



Scientific Drilling

SUR: B-19-18s-38e, 290/N & 2510/E
BHL: C-19-18s-38e, 557/N & 2940/E
API # 30-025-38524

OCCIDENTAL PERMIAN LTD.

Field: Hobbs, North
Site: Lea County, NM
Well: NHU #19-628
Wellpath: DH - Job #32D12061026
Survey: 12/17/06-12/25/06

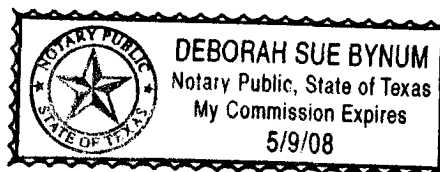
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*R. W. Carter*..... Company Representative

Notorized this date 11th of January, 2007.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: OCCIDENTAL PERMIAN LTD.
Field: Hobbs, North
Site: Lea County, NM
Well: NHU #19-628
Wellpath: VH - Job #32K12061029

Date: 01/08/2007 Time: 12:10:05 Page: 1
Co-ordinate(NE) Reference: Well: NHU #19-628, True North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,238.08Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 12/17/06
KSRG 0'-1450'
Company: Scientific Drilling Internatio
Tool: Keeper;Keeper Surface Readout

Start Date: 12/17/2006
Engineer: Gonzales/Sharpe w/P&M
Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ChD ft	ChA deg
0.00	0.00	359.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.17	152.16	100.00	0.01	-0.13	0.07	0.17	0.15	152.16
200.00	0.23	35.13	200.00	-0.16	-0.10	0.25	0.34	0.27	111.13
300.00	0.21	51.62	300.00	-0.53	0.18	0.51	0.07	0.54	70.70
400.00	0.26	92.55	400.00	-0.90	0.28	0.88	0.17	0.93	72.22
500.00	0.20	113.49	500.00	-1.19	0.20	1.27	0.10	1.29	80.89
600.00	0.24	166.67	600.00	-1.22	-0.07	1.48	0.20	1.48	92.70
700.00	0.17	190.04	700.00	-1.05	-0.42	1.50	0.11	1.56	105.61
800.00	0.37	202.32	799.99	-0.69	-0.86	1.35	0.21	1.61	122.58
900.00	0.41	247.70	899.99	-0.08	-1.30	0.90	0.30	1.58	145.31
1000.00	0.35	260.36	999.99	0.56	-1.49	0.27	0.10	1.51	169.82
1100.00	0.22	282.80	1099.99	0.98	-1.49	-0.22	0.17	1.51	188.43
1200.00	0.42	309.76	1199.99	1.23	-1.22	-0.69	0.25	1.40	209.56
1300.00	0.13	58.36	1299.99	1.23	-0.92	-0.88	0.48	1.27	223.48
1400.00	0.37	41.81	1399.99	0.81	-0.62	-0.56	0.25	0.84	222.14
1450.00	0.41	54.80	1449.98	0.47	-0.40	-0.31	0.19	0.51	217.80



Scientific Drilling International

Survey Report

Company: OCCIDENTAL PERMIAN LTD.	Date: 01/08/2007	Time: 12:09:24	Page: 1
Field: Hobbs, North	Co-ordinate(NE) Reference:	Well: NHU #19-628, True North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: NHU #19-628	Section (VS) Reference:	Well (0.00N,0.00E,238.08Azi)	
Wellpath: DH - Job #32D12061026	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 12/17/06-12/25/06	Start Date: 12/17/2006
MWD 1572'-4471'	
Company: Scientific Drilling Internatio	Engineer: Lopez/Baird
Tool: MWD;MWD	Tied-to: From: Definitive Path

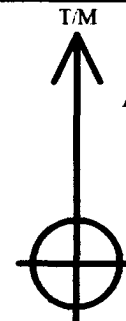
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ChD ft	ChA deg
1450.00	0.41	54.80	1449.98	0.47	-0.40	-0.31	0.00	0.51	217.80
1572.00	1.14	192.25	1571.98	0.88	-1.33	-0.21	1.20	1.35	188.98
1634.00	1.96	215.89	1633.96	2.30	-2.80	-0.96	1.65	2.96	199.01
1695.00	1.67	203.13	1694.92	3.99	-4.46	-1.92	0.81	4.86	203.34
1757.00	1.68	208.74	1756.90	5.52	-6.09	-2.72	0.26	6.66	204.05
1880.00	5.55	250.51	1879.64	12.91	-9.65	-9.19	3.61	13.33	223.60
1939.00	5.84	256.23	1938.35	18.55	-11.32	-14.80	1.08	18.63	232.59
2002.00	6.45	252.74	2000.99	25.01	-13.13	-21.29	1.13	25.02	238.33
2064.00	7.98	252.26	2062.50	32.56	-15.48	-28.72	2.47	32.62	241.68
2126.00	9.89	251.85	2123.74	41.90	-18.45	-37.88	3.08	42.13	244.03
2188.00	10.97	247.22	2184.72	52.90	-22.39	-48.37	2.20	53.30	245.16
2250.00	11.46	243.75	2245.54	64.85	-27.40	-59.34	1.34	65.36	245.22
2313.00	12.41	240.26	2307.17	77.84	-33.53	-70.83	1.89	78.36	244.67
2376.00	13.22	237.45	2368.61	91.81	-40.76	-82.78	1.62	92.27	243.78
2438.00	13.58	238.58	2428.92	106.18	-48.37	-94.97	0.72	106.57	243.01
2532.00	13.67	235.90	2520.27	128.32	-60.35	-113.58	0.68	128.62	242.02
2625.00	13.67	232.84	2610.64	150.24	-73.15	-131.44	0.78	150.42	240.90
2719.00	12.57	234.09	2702.19	171.51	-85.86	-148.58	1.21	171.60	239.98
2843.00	11.49	231.18	2823.46	197.23	-101.51	-169.13	1.00	197.26	239.03
2937.00	10.17	236.31	2915.79	214.82	-111.99	-183.33	1.74	214.83	238.58
3031.00	9.65	236.00	3008.38	230.99	-121.00	-196.77	0.56	230.99	238.41
3124.00	9.57	238.36	3100.08	246.51	-129.41	-209.81	0.43	246.51	238.33
3219.00	9.74	238.14	3193.73	262.44	-137.80	-223.36	0.18	262.44	238.33
3313.00	9.76	236.24	3286.38	278.35	-146.42	-236.73	0.34	278.36	238.26
3407.00	10.55	238.56	3378.90	294.92	-155.34	-250.70	0.95	294.92	238.22
3501.00	9.89	238.82	3471.41	311.60	-164.00	-264.95	0.70	311.60	238.24
3595.00	10.12	238.80	3563.98	327.93	-172.46	-278.92	0.24	327.93	238.27
3689.00	11.24	237.27	3656.35	345.35	-181.69	-293.69	1.23	345.35	238.26
3783.00	11.99	239.21	3748.43	364.27	-191.65	-309.79	0.90	364.27	238.26
3877.00	12.29	240.11	3840.33	384.03	-201.63	-326.85	0.38	384.04	238.33
3971.00	12.63	239.61	3932.11	404.30	-211.81	-344.39	0.38	404.31	238.41
4065.00	11.91	239.39	4023.96	424.27	-221.95	-361.60	0.77	424.28	238.46
4159.00	11.57	235.59	4116.00	443.39	-232.22	-377.72	0.90	443.40	238.42
4253.00	11.57	236.10	4208.09	462.23	-242.80	-393.33	0.11	462.23	238.31
4345.00	11.45	237.04	4298.24	480.58	-252.92	-408.64	0.24	480.58	238.25
4424.00	11.58	236.48	4375.65	496.34	-261.56	-421.83	0.22	496.34	238.20
4471.00	11.66	236.15	4421.68	505.81	-266.81	-429.71	0.22	505.81	238.16



Scientific
Drilling

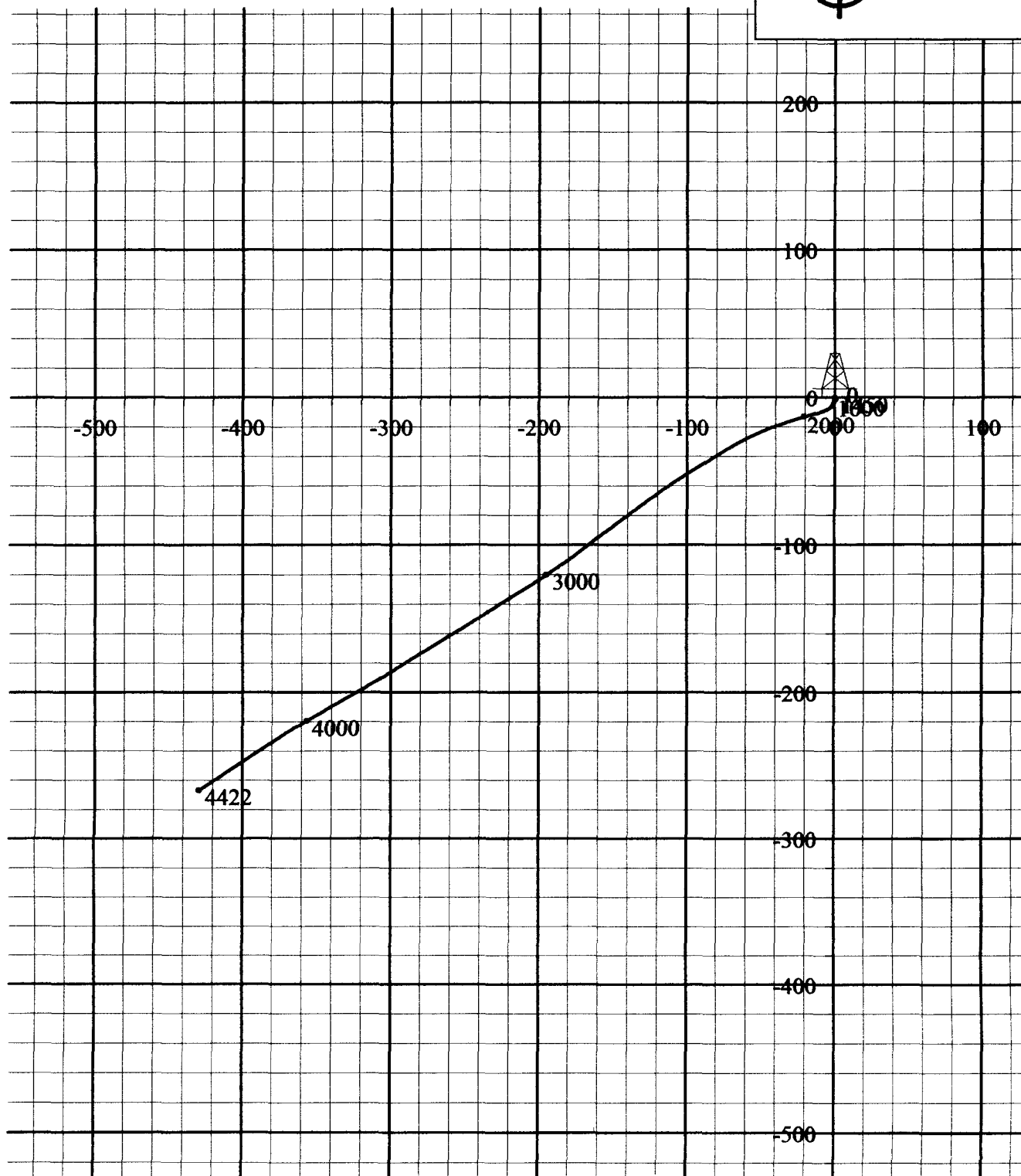
Field: Hobbs, North
Site: Lea County, NM
Well: NHU #19-628
Wellpath: DH - Job #32D12061026
Survey: 12/17/06-12/25/06



Azimuths to True North
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 01/07/2007
Model: Wmm_95

South(-)/North(+) [100ft/in]



West(-)/East(+) [100ft/in]