

Results of Directional Survey

API number:	30-025-40000		
OGRID:		Operator:	MEWBORNE OIL CO
		Property:	ZEBRA 16 STATE COM # 1H

surface	ULSTR:	M	16	T	17S	R	35E
				330	FSL	385	FWL

BH Loc	ULSTR:	D	16	T	17S	R	35E
12710	MD	8973.0	TVD	4383	FSL	383	FWL
				897	FNL		

Top Perf/OH	ULSTR:	M	16	T	17S	R	35E
9134	MD	8854.0	TVD	810	FSL	383	FWL

Bot Perf/OH	ULSTR:	D	16	T	17S	R	35E
12688	MD	8972.4	TVD	4361	FSL	384	FWL
				919	FNL		

	MD	N/S	E/W	VD
	9089	435.37	1.90	8849.59
TOP PERFS/OH	9134	479.99	-1.64	8853.98
	9170	515.68	-4.48	8857.49
	12631	3973.79	0.00	8970.63
BOT PERFS/OH	12688	4030.74	-1.44	8972.38
	12663	4005.76	-0.81	8971.61

NEXT TO LAST	12631	3973.79	0.00	8970.63
LAST READING	12663	4005.76	-0.81	8971.61
TD	12710	4052.72	-2.00	8973.05

Surface Location	330	FS	385	FW
Projected BHL	4383	FS	383	FW
Location of				
Top Perfs/OH	810	FS	383	FW
Bottom Perfs/OH	4361	FS	384	FW

SUMMARY of Subsurface Locations

Surface Location	M-16-17S-35E	330	FS	385	FW	Vert. Depth
Top Perfs/OH	M-16-17S-35E	810	FS	383	FW	8853.98
Bottom Perfs/OH	D-16-17S-35E	4361	FS	384	FW	8972.38
Projected TD	D-16-17S-35E	4383	FS	383	FW	8973.05

OPERATOR
WELL/LEASE
COUNTY

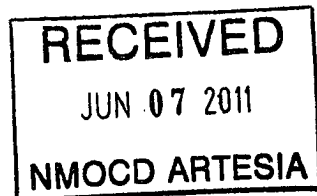
MEWBOURNE OIL COMPANY
ZEBRA 16 ST COM # 1 H
LEA

STATE OF NEW MEXICO
DEVIATION REPORT

30-025-40000

494	0.65
872	1.15
1,320	0.45
1,800	1.12
2,145	1.00
2,560	0.60
2,814	0.52
3,130	0.60
3,546	0.43
3,959	0.50
4,372	0.35
4,753	0.40
5,167	0.68
5,611	0.60
6,022	0.60
6,403	0.28
6,816	0.37
7,220	0.33
7,626	0.73

SUR: M-16-17s-35e, 330/S & 385/W
BHL: D-16-17s-35e, 4383/S & 383/W
API # 30-025-40000



STATE OF TEXAS

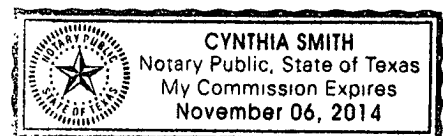
COUNTY OF MIDLAND

BY: Steve Moore

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTL Drilling Company LLC.

4/18/11, by Steve

Cynthia Smith
Notary Public for Midland County, Texas
My Commission Expires:

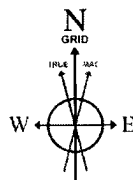


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°100ft)	VS (ft)
Tie On	8135.00	0.180	191.450	8134.76	-21.67	14.13	0.00	-21.78
Est KOP	8300.00	0.180	191.450	8299.76	-22.17	14.02	0.00	-22.28
End of Curve	9181.03	88.897	359.386	8868.12	533.60	7.70	10.11	533.52
No.1H PBHL	13277.00	88.897	359.386	8947.00	4628.57	-36.20	0.00	4628.71

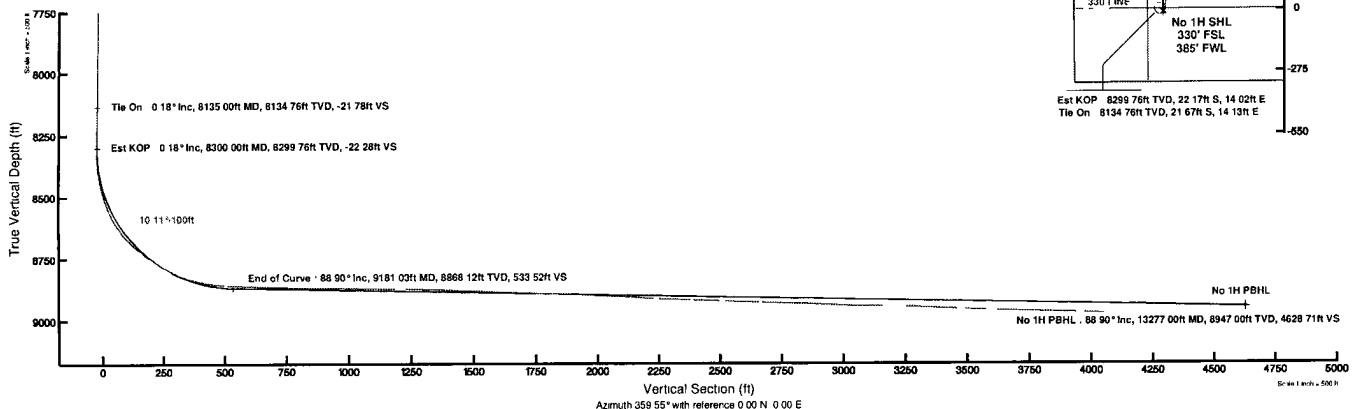
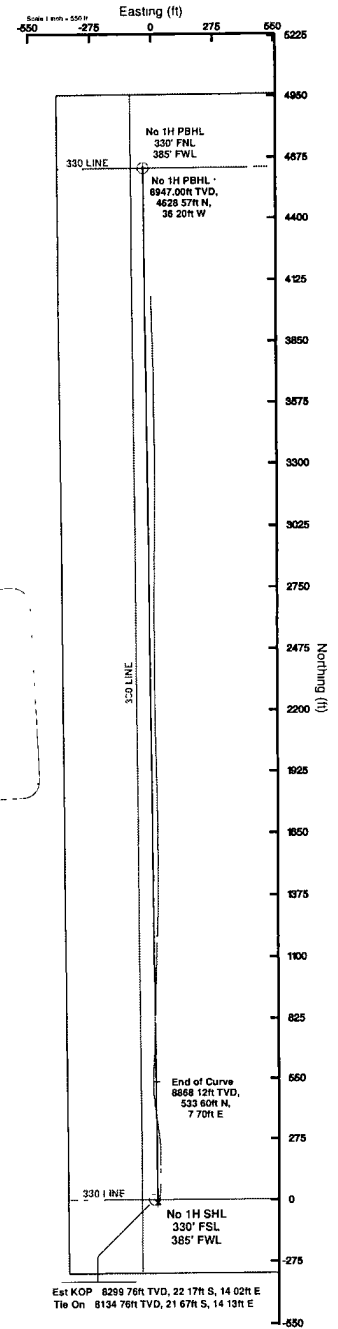
Plot reference wellbore is Plan 1	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on No.1H SHL (RT)	North Reference: Grid north
Measured depths are referenced to Rig on No.1H SHL (RT)	Scale: True distance
Rig on No.1H SHL (RT) to Mean Sea Level: 3983 feet	Depths are in feet
Mean Sea Level to Mud line (Facility: Zebra 16 State Com No.1H): -3965 feet	Created by: calphink on 3/15/2011
Coordinates are in feet referenced to Slot	

RECEIVED
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NMOCD ARTESIA



BGGM (1945 0 to 2012 0) Dip 60.79° Field 49071.8 nT
Magnetic North is 7.69 degrees East of True North (at 1/13/2011)
Grid North is 0.47 degrees East of True North
To correct azimuth from True to Grid subtract 0.47 degrees
To correct azimuth from Magnetic to Grid add 7.22 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.22 = 97.22

SUR: M-16-17s-35e, 330/S & 385/W
BHL: D-16-17s-35e, 4383/S & 383/W
API # 30-025-40000



Actual Wellpath Report

No. 1H AWP ST01

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Calhphik
Scale	0.99999	Report Generated	4/11/2011 at 4:53:00 PM
Convergence at slot	0.47° East	Database/Source file	WA Midland/No. 1H_AWP_ST01.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	765324.71	666222.21	32°49'42.783"N	103°28'10.520"W
Facility Reference Pt			765324.71	666222.21	32°49'42.783"N	103°28'10.520"W
Field Reference Pt			765324.71	666222.21	32°49'42.783"N	103°28'10.520"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.1H SHL (RT) to GL	18.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (RT) to Mean Sea Level	3983.00ft
Vertical Reference Pt	Rig on No.1H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.55°

Actual Wellpath Report

No. 1H AWP ST01

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Mewbourne Oil Company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

WELLPATH DATA (225 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	73.200	0.00	0.00	0.00	0.00	765324.71	666222.21	32°49'42.783"N	103°28'10.520"W	0.00	
100.00	0.440	73.200	100.00	0.11	0.11	0.37	765325.08	666222.32	32°49'42.784"N	103°28'10.516"W	0.44	
200.00	0.240	59.180	200.00	0.32	0.33	0.92	765325.63	666222.54	32°49'42.787"N	103°28'10.509"W	0.22	
300.00	0.160	126.220	300.00	0.34	0.35	1.21	765325.92	666222.56	32°49'42.787"N	103°28'10.506"W	0.23	
400.00	0.270	107.210	400.00	0.19	0.20	1.55	765326.26	666222.41	32°49'42.785"N	103°28'10.502"W	0.13	
500.00	0.330	122.640	499.99	-0.04	-0.02	2.01	765326.72	666222.19	32°49'42.783"N	103°28'10.497"W	0.10	
600.00	0.290	148.850	599.99	-0.41	-0.40	2.39	765327.10	666221.81	32°49'42.779"N	103°28'10.492"W	0.15	
700.00	0.330	151.900	699.99	-0.89	-0.87	2.65	765327.36	666221.34	32°49'42.775"N	103°28'10.489"W	0.04	
800.00	0.470	156.050	799.99	-1.52	-1.49	2.95	765327.66	666220.72	32°49'42.768"N	103°28'10.486"W	0.14	
900.00	0.420	140.200	899.99	-2.18	-2.15	3.36	765328.07	666220.06	32°49'42.762"N	103°28'10.481"W	0.13	
1000.00	0.290	142.860	999.98	-2.66	-2.63	3.74	765328.45	666219.58	32°49'42.757"N	103°28'10.477"W	0.13	
1100.00	0.270	130.390	1099.98	-3.02	-2.99	4.08	765328.79	666219.22	32°49'42.753"N	103°28'10.473"W	0.06	
1200.00	0.260	139.910	1199.98	-3.35	-3.32	4.40	765329.11	666218.90	32°49'42.750"N	103°28'10.469"W	0.05	
1300.00	0.230	116.560	1299.98	-3.62	-3.58	4.73	765329.44	666218.63	32°49'42.748"N	103°28'10.465"W	0.10	
1400.00	0.260	133.280	1399.98	-3.86	-3.82	5.07	765329.78	666218.39	32°49'42.745"N	103°28'10.461"W	0.08	
1500.00	0.410	123.540	1499.98	-4.22	-4.18	5.54	765330.24	666218.03	32°49'42.742"N	103°28'10.456"W	0.16	
1600.00	0.500	124.300	1599.98	-4.67	-4.62	6.19	765330.90	666217.59	32°49'42.737"N	103°28'10.448"W	0.09	
1700.00	0.440	142.490	1699.97	-5.22	-5.17	6.79	765331.50	666217.04	32°49'42.732"N	103°28'10.441"W	0.16	
1800.00	0.610	172.780	1799.97	-6.06	-6.00	7.09	765331.80	666216.21	32°49'42.723"N	103°28'10.438"W	0.32	
1900.00	0.580	169.680	1899.96	-7.09	-7.03	7.25	765331.96	666215.18	32°49'42.713"N	103°28'10.436"W	0.04	
2000.00	0.550	164.710	1999.96	-8.05	-7.99	7.46	765332.17	666214.22	32°49'42.704"N	103°28'10.433"W	0.06	
2100.00	0.600	157.720	2099.95	-9.00	-8.94	7.79	765332.50	666213.27	32°49'42.694"N	103°28'10.430"W	0.09	
2200.00	0.550	149.660	2199.95	-9.90	-9.84	8.23	765332.94	666212.37	32°49'42.685"N	103°28'10.425"W	0.09	
2300.00	0.700	159.700	2299.94	-10.89	-10.82	8.68	765333.39	666211.39	32°49'42.676"N	103°28'10.419"W	0.19	
2400.00	0.570	146.930	2399.94	-11.88	-11.81	9.17	765333.88	666210.40	32°49'42.666"N	103°28'10.414"W	0.19	
2500.00	0.540	146.830	2499.93	-12.70	-12.62	9.70	765334.41	666209.59	32°49'42.658"N	103°28'10.408"W	0.03	
2600.00	0.510	144.330	2599.93	-13.46	-13.38	10.21	765334.92	666208.83	32°49'42.650"N	103°28'10.402"W	0.04	
2700.00	0.540	142.290	2699.92	-14.20	-14.12	10.76	765335.47	666208.09	32°49'42.643"N	103°28'10.395"W	0.04	
2800.00	0.560	99.350	2799.92	-14.66	-14.57	11.53	765336.24	666207.64	32°49'42.638"N	103°28'10.386"W	0.40	
2900.00	0.540	98.860	2899.91	-14.82	-14.72	12.48	765337.19	666207.49	32°49'42.637"N	103°28'10.375"W	0.02	
3000.00	0.620	89.740	2999.91	-14.89	-14.79	13.49	765338.20	666207.42	32°49'42.636"N	103°28'10.364"W	0.12	
3100.00	0.680	90.720	3099.90	-14.91	-14.79	14.62	765339.33	666207.42	32°49'42.636"N	103°28'10.350"W	0.06	
3200.00	0.630	93.600	3199.90	-14.96	-14.84	15.76	765340.47	666207.37	32°49'42.635"N	103°28'10.337"W	0.06	
3300.00	0.700	101.300	3299.89	-15.12	-14.99	16.91	765341.62	666207.22	32°49'42.634"N	103°28'10.323"W	0.11	
3400.00	0.660	109.290	3399.88	-15.44	-15.30	18.05	765342.76	666206.91	32°49'42.631"N	103°28'10.310"W	0.10	
3500.00	0.690	123.170	3499.88	-15.97	-15.82	19.10	765343.81	666206.39	32°49'42.625"N	103°28'10.298"W	0.17	
3600.00	0.600	136.130	3599.87	-16.68	-16.53	19.97	765344.68	666205.68	32°49'42.618"N	103°28'10.288"W	0.17	
3700.00	0.610	139.650	3699.86	-17.47	-17.31	20.68	765345.38	666204.90	32°49'42.610"N	103°28'10.280"W	0.04	
3800.00	0.560	137.780	3799.86	-18.24	-18.08	21.35	765346.06	666204.13	32°49'42.603"N	103°28'10.272"W	0.05	
3900.00	0.620	136.850	3899.85	-19.01	-18.83	22.05	765346.76	666203.38	32°49'42.595"N	103°28'10.264"W	0.06	
4000.00	0.590	137.260	3999.85	-19.78	-19.61	22.77	765347.48	666202.60	32°49'42.588"N	103°28'10.255"W	0.03	
4100.00	0.630	140.980	4099.84	-20.60	-20.41	23.46	765348.17	666201.80	32°49'42.580"N	103°28'10.247"W	0.06	
4200.00	0.500	149.180	4199.84	-21.40	-21.21	24.03	765348.74	666201.00	32°49'42.572"N	103°28'10.241"W	0.15	
4300.00	0.350	206.490	4299.83	-22.05	-21.86	24.12	765348.83	666200.35	32°49'42.565"N	103°28'10.240"W	0.43	
4400.00	0.330	206.860	4399.83	-22.58	-22.39	23.85	765348.56	666199.82	32°49'42.560"N	103°28'10.243"W	0.02	

Actual Wellpath Report

No. 1H AWP ST01

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INTEQ

Mewbourne Oil Company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

WELLPATH DATA (225 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4500.00	0.310	243.050	4499.83	-22.96	-22.77	23.48	765348.19	666199.44	32°49'42.556"N	103°28'10.247"W	0.20	
4600.00	0.290	261.260	4599.83	-23.11	-22.93	22.99	765347.70	666199.28	32°49'42.555"N	103°28'10.253"W	0.10	
4700.00	0.420	296.900	4699.83	-22.98	-22.81	22.41	765347.12	666199.40	32°49'42.556"N	103°28'10.260"W	0.25	
4800.00	0.460	304.340	4799.82	-22.58	-22.41	21.75	765346.46	666199.80	32°49'42.560"N	103°28'10.267"W	0.07	
4900.00	0.440	297.750	4899.82	-22.17	-22.01	21.08	765345.79	666200.20	32°49'42.564"N	103°28'10.275"W	0.06	
5000.00	0.460	283.350	4999.82	-21.90	-21.74	20.35	765345.06	666200.47	32°49'42.567"N	103°28'10.284"W	0.11	
5100.00	0.450	286.630	5099.82	-21.68	-21.53	19.59	765344.30	666200.68	32°49'42.569"N	103°28'10.293"W	0.03	
5200.00	0.450	291.130	5199.81	-21.42	-21.28	18.84	765343.55	666200.93	32°49'42.571"N	103°28'10.301"W	0.04	
5300.00	0.520	288.540	5299.81	-21.13	-20.99	18.05	765342.76	666201.22	32°49'42.574"N	103°28'10.311"W	0.07	
5400.00	0.480	282.100	5399.81	-20.89	-20.76	17.21	765341.92	666201.45	32°49'42.577"N	103°28'10.320"W	0.07	
5500.00	0.460	282.770	5499.80	-20.71	-20.58	16.41	765341.12	666201.63	32°49'42.578"N	103°28'10.330"W	0.02	
5600.00	0.500	285.290	5599.80	-20.50	-20.38	15.59	765340.30	666201.83	32°49'42.580"N	103°28'10.339"W	0.05	
5700.00	0.490	282.910	5699.79	-20.28	-20.17	14.76	765339.47	666202.04	32°49'42.583"N	103°28'10.349"W	0.02	
5800.00	0.450	290.760	5799.79	-20.04	-19.93	13.97	765338.68	666202.28	32°49'42.585"N	103°28'10.358"W	0.08	
5900.00	0.460	286.950	5899.79	-19.78	-19.68	13.22	765337.93	666202.53	32°49'42.588"N	103°28'10.367"W	0.03	
6000.00	0.430	287.490	5999.79	-19.55	-19.45	12.48	765337.19	666202.76	32°49'42.590"N	103°28'10.376"W	0.03	
6100.00	0.520	274.550	6099.78	-19.39	-19.30	11.67	765336.38	666202.91	32°49'42.591"N	103°28'10.385"W	0.14	
6200.00	0.460	294.000	6199.78	-19.18	-19.10	10.85	765335.56	666203.11	32°49'42.594"N	103°28'10.395"W	0.18	
6300.00	0.130	343.730	6299.78	-18.91	-18.83	10.45	765335.16	666203.38	32°49'42.596"N	103°28'10.399"W	0.39	
6400.00	0.170	39.510	6399.78	-18.69	-18.60	10.51	765335.22	666203.61	32°49'42.598"N	103°28'10.399"W	0.14	
6500.00	0.170	37.010	6499.78	-18.46	-18.37	10.70	765335.41	666203.84	32°49'42.601"N	103°28'10.397"W	0.01	
6600.00	0.220	46.540	6599.78	-18.21	-18.12	10.93	765335.64	666204.09	32°49'42.603"N	103°28'10.394"W	0.06	
6700.00	0.230	37.760	6699.77	-17.92	-17.83	11.19	765335.90	666204.38	32°49'42.606"N	103°28'10.391"W	0.04	
6800.00	0.190	64.260	6799.77	-17.69	-17.60	11.46	765336.17	666204.61	32°49'42.608"N	103°28'10.388"W	0.10	
6900.00	0.170	72.710	6899.77	-17.58	-17.48	11.75	765336.46	666204.73	32°49'42.609"N	103°28'10.384"W	0.03	
7000.00	0.160	144.880	6999.77	-17.65	-17.55	11.97	765336.68	666204.66	32°49'42.609"N	103°28'10.382"W	0.19	
7100.00	0.280	126.000	7099.77	-17.91	-17.81	12.25	765336.96	666204.40	32°49'42.606"N	103°28'10.378"W	0.14	
7200.00	0.340	136.730	7199.77	-18.27	-18.17	12.65	765337.36	666204.04	32°49'42.603"N	103°28'10.374"W	0.08	
7300.00	0.170	128.490	7299.77	-18.58	-18.48	12.97	765337.68	666203.73	32°49'42.600"N	103°28'10.370"W	0.17	
7400.00	0.050	130.820	7399.77	-18.70	-18.60	13.12	765337.83	666203.61	32°49'42.598"N	103°28'10.368"W	0.12	
7500.00	0.180	148.140	7499.77	-18.87	-18.76	13.24	765337.95	666203.45	32°49'42.597"N	103°28'10.367"W	0.13	
7600.00	0.160	188.540	7599.77	-19.14	-19.03	13.30	765338.01	666203.18	32°49'42.594"N	103°28'10.366"W	0.12	
7700.00	0.150	161.280	7699.77	-19.40	-19.30	13.32	765338.03	666202.91	32°49'42.591"N	103°28'10.366"W	0.07	
7800.00	0.270	137.520	7799.77	-19.70	-19.59	13.52	765338.23	666202.62	32°49'42.588"N	103°28'10.364"W	0.15	
7900.00	0.340	154.180	7899.77	-20.14	-20.03	13.81	765338.52	666202.18	32°49'42.584"N	103°28'10.360"W	0.11	
8000.00	0.470	160.640	7999.76	-20.80	-20.69	14.08	765338.79	666201.52	32°49'42.578"N	103°28'10.357"W	0.14	
8100.00	0.460	187.720	8099.76	-21.58	-21.47	14.16	765338.87	666200.74	32°49'42.570"N	103°28'10.356"W	0.22	
8135.00	0.180	191.450	8134.76	-21.78	-21.67	14.13	765338.84	666200.54	32°49'42.568"N	103°28'10.357"W	0.80	
8184.00	0.300	179.000	8183.76	-21.98	-21.87	14.11	765338.82	666200.34	32°49'42.566"N	103°28'10.357"W	0.27	
8215.00	1.200	141.900	8214.76	-22.32	-22.21	14.32	765339.03	666200.00	32°49'42.563"N	103°28'10.355"W	3.15	
8247.00	1.700	147.500	8246.75	-22.99	-22.87	14.78	765339.49	666199.34	32°49'42.556"N	103°28'10.349"W	1.62	
8278.00	1.600	138.900	8277.73	-23.70	-23.59	15.31	765340.02	666198.63	32°49'42.549"N	103°28'10.343"W	0.86	
8309.00	1.200	69.900	8308.73	-23.92	-23.80	15.90	765340.61	666198.41	32°49'42.547"N	103°28'10.336"W	5.22	
8340.00	2.700	29.200	8339.71	-23.18	-23.05	16.56	765341.27	666199.16	32°49'42.554"N	103°28'10.328"W	6.30	
8372.00	5.400	19.000	8371.63	-21.10	-20.97	17.42	765342.13	666201.24	32°49'42.575"N	103°28'10.318"W	8.70	

Actual Wellpath Report

No. 1H AWP ST01

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INTEQ

Mewbourne Oil Company

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

WELLPATH DATA (225-stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8403.00	8.200	16.000	8402.41	-17.61	-17.46	18.50	765343.21	666204.75	32°49'42.609"N	103°28'10.305"W	9.10	
8434.00	11.200	12.600	8432.96	-12.55	-12.40	19.77	765344.48	666209.81	32°49'42.659"N	103°28'10.290"W	9.85	
8466.00	14.100	11.500	8464.18	-5.71	-5.55	21.22	765345.93	666216.66	32°49'42.727"N	103°28'10.272"W	9.09	
8497.00	17.100	10.000	8494.03	2.47	2.65	22.77	765347.48	666224.86	32°49'42.808"N	103°28'10.253"W	9.76	
8529.00	20.300	6.600	8524.34	12.61	12.80	24.22	765348.93	666235.01	32°49'42.908"N	103°28'10.235"W	10.56	
8561.00	23.800	4.000	8554.00	24.56	24.75	25.31	765350.02	666246.96	32°49'43.026"N	103°28'10.221"W	11.35	
8591.00	27.800	2.500	8581.00	37.58	37.79	26.04	765350.75	666260.00	32°49'43.155"N	103°28'10.211"W	13.51	
8623.00	31.500	1.400	8608.81	53.40	53.61	26.57	765351.28	666275.82	32°49'43.312"N	103°28'10.204"W	11.69	
8654.00	35.700	0.600	8634.62	70.54	70.75	26.86	765351.57	666292.96	32°49'43.481"N	103°28'10.199"W	13.62	
8684.00	40.100	359.900	8658.29	88.96	89.18	26.94	765351.65	666311.39	32°49'43.664"N	103°28'10.196"W	14.74	
8714.00	44.700	359.600	8680.44	109.19	109.40	26.85	765351.56	666331.61	32°49'43.864"N	103°28'10.195"W	15.35	
8747.00	49.400	359.600	8702.91	133.34	133.55	26.68	765351.39	666355.76	32°49'44.103"N	103°28'10.195"W	14.24	
8777.00	52.200	0.100	8721.87	156.58	156.79	26.62	765351.33	666379.00	32°49'44.333"N	103°28'10.193"W	9.42	
8809.00	54.500	0.100	8740.97	182.25	182.47	26.67	765351.37	666404.67	32°49'44.587"N	103°28'10.190"W	7.19	
8839.00	56.700	0.300	8757.92	207.00	207.22	26.75	765351.46	666429.43	32°49'44.831"N	103°28'10.187"W	7.35	
8870.00	57.700	358.000	8774.72	233.06	233.27	26.36	765351.07	666455.48	32°49'45.089"N	103°28'10.189"W	7.02	
8902.00	59.400	354.500	8791.42	260.30	260.50	24.57	765349.28	666482.71	32°49'45.359"N	103°28'10.207"W	10.74	
8933.00	63.100	352.400	8806.33	287.32	287.49	21.46	765346.17	666509.70	32°49'45.626"N	103°28'10.241"W	13.33	
8965.00	68.400	352.000	8819.46	316.24	316.39	17.50	765342.21	666538.60	32°49'45.912"N	103°28'10.285"W	16.60	
8997.00	73.000	352.000	8830.04	346.18	346.29	13.30	765338.01	666568.50	32°49'46.209"N	103°28'10.331"W	14.37	
9027.00	76.500	352.700	8837.93	374.89	374.97	9.45	765334.16	666597.18	32°49'46.493"N	103°28'10.374"W	11.88	
9059.00	79.100	352.900	8844.69	405.94	406.00	5.53	765330.24	666628.21	32°49'46.800"N	103°28'10.416"W	8.15	
9089.00	82.100	353.000	8849.59	435.34	435.37	1.90	765326.61	666657.57	32°49'47.091"N	103°28'10.456"W	10.01	
9170.00	86.700	357.900	8857.49	515.70	515.68	-4.48	765320.23	666737.89	32°49'47.886"N	103°28'10.523"W	8.28	
9202.00	87.800	1.400	8859.03	547.66	547.64	-4.68	765320.03	666769.84	32°49'48.202"N	103°28'10.522"W	11.45	
9233.00	88.100	2.700	8860.14	578.61	578.60	-3.57	765321.14	666800.80	32°49'48.508"N	103°28'10.507"W	4.30	
9265.00	87.800	2.900	8861.28	610.54	610.54	-2.01	765322.70	666832.74	32°49'48.824"N	103°28'10.485"W	1.13	
9297.00	87.500	2.900	8862.60	642.46	642.47	-0.39	765324.32	666864.68	32°49'49.140"N	103°28'10.463"W	0.94	
9329.00	88.500	2.200	8863.71	674.39	674.42	1.04	765325.75	666896.62	32°49'49.456"N	103°28'10.443"W	3.81	
9361.00	87.700	1.700	8864.77	706.35	706.39	2.12	765326.83	666928.59	32°49'49.772"N	103°28'10.428"W	2.95	
9392.00	88.200	1.100	8865.88	737.31	737.36	2.88	765327.59	666959.56	32°49'50.079"N	103°28'10.416"W	2.52	
9424.00	89.300	0.900	8866.58	769.29	769.34	3.44	765328.15	666991.54	32°49'50.395"N	103°28'10.406"W	3.49	
9456.00	89.300	1.300	8866.97	801.28	801.34	4.05	765328.76	667023.54	32°49'50.712"N	103°28'10.396"W	1.25	
9487.00	89.200	1.500	8867.38	832.26	832.32	4.81	765329.52	667054.52	32°49'51.018"N	103°28'10.384"W	0.72	
9519.00	89.600	2.000	8867.71	864.23	864.31	5.79	765330.50	667086.51	32°49'51.335"N	103°28'10.370"W	2.00	
9551.00	89.900	2.000	8867.85	896.21	896.29	6.90	765331.61	667118.49	32°49'51.651"N	103°28'10.353"W	0.94	
9582.00	89.300	2.100	8868.07	927.17	927.27	8.01	765332.72	667149.46	32°49'51.957"N	103°28'10.337"W	1.96	
9614.00	88.600	2.100	8868.66	959.14	959.24	9.19	765333.90	667181.44	32°49'52.274"N	103°28'10.321"W	2.19	
9646.00	88.600	1.700	8869.44	991.10	991.21	10.25	765334.96	667213.41	32°49'52.590"N	103°28'10.305"W	1.25	
9678.00	88.300	1.500	8870.30	1023.07	1023.19	11.14	765335.85	667245.38	32°49'52.906"N	103°28'10.292"W	1.13	
9710.00	89.400	1.700	8870.94	1055.04	1055.17	12.03	765336.74	667277.36	32°49'53.222"N	103°28'10.278"W	3.49	
9742.00	89.400	1.300	8871.28	1087.02	1087.16	12.87	765337.58	667309.35	32°49'53.539"N	103°28'10.265"W	1.25	
9773.00	89.700	1.700	8871.52	1118.00	1118.14	13.68	765338.39	667340.34	32°49'53.845"N	103°28'10.253"W	1.61	
9805.00	89.500	1.800	8871.75	1149.98	1150.13	14.66	765339.37	667372.32	32°49'54.162"N	103°28'10.238"W	0.70	
9837.00	89.100	1.800	8872.14	1181.95	1182.11	15.66	765340.37	667404.30	32°49'54.478"N	103°28'10.223"W	1.25	

Actual Wellpath Report

No. 1H AWP ST01

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

WELLPATH DATA (225 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9869.00	89.000	2.100	8872.67	1213.92	1214.09	16.75	765341.46	667436.28	32°49'54.794"N	103°28'10.208"W	0.99	
9901.00	89.100	1.700	8873.20	1245.89	1246.06	17.81	765342.52	667468.26	32°49'55.111"N	103°28'10.192"W	1.29	
9932.00	89.100	1.600	8873.69	1276.86	1277.05	18.71	765343.42	667499.24	32°49'55.417"N	103°28'10.179"W	0.32	
9964.00	89.000	1.600	8874.22	1308.84	1309.03	19.60	765344.31	667531.22	32°49'55.734"N	103°28'10.165"W	0.31	
9996.00	88.100	0.200	8875.03	1340.82	1341.02	20.10	765344.81	667563.21	32°49'56.050"N	103°28'10.156"W	5.20	
10027.00	87.800	0.000	8876.14	1371.80	1372.00	20.16	765344.87	667594.19	32°49'56.357"N	103°28'10.153"W	1.16	
10059.00	87.600	0.300	8877.42	1403.77	1403.97	20.24	765344.95	667626.16	32°49'56.673"N	103°28'10.148"W	1.13	
10091.00	87.600	359.900	8878.76	1435.74	1435.94	20.30	765345.01	667658.13	32°49'56.989"N	103°28'10.145"W	1.25	
10122.00	87.200	0.300	8880.17	1466.71	1466.91	20.35	765345.06	667689.10	32°49'57.296"N	103°28'10.141"W	1.82	
10154.00	88.000	0.100	8881.51	1498.67	1498.88	20.46	765345.17	667721.07	32°49'57.612"N	103°28'10.137"W	2.58	
10185.00	87.700	0.000	8882.67	1529.65	1529.86	20.49	765345.20	667752.05	32°49'57.918"N	103°28'10.134"W	1.02	
10217.00	87.200	359.500	8884.09	1561.62	1561.83	20.35	765345.06	667784.02	32°49'58.235"N	103°28'10.132"W	2.21	
10249.00	88.000	359.100	8885.43	1593.59	1593.80	19.96	765344.67	667815.99	32°49'58.551"N	103°28'10.134"W	2.79	
10281.00	88.300	359.500	8886.47	1625.57	1625.78	19.57	765344.28	667847.97	32°49'58.868"N	103°28'10.135"W	1.56	
10313.00	88.200	359.000	8887.44	1657.56	1657.76	19.15	765343.86	667879.95	32°49'59.184"N	103°28'10.137"W	1.59	
10344.00	88.100	359.200	8888.44	1688.54	1688.74	18.66	765343.37	667910.93	32°49'59.491"N	103°28'10.140"W	0.72	
10376.00	88.000	359.000	8889.53	1720.52	1720.72	18.16	765342.87	667942.91	32°49'59.807"N	103°28'10.143"W	0.70	
10408.00	87.700	359.300	8890.73	1752.50	1752.69	17.69	765342.40	667974.88	32°50'00.123"N	103°28'10.145"W	1.33	
10439.00	88.700	359.200	8891.71	1783.48	1783.67	17.28	765341.99	668005.86	32°50'00.430"N	103°28'10.147"W	3.24	
10471.00	88.700	358.900	8892.43	1815.47	1815.66	16.75	765341.46	668037.85	32°50'00.746"N	103°28'10.150"W	0.94	
10503.00	88.400	358.600	8893.24	1847.46	1847.64	16.05	765340.76	668069.83	32°50'01.063"N	103°28'10.155"W	1.33	
10535.00	87.600	358.600	8894.36	1879.44	1879.61	15.27	765339.98	668101.80	32°50'01.379"N	103°28'10.161"W	2.50	
10566.00	87.400	358.400	8895.71	1910.40	1910.57	14.46	765339.17	668132.76	32°50'01.686"N	103°28'10.168"W	0.91	
10598.00	87.300	358.600	8897.19	1942.36	1942.53	13.62	765338.33	668164.71	32°50'02.002"N	103°28'10.174"W	0.70	
10630.00	87.300	358.700	8898.70	1974.32	1974.48	12.87	765337.58	668196.67	32°50'02.318"N	103°28'10.180"W	0.31	
10662.00	87.200	358.500	8900.23	2006.28	2006.44	12.09	765336.80	668228.62	32°50'02.634"N	103°28'10.186"W	0.70	
10694.00	87.900	358.500	8901.60	2038.25	2038.40	11.25	765335.96	668260.58	32°50'02.951"N	103°28'10.193"W	2.19	
10726.00	87.100	358.800	8903.00	2070.21	2070.36	10.50	765335.21	668292.54	32°50'03.267"N	103°28'10.199"W	2.67	
10757.00	87.000	0.300	8904.59	2101.17	2101.31	10.26	765334.97	668323.50	32°50'03.573"N	103°28'10.199"W	4.84	
10789.00	86.200	359.300	8906.49	2133.11	2133.26	10.14	765334.85	668355.44	32°50'03.889"N	103°28'10.197"W	4.00	
10821.00	85.700	359.400	8908.75	2165.03	2165.17	9.78	765334.49	668387.36	32°50'04.205"N	103°28'10.198"W	1.59	
10853.00	85.500	359.500	8911.21	2196.94	2197.08	9.48	765334.19	668419.26	32°50'04.521"N	103°28'10.199"W	0.70	
10885.00	87.200	359.200	8913.24	2228.87	2229.01	9.11	765333.82	668451.19	32°50'04.837"N	103°28'10.200"W	5.39	
10917.00	88.300	358.400	8914.50	2260.84	2260.98	8.44	765333.15	668483.16	32°50'05.153"N	103°28'10.205"W	4.25	
10949.00	88.400	358.500	8915.42	2292.82	2292.95	7.58	765332.29	668515.13	32°50'05.470"N	103°28'10.212"W	0.44	
10980.00	88.400	358.600	8916.29	2323.81	2323.93	6.79	765331.50	668546.11	32°50'05.776"N	103°28'10.218"W	0.32	
11012.00	87.800	359.400	8917.35	2355.79	2355.91	6.24	765330.95	668578.09	32°50'06.093"N	103°28'10.221"W	3.12	
11044.00	87.500	0.000	8918.66	2387.76	2387.88	6.07	765330.78	668610.06	32°50'06.409"N	103°28'10.220"W	2.09	
11076.00	87.400	0.200	8920.08	2419.73	2419.85	6.12	765330.83	668642.03	32°50'06.725"N	103°28'10.217"W	0.70	
11107.00	87.200	0.200	8921.54	2450.69	2450.81	6.23	765330.94	668672.99	32°50'07.032"N	103°28'10.212"W	0.65	
11139.00	88.000	0.000	8922.88	2482.66	2482.79	6.29	765331.00	668704.96	32°50'07.348"N	103°28'10.209"W	2.58	
11170.00	87.900	359.800	8923.99	2513.64	2513.77	6.23	765330.94	668735.94	32°50'07.654"N	103°28'10.206"W	0.72	
11202.00	87.900	359.200	8925.16	2545.62	2545.74	5.96	765330.66	668767.92	32°50'07.971"N	103°28'10.206"W	1.87	
11234.00	87.700	359.500	8926.39	2577.59	2577.72	5.59	765330.30	668799.90	32°50'08.287"N	103°28'10.208"W	1.13	
11266.00	87.700	359.600	8927.68	2609.57	2609.69	5.34	765330.05	668831.87	32°50'08.604"N	103°28'10.208"W	0.31	

Actual Wellpath Report

No. 1H AWP ST01

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWP ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWP at 8809.00 MD

WELLPATH DATA (225 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11297.00	88.300	359.900	8928.76	2640.55	2640.67	5.21	765329.92	668862.85	32°50'08.910"N	103°28'10.206"W	2.16	
11329.00	88.400	0.100	8929.68	2672.53	2672.66	5.21	765329.92	668894.83	32°50'09.227"N	103°28'10.203"W	0.70	
11361.00	88.300	0.400	8930.60	2704.52	2704.64	5.35	765330.06	668926.82	32°50'09.543"N	103°28'10.198"W	0.99	
11393.00	88.100	0.400	8931.61	2736.50	2736.63	5.57	765330.28	668958.80	32°50'09.860"N	103°28'10.193"W	0.62	
11424.00	88.200	1.000	8932.61	2767.48	2767.61	5.95	765330.66	668989.78	32°50'10.166"N	103°28'10.185"W	1.96	
11456.00	88.400	1.000	8933.56	2799.45	2799.59	6.51	765331.22	669021.77	32°50'10.482"N	103°28'10.176"W	0.62	
11488.00	88.400	0.080	8934.45	2831.44	2831.58	6.81	765331.52	669053.75	32°50'10.799"N	103°28'10.169"W	2.87	
11520.00	87.600	0.600	8935.57	2863.41	2863.55	7.00	765331.71	669085.73	32°50'11.115"N	103°28'10.164"W	2.98	
11552.00	87.700	0.800	8936.88	2895.38	2895.53	7.39	765332.10	669117.70	32°50'11.432"N	103°28'10.156"W	0.70	
11583.00	87.500	0.500	8938.18	2926.35	2926.50	7.74	765332.45	669148.67	32°50'11.738"N	103°28'10.149"W	1.16	
11615.00	87.600	0.400	8939.55	2958.31	2958.47	7.99	765332.70	669180.64	32°50'12.054"N	103°28'10.143"W	0.44	
11647.00	88.200	1.000	8940.72	2990.28	2990.44	8.38	765333.09	669212.62	32°50'12.371"N	103°28'10.135"W	2.65	
11679.00	87.900	0.900	8941.81	3022.26	3022.42	8.91	765333.62	669244.59	32°50'12.687"N	103°28'10.126"W	0.99	
11711.00	88.200	0.800	8942.90	3054.23	3054.40	9.39	765334.10	669276.57	32°50'13.003"N	103°28'10.118"W	0.99	
11742.00	89.600	0.400	8943.49	3085.22	3085.39	9.71	765334.42	669307.56	32°50'13.310"N	103°28'10.111"W	4.70	
11774.00	89.900	0.900	8943.63	3117.21	3117.39	10.07	765334.78	669339.56	32°50'13.627"N	103°28'10.103"W	1.82	
11806.00	88.600	0.500	8944.05	3149.20	3149.38	10.46	765335.17	669371.55	32°50'13.943"N	103°28'10.096"W	4.25	
11837.00	89.900	0.500	8944.46	3180.19	3180.38	10.73	765335.44	669402.55	32°50'14.250"N	103°28'10.090"W	4.19	
11869.00	89.800	0.900	8944.54	3212.19	3212.37	11.13	765335.84	669434.54	32°50'14.566"N	103°28'10.082"W	1.29	
11901.00	88.900	359.500	8944.90	3244.18	3244.37	11.24	765335.95	669466.54	32°50'14.883"N	103°28'10.078"W	5.20	
11933.00	87.400	359.600	8945.94	3276.17	3276.35	10.99	765335.70	669498.52	32°50'15.199"N	103°28'10.078"W	4.70	
11964.00	87.300	359.700	8947.37	3307.13	3307.32	10.80	765335.51	669529.49	32°50'15.506"N	103°28'10.077"W	0.46	
11997.00	87.300	359.500	8948.92	3340.10	3340.28	10.57	765335.28	669562.45	32°50'15.832"N	103°28'10.076"W	0.61	
12028.00	87.400	359.800	8950.36	3371.06	3371.25	10.38	765335.09	669593.41	32°50'16.138"N	103°28'10.076"W	1.02	
12060.00	87.400	359.300	8951.81	3403.03	3403.21	10.13	765334.84	669625.38	32°50'16.455"N	103°28'10.075"W	1.56	
12092.00	87.400	359.700	8953.26	3435.00	3435.18	9.85	765334.56	669657.35	32°50'16.771"N	103°28'10.076"W	1.25	
12124.00	87.400	359.900	8954.71	3466.96	3467.14	9.74	765334.45	669689.31	32°50'17.087"N	103°28'10.074"W	0.62	
12155.00	87.800	359.000	8956.01	3497.94	3498.12	9.44	765334.15	669720.28	32°50'17.394"N	103°28'10.074"W	3.17	
12187.00	87.800	359.300	8957.24	3529.91	3530.09	8.96	765333.67	669752.26	32°50'17.710"N	103°28'10.077"W	0.94	
12219.00	87.800	359.100	8958.47	3561.89	3562.06	8.52	765333.23	669784.23	32°50'18.026"N	103°28'10.079"W	0.62	
12251.00	87.900	359.600	8959.67	3593.86	3594.04	8.15	765332.86	669816.20	32°50'18.343"N	103°28'10.080"W	1.59	
12282.00	88.000	359.000	8960.78	3624.84	3625.02	7.78	765332.49	669847.18	32°50'18.649"N	103°28'10.082"W	1.96	
12314.00	88.200	358.900	8961.84	3656.82	3656.99	7.19	765331.90	669879.16	32°50'18.966"N	103°28'10.086"W	0.70	
12345.00	88.300	358.900	8962.78	3687.81	3687.97	6.60	765331.31	669910.14	32°50'19.272"N	103°28'10.090"W	0.32	
12377.00	88.200	358.800	8963.76	3719.79	3719.95	5.95	765330.66	669942.11	32°50'19.589"N	103°28'10.094"W	0.44	
12409.00	88.300	358.700	8964.74	3751.77	3751.93	5.26	765329.97	669974.09	32°50'19.905"N	103°28'10.099"W	0.44	
12440.00	88.300	358.700	8965.66	3782.76	3782.91	4.55	765329.26	670005.07	32°50'20.212"N	103°28'10.104"W	0.00	
12472.00	88.300	358.700	8966.61	3814.74	3814.88	3.83	765328.54	670037.05	32°50'20.528"N	103°28'10.110"W	0.00	
12504.00	88.400	358.700	8967.53	3846.72	3846.86	3.10	765327.81	670069.03	32°50'20.845"N	103°28'10.115"W	0.31	
12536.00	88.500	358.800	8968.39	3878.71	3878.84	2.40	765327.11	670101.01	32°50'21.161"N	103°28'10.120"W	0.44	
12568.00	88.500	358.400	8969.23	3910.69	3910.82	1.62	765326.33	670132.98	32°50'21.478"N	103°28'10.126"W	1.25	
12599.00	88.700	358.500	8969.99	3941.68	3941.80	0.78	765325.49	670163.96	32°50'21.784"N	103°28'10.133"W	0.72	
12631.00	89.000	358.700	8970.63	3973.66	3973.79	0.00	765324.71	670195.95	32°50'22.101"N	103°28'10.139"W	1.13	
12663.00	87.500	358.400	8971.61	4005.64	4005.76	-0.81	765323.90	670227.92	32°50'22.417"N	103°28'10.146"W	4.78	
12709.00	87.500	358.400	8973.61	4051.59	4051.70	-2.09	765322.62	670273.86	32°50'22.872"N	103°28'10.156"W	0.00	Proj.to Bit

Actual Wellpath Report

No. 1H AWP ST01

Page 7 of 7

INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Zebra) Sec 16, T17S, R35E	Wellbore	No. 1H AWB ST01
Facility	Zebra 16 State Com No.1H	Sidetrack from	No. 1H AWB at 8809.00 MD

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No.1H PBHL		8947.00	4628.57	-36.20	765288.51	670850.72	32°50'28.582"N	103°28'10.501"W	point

WELLPATH COMPOSITION					Ref Wellbore: No. 1H AWB ST01	Ref Wellpath: No. 1H AWP ST01
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment	Wellbore
0.00	8135.00	Generic gyro - northseeking (Standard)			Gyro (100 - 8135)	No. 1H AWB
8135.00	8809.00	NaviTrak (Standard)			MWD	No. 1H AWB
8809.00	12709.00	NaviTrak (Standard)			MWD ST01	No. 1H AWB ST01

30-025-40000

HOBBS OCD

JUN 08 2011

MEWBOURNE OIL

Vacuum

Lea County, NM

Zebra "16" State Com #1H

VH - Job #32K0311240

RECEIVED

RECEIVED

JUN 07 2011

NMOCD ARTESIA

Survey: Actual

SDI Standard Survey Report

16 March, 2011

SUR: M-16-17s-35e, 330/S & 385/W
BHL: D-16-17s-35e, 4383/S & 383/W
API # 30-025-40000

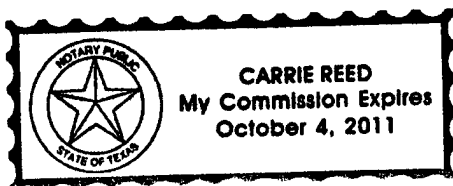
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 14 of April, 2011.

[Signature]

Notary Signature
County of Midland
State of Texas



Scientific Drilling
Directional Drilling Operations
APR 18 2011

BY:

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Zebra "16" State Com #1H
Project:	Vacuum	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	Zebra "16" State Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K0311240	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0311240	Database:	EDM-Regulatory

Project		Vacuum	
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Lea County, NM			
Site Position:		Northing:	666,221 97 usft	Latitude:	32° 49' 42 781 N
From:	Lat/Long	Easting:	765,324 72 usft	Longitude:	103° 28' 10 520 W
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0 47 °

Well	Zebra "16" State Com #1H, Directional (Baker Inteq)					
Well Position	+N/-S	0 0 usft	Northing:	666,221 97 usft	Latitude:	32° 49' 42 781 N
	+E/-W	0 0 usft	Easting:	765,324 72 usft	Longitude:	103° 28' 10 520 W
Position Uncertainty		0 0 usft	Wellhead Elevation:	usft	Ground Level:	0 0 usft

Wellbore	VH - Job #32K0311240				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	3/15/2011	7 67	60 78	49,083

Design		VH - Job #32K0311240			
Audit Notes:					
Version:		1 0	Phase:	ACTUAL	Tie On Depth: 0 0
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0 0	0 0	0 0	359 55

Survey Program		Date	3/16/2011		
From (usft)	To (usft)	Survey (Wellbore)		Tool Name	Description
100 0	8,135 0	Actual (VH - Job #32K0311240)		Keeper	Keeper Gyro

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 0
100 0	0 44	73 20	100 0	0 1	0 4	73 20	0 4
200 0	0 24	59 18	200 0	0 3	0 9	70 21	1 0
300 0	0 16	126 22	300 0	0 4	1 2	73 66	1 3
400 0	0 27	107 21	400 0	0 2	1 5	82 56	1 6
500 0	0 33	122 64	500 0	0 0	2 0	90 66	2 0
600 0	0 29	148 85	600 0	-0 4	2 4	99 40	2 4
700 0	0 33	151 90	700 0	-0 9	2 7	108 07	2 8
800 0	0 47	156 05	800 0	-1 5	3 0	116 83	3 3
900 0	0 42	140 20	900 0	-2 2	3 4	122 66	4 0
1,000 0	0 29	142 86	1,000 0	-2 6	3 7	125 13	4 6
1,100 0	0 27	130 39	1,100 0	-3 0	4 1	126 25	5 1

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Zebra "16" State Com #1H
Project:	Vacuum	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Zebra "16" State Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K0311240	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0311240	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
1,200.0	0.26	139.91	1,200.0	-3.3	4.4	126.99	5.5	
1,300.0	0.23	116.56	1,300.0	-3.6	4.7	127.13	5.9	
1,400.0	0.26	133.28	1,400.0	-3.8	5.1	127.01	6.4	
1,500.0	0.41	123.54	1,500.0	-4.2	5.5	127.04	6.9	
1,600.0	0.50	124.30	1,600.0	-4.6	6.2	126.72	7.7	
1,700.0	0.44	142.49	1,700.0	-5.2	6.8	127.30	8.5	
1,800.0	0.61	172.78	1,800.0	-6.0	7.1	130.26	9.3	
1,900.0	0.58	169.68	1,900.0	-7.0	7.2	134.13	10.1	
2,000.0	0.55	164.71	2,000.0	-8.0	7.5	136.95	10.9	
2,100.0	0.60	157.72	2,100.0	-8.9	7.8	138.93	11.9	
2,200.0	0.55	149.66	2,199.9	-9.8	8.2	140.08	12.8	
2,300.0	0.70	159.70	2,299.9	-10.8	8.7	141.26	13.9	
2,400.0	0.57	146.93	2,399.9	-11.8	9.2	142.19	15.0	
2,500.0	0.54	146.83	2,499.9	-12.6	9.7	142.47	15.9	
2,600.0	0.51	144.33	2,599.9	-13.4	10.2	142.65	16.8	
2,700.0	0.54	142.29	2,699.9	-14.1	10.8	142.68	17.7	
2,800.0	0.56	99.35	2,799.9	-14.6	11.5	141.63	18.6	
2,900.0	0.54	98.86	2,899.9	-14.7	12.5	139.71	19.3	
3,000.0	0.62	89.74	2,999.9	-14.8	13.5	137.64	20.0	
3,100.0	0.68	90.72	3,099.9	-14.8	14.6	135.34	20.8	
3,200.0	0.63	93.60	3,199.9	-14.8	15.8	133.27	21.6	
3,300.0	0.70	101.30	3,299.9	-15.0	16.9	131.56	22.6	
3,400.0	0.66	109.29	3,399.9	-15.3	18.1	130.28	23.7	
3,500.0	0.69	123.17	3,499.9	-15.8	19.1	129.63	24.8	
3,600.0	0.60	136.13	3,599.9	-16.5	20.0	129.61	25.9	
3,700.0	0.61	139.65	3,699.9	-17.3	20.7	129.94	27.0	
3,800.0	0.56	137.78	3,799.9	-18.1	21.3	130.26	28.0	
3,900.0	0.62	136.85	3,899.9	-18.8	22.0	130.51	29.0	
4,000.0	0.59	137.26	3,999.8	-19.6	22.8	130.74	30.0	
4,100.0	0.63	140.98	4,099.8	-20.4	23.5	131.02	31.1	
4,200.0	0.50	149.18	4,199.8	-21.2	24.0	131.44	32.1	
4,300.0	0.35	206.49	4,299.8	-21.9	24.1	132.19	32.6	
4,400.0	0.33	206.86	4,399.8	-22.4	23.9	133.19	32.7	
4,500.0	0.31	243.05	4,499.8	-22.8	23.5	134.12	32.7	
4,600.0	0.29	261.26	4,599.8	-22.9	23.0	134.93	32.5	
4,700.0	0.42	296.90	4,699.8	-22.8	22.4	135.50	32.0	
4,800.0	0.46	304.34	4,799.8	-22.4	21.8	135.86	31.2	
4,900.0	0.44	297.75	4,899.8	-22.0	21.1	136.23	30.5	
5,000.0	0.46	283.35	4,999.8	-21.7	20.4	136.88	29.8	
5,100.0	0.45	286.63	5,099.8	-21.5	19.6	137.71	29.1	
5,200.0	0.45	291.13	5,199.8	-21.3	18.8	138.47	28.4	
5,300.0	0.52	288.54	5,299.8	-21.0	18.0	139.31	27.7	
5,400.0	0.48	282.10	5,399.8	-20.8	17.2	140.35	27.0	
5,500.0	0.46	282.77	5,499.8	-20.6	16.4	141.44	26.3	

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	MEWBOURNE OIL	Local Co-ordinate Reference:	Well Zebra "16" State Com #1H
Project:	Vacuum	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	Zebra "16" State Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K0311240	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0311240	Database:	EDM-Regulatory

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
5,600 0	0 50	285 29	5,599 8	-20 4	15 6	142 58	25 7	
5,700 0	0 49	282 91	5,699 8	-20 2	14 8	143 81	25 0	
5,800 0	0 45	290 76	5,799 8	-19 9	14 0	144 97	24 3	
5,900 0	0 46	286 95	5,899 8	-19 7	13 2	146 11	23 7	
6,000 0	0 43	287 49	5,999 8	-19 4	12 5	147 31	23 1	
6,100 0	0 52	274 55	6,099 8	-19 3	11 7	148 84	22 6	
6,200 0	0 46	294 00	6,199 8	-19 1	10 8	150 40	22 0	
6,300 0	0 13	343 73	6,299 8	-18 8	10 5	150 97	21 5	
6,400 0	0 17	39 51	6,399 8	-18 6	10 5	150 53	21 4	
6,500 0	0 17	37 01	6,499 8	-18 4	10 7	149 79	21 3	
6,600 0	0 22	46 54	6,599 8	-18 1	10 9	148 91	21 2	
6,700 0	0 23	37 76	6,699 8	-17 8	11 2	147 89	21 1	
6,800 0	0 19	64 26	6,799 8	-17 6	11 5	146 93	21 0	
6,900 0	0 17	72 71	6,899 8	-17 5	11 8	146 09	21 1	
7,000 0	0 16	144 88	6,999 8	-17 6	12 0	145 70	21 2	
7,100 0	0 28	126 00	7,099 8	-17 8	12 3	145 48	21 6	
7,200 0	0 34	136 73	7,199 8	-18 2	12 7	145 15	22 1	
7,300 0	0 17	128 49	7,299 8	-18 5	13 0	144 93	22 6	
7,400 0	0 05	130 82	7,399 8	-18 6	13 1	144 80	22 8	
7,500 0	0 18	148 14	7,499 8	-18 8	13 2	144 80	23 0	
7,600 0	0 16	188 54	7,599 8	-19 0	13 3	145 06	23 2	
7,700 0	0 15	161 28	7,699 8	-19 3	13 3	145 38	23 4	
7,800 0	0 27	137 52	7,799 8	-19 6	13 5	145 39	23 8	
7,900 0	0 34	154 18	7,899 8	-20 0	13 8	145 42	24 3	
8,000 0	0 47	160 64	7,999 8	-20 7	14 1	145 77	25 0	
8,100 0	0 46	187 72	8,099 8	-21 5	14 2	146 60	25 7	
8,135 0	0 18	191 45	8,134 8	-21 7	14 1	146 89	25 9	



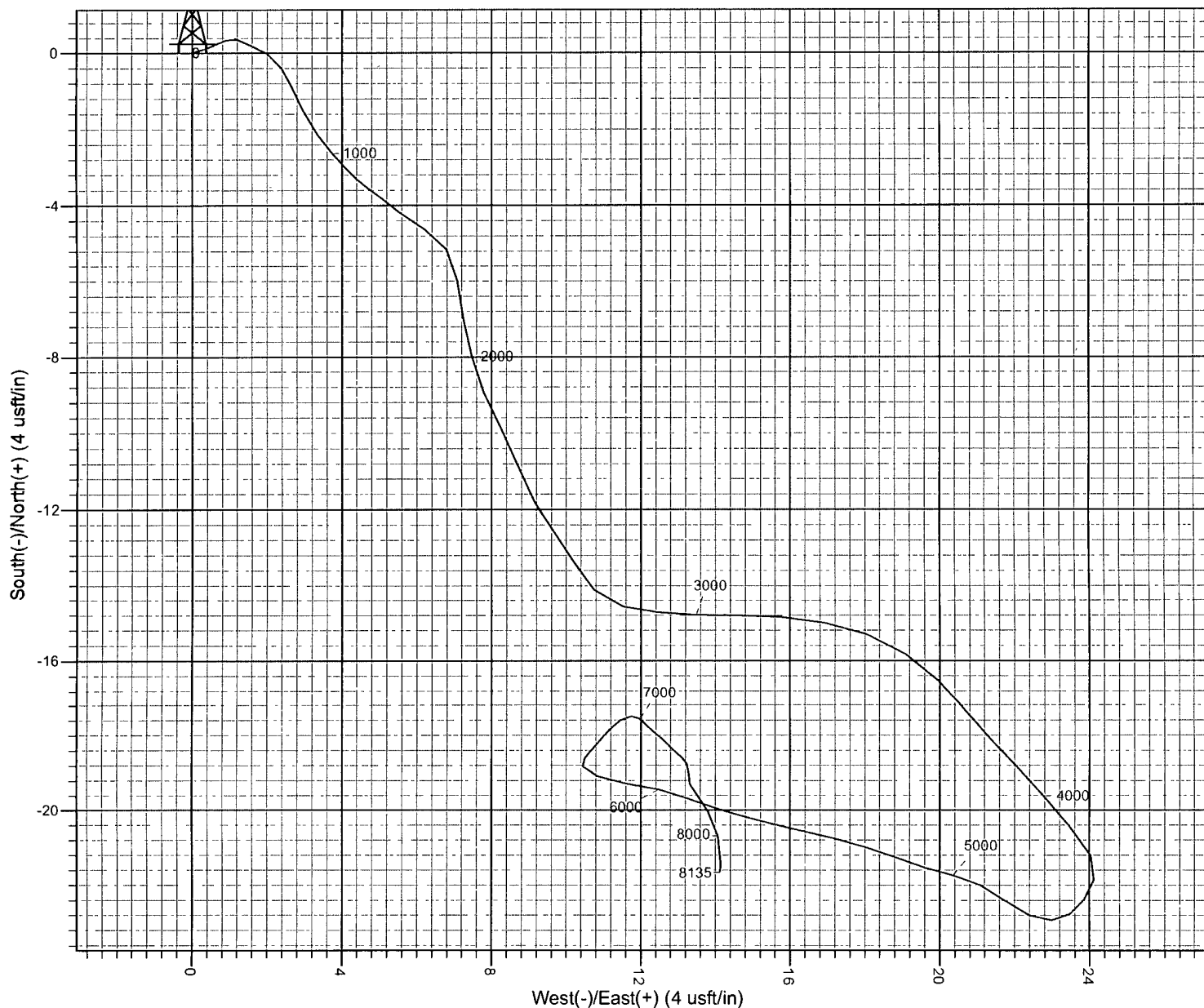
Project: Vacuum
Lea County, NM
Well: Zebra "16" State Com #1H
Wellbore: VH - Job #32K0311240
Design: VH - Job #32K0311240



Azimuths to Grid North
True North -0 47°
Magnetic North 7 20°
Magnetic Field
Strength 49083.4snT
Dip Angle 60 78°
Date 3/15/2011
Model BGGM2010

WELL DETAILS: Zebra "16" State Com #1H
WELL @ 0.0usft (Original Well Elev)
Ground Level. 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	666221.97	765324.72	32° 49' 42.781 N	103° 28' 10.520 W	



PROJECT DETAILS: Vacuum
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 32° 49' 42.781 N
Longitude: 103° 28' 10.520 W
Positional Uncertainty: 0.0
Convergence: 0.47
Local North: Grid