

DEVON ENERGY

Hackberry

Eddy County, NM

Sirius 17 Federal #1H

VH - Job #32K1210960

30-015-38238

Survey: Actual

SDI Standard Survey Report

16 December, 2010

RECEIVED

AUG 10 2011

NMOCD ARTESIA

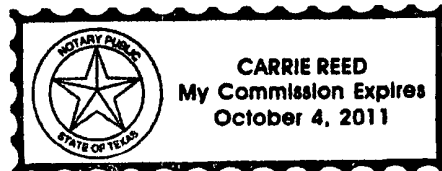
This survey is correct to the best of my knowledge and is supported by actual field data.

Robert

Notorized this date 31st of December, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Sirius 17 Federal #1H
Project:	Hackberry	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Sirius 17 Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210960	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210960	Database:	EDM-Regulatory

Project	Hackberry		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico Central 3002		

Site	Eddy County, NM				
Site Position:		Northing:	615,089.64 usft	Latitude:	32° 40' 8.400 N
From:	Lat/Long	Easting:	1,222,919.56 usft	Longitude:	103° 54' 3.600 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	1 27 °

Well:	Sirius 17 Federal #1H, Directional (Weatherford)					
Well Position	+N/-S	0.0 usft	Northing:	614,157.97 usft	Latitude:	32° 39' 59.165 N
	+E/-W	0.0 usft	Easting:	1,223,025.32 usft	Longitude:	103° 54' 2.605 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	0.0 usft

Wellbore	VH - Job #32K1210960				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	12/8/2010	7 90	60 56	48,960

Design		VH - Job #32K1210960		
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	89.65

Survey Program	Date 12/16/2010			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,127.0	Actual (VH - Job #32K1210960)	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	0.55	285.28	100.0	0.1	-0.5	285.28	0.5
200.0	0.33	283.34	200.0	0.3	-1.2	284.83	1.2
300.0	0.41	276.61	300.0	0.4	-1.8	283.05	1.9
400.0	0.65	260.92	400.0	0.4	-2.8	277.82	2.8
500.0	0.88	249.65	500.0	0.0	-4.0	270.31	4.0
600.0	1.00	237.80	600.0	-0.7	-5.5	262.64	5.5
700.0	1.01	235.21	700.0	-1.7	-7.0	256.44	7.2
800.0	0.88	221.21	799.9	-2.8	-8.2	251.38	8.6
900.0	0.77	219.20	899.9	-3.9	-9.1	247.07	9.9
1,000.0	0.74	188.44	999.9	-5.0	-9.6	242.50	10.9
1,100.0	0.59	186.23	1,099.9	-6.2	-9.8	237.79	11.6

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Sirius 17 Federal #1H
Project:	Hackberry	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Sirius 17 Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210960	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210960	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	0.58	169.60	1,199.9	-7.2	-9.8	233.65	12.1
1,300.0	0.60	138.35	1,299.9	-8.1	-9.3	229.11	12.3
1,400.0	0.71	105.54	1,399.9	-8.6	-8.4	224.14	12.0
1,500.0	0.89	90.27	1,499.9	-8.8	-7.0	218.51	11.2
1,600.0	1.31	85.67	1,599.9	-8.7	-5.1	210.25	10.1
1,700.0	1.34	82.26	1,699.8	-8.5	-2.8	198.18	8.9
1,800.0	1.51	81.33	1,799.8	-8.1	-0.3	182.25	8.1
1,900.0	1.69	77.09	1,899.8	-7.6	2.4	162.29	8.0
2,000.0	1.78	79.85	1,999.7	-7.0	5.4	142.34	8.8
2,100.0	1.78	81.38	2,099.7	-6.5	8.5	127.45	10.6
2,200.0	1.80	79.04	2,199.6	-5.9	11.5	117.26	13.0
2,300.0	1.51	76.42	2,299.6	-5.3	14.4	110.38	15.3
2,400.0	1.37	77.29	2,399.6	-4.8	16.8	105.82	17.5
2,500.0	1.28	78.85	2,499.5	-4.3	19.1	102.66	19.5
2,600.0	1.39	75.02	2,599.5	-3.8	21.3	99.98	21.7
2,700.0	1.37	76.61	2,699.5	-3.2	23.7	97.61	23.9
2,800.0	1.26	74.01	2,799.4	-2.6	25.9	95.70	26.0
2,900.0	1.03	66.19	2,899.4	-1.9	27.8	93.95	27.8
3,000.0	0.96	67.48	2,999.4	-1.2	29.4	92.40	29.4
3,100.0	0.66	69.66	3,099.4	-0.7	30.7	91.33	30.7
3,200.0	0.67	69.48	3,199.4	-0.3	31.8	90.55	31.8
3,300.0	0.68	75.95	3,299.4	0.0	32.9	89.93	32.9
3,400.0	0.65	64.39	3,399.4	0.4	34.0	89.27	34.0
3,500.0	0.61	59.66	3,499.4	0.9	34.9	88.45	35.0
3,600.0	0.50	47.54	3,599.4	1.5	35.7	87.58	35.8
3,700.0	0.40	50.86	3,699.4	2.0	36.3	86.81	36.4
3,800.0	0.44	47.23	3,799.4	2.5	36.9	86.11	37.0
3,900.0	0.41	55.13	3,899.4	3.0	37.4	85.46	37.6
4,000.0	0.34	57.97	3,999.4	3.3	38.0	84.99	38.1
4,100.0	0.39	39.12	4,099.4	3.8	38.5	84.42	38.6
4,200.0	0.54	28.33	4,199.4	4.4	38.9	83.50	39.1
4,300.0	0.77	14.04	4,299.3	5.5	39.3	82.03	39.7
4,400.0	0.73	14.11	4,399.3	6.8	39.6	80.30	40.2
4,500.0	0.72	1.26	4,499.3	8.0	39.8	78.60	40.6
4,600.0	0.70	15.19	4,599.3	9.2	39.9	76.98	41.0
4,700.0	0.64	32.71	4,699.3	10.3	40.4	75.71	41.7
4,800.0	0.69	45.03	4,799.3	11.2	41.1	74.78	42.6
4,900.0	0.75	74.33	4,899.3	11.8	42.2	74.39	43.8
5,000.0	0.79	70.75	4,999.3	12.2	43.5	74.33	45.1
5,100.0	0.83	74.67	5,099.3	12.6	44.8	74.28	46.6
5,200.0	0.99	82.87	5,199.3	12.9	46.4	74.44	48.1
5,300.0	1.02	79.59	5,299.3	13.2	48.1	74.68	49.9
5,400.0	0.88	65.96	5,399.2	13.7	49.7	74.63	51.5
5,500.0	0.90	60.48	5,499.2	14.4	51.1	74.30	53.0

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Sirius 17 Federal #1H
Project:	Hackberry	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Sirius 17 Federal #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210960	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210960	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	0.79	54.89	5,599.2	15.1	52.3	73.86	54.5
5,700.0	0.81	52.04	5,699.2	16.0	53.4	73.36	55.8
5,800.0	0.74	28.14	5,799.2	17.0	54.3	72.64	56.9
5,900.0	0.73	28.57	5,899.2	18.1	54.9	71.75	57.8
6,000.0	0.52	39.05	5,999.2	19.0	55.5	71.09	58.7
6,100.0	0.21	30.11	6,099.2	19.5	55.9	70.74	59.2
6,200.0	0.16	4.78	6,199.2	19.8	56.0	70.50	59.4
6,300.0	0.20	278.95	6,299.2	20.0	55.8	70.30	59.3
6,400.0	0.18	304.62	6,399.2	20.1	55.5	70.09	59.0
6,500.0	0.18	298.93	6,499.2	20.3	55.2	69.85	58.8
6,600.0	0.22	18.54	6,599.2	20.5	55.2	69.59	58.9
6,700.0	0.52	354.16	6,699.2	21.2	55.2	69.02	59.1
6,800.0	0.53	347.11	6,799.2	22.1	55.0	68.16	59.3
6,900.0	0.52	343.43	6,899.2	22.9	54.8	67.28	59.4
7,000.0	0.21	273.11	6,999.2	23.4	54.5	66.77	59.3
7,100.0	0.52	6.32	7,099.2	23.9	54.4	66.31	59.4
7,200.0	0.63	42.35	7,199.2	24.7	54.8	65.72	60.1
7,300.0	0.82	74.14	7,299.2	25.3	55.8	65.61	61.3
7,400.0	0.80	68.62	7,399.1	25.8	57.2	65.74	62.7
7,500.0	0.35	68.55	7,499.1	26.1	58.1	65.79	63.7
7,600.0	0.82	96.32	7,599.1	26.2	59.1	66.12	64.6
7,700.0	1.43	98.10	7,699.1	25.9	61.1	67.01	66.3
7,800.0	1.84	100.95	7,799.1	25.4	63.9	68.29	68.7
7,900.0	1.67	104.72	7,899.0	24.8	66.9	69.68	71.3
8,000.0	1.32	103.55	7,999.0	24.1	69.4	70.84	73.4
8,100.0	1.08	110.60	8,099.0	23.5	71.4	71.77	75.2
8,127.0	0.89	111.71	8,126.0	23.3	71.8	71.99	75.5



Scientific Drilling
Directional Drilling Operations

Project: Hackberry
Eddy County, NM
Well: Sirius 17 Federal #1H
Wellbore: VH - Job #32K1210960
Design: VH - Job #32K1210960



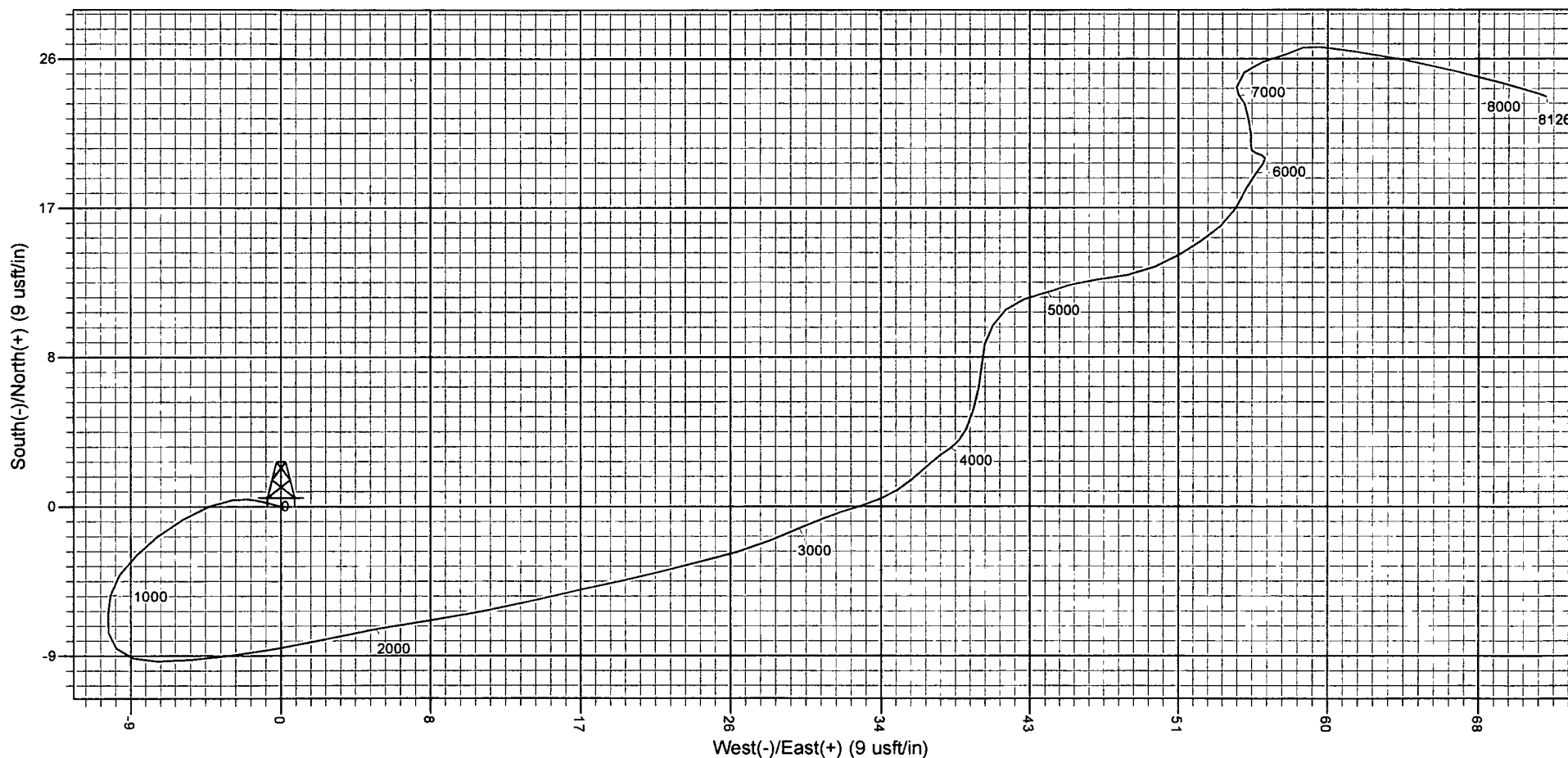
Azimuths to Grid North
True North: -1.27°
Magnetic North: 6.63°

Magnetic Field
Strength: 48960.4snT
Dip Angle: 60.56°
Date: 12/8/2010
Model: BGGM2010

WELL DETAILS: Sirius 17 Federal #1H
WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	614157.97	1223025.32	32° 39' 59.165 N	103° 54' 2.605 W	



PROJECT DETAILS: Hackberry
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 40' 8.400 N
Longitude: 103° 54' 3.600 W
Positional Uncertainty: 0.0
Convergence: 1.27
Local North: Grid