

Results of Directional Survey

30-025-36245

**OCCIDENTAL PERMIAN LIMITED PART
NORTH HOBBS UNIT # 514**

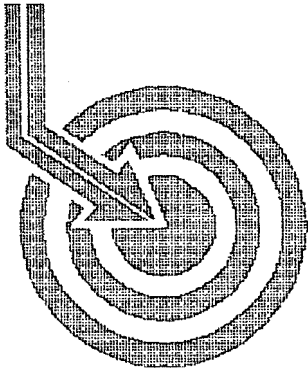
	MD	N/S	E/W	VD
	4174	2.90	551.90	4105.1
TOP PERFS/OH	4186	2.90	555.22	4116.63
	4269	2.90	578.20	4196.40
	4269	2.90	578.20	4196.40
BOT PERFS/OH	4320	2.69	592.96	4245.25
	4364	2.50	605.70	4287.40

NEXT TO LAST	4396	2.30	615.20	4317.90
LAST READING	4481	1.70	640.90	4398.90
TD	4483	1.69	641.50	4400.81

Surface Location	2279	FN	229	FW
Projected BHL	2277	FN	871	FW
Location of				
Top Perfs/OH	2276	FN	784	FW
Bottom Perfs/OH	2276	FN	822	FW

SUMMARY of Subsurface Locations

Surface Location	E-32-18S-38E	2279	FN	229	FW	Vert. Depth
Top Perfs/OH	E-32-18S-38E	2276	FN	784	FW	4116.63
Bottom Perfs/OH	E-32-18S-38E	2276	FN	822	FW	4245.25
Projected TD	E-32-18S-38E	2277	FN	871	FW	4400.81



Scientific Drilling

SUR: E-32-18s-38e, 2279/S & 229/W
BHL: E-32-18s-38e, 2277/S & 871/W
API # 30-025-36245

OCCIDENTAL PERMIAN LTD.

Field: North Hobbs
Site: Lea County, NM
Well: NHU #32-514
Wellpath: DH - Job #32D0503221
Survey: 05/10/03-05/16/03

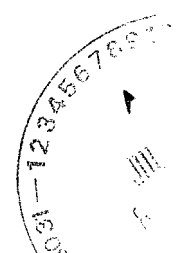
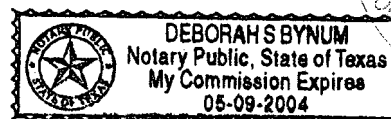
This survey is correct to the best of my knowledge
and is supported by actual field data.

Greg Mowley Company Representative

Notorized this date 30th of May, 2003.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas



KZ

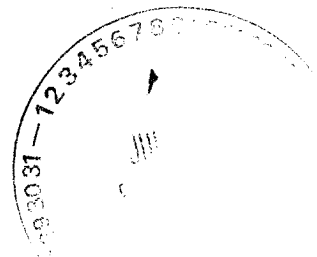
Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD.	Date: 5/30/2003	Time: 16:47:44	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 #32-514	Section (VS) Reference:	Well (0.00N,0.00E,222.26Azi)	
Wellpath: VH - Job #32K0503223	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 05/12/03 KSRG 0'-1660'	Start Date: 5/12/2003
Company: Scientific Drilling	Engineer: Angel Guebara
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	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.39	184.76	100.0	0.3	-0.3	0.0	0.39	0.3	184.76
200.0	0.31	206.49	200.0	0.8	-0.9	-0.2	0.15	0.9	190.90
300.0	0.28	182.52	300.0	1.2	-1.4	-0.3	0.13	1.4	192.38
400.0	0.19	142.21	400.0	1.5	-1.8	-0.2	0.18	1.8	186.97
500.0	0.22	223.48	500.0	1.7	-2.1	-0.2	0.27	2.1	186.87
600.0	0.11	267.60	600.0	1.9	-2.2	-0.5	0.16	2.2	192.20
700.0	0.20	275.84	700.0	2.1	-2.2	-0.7	0.09	2.3	198.83
800.0	0.18	260.24	800.0	2.3	-2.2	-1.1	0.05	2.4	206.08
900.0	0.28	268.34	900.0	2.6	-2.2	-1.5	0.10	2.7	213.48
1000.0	0.13	203.87	1000.0	2.9	-2.3	-1.8	0.25	2.9	217.03
1100.0	0.29	189.19	1100.0	3.2	-2.7	-1.8	0.17	3.3	214.51
1200.0	0.19	163.34	1200.0	3.5	-3.1	-1.8	0.14	3.6	210.73
1300.0	0.37	188.90	1300.0	3.9	-3.6	-1.8	0.21	4.0	207.28
1400.0	0.10	14.24	1400.0	4.1	-3.8	-1.9	0.47	4.2	206.18
1500.0	0.09	248.44	1500.0	4.1	-3.7	-1.9	0.17	4.2	207.15
1600.0	0.69	319.50	1600.0	4.1	-3.3	-2.4	0.66	4.1	215.69
1660.0	0.21	315.62	1660.0	4.0	-3.0	-2.7	0.80	4.0	222.26



Scientific Drilling Survey Report

Company: OCCIDENTAL PERMIAN LTD.
Field: North Hobbs
Site: Lea County, NM
Well: NHU #32-514
Wellpath: DH - Job #32D0503221

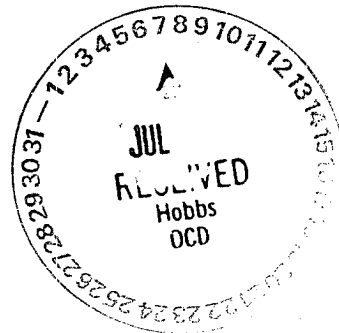
Date: 5/30/2003 Time: 16:54:50 Page: 1
Co-ordinate(N/E) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0
Section (V/S) Reference: Well (0.00N,0.00E,89.85Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 05/10/03-05/16/03
E-field 1751'-4481'
Company: Scientific Drilling
Tool:

Start Date: 5/10/2003
Engineer: Brusenhan/Drake
Tied-to: From: Definitive Path

Survey

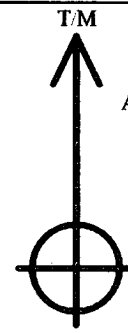
MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1660.0	0.21	315.62	1660.0	-2.7	-3.0	-2.7	0.00	4.0	222.26
1751.0	2.20	72.80	1751.0	-1.1	-2.3	-1.1	2.53	2.6	206.08
1846.0	3.90	82.10	1845.8	3.8	-1.3	3.8	1.86	4.0	109.42
1940.0	6.70	77.90	1939.4	12.3	0.2	12.3	3.01	12.3	88.85
2036.0	8.80	80.60	2034.5	25.1	2.6	25.1	2.22	25.2	84.03
2129.0	11.20	85.30	2126.1	41.1	4.5	41.1	2.72	41.3	83.72
2224.0	13.50	84.80	2218.9	61.3	6.3	61.3	2.42	61.6	84.15
2318.0	15.60	88.10	2309.9	84.9	7.7	84.9	2.40	85.2	84.82
2412.0	17.30	88.50	2400.0	111.5	8.5	111.5	1.81	111.8	85.65
2507.0	19.00	89.50	2490.3	141.1	9.0	141.1	1.82	141.4	86.35
2601.0	17.90	88.10	2579.5	170.8	9.6	170.8	1.26	171.1	86.78
2695.0	16.10	87.30	2669.4	198.3	10.7	198.3	1.93	198.6	86.91
2750.0	15.20	87.50	2722.3	213.1	11.4	213.1	1.64	213.4	86.95
2821.0	14.60	89.60	2790.9	231.4	11.8	231.3	1.14	231.6	87.07
2884.0	14.70	92.30	2851.9	247.3	11.6	247.3	1.10	247.5	87.32
2947.0	14.50	93.20	2912.9	263.2	10.8	263.1	0.48	263.4	87.65
3010.0	14.20	94.40	2973.9	278.7	9.8	278.7	0.67	278.9	87.99
3073.0	14.60	93.90	3034.9	294.4	8.6	294.3	0.66	294.5	88.32
3167.0	14.50	96.00	3125.9	317.9	6.6	317.9	0.57	317.9	88.81
3230.0	14.80	93.90	3186.9	333.7	5.2	333.7	0.97	333.8	89.10
3325.0	14.00	90.10	3278.9	357.3	4.4	357.3	1.30	357.4	89.30
3388.0	13.30	88.70	3340.1	372.2	4.5	372.2	1.23	372.2	89.30
3451.0	13.10	88.40	3401.4	386.6	4.9	386.6	0.34	386.6	89.27
3514.0	12.30	89.00	3462.9	400.4	5.2	400.4	1.29	400.5	89.25
3608.0	11.80	89.90	3554.8	420.1	5.4	420.0	0.57	420.1	89.26
3671.0	12.10	92.10	3616.4	433.1	5.2	433.1	0.87	433.1	89.31
3765.0	12.70	91.50	3708.3	453.3	4.6	453.3	0.65	453.3	89.42
3859.0	13.10	91.60	3799.9	474.2	4.0	474.2	0.43	474.3	89.52
3954.0	13.80	91.90	3892.3	496.3	3.3	496.3	0.74	496.3	89.62
4017.0	14.20	91.20	3953.4	511.6	2.9	511.6	0.69	511.6	89.68
4080.0	14.60	90.00	4014.4	527.2	2.7	527.2	0.79	527.2	89.70
4174.0	15.80	89.20	4105.1	551.9	2.9	551.9	1.30	551.9	89.70
4269.0	16.40	90.90	4196.4	578.2	2.9	578.2	0.80	578.2	89.71
4364.0	17.20	90.90	4287.4	605.7	2.5	605.7	0.84	605.7	89.77
4396.0	17.60	91.30	4317.9	615.2	2.3	615.2	1.30	615.2	89.79
4481.0	17.60	91.30	4398.9	640.9	1.7	640.9	0.00	640.9	89.85





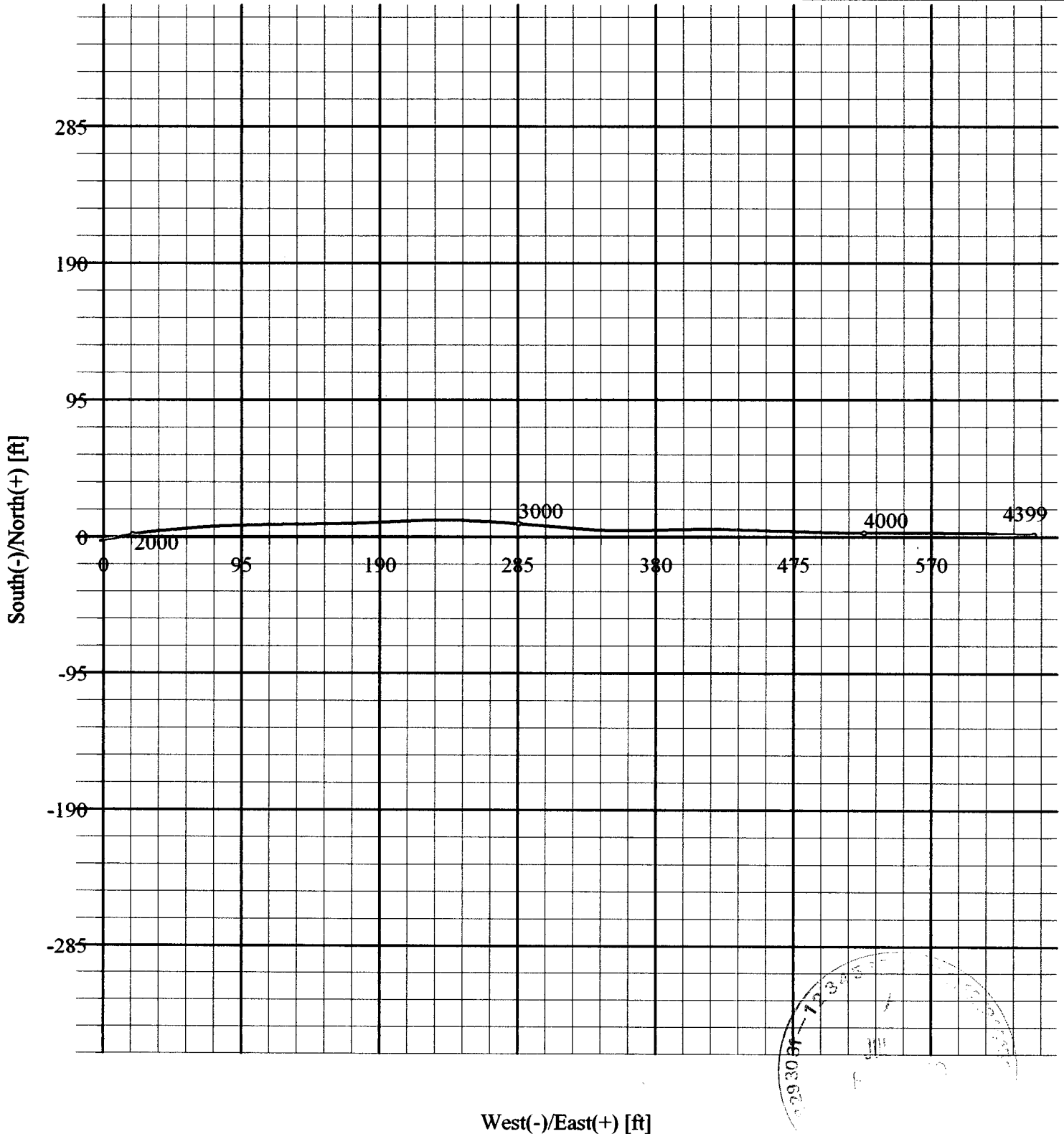
Scientific
Drilling

Field: North Hobbs
Site: Lea County, NM
Well: NHU #32-514
Wellpath: DH - Job #32D0503221
Survey: 05/10/03-05/16/03



Azimuths to True North
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 5/30/2003
Model: Wmm_95





KEY ENERGY DRILLING, INC.
6 Desta Drive
Suite 4400
Midland, Texas 79705
Phone 915-570-0494
Fax 915-570-0465

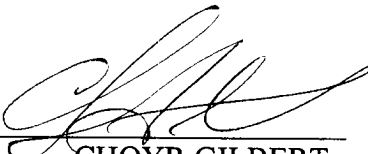
To: Whom It May Concern:

RE: STATE OF NEW MEXICO
OIL AND GAS DIVISION
INCLINATION REPORT

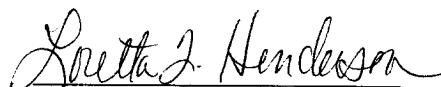
Lease Name: NORTH HOBBS UNIT
Well Number: #32-514
County/State: LEA COUNTY, NEW MEXICO
Operator: OCCIDENTAL PERMIAN, LTD (OPERATOR NO. 617544)
Address: P O BOX 4294
Address: HOUSTON TX 77210-4294
Location:

I, **CHOYR GILBERT**, Contract Manager for Key Energy Drilling, Inc., 6 Desta Drive, Suite 4400, Midland, TX 79705, declare that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on this form and that such data and facts are true, correct, and complete to the best of my knowledge.

Sworn to and Subscribed Before Me by the said

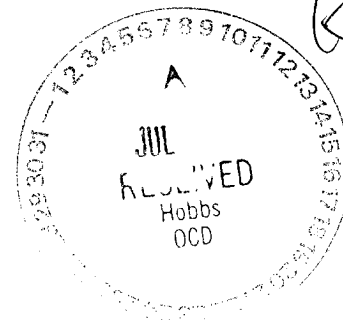

CHOYR GILBERT
Contract Manager

This the 24TH day of JUNE, 2003


Signature of Notary Public
In and for the State of Texas



LORETTA J. HENDERSON
Print Name of Notary Public



INCLINATION REPORT

30-025-36245

	NAME OF COMPANY KEY ENERGY DRILLING, INC.
CHOYR GILBERT - CONTRACT MANAGER	TELEPHONE NUMBER (915) 620-0300