30-025-39902

MEWBOURNE OIL

Wildcat Bone Springs
Lea County, NM
Red Hills West "8" Federal #1H
VH - Job #32K1010821

Survey: Actual

SDI Standard Survey Report

14 November, 2010

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

R. Burkarton

Notorized this date 4th of November, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas

CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company:	MEWBOURNE OIL	**Local Co-ordinate Reference:**	Well Red Hills West "8" Federal #1H
Project:	Wildcat Bone Springs	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Well:	Red Hills West "8" Federal #1H	**North Reference:**	Grid
Wellbore:	VH - Job #32K1010821	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K1010821	**Database:**	EDM-Regulatory

Project Wildcat Bone Springs

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:**	382,884.16 usft	**Latitude:**	32° 3' 3.700 N
From:	Lat/Long	**Easting:**	699,520.90 usft	**Longitude:**	103° 41' 21.680 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.34 °

Well Red Hills West "8" Federal #1H, Directional (Baker Inteq)

Well Position	**+N/-S**	0.0 usft	**Northing:**	382,884.16 usft	**Latitude:**	32° 3' 3.700 N
	+E/-W	0.0 usft	**Easting:**	699,520.90 usft	**Longitude:**	103° 41' 21.680 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	0.0 usft

Wellbore VH - Job #32K1010821

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/23/2010	7.76	60.02	48,625

Design VH - Job #32K1010821

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	359.50

Survey Program **Date** 11/14/2010

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,475.0	Actual (VH - Job #32K1010821)	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	0.22	130.11	100.0	-0.1	0.1	130.11	0.2
200.0	0.12	158.20	200.0	-0.3	0.3	136.02	0.5
300.0	0.23	227.05	300.0	-0.6	0.2	158.79	0.6
400.0	0.28	215.30	400.0	-0.9	-0.1	183.98	0.9
500.0	0.50	196.61	500.0	-1.5	-0.3	192.14	1.6
600.0	0.68	194.59	600.0	-2.5	-0.6	193.45	2.6
700.0	0.75	186.83	700.0	-3.7	-0.8	192.50	3.8
800.0	0.75	200.98	800.0	-5.0	-1.1	192.85	5.1
900.0	1.24	185.23	900.0	-6.7	-1.5	192.43	6.9
1,000.0	1.09	216.05	999.9	-8.5	-2.1	194.03	8.8
1,100.0	1.24	181.19	1,099.9	-10.4	-2.7	194.65	10.7

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Wellbore:	VH - Job #32K1010821	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K1010821	**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	1.40	161.00	1,199.9	-12.6	-2.3	190.50	12.8
1,300.0	1.42	149.03	1,299.9	-14.9	-1.3	185.03	14.9
1,400.0	1.30	148.11	1,399.8	-16.9	-0.1	180.24	16.9
1,500.0	1.11	144.70	1,499.8	-18.6	1.1	176.65	18.7
1,600.0	0.86	198.82	1,599.8	-20.1	1.4	176.00	20.2
1,700.0	1.81	210.40	1,699.8	-22.2	0.4	179.06	22.2
1,800.0	1.83	205.25	1,799.7	-25.0	-1.1	182.55	25.0
1,900.0	2.09	196.23	1,899.7	-28.2	-2.3	184.67	28.3
2,000.0	2.04	199.10	1,999.6	-31.6	-3.4	186.13	31.8
2,100.0	1.86	191.47	2,099.5	-34.9	-4.3	187.03	35.2
2,200.0	1.84	189.97	2,199.5	-38.1	-4.9	187.34	38.4
2,300.0	2.04	190.61	2,299.4	-41.4	-5.5	187.58	41.8
2,400.0	1.87	193.12	2,399.4	-44.7	-6.2	187.90	45.2
2,500.0	1.52	199.86	2,499.3	-47.6	-7.0	188.40	48.1
2,600.0	1.11	200.13	2,599.3	-49.7	-7.8	188.92	50.4
2,700.0	0.99	203.56	2,699.3	-51.4	-8.5	189.37	52.1
2,800.0	1.03	206.53	2,799.3	-53.0	-9.2	189.88	53.8
2,900.0	0.82	199.08	2,899.3	-54.5	-9.9	190.26	55.4
3,000.0	0.81	196.52	2,999.2	-55.9	-10.3	190.45	56.8
3,100.0	0.70	155.46	3,099.2	-57.1	-10.3	190.18	58.0
3,200.0	0.58	110.63	3,199.2	-57.8	-9.5	189.35	58.6
3,300.0	1.37	67.13	3,299.2	-57.6	-8.0	187.87	58.1
3,400.0	1.41	65.56	3,399.2	-56.6	-5.7	185.78	56.9
3,500.0	1.28	64.65	3,499.2	-55.6	-3.6	183.71	55.7
3,600.0	1.29	71.53	3,599.1	-54.8	-1.5	181.59	54.8
3,700.0	1.91	97.18	3,699.1	-54.6	1.2	178.74	54.6
3,800.0	2.77	109.23	3,799.0	-55.6	5.1	174.73	55.9
3,900.0	2.82	110.41	3,898.9	-57.3	9.7	170.37	58.1
4,000.0	3.49	113.75	3,998.7	-59.4	14.8	165.99	61.2
4,100.0	3.75	118.74	4,098.5	-62.2	20.5	161.78	65.4
4,200.0	3.50	119.43	4,198.3	-65.2	26.0	158.27	70.2
4,300.0	2.73	122.11	4,298.2	-68.0	30.7	155.72	74.6
4,400.0	2.25	115.31	4,398.1	-70.1	34.5	153.82	78.1
4,500.0	2.04	117.50	4,498.0	-71.8	37.8	152.21	81.1
4,600.0	1.82	117.38	4,598.0	-73.3	40.8	150.90	83.9
4,700.0	1.58	115.64	4,697.9	-74.6	43.5	149.79	86.4
4,800.0	1.44	118.79	4,797.9	-75.8	45.8	148.87	88.6
4,900.0	1.17	120.83	4,897.9	-77.0	47.8	148.17	90.6
5,000.0	1.17	121.95	4,997.8	-78.0	49.5	147.60	92.4
5,100.0	1.15	128.82	5,097.8	-79.2	51.2	147.14	94.3
5,200.0	1.01	128.18	5,197.8	-80.4	52.6	146.78	96.1
5,300.0	0.95	136.74	5,297.8	-81.5	53.9	146.53	97.7
5,400.0	0.68	152.60	5,397.8	-82.7	54.7	146.48	99.1
5,500.0	0.69	166.60	5,497.8	-83.8	55.2	146.64	100.3

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Wellbore:	VH - Job #32K1010821	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K1010821	**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	0.59	186.72	5,597.8	-84.9	55.2	146.94	101.3
5,700.0	0.59	196.58	5,697.8	-85.9	55.0	147.35	102.0
5,800.0	0.58	197.02	5,797.8	-86.8	54.7	147.78	102.7
5,900.0	0.53	194.87	5,897.8	-87.8	54.5	148.18	103.3
6,000.0	0.55	193.60	5,997.8	-88.7	54.2	148.55	104.0
6,100.0	0.54	193.92	6,097.7	-89.6	54.0	148.92	104.6
6,200.0	0.56	185.71	6,197.7	-90.6	53.8	149.26	105.4
6,300.0	0.59	195.59	6,297.7	-91.5	53.7	149.62	106.1
6,400.0	0.69	214.63	6,397.7	-92.5	53.2	150.11	106.7
6,500.0	0.71	207.31	6,497.7	-93.6	52.6	150.68	107.3
6,600.0	0.76	214.93	6,597.7	-94.7	51.9	151.27	108.0
6,700.0	1.02	206.67	6,697.7	-96.0	51.1	151.97	108.8
6,800.0	1.15	215.37	6,797.7	-97.6	50.1	152.82	109.7
6,900.0	1.10	210.44	6,897.7	-99.3	49.1	153.70	110.7
7,000.0	1.20	213.30	6,997.6	-101.0	48.0	154.57	111.8
7,100.0	1.26	220.06	7,097.6	-102.7	46.7	155.54	112.8
7,200.0	1.26	225.85	7,197.6	-104.3	45.2	156.56	113.7
7,300.0	1.29	227.78	7,297.6	-105.8	43.6	157.61	114.4
7,400.0	1.53	224.24	7,397.5	-107.5	41.8	158.74	115.4
7,500.0	1.53	217.56	7,497.5	-109.5	40.1	159.90	116.6
7,600.0	1.60	215.97	7,597.5	-111.7	38.5	161.01	118.2
7,700.0	1.66	213.44	7,697.4	-114.1	36.8	162.10	119.9
7,800.0	1.56	213.03	7,797.4	-116.4	35.3	163.13	121.7
7,900.0	1.70	215.72	7,897.4	-118.8	33.7	164.16	123.5
8,000.0	1.72	215.79	7,997.3	-121.2	31.9	165.23	125.3
8,100.0	1.65	214.87	8,097.3	-123.6	30.2	166.25	127.2
8,200.0	1.52	218.03	8,197.2	-125.8	28.6	167.19	129.0
8,300.0	1.51	217.18	8,297.2	-127.9	27.0	168.08	130.7
8,400.0	1.39	224.07	8,397.2	-129.8	25.4	168.95	132.3
8,500.0	1.55	228.79	8,497.1	-131.6	23.5	169.88	133.7
8,600.0	1.57	222.61	8,597.1	-133.5	21.5	170.83	135.2
8,700.0	2.02	235.13	8,697.0	-135.5	19.2	171.95	136.9
8,800.0	2.15	242.65	8,797.0	-137.4	16.1	173.33	138.3
8,900.0	2.14	243.60	8,896.9	-139.1	12.7	174.77	139.6
9,000.0	1.72	236.13	8,996.8	-140.7	9.8	176.02	141.1
9,100.0	1.48	216.37	9,096.8	-142.6	7.8	176.87	142.8
9,200.0	1.66	204.31	9,196.8	-145.0	6.4	177.46	145.1
9,300.0	2.48	181.99	9,296.7	-148.5	5.8	177.78	148.6
9,400.0	2.81	179.11	9,396.6	-153.1	5.7	177.86	153.2
9,475.0	2.64	181.74	9,471.5	-156.6	5.7	177.92	156.7

Scientific Drilling
Directional Drilling Operations

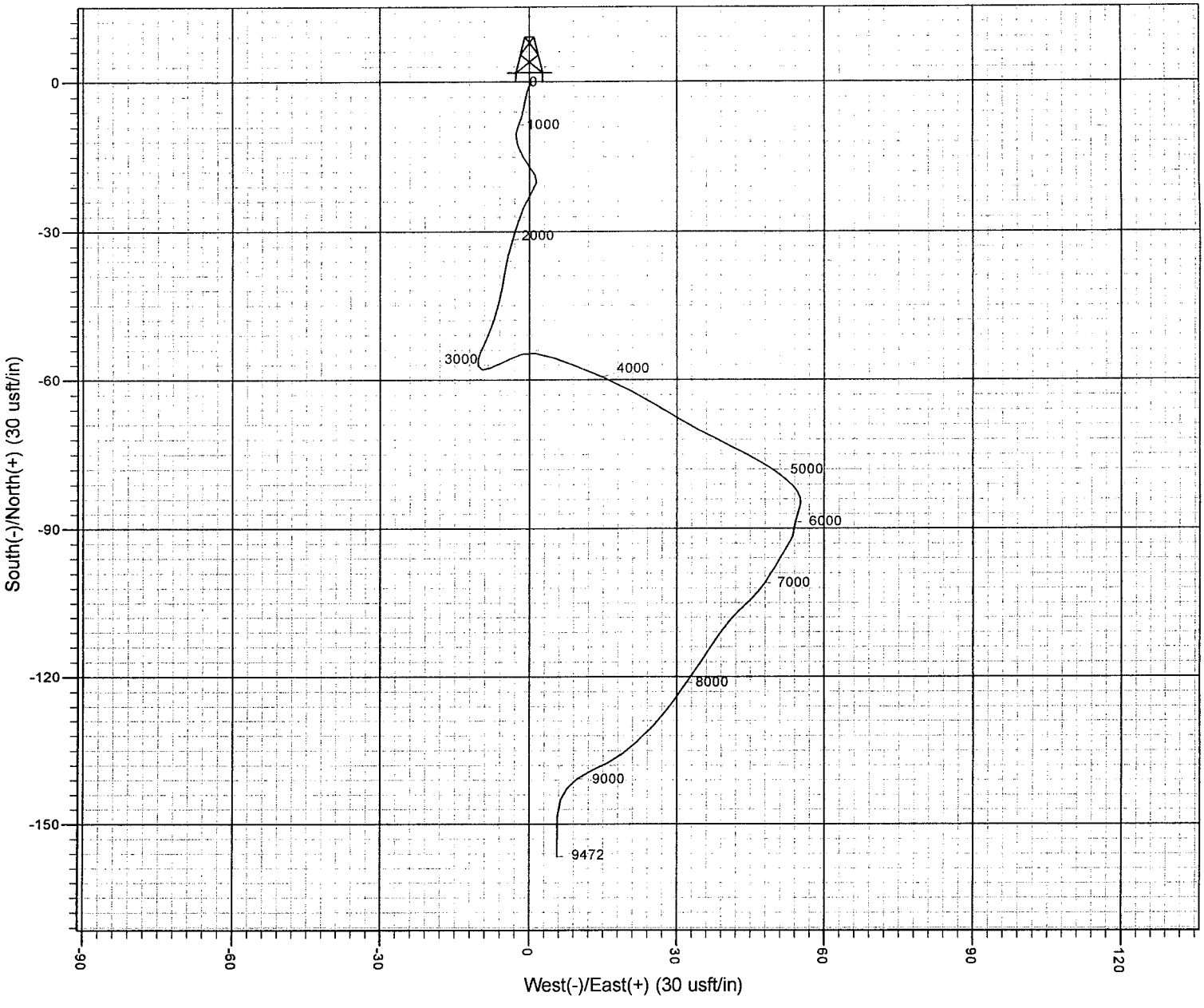
Project: Wildcat Bone Springs
Lea County, NM
Well: Red Hills West "8" Federal #1H
Wellbore: VH - Job #32K1010821
Design: VH - Job #32K1010821

Azimuths to Grid North
True North: -0.34°
Magnetic North: 7.42°

Magnetic Field
Strength: 48625.0snT
Dip Angle: 60.02°
Date: 10/23/2010
Model: BGGM2010

WELL DETAILS: Red Hills West "8" Federal #1H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	382884.16	699520.90	32° 3' 3.700 N	103° 41' 21.680 W	



PROJECT DETAILS: Wildcat Bone Springs
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° 3' 3.700 N
Longitude: 103° 41' 21.680 W
Positional Uncertainity: 0.0
Convergence: 0.34
Local North: Grid