-field		

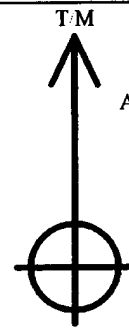
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
2355.0	2.21	40.46	2354.8	3.6	5.2	-10.6	0.00	11.8	295.88
2443.0	0.60	327.50	2442.8	1.8	6.8	-9.8	2.40	11.9	304.96
2537.0	1.80	234.30	2536.8	3.1	6.4	-11.2	2.05	12.9	299.62
2632.0	3.80	211.10	2631.7	7.7	2.8	-14.1	2.38	14.4	281.35
2724.0	5.80	214.80	2723.3	15.2	-3.6	-18.3	2.20	18.7	258.87
2819.0	7.30	212.90	2817.7	25.9	-12.6	-24.3	1.60	27.4	242.60
2913.0	6.60	213.70	2911.0	37.1	-22.1	-30.6	0.75	37.7	234.11
3007.0	7.40	210.70	3004.3	48.3	-31.8	-36.7	0.94	48.5	229.04
3070.0	6.90	212.40	3066.8	56.0	-38.5	-40.8	0.86	56.1	226.63
3165.0	8.50	218.40	3161.0	68.6	-48.8	-48.2	1.88	68.6	224.62
3259.0	7.70	220.80	3254.0	81.8	-59.0	-56.6	0.92	81.8	223.80
3322.0	7.40	219.40	3316.5	90.1	-65.4	-61.9	0.56	90.1	223.46
3417.0	6.40	216.30	3410.8	101.4	-74.4	-69.0	1.12	101.4	222.84
3511.0	6.70	226.30	3504.2	112.1	-82.4	-76.0	1.25	112.1	222.70
3575.0	5.90	224.40	3567.8	119.1	-87.3	-81.0	1.29	119.1	222.86
3637.0	6.90	226.70	3629.4	126.0	-92.1	-86.0	1.66	126.0	223.02
3732.0	6.50	225.10	3723.8	137.1	-99.8	-93.9	0.46	137.1	223.25
3827.0	6.20	226.00	3818.2	147.6	-107.2	-101.4	0.33	147.6	223.41
3889.0	5.90	224.50	3879.8	154.1	-111.8	-106.1	0.55	154.1	223.49
3953.0	6.90	229.60	3943.4	161.2	-116.6	-111.3	1.80	161.2	223.66
4047.0	7.00	227.00	4036.8	172.6	-124.2	-119.8	0.35	172.6	223.96
4142.0	7.20	225.20	4131.0	184.3	-132.3	-128.2	0.31	184.3	224.10
4236.0	6.90	218.70	4224.3	195.8	-140.9	-136.0	0.91	195.8	223.98
4331.0	6.30	219.00	4318.7	206.7	-149.4	-142.8	0.63	206.7	223.71
4427.0	6.30	219.00	4414.1	217.2	-157.6	-149.4	0.00	217.2	223.48



Scientific
Drilling

Field: North Hobbs
Site: Lea County, NM
Well: NHU #30-536
Wellpath: DH - Job #32D0603317
Survey: 06/19/03-06/24/03



Azimuths to True North
Magnetic North: 0.00°

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

