



Directional Survey

District PERMIAN BASIN	County LEA	Field Name LUSK NORTH	Project Group PB NEW MEXICO	State/Province NM
Surface Legal Location 30-18S-32E	API/UWI 3002539579	Latitude (DMS) 32° 43' 3.67" N	Longitude (DMS) 103° 48' 12.64" W	Ground Elev ... 3,702.00
			KB - GL (ft) 16.00	Orig KB Elev (ft) 3,718.00
				TH Elev (ft)

Wellbores

Wellbore Name GEOLOGICAL ST01	Parent Wellbore OH	Property Number 029553-060	Kick Off Depth (ftKB) 8,121.0	Vertical Section Direction (*)
Deviation Survey MWD		Definitive? Yes	Proposed? No	Proposed Deviation Survey MWD

Deviation Survey

Date 11/1/2010		Description MWD			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (*)	Azm (*)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/22/2...	7,971.00	33.00	173.60	7,537.55	2,220.66	-2,218.81	248.88	0.41	MWD	INWELL
10/22/2...	8,003.00	36.10	176.60	7,563.91	2,238.75	-2,236.89	250.41	11.05	MWD	INWELL
10/22/2...	8,035.00	39.00	180.00	7,589.28	2,258.24	-2,256.37	250.97	11.14	MWD	INWELL
10/22/2...	8,067.00	41.40	181.10	7,613.72	2,278.89	-2,277.02	250.77	7.82	MWD	INWELL
10/22/2...	8,098.00	43.80	181.50	7,636.53	2,299.86	-2,298.00	250.29	7.79	MWD	INWELL
10/22/2...	8,131.00	44.30	180.90	7,660.25	2,322.79	-2,320.94	249.81	1.97	MWD	INWELL
10/22/2...	8,163.00	40.80	179.70	7,683.82	2,344.43	-2,342.57	249.69	11.23	MWD	INWELL
10/22/2...	8,195.00	39.70	180.00	7,708.25	2,365.10	-2,363.25	249.74	3.49	MWD	INWELL
10/22/2...	8,227.00	41.70	180.40	7,732.50	2,385.97	-2,384.12	249.67	6.30	MWD	INWELL
10/22/2...	8,258.00	45.40	180.00	7,754.97	2,407.32	-2,405.47	249.60	11.97	MWD	INWELL
10/22/2...	8,290.00	48.70	179.40	7,776.77	2,430.74	-2,428.89	249.72	10.40	MWD	INWELL
10/22/2...	8,322.00	52.00	179.20	7,797.19	2,455.37	-2,453.52	250.02	10.32	MWD	INWELL
10/22/2...	8,354.00	55.20	179.30	7,816.17	2,481.13	-2,479.27	250.36	10.00	MWD	INWELL
10/22/2...	8,385.00	58.50	179.10	7,833.12	2,507.08	-2,505.22	250.72	10.66	MWD	INWELL
11/3/2010	8,417.00	61.30	179.00	7,849.17	2,534.76	-2,532.90	251.18	8.75	MWD	INWELL
11/3/2010	8,449.00	64.80	179.40	7,863.67	2,563.28	-2,561.42	251.58	10.99	MWD	INWELL
11/3/2010	8,480.00	67.90	179.50	7,876.10	2,591.67	-2,589.81	251.85	10.00	MWD	INWELL
11/3/2010	8,512.00	71.50	179.80	7,887.20	2,621.68	-2,619.82	252.03	11.28	MWD	INWELL
11/4/2010	8,544.00	74.80	180.00	7,896.48	2,652.30	-2,650.44	252.09	10.33	MWD	INWELL
11/4/2010	8,576.00	78.10	180.00	7,903.98	2,683.40	-2,681.54	252.09	10.31	MWD	INWELL
11/4/2010	8,607.00	80.70	179.50	7,909.68	2,713.87	-2,712.01	252.22	8.54	MWD	INWELL
11/4/2010	8,639.00	83.60	179.40	7,914.05	2,745.57	-2,743.71	252.53	9.07	MWD	INWELL
11/5/2010	8,861.00	91.00	178.20	7,924.50	2,967.14	-2,965.25	257.17	3.38	MWD	INWELL
11/5/2010	8,956.00	88.90	179.10	7,924.58	3,062.13	-3,060.22	259.41	2.40	MWD	INWELL
11/5/2010	9,051.00	88.80	179.40	7,926.49	3,157.11	-3,155.19	260.65	0.33	MWD	INWELL
11/5/2010	9,146.00	89.40	178.60	7,927.98	3,252.09	-3,250.17	262.31	1.05	MWD	INWELL
11/5/2010	9,241.00	90.40	178.00	7,928.15	3,347.06	-3,345.12	265.13	1.23	MWD	INWELL
11/6/2010	9,336.00	89.00	177.80	7,928.64	3,442.02	-3,440.05	268.61	1.49	MWD	INWELL
11/6/2010	9,431.00	88.80	180.50	7,930.47	3,536.99	-3,535.02	270.02	2.85	MWD	INWELL
11/6/2010	9,622.00	91.20	181.70	7,930.47	3,727.90	-3,725.96	266.35	1.40	MWD	INWELL
11/6/2010	9,717.00	92.80	181.60	7,927.15	3,822.78	-3,820.86	263.62	1.69	MWD	INWELL
11/6/2010	9,812.00	91.50	180.60	7,923.59	3,917.68	-3,915.78	261.80	1.73	MWD	INWELL
11/6/2010	9,907.00	88.90	179.90	7,923.26	4,012.66	-4,010.77	261.38	2.83	MWD	INWELL
11/6/2010	10,028.00	88.00	178.00	7,926.53	4,133.60	-4,131.70	263.60	1.74	BIT	INWELL

Wellbore Name OH	Parent Wellbore OH	Property Number 029553-060	Kick Off Depth (ftKB) 179.63	Vertical Section Direction (*)
Deviation Survey GYRO		Definitive? No	Proposed? No	Proposed Deviation Survey ACTUAL

Deviation Survey

Date		Description			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (*)	Azm (*)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
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NANA 30 FED 2H

WEST UNRESTRICTED

Directional Survey

District	County	Field Name	Project Group	State/Province			
PERMIAN BASIN	LEA	LUSK NORTH	PB NEW MEXICO	NM			
Surface Legal Location	API/UWM	Latitude (DMS)	Longitude (DMS)	Ground Elev ...	KB - GL (ft)	Orig KB Elev (ft)	TH Elev (ft)
30-18S-32E	3002539579	32° 43' 3.67" N	103° 48' 12.64" W	3,702.00	16.00	3,718.00	

Wellbores

Wellbore Name GEOLOGICAL ST01	Parent Wellbore OH	Property Number 029553-060	Kick Off Depth (ftKB) 8,121.0	Vertical Section Direction (°)
Deviation Survey MWD	Definitive? No	Proposed? No	Proposed Deviation Survey MWD	

Deviation Survey

Date		Description			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EWtie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
Wellbore Name OH		Parent Wellbore OH		Property Number 029553-060		Kick Off Depth (ftKB)		Vertical Section Direction (°) 179.63		
Deviation Survey GYRO				Definitive? No	Proposed? Yes	Proposed Deviation Survey ACTUAL				

Deviation Survey

Date 9/30/2010		Description ACTUAL			
MD Tie In (ftKB) 7,842.00	TVD Tie In (ftKB)	Inclination Tie In (°) 0.10	Azimuth Tie In (°)	NSTie In (ft)	EWtie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/10/2...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SS	PATTERSON
10/10/2...	1,296.00	0.50	0.00	1,295.98	-5.65	5.65	0.00	0.04	SS	PATTERSON
10/11/2...	1,614.00	0.50	0.00	1,613.97	-8.43	8.43	0.00	0.00	SS	PATTERSON
10/11/2...	1,868.00	0.50	0.00	1,867.96	-10.65	10.65	0.00	0.00	SS	PATTERSON
10/11/2...	2,154.00	0.50	0.00	2,153.95	-13.14	13.14	0.00	0.00	SS	PATTERSON
10/12/2...	2,471.00	0.50	0.00	2,470.94	-15.91	15.91	0.00	0.00	SS	PATTERSON
10/14/2...	2,974.00	1.00	0.00	2,973.89	-22.49	22.49	0.00	0.10	SS	PATTERSON
10/14/2...	3,418.00	2.00	0.00	3,417.74	-34.11	34.11	0.00	0.23	SS	PATTERSON
10/15/2...	3,926.00	1.50	0.00	3,925.50	-49.63	49.63	0.00	0.10	SS	PATTERSON
10/15/2...	4,370.00	1.00	0.00	4,369.39	-59.31	59.31	0.00	0.11	SS	PATTERSON
10/15/2...	4,877.00	0.25	0.00	4,876.36	-64.84	64.84	0.00	0.15	SS	PATTERSON
10/16/2...	5,353.00	1.00	0.00	5,352.33	-70.04	70.04	0.00	0.16	SS	PATTERSON
10/17/2...	5,829.00	1.25	0.00	5,828.23	-79.38	79.38	0.00	0.05	SS	PATTERSON
10/17/2...	6,270.00	0.25	0.00	6,269.19	-85.15	85.15	0.00	0.23	SS	PATTERSON
10/18/2...	6,748.00	1.00	0.00	6,747.16	-90.37	90.37	0.00	0.16	SS	PATTERSON
10/19/2...	7,287.00	0.25	0.00	7,286.12	-96.25	96.25	0.00	0.14	SS	PATTERSON

RECEIVED

FEB 16 2011
HOBBSDOCD

DEVON ENERGY

Lusk Bone Spring, North

Lea County, NM

Nana 30 Federal #2H¹

VH - Job #32K1010801

Survey: Actual

SDI Standard Survey Report

25 October, 2010

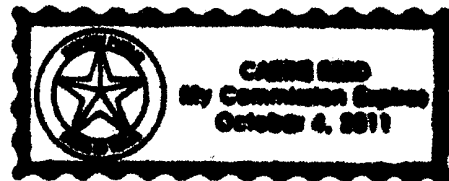
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notorized this date 11th of November, 2010.

Carmel 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 Nana 30 Federal #2H
Project:	Lusk Bone Spring, North	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Nana 30 Federal #2H	North Reference:	Grid
Wellbore:	VH - Job #32K1010801	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010801	Database:	EDM-Regulatory

Project	Lusk Bone Spring, North		
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:	625,212.40 usft
From:	Lat/Long	Easting:	662,950.91 usft
Position Uncertainty:	0.0 usft	Slot Radius:	0"
		Latitude:	32° 43' 3.670 N
		Longitude:	103° 48' 12.640 W
		Grid Convergence:	0.29 °

Well	Nana 30 Federal #2H, Directional (Inwell)		
Well Position	+N/-S	0.0 usft	Northing: 625,212.40 usft
	+E/-W	0.0 usft	Easting: 662,950.91 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 43' 3.670 N
		Longitude:	103° 48' 12.640 W
		Ground Level:	0.0usft

Wellbore	VH - Job #32K1010801				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	10/19/2010	7.87	60.63	49,019

Design	VH - Job #32K1010801			
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	179.63

Survey Program	Date	10/25/2010			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	7,588.0	Actual (VH - Job #32K1010801)	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	0.33	314.22	100.0	0.2	-0.2	314.22	0.3	
200.0	0.39	316.27	200.0	0.6	-0.6	314.98	0.9	
300.0	0.42	309.12	300.0	1.1	-1.2	313.93	1.6	
400.0	0.25	288.44	400.0	1.4	-1.7	310.66	2.2	
500.0	0.61	285.03	500.0	1.6	-2.4	304.44	2.9	
600.0	0.57	293.11	600.0	2.0	-3.4	300.39	3.9	
700.0	0.89	281.04	700.0	2.3	-4.6	296.80	5.1	
800.0	0.51	256.63	800.0	2.4	-5.8	292.22	6.2	
900.0	0.40	240.89	900.0	2.1	-6.5	287.75	6.8	
1,000.0	0.58	269.41	1,000.0	1.9	-7.3	284.61	7.6	
1,100.0	0.34	282.65	1,100.0	2.0	-8.1	283.63	8.3	

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Nana 30 Federal #2H
Project:	Lusk Bone Spring, North	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Nana 30 Federal #2H	North Reference:	Grid
Wellbore:	VH - Job #32K1010801	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010801	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	0.20	173.11	1,200.0	1.9	-8.4	282.51	8.6
1,300.0	0.18	1.89	1,300.0	1.8	-8.4	282.44	8.6
1,400.0	0.26	21.95	1,400.0	2.2	-8.3	284.97	8.6
1,500.0	0.56	51.27	1,500.0	2.7	-7.8	289.27	8.3
1,600.0	0.45	71.57	1,600.0	3.2	-7.0	294.14	7.7
1,700.0	0.23	44.66	1,699.9	3.4	-6.5	297.66	7.4
1,800.0	0.48	89.62	1,799.9	3.6	-6.0	300.87	7.0
1,900.0	0.41	81.48	1,899.9	3.6	-5.2	304.89	6.3
2,000.0	0.65	53.83	1,999.9	4.0	-4.4	312.45	5.9
2,100.0	0.93	46.40	2,099.9	4.9	-3.3	325.75	5.9
2,200.0	1.16	52.94	2,199.9	6.1	-1.9	342.25	6.4
2,300.0	2.17	58.93	2,299.9	7.7	0.5	3.62	7.7
2,400.0	2.59	62.98	2,399.8	9.7	4.1	23.08	10.5
2,500.0	1.95	50.32	2,499.7	11.8	7.4	32.28	13.9
2,600.0	1.83	49.00	2,599.7	13.9	10.0	35.59	17.1
2,700.0	2.09	37.33	2,699.6	16.4	12.3	36.78	20.5
2,800.0	2.76	25.03	2,799.5	20.0	14.4	35.68	24.7
2,900.0	3.11	18.88	2,899.4	24.8	16.3	33.30	29.7
3,000.0	3.28	13.82	2,999.2	30.1	17.8	30.64	35.0
3,100.0	3.01	9.32	3,099.1	35.5	19.0	28.10	40.2
3,200.0	2.54	2.25	3,198.9	40.3	19.5	25.78	44.8
3,300.0	2.45	350.87	3,298.9	44.6	19.2	23.29	48.6
3,400.0	2.48	345.95	3,398.8	48.8	18.4	20.59	52.2
3,500.0	2.13	345.61	3,498.7	52.7	17.4	18.22	55.5
3,600.0	1.75	341.94	3,598.6	56.0	16.4	16.35	58.4
3,700.0	1.41	335.45	3,698.6	58.6	15.4	14.77	60.6
3,800.0	0.83	305.60	3,798.6	60.1	14.3	13.42	61.8
3,900.0	0.66	289.48	3,898.6	60.7	13.2	12.28	62.1
4,000.0	0.63	286.40	3,998.6	61.1	12.1	11.25	62.3
4,100.0	0.48	275.85	4,098.5	61.3	11.2	10.36	62.3
4,200.0	0.37	267.63	4,198.5	61.3	10.5	9.68	62.2
4,300.0	0.48	276.00	4,298.5	61.3	9.7	9.01	62.1
4,400.0	0.31	262.54	4,398.5	61.3	9.0	8.38	62.0
4,500.0	0.23	250.24	4,498.5	61.2	8.6	7.98	61.8
4,600.0	0.19	244.13	4,598.5	61.1	8.2	7.68	61.6
4,700.0	0.42	251.29	4,698.5	60.9	7.7	7.25	61.4
4,800.0	0.62	264.74	4,798.5	60.7	6.9	6.44	61.1
4,900.0	0.64	266.53	4,898.5	60.6	5.8	5.43	60.9
5,000.0	0.44	258.85	4,998.5	60.5	4.8	4.56	60.7
5,100.0	0.52	263.57	5,098.5	60.4	4.0	3.79	60.5
5,200.0	0.42	263.98	5,198.5	60.3	3.2	3.02	60.4
5,300.0	0.35	263.46	5,298.5	60.3	2.5	2.39	60.3
5,400.0	0.35	265.58	5,398.5	60.2	1.9	1.82	60.2
5,500.0	0.53	272.06	5,498.5	60.2	1.1	1.09	60.2

Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Nana 30 Federal #2H
Project:	Lusk Bone Spring, North	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Nana 30 Federal #2H	North Reference:	Grid
Wellbore:	VH - Job #32K1010801	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010801	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	0.23	248.47	5,598.5	60.1	0.5	0.47	60.1
5,700.0	0.22	250.16	5,698.5	60.0	0.1	0.12	60.0
5,800.0	0.36	262.75	5,798.5	59.9	-0.4	359.65	59.9
5,900.0	0.36	257.64	5,898.5	59.8	-1.0	359.06	59.8
6,000.0	0.45	265.73	5,998.5	59.7	-1.7	358.38	59.7
6,100.0	0.57	268.51	6,098.5	59.6	-2.6	357.53	59.7
6,200.0	0.58	268.48	6,198.5	59.6	-3.6	356.57	59.7
6,300.0	0.62	259.62	6,298.5	59.5	-4.6	355.57	59.7
6,400.0	0.69	266.56	6,398.5	59.4	-5.7	354.47	59.6
6,500.0	0.69	270.02	6,498.5	59.3	-6.9	353.32	59.7
6,600.0	0.61	284.75	6,598.5	59.5	-8.1	352.28	60.0
6,700.0	0.71	303.80	6,698.5	60.0	-9.1	351.37	60.6
6,800.0	0.83	315.48	6,798.4	60.8	-10.1	350.55	61.6
6,900.0	1.11	341.81	6,898.4	62.2	-10.9	350.04	63.2
7,000.0	0.76	313.18	6,998.4	63.6	-11.7	349.57	64.7
7,100.0	0.54	339.18	7,098.4	64.5	-12.4	349.15	65.7
7,200.0	0.38	285.05	7,198.4	65.0	-12.9	348.82	66.3
7,300.0	0.90	283.56	7,298.4	65.3	-13.9	347.95	66.8
7,400.0	1.58	266.59	7,398.4	65.4	-16.1	346.19	67.4
7,500.0	1.79	259.96	7,498.3	65.1	-19.0	343.73	67.8
7,588.0	1.98	248.43	7,586.3	64.3	-21.8	341.29	67.8

Checked By: _____	Approved By: _____	Date: _____
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Scientific Drilling
Directional Drilling Operations

Project: Lusk Bone Spring, North
Lea County, NM
Well: Nana 30 Federal #2H
Wellbore: VH - Job #32K1010801
Design: VH - Job #32K1010801

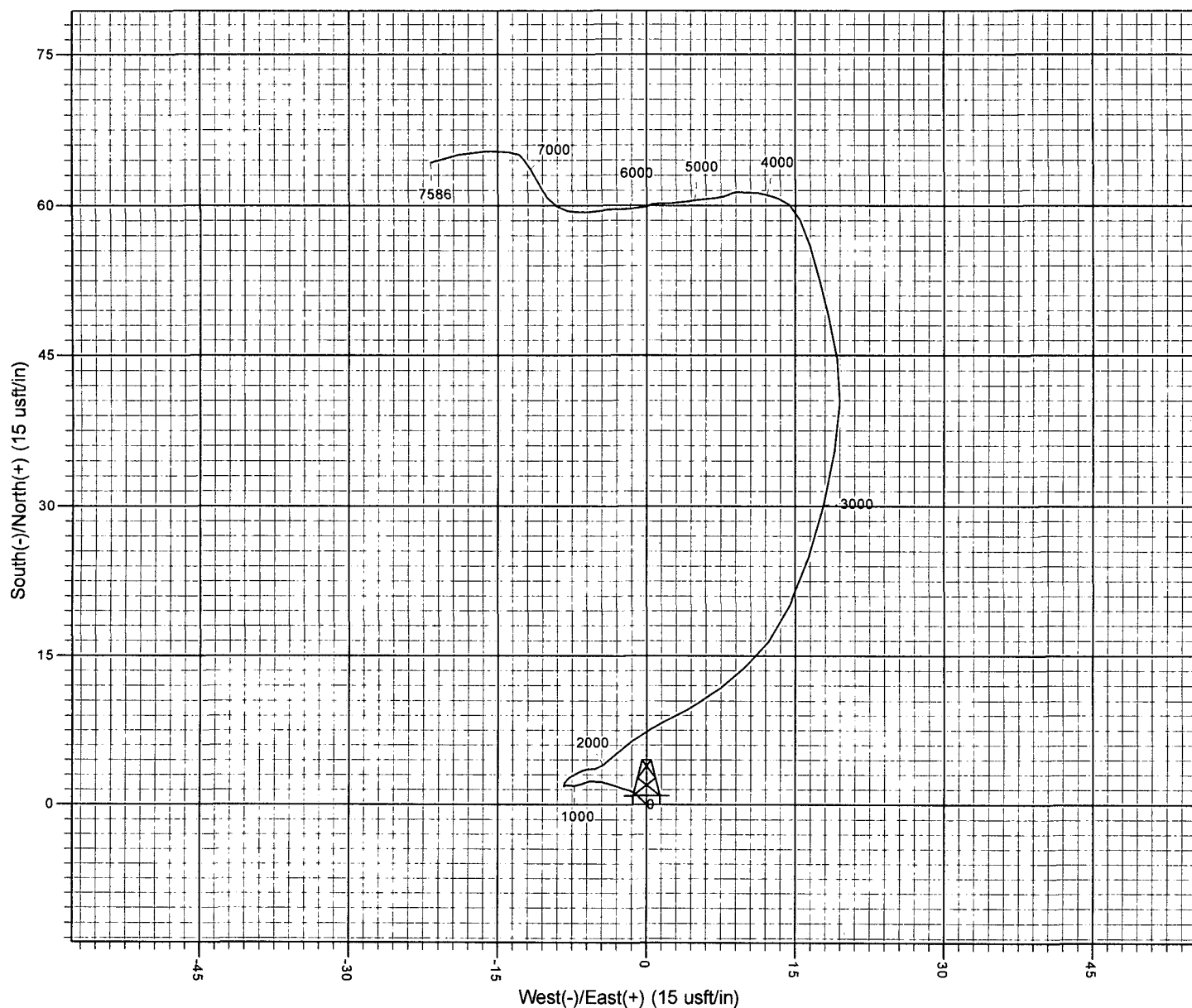


Azimuths to Grid North
True North: -0.29°
Magnetic North: 7.59°

Magnetic Field
Strength: 49018.7snT
Dip Angle: 60.63°
Date: 10/19/2010
Model: BGGM2010

WELL DETAILS: Nana 30 Federal #2H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	625212.40	662950.91	32° 43' 3.670 N	103° 48' 12.640 W	



PROJECT DETAILS: Lusk Bone Spring, North
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° 43' 3.670 N
Longitude: 103° 48' 12.640 W
Positional Uncertainty: 0.0
Convergence: 0.29
Local North: Grid



Directional Survey

District PERMIAN BASIN	County LEA	Field Name LUSK NORTH	Project Group PB NEW MEXICO	State/Province NM
Surface Legal Location 30-18S-32E	API/UWI 3002539579	Latitude (DMS) 32° 43' 3.67" N	Longitude (DMS) 103° 48' 12.64" W	Ground Elev ... 3,702.00
			KB - GL (ft) 16.00	Orig KB Elev (ft) 3,718.00
				TH Elev (ft)

Wellbores

Wellbore Name GEOLOGICAL ST01	Parent Wellbore OH	Property Number 029553-060	Kick Off Depth (ftKB) 8,121.0	Vertical Section Direction (°)
Deviation Survey MWD		Definitive? No	Proposed? No	Proposed Deviation Survey MWD

Deviation Survey

Date	Description
MD Tie In (ftKB)	TVD Tie In (ftKB)
Inclination Tie In (°)	Azimuth Tie In (°)
NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
Wellbore Name OH	Parent Wellbore OH	Property Number 029553-060	Kick Off Depth (ftKB) 179.63	Vertical Section Direction (°)						
Deviation Survey GYRO		Definitive?	Proposed?	Proposed Deviation Survey ACTUAL						

Deviation Survey

Date 10/19/2010	Description GYRO
MD Tie In (ftKB)	TVD Tie In (ftKB)
Inclination Tie In (°)	Azimuth Tie In (°)
NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/19/2...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	GYRO	SCIENTIFIC DRILLING
10/19/2...	100.00	0.33	314.22	100.00	-0.20	0.20	-0.21	0.33	GYRO	SCIENTIFIC DRILLING
10/19/2...	200.00	0.39	316.27	200.00	-0.65	0.65	-0.65	0.06	GYRO	SCIENTIFIC DRILLING
10/19/2...	300.00	0.42	309.12	300.00	-1.13	1.12	-1.17	0.06	GYRO	SCIENTIFIC DRILLING
10/19/2...	400.00	0.25	288.44	399.99	-1.44	1.43	-1.66	0.21	GYRO	SCIENTIFIC DRILLING
10/19/2...	500.00	0.61	285.03	499.99	-1.65	1.63	-2.38	0.36	GYRO	SCIENTIFIC DRILLING
10/19/2...	600.00	0.57	293.11	599.99	-1.99	1.97	-3.35	0.09	GYRO	SCIENTIFIC DRILLING
10/19/2...	700.00	0.89	281.04	699.98	-2.34	2.31	-4.57	0.35	GYRO	SCIENTIFIC DRILLING
10/19/2...	800.00	0.51	256.63	799.97	-2.39	2.36	-5.77	0.47	GYRO	SCIENTIFIC DRILLING
10/19/2...	900.00	0.40	240.89	899.97	-2.12	2.08	-6.50	0.17	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,000.00	0.58	269.41	999.96	-1.95	1.91	-7.32	0.30	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,100.00	0.34	282.65	1,099.96	-2.02	1.97	-8.11	0.26	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,200.00	0.20	173.11	1,199.96	-1.91	1.86	-8.38	0.45	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,300.00	0.18	1.89	1,299.96	-1.90	1.84	-8.35	0.38	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,400.00	0.26	21.95	1,399.96	-2.26	2.21	-8.26	0.11	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,500.00	0.56	51.27	1,499.96	-2.78	2.73	-7.80	0.36	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,600.00	0.45	71.57	1,599.95	-3.20	3.16	-7.04	0.21	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,700.00	0.23	44.66	1,699.95	-3.47	3.42	-6.53	0.27	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,800.00	0.48	89.62	1,799.95	-3.61	3.57	-5.97	0.36	GYRO	SCIENTIFIC DRILLING
10/19/2...	1,900.00	0.41	81.48	1,899.95	-3.66	3.62	-5.20	0.09	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,000.00	0.65	53.83	1,999.94	-4.04	4.01	-4.39	0.34	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,100.00	0.93	46.40	2,099.93	-4.93	4.91	-3.34	0.30	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,200.00	1.16	52.94	2,199.91	-6.09	6.08	-1.94	0.26	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,300.00	2.17	58.93	2,299.87	-7.66	7.66	0.48	1.02	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,400.00	2.59	62.98	2,399.79	-9.64	9.67	4.12	0.45	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,500.00	1.95	50.32	2,499.71	-11.73	11.78	7.44	0.81	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,600.00	1.83	49.00	2,599.65	-13.85	13.91	9.96	0.13	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,700.00	2.09	37.33	2,699.59	-16.33	16.41	12.27	0.48	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,800.00	2.76	25.03	2,799.50	-19.95	20.04	14.39	0.84	GYRO	SCIENTIFIC DRILLING
10/19/2...	2,900.00	3.11	18.88	2,899.37	-24.69	24.79	16.29	0.47	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,000.00	3.28	13.82	2,999.22	-30.02	30.14	17.85	0.33	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,100.00	3.01	9.32	3,099.07	-35.38	35.50	18.96	0.37	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,200.00	2.54	2.25	3,198.95	-40.18	40.31	19.47	0.58	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,300.00	2.45	350.87	3,298.86	-44.51	44.63	19.22	0.50	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,400.00	2.48	345.95	3,398.76	-48.72	48.84	18.35	0.21	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,500.00	2.13	345.61	3,498.68	-52.63	52.74	17.37	0.35	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,600.00	1.75	341.94	3,598.63	-55.89	55.99	16.43	0.40	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,700.00	1.41	335.45	3,698.59	-58.46	58.56	15.45	0.38	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,800.00	0.83	305.60	3,798.57	-60.01	60.11	14.35	0.80	GYRO	SCIENTIFIC DRILLING
10/19/2...	3,900.00	0.66	289.48	3,898.56	-60.63	60.72	13.21	0.27	GYRO	SCIENTIFIC DRILLING



Directional Survey

District PERMIAN BASIN	County LEA	Field Name LUSK NORTH	Project Group PB NEW MEXICO	State/Province NM
Surface Legal Location 30-18S-32E	API/UWI 3002539579	Latitude (DMS) 32° 43' 3.67" N	Longitude (DMS) 103° 48' 12.64" W	Ground Elev ... 3,702.00
			KB - GL (ft) 16.00	Orig KB Elev (ft) 3,718.00
				TH Elev (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/19/2...	4,000.00	0.63	286.40	3,998.55	-60.99	61.07	12.14	0.05	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,100.00	0.48	275.85	4,098.55	-61.19	61.26	11.20	0.18	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,200.00	0.37	267.63	4,198.55	-61.22	61.29	10.46	0.13	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,300.00	0.48	276.00	4,298.54	-61.26	61.32	9.72	0.13	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,400.00	0.31	262.54	4,398.54	-61.27	61.33	9.04	0.19	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,500.00	0.23	250.24	4,498.54	-61.17	61.23	8.58	0.10	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,600.00	0.19	244.13	4,598.54	-61.03	61.09	8.24	0.05	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,700.00	0.42	251.29	4,698.54	-60.85	60.90	7.74	0.23	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,800.00	0.62	264.74	4,798.53	-60.69	60.73	6.86	0.23	GYRO	SCIENTIFIC DRILLING
10/19/2...	4,900.00	0.64	266.53	4,898.53	-60.61	60.65	5.76	0.03	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,000.00	0.44	258.85	4,998.52	-60.51	60.54	4.83	0.21	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,100.00	0.52	263.57	5,098.52	-60.39	60.42	4.00	0.09	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,200.00	0.42	263.98	5,198.52	-60.30	60.33	3.19	0.10	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,300.00	0.35	263.46	5,298.51	-60.24	60.25	2.52	0.07	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,400.00	0.35	265.58	5,398.51	-60.18	60.19	1.91	0.01	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,500.00	0.53	272.06	5,498.51	-60.18	60.19	1.14	0.19	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,600.00	0.23	248.47	5,598.51	-60.13	60.13	0.49	0.33	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,700.00	0.22	250.16	5,698.51	-59.99	59.99	0.13	0.01	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,800.00	0.36	262.75	5,798.50	-59.89	59.89	-0.37	0.15	GYRO	SCIENTIFIC DRILLING
10/19/2...	5,900.00	0.36	257.64	5,898.50	-59.79	59.78	-0.98	0.03	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,000.00	0.45	265.73	5,998.50	-59.69	59.68	-1.68	0.11	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,100.00	0.57	268.51	6,098.50	-59.66	59.64	-2.57	0.12	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,200.00	0.58	268.48	6,198.49	-59.64	59.62	-3.57	0.01	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,300.00	0.62	259.62	6,298.49	-59.53	59.50	-4.61	0.10	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,400.00	0.69	266.56	6,398.48	-59.41	59.37	-5.75	0.11	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,500.00	0.69	270.02	6,498.47	-59.38	59.33	-6.95	0.04	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,600.00	0.61	284.75	6,598.47	-59.52	59.47	-8.07	0.18	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,700.00	0.71	303.80	6,698.46	-60.01	59.95	-9.10	0.24	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,800.00	0.83	315.48	6,798.45	-60.88	60.81	-10.12	0.20	GYRO	SCIENTIFIC DRILLING
10/19/2...	6,900.00	1.11	341.81	6,898.44	-62.32	62.25	-10.93	0.52	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,000.00	0.76	313.18	6,998.42	-63.70	63.62	-11.71	0.57	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,100.00	0.54	339.18	7,098.42	-64.60	64.52	-12.37	0.36	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,200.00	0.38	285.05	7,198.41	-65.13	65.04	-12.85	0.44	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,300.00	0.90	283.56	7,298.41	-65.40	65.31	-13.94	0.52	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,400.00	1.58	266.59	7,398.38	-65.52	65.42	-16.08	0.77	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,500.00	1.79	259.96	7,498.34	-65.18	65.06	-18.99	0.29	GYRO	SCIENTIFIC DRILLING
10/19/2...	7,588.00	1.98	248.43	7,586.29	-64.40	64.26	-21.76	0.48	GYRO	SCIENTIFIC DRILLING
10/20/2...	7,654.00	2.20	220.70	7,652.25	-63.03	62.88	-23.64	1.55	MWD	INWELL
10/21/2...	7,686.00	5.20	175.00	7,684.19	-61.13	60.97	-23.92	12.46	MWD	INWELL
10/21/2...	7,717.00	9.40	165.70	7,714.93	-57.27	57.12	-23.17	14.03	MWD	INWELL
10/21/2...	7,749.00	12.90	165.20	7,746.32	-51.27	51.13	-21.61	10.94	MWD	INWELL
10/21/2...	7,781.00	15.70	165.50	7,777.33	-43.61	43.48	-19.62	8.75	MWD	INWELL
10/21/2...	7,813.00	17.80	165.30	7,807.97	-34.67	34.56	-17.29	6.57	MWD	INWELL
10/21/2...	7,845.00	20.10	164.80	7,838.23	-24.62	24.52	-14.61	7.21	MWD	INWELL
10/21/2...	7,876.00	23.20	166.10	7,867.04	-13.53	13.45	-11.74	10.12	MWD	INWELL
10/21/2...	7,908.00	26.50	168.70	7,896.07	-0.38	0.33	-8.83	10.86	BIT	INWELL

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DEVON ENERGY

Lusk Bone Spring, North
Lea County, NM
Nana 30 Federal #2H
VH - Job #32K1010801

Survey: Actual

SDI Standard Survey Report

25 October, 2010

RECEIVED

201 JUN 26 PM 12:42

BUREAU OF LAND MGMT
CARLSBAD OFFICE

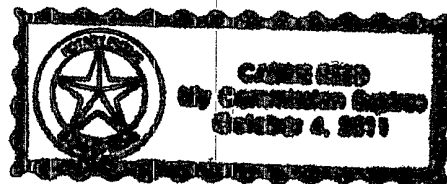
This survey is correct to the best of my knowledge and is supported by actual field data.

R. W. Harts

Notorized this date 11th of November, 2010.

Carrin 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 Nana 30 Federal #2H
Project:	Lusk Bone Spring, North	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Nana 30 Federal #2H	North Reference:	Grid
Wellbore:	VH - Job #32K1010801	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1010801	Database:	EDM-Regulatory

Project	Lusk Bone Spring, North		
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:	625,212.40 usft
From:	Lat/Long	Easting:	662,950.91 usft
Position Uncertainty:	0.0 usft	Slot Radius:	0"
		Latitude:	32° 43' 3.670 N
		Longitude:	103° 48' 12.640 W
		Grid Convergence:	0.29 °

Well	Nana 30 Federal #2H, Directional (Inwell)		
Well Position	+N-S	0.0 usft	Northing: 625,212.40 usft
	+E-W	0.0 usft	Easting: 662,950.91 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 43' 3.670 N
		Longitude:	103° 48' 12.640 W
		Ground Level:	0.0 usft

Wellbore	VH - Job #32K1010801				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2010	10/19/2010	(°)	(°)	(nT)
			7.87	60.63	49,019

Design	VH - Job #32K1010801				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	179.63	

Survey Program	Date	10/25/2010		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.0	7,588.0	Actual (VH - Job #32K1010801)	Keeper	Keeper Gyro

Survey								
Measured Depth	Inclination	Azimuth	True Vertical	North/South	East/West	Closure Azimuth	Closure Distance	
(usft)	(°)	(°)	Depth	(usft)	(usft)	(°)	(usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
100.0	0.33	314.22	100.0	0.2	-0.2	314.22	0.3	
200.0	0.39	316.27	200.0	0.6	-0.6	314.98	0.9	
300.0	0.42	309.12	300.0	1.1	-1.2	313.93	1.6	
400.0	0.25	288.44	400.0	1.4	-1.7	310.66	2.2	
500.0	0.61	285.03	500.0	1.6	-2.4	304.44	2.9	
600.0	0.57	293.11	600.0	2.0	-3.4	300.39	3.9	
700.0	0.89	281.04	700.0	2.3	-4.6	296.80	5.1	
800.0	0.51	256.63	800.0	2.4	-5.8	292.22	6.2	
900.0	0.40	240.89	900.0	2.1	-6.5	287.75	6.8	
1,000.0	0.58	269.41	1,000.0	1.9	-7.3	284.61	7.6	
1,100.0	0.34	282.65	1,100.0	2.0	-8.1	283.63	8.3	

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company: DEVON ENERGY
Project: Lusk Bone Spring, North
Site: Lea County, NM
Well: Nana 30 Federal #2H
Wellbore: VH - Job #32K1010801
Design: VH - Job #32K1010801

Local Co-ordinate Reference: Well Nana 30 Federal #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	0.20	173.11	1,200.0	1.9	-8.4	282.51	8.6
1,300.0	0.18	1.89	1,300.0	1.8	-8.4	282.44	8.6
1,400.0	0.26	21.95	1,400.0	2.2	-8.3	284.97	8.6
1,500.0	0.56	51.27	1,500.0	2.7	-7.8	289.27	8.3
1,600.0	0.45	71.57	1,600.0	3.2	-7.0	294.14	7.7
1,700.0	0.23	44.66	1,699.9	3.4	-6.5	297.66	7.4
1,800.0	0.48	89.62	1,799.9	3.6	-6.0	300.87	7.0
1,900.0	0.41	81.48	1,899.9	3.6	-5.2	304.89	6.3
2,000.0	0.65	53.83	1,999.9	4.0	-4.4	312.45	5.9
2,100.0	0.93	46.40	2,099.9	4.9	-3.3	325.75	5.9
2,200.0	1.16	52.94	2,199.9	6.1	-1.9	342.25	6.4
2,300.0	2.17	58.93	2,299.9	7.7	0.5	3.62	7.7
2,400.0	2.59	62.98	2,399.8	9.7	4.1	23.08	10.5
2,500.0	1.95	50.32	2,499.7	11.8	7.4	32.28	13.9
2,600.0	1.83	49.00	2,599.7	13.9	10.0	35.59	17.1
2,700.0	2.09	37.33	2,699.6	16.4	12.3	36.78	20.5
2,800.0	2.76	25.03	2,799.5	20.0	14.4	35.68	24.7
2,900.0	3.11	18.88	2,899.4	24.8	16.3	33.30	29.7
3,000.0	3.28	13.82	2,999.2	30.1	17.8	30.64	35.0
3,100.0	3.01	9.32	3,099.1	35.5	19.0	28.10	40.2
3,200.0	2.54	2.25	3,198.9	40.3	19.5	25.78	44.8
3,300.0	2.45	350.87	3,298.9	44.6	19.2	23.29	48.6
3,400.0	2.48	345.95	3,398.8	48.8	18.4	20.59	52.2
3,500.0	2.13	345.61	3,498.7	52.7	17.4	18.22	55.5
3,600.0	1.75	341.94	3,598.6	56.0	16.4	16.35	58.4
3,700.0	1.41	335.45	3,698.6	58.6	15.4	14.77	60.6
3,800.0	0.83	305.60	3,798.6	60.1	14.3	13.42	61.8
3,900.0	0.66	289.48	3,898.6	60.7	13.2	12.28	62.1
4,000.0	0.63	286.40	3,998.6	61.1	12.1	11.25	62.3
4,100.0	0.48	275.85	4,098.5	61.3	11.2	10.36	62.3
4,200.0	0.37	267.63	4,198.5	61.3	10.5	9.68	62.2
4,300.0	0.48	276.00	4,298.5	61.3	9.7	9.01	62.1
4,400.0	0.31	262.54	4,398.5	61.3	9.0	8.38	62.0
4,500.0	0.23	250.24	4,498.5	61.2	8.6	7.98	61.8
4,600.0	0.19	244.13	4,598.5	61.1	8.2	7.68	61.6
4,700.0	0.42	251.29	4,698.5	60.9	7.7	7.25	61.4
4,800.0	0.62	264.74	4,798.5	60.7	6.9	6.44	61.1
4,900.0	0.64	266.53	4,898.5	60.6	5.8	5.43	60.9
5,000.0	0.44	258.85	4,998.5	60.5	4.8	4.56	60.7
5,100.0	0.52	263.57	5,098.5	60.4	4.0	3.79	60.5
5,200.0	0.42	263.98	5,198.5	60.3	3.2	3.02	60.4
5,300.0	0.35	263.46	5,298.5	60.3	2.5	2.39	60.3
5,400.0	0.35	265.58	5,398.5	60.2	1.9	1.82	60.2
5,500.0	0.53	272.06	5,498.5	60.2	1.1	1.09	60.2

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company: DEVON ENERGY
Project: Lusk Bone Spring, North
Site: Lea County, NM
Well: Nana 30 Federal #2H
Wellbore: VH - Job #32K1010801
Design: VH - Job #32K1010801

Local Co-ordinate Reference: Well Nana 30 Federal #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	0.23	248.47	5,598.5	60.1	0.5	0.47	60.1
5,700.0	0.22	250.16	5,698.5	60.0	0.1	0.12	60.0
5,800.0	0.36	262.75	5,798.5	59.9	-0.4	359.65	59.9
5,900.0	0.36	257.64	5,898.5	59.8	-1.0	359.06	59.8
6,000.0	0.45	265.73	5,998.5	59.7	-1.7	358.38	59.7
6,100.0	0.57	268.51	6,098.5	59.6	-2.6	357.53	59.7
6,200.0	0.58	268.48	6,198.5	59.6	-3.6	356.57	59.7
6,300.0	0.62	259.62	6,298.5	59.5	-4.6	355.57	59.7
6,400.0	0.69	266.56	6,398.5	59.4	-5.7	354.47	59.6
6,500.0	0.69	270.02	6,498.5	59.3	-6.9	353.32	59.7
6,600.0	0.61	284.75	6,598.5	59.5	-8.1	352.28	60.0
6,700.0	0.71	303.80	6,698.5	60.0	-9.1	351.37	60.6
6,800.0	0.83	315.48	6,798.4	60.8	-10.1	350.55	61.6
6,900.0	1.11	341.81	6,898.4	62.2	-10.9	350.04	63.2
7,000.0	0.76	313.18	6,998.4	63.6	-11.7	349.57	64.7
7,100.0	0.54	339.18	7,098.4	64.5	-12.4	349.15	65.7
7,200.0	0.38	285.05	7,198.4	65.0	-12.9	348.82	66.3
7,300.0	0.90	283.56	7,298.4	65.3	-13.9	347.95	66.8
7,400.0	1.58	266.59	7,398.4	65.4	-16.1	346.19	67.4
7,500.0	1.79	259.96	7,498.3	65.1	-19.0	343.73	67.8
7,588.0	1.98	248.43	7,586.3	64.3	-21.8	341.29	67.8

Checked By: _____ Approved By: _____ Date: _____



Scientific Drilling
Directional Drilling Operations

Project: Lusk Bone Spring, North
Lea County, NM
Well: Nana 30 Federal #2H
Wellbore: VH - Job #32K1010801
Design: VH - Job #32K1010801

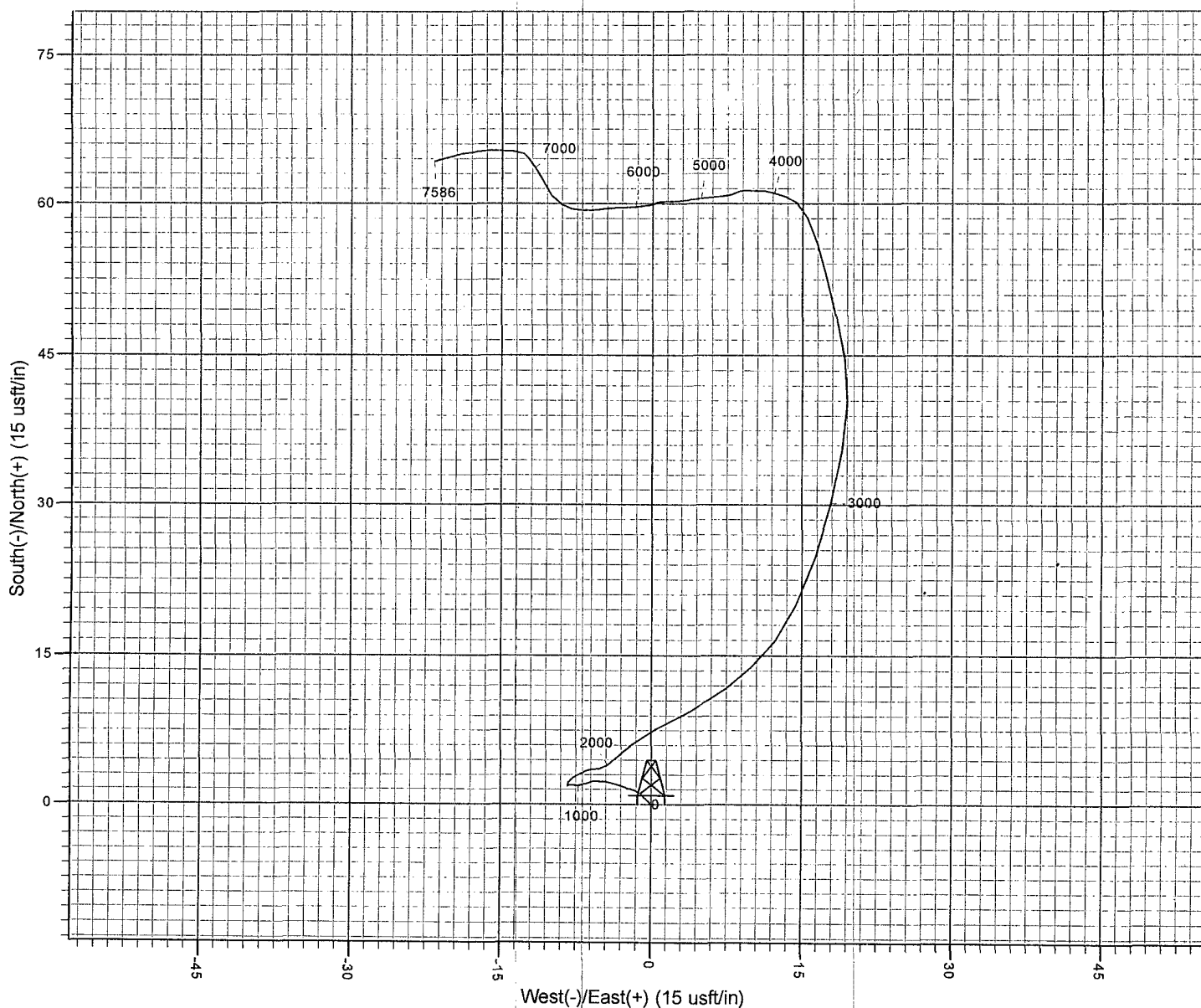


Azimuths to Grid North
True North: -0.29°
Magnetic North: 7.59°

Magnetic Field
Strength: 49018.7snT
Dip Angle: 60.63°
Date: 10/19/2010
Model: BGGM2010

WELL DETAILS: Nana 30 Federal #2H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	625212.40	662950.91	32° 43' 3.670 N	103° 48' 12.640 W	



PROJECT DETAILS: Lusk Bone Spring, North
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° 43' 3.670 N
Longitude: 103° 48' 12.640 W
Positional Uncertainty: 0.0
Convergence: 0.29
Local North: Grid