

DEVON ENERGY

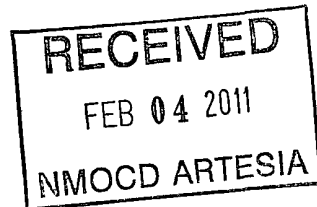
Upper Penn
Eddy County, NM
North Pure Gold 8 Federal #13
VH - Job 32K0710536

30-015-37051

Survey: Actual

SDI Standard Survey Report

21 August, 2010



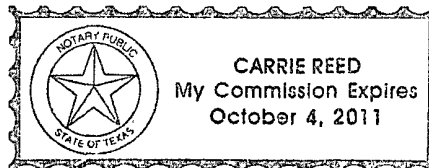
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notorized this date 23rd of August, 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:	Site Eddy County, NM
Project:	Upper Penn.	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	North Pure Gold 8 Federal #13	North Reference:	Grid
Wellbore:	VH - Job 32K0710536	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job 32K0710536	Database:	EDM-Regulatory

Project	Upper Penn		
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		

Well	North Pure Gold 8 Federal #13				
Well Position	+N-S	0.0 usft	Northing:	478,364.26 usft	Latitude: 32° 18' 50.400 N
	+E-W	0.0 usft	Easting:	665,692.45 usft	Longitude: 103° 47' 49.200 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level: 0.0 usft

Wellbore VH - Job 32K0710536

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/21/2010	7.78	60.27	48,787

Design VH - Job 32K0710536

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	179.49	

Survey Program Date 8/21/2010

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	11,850.0	Actual (VH - Job 32K0710536)	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	0.40	45.94	100.0	0.2	0.3	45.94	0.3
200.0	0.37	68.36	200.0	0.6	0.8	52.98	1.0
300.0	0.34	33.68	300.0	1.0	1.3	52.54	1.6
400.0	0.21	8.70	400.0	1.4	1.5	46.21	2.0
500.0	0.30	282.59	500.0	1.6	1.2	36.94	2.0
600.0	0.60	280.31	600.0	1.8	0.5	14.44	1.8
700.0	0.37	304.27	700.0	2.1	-0.3	351.14	2.1
800.0	0.65	292.18	800.0	2.5	-1.1	335.63	2.7
900.0	0.50	293.00	900.0	2.8	-2.0	324.34	3.5
1,000.0	0.52	279.74	1,000.0	3.1	-2.9	316.93	4.2
1,100.0	0.33	282.97	1,100.0	3.2	-3.6	311.78	4.9
1,200.0	0.21	292.13	1,200.0	3.4	-4.1	309.61	5.3
1,300.0	0.10	305.89	1,300.0	3.5	-4.3	308.98	5.5
1,400.0	0.20	253.19	1,400.0	3.5	-4.5	307.49	5.7
1,500.0	0.13	5.20	1,500.0	3.5	-4.7	307.04	5.9
1,600.0	0.20	356.22	1,600.0	3.8	-4.7	309.20	6.1

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Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	North Pure Gold 8 Federal #13	North Reference:	Grid
Wellbore:	VH - Job 32K0710536	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job 32K0710536	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure-Azimuth (°)	Closure Distance (usft)
1,700.0	0.19	355.98	1,700.0	4.2	-4.7	311.46	6.3
1,800.0	0.16	307.28	1,800.0	4.4	-4.8	312.38	6.6
1,900.0	0.10	10.58	1,900.0	4.6	-4.9	312.91	6.8
2,000.0	0.06	340.92	2,000.0	4.7	-4.9	313.73	6.8
2,100.0	0.13	295.66	2,100.0	4.8	-5.1	313.64	7.0
2,200.0	0.38	337.46	2,200.0	5.2	-5.3	314.40	7.4
2,300.0	0.47	327.16	2,300.0	5.8	-5.6	315.96	8.1
2,400.0	0.56	323.18	2,400.0	6.6	-6.2	316.86	9.0
2,500.0	0.69	320.94	2,500.0	7.4	-6.8	317.41	10.1
2,600.0	0.83	320.43	2,599.9	8.5	-7.7	317.78	11.4
2,700.0	0.93	322.96	2,699.9	9.7	-8.6	318.26	13.0
2,800.0	1.07	327.64	2,799.9	11.1	-9.6	319.11	14.7
2,900.0	1.00	346.37	2,899.9	12.7	-10.3	320.99	16.4
3,000.0	0.97	0.99	2,999.9	14.4	-10.5	323.94	17.9
3,100.0	0.88	355.78	3,099.9	16.0	-10.5	326.67	19.2
3,200.0	0.78	6.55	3,199.9	17.5	-10.5	328.95	20.4
3,300.0	0.94	46.54	3,299.9	18.7	-9.9	332.24	21.2
3,400.0	1.26	57.50	3,399.8	19.9	-8.3	337.26	21.6
3,500.0	1.45	72.74	3,499.8	20.8	-6.2	343.44	21.7
3,600.0	1.61	79.71	3,599.8	21.5	-3.6	350.46	21.8
3,700.0	1.95	90.31	3,699.7	21.7	-0.5	358.62	21.7
3,800.0	2.08	96.10	3,799.7	21.5	3.0	7.89	21.7
3,900.0	1.84	97.34	3,899.6	21.1	6.4	16.81	22.1
4,000.0	1.11	98.53	3,999.6	20.8	8.9	23.27	22.6
4,100.0	0.90	106.94	4,099.6	20.4	10.6	27.55	23.0
4,200.0	0.78	103.10	4,199.5	20.0	12.1	31.06	23.4
4,300.0	0.77	108.77	4,299.5	19.6	13.4	34.21	23.7
4,400.0	0.66	118.07	4,399.5	19.2	14.5	37.12	24.0
4,500.0	0.51	145.16	4,499.5	18.5	15.3	39.49	24.0
4,600.0	0.46	150.44	4,599.5	17.8	15.7	41.43	23.7
4,700.0	0.43	137.11	4,699.5	17.2	16.2	43.26	23.6
4,800.0	0.44	148.79	4,799.5	16.6	16.6	45.08	23.5
4,900.0	0.32	124.45	4,899.5	16.1	17.0	46.66	23.4
5,000.0	0.22	131.74	4,999.5	15.8	17.4	47.79	23.5
5,100.0	0.21	123.29	5,099.5	15.6	17.7	48.69	23.6
5,200.0	0.28	121.00	5,199.5	15.3	18.1	49.67	23.7
5,300.0	0.25	120.06	5,299.5	15.1	18.5	50.72	23.9
5,400.0	0.19	100.50	5,399.5	15.0	18.8	51.51	24.1
5,500.0	0.20	99.24	5,499.5	14.9	19.2	52.11	24.3
5,600.0	0.22	89.73	5,599.5	14.9	19.5	52.68	24.6
5,700.0	0.31	109.46	5,699.5	14.8	20.0	53.47	24.9
5,800.0	0.23	106.87	5,799.5	14.6	20.4	54.35	25.1
5,900.0	0.24	111.62	5,899.5	14.5	20.8	55.11	25.4
6,000.0	0.26	118.12	5,999.5	14.3	21.2	55.95	25.6

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Site:	Eddy County, NM	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Well:	North Pure Gold 8 Federal #13	North Reference:	Gnd
Wellbore:	VH - Job 32K0710536	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job 32K0710536	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
6,100.0	0.32	122.15	6,099.5	14.1	21.6	56.96	25.8
6,200.0	0.33	135.94	6,199.5	13.7	22.1	58.15	26.0
6,300.0	0.26	117.72	6,299.5	13.4	22.5	59.19	26.2
6,400.0	0.15	110.59	6,399.5	13.3	22.8	59.83	26.4
6,500.0	0.24	196.05	6,499.5	13.0	22.9	60.37	26.3
6,600.0	0.16	176.06	6,599.5	12.7	22.8	60.97	26.1
6,700.0	0.33	180.50	6,699.5	12.2	22.8	61.80	25.9
6,800.0	0.29	185.48	6,799.5	11.7	22.8	62.84	25.6
6,900.0	0.36	176.34	6,899.5	11.1	22.8	63.97	25.4
7,000.0	0.32	186.58	6,999.5	10.5	22.8	65.17	25.1
7,100.0	0.37	180.67	7,099.5	9.9	22.7	66.39	24.8
7,200.0	0.29	192.45	7,199.5	9.4	22.7	67.55	24.6
7,300.0	0.32	190.15	7,299.5	8.9	22.6	68.60	24.3
7,400.0	0.45	185.95	7,399.5	8.2	22.5	70.00	23.9
7,500.0	0.40	185.43	7,499.5	7.4	22.4	71.63	23.6
7,600.0	0.55	184.94	7,599.5	6.6	22.3	73.49	23.3
7,700.0	0.71	178.20	7,699.5	5.5	22.3	76.10	23.0
7,800.0	0.82	174.36	7,799.5	4.2	22.4	79.40	22.8
7,900.0	0.93	178.81	7,899.4	2.7	22.5	83.23	22.7
8,000.0	1.03	177.78	7,999.4	1.0	22.6	87.56	22.6
8,100.0	1.05	176.58	8,099.4	-0.9	22.6	92.16	22.7
8,200.0	1.08	169.99	8,199.4	-2.7	22.9	96.72	23.0
8,300.0	1.33	171.29	8,299.4	-4.8	23.2	101.62	23.7
8,400.0	1.62	179.13	8,399.3	-7.3	23.4	107.39	24.5
8,500.0	1.78	178.91	8,499.3	-10.3	23.5	113.71	25.6
8,600.0	1.84	177.87	8,599.2	-13.5	23.5	119.75	27.1
8,700.0	1.85	186.49	8,699.2	-16.7	23.4	125.43	28.7
8,800.0	1.93	191.88	8,799.1	-19.9	22.9	131.02	30.3
8,900.0	1.81	194.20	8,899.1	-23.1	22.2	136.19	32.0
9,000.0	1.78	203.83	8,999.0	-26.0	21.1	140.93	33.5
9,100.0	1.93	203.25	9,099.0	-29.0	19.8	145.62	35.2
9,200.0	2.03	203.20	9,198.9	-32.2	18.5	150.13	37.1
9,300.0	2.26	205.48	9,298.9	-35.6	16.9	154.55	39.4
9,400.0	2.35	207.31	9,398.8	-39.2	15.2	158.87	42.0
9,500.0	2.45	203.85	9,498.7	-43.0	13.3	162.75	45.0
9,600.0	2.31	201.38	9,598.6	-46.8	11.7	165.91	48.3
9,700.0	2.20	201.59	9,698.5	-50.5	10.3	168.46	51.5
9,800.0	2.30	197.37	9,798.5	-54.2	9.0	170.57	54.9
9,900.0	2.24	196.54	9,898.4	-58.0	7.8	172.29	58.5
10,000.0	1.87	191.22	9,998.3	-61.4	7.0	173.53	61.8
10,100.0	1.86	190.99	10,098.3	-64.6	6.3	174.39	64.9
10,200.0	1.92	193.09	10,198.2	-67.8	5.7	175.24	68.1
10,300.0	1.61	192.55	10,298.2	-70.8	5.0	175.99	71.0
10,400.0	1.52	194.39	10,398.1	-73.5	4.3	176.62	73.6

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SDI Standard Survey Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Site Eddy County, NM
Project:	Upper Penn	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	North Pure Gold 8 Federal #13	North Reference:	Grid
Wellbore:	VH - Job 32K0710536	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job 32K0710536	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
10,500.0	1.32	171.22	10,498.1	-75.9	4.2	176.85	76.0
10,600.0	1.51	169.61	10,598.1	-78.4	4.6	176.64	78.5
10,700.0	1.50	171.15	10,698.0	-81.0	5.0	176.44	81.1
10,800.0	1.59	172.48	10,798.0	-83.6	5.4	176.29	83.8
10,900.0	1.04	182.85	10,898.0	-85.9	5.6	176.30	86.1
11,000.0	0.96	195.38	10,997.9	-87.6	5.3	176.55	87.8
11,100.0	0.96	195.54	11,097.9	-89.2	4.8	176.90	89.4
11,200.0	0.96	198.93	11,197.9	-90.8	4.3	177.26	90.9
11,300.0	0.93	209.54	11,297.9	-92.3	3.7	177.72	92.4
11,400.0	0.88	197.69	11,397.9	-93.8	3.0	178.14	93.8
11,500.0	0.77	199.52	11,497.9	-95.1	2.6	178.45	95.2
11,600.0	0.89	191.60	11,597.9	-96.5	2.2	178.69	96.6
11,700.0	0.58	197.39	11,697.9	-97.8	1.9	178.89	97.8
11,800.0	-0.55	-252.89	11,797.9	-98.4	-1.3	179.25	98.4
11,850.0	0.39	262.91	11,847.9	-98.5	0.9	179.49	98.5



Project: Upper Penn
Eddy County, NM
Well: North Pure Gold 8 Federal #13
Wellbore: VH - Job 32K0710536
Design: VH - Job 32K0710536



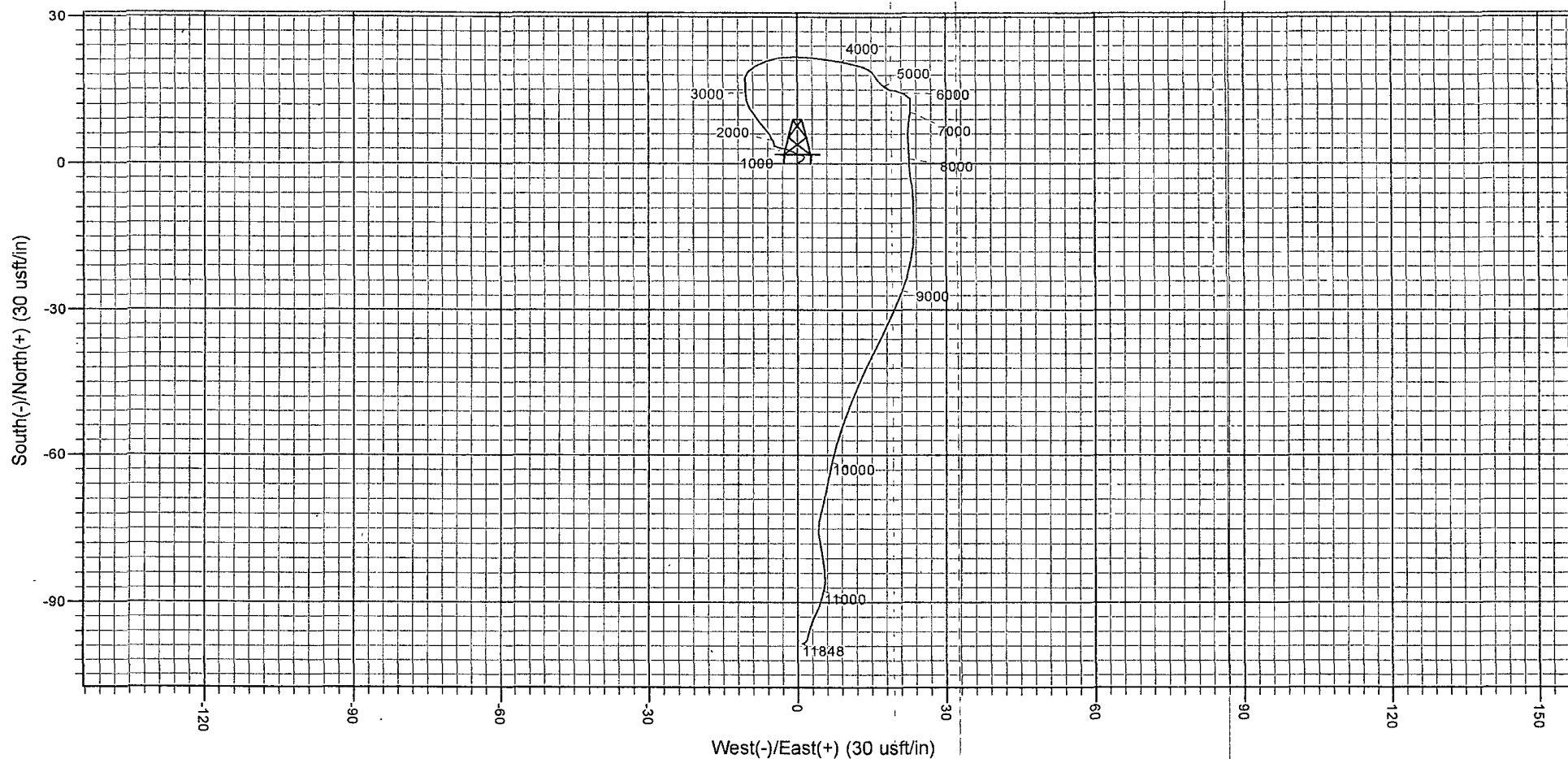
Azimuths to Grid North
True North: -0.29°
Magnetic North: 7.50°
Magnetic Field
Strength 48786.6snT
Dip Angle: 60.27°
Date: 8/21/2010
Model: IGRF200510

WELL DETAILS: North Pure Gold 8 Federal #13

WELL @ 0.0usft (Original Well Elev)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	478364.26	665692.45	32° 18' 50.400 N	103° 47' 49.200 W	



PROJECT DETAILS: Upper Penn
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: Eddy County, NM
Site Centre Latitude: 32° 18' 50.400 N
Longitude: 103° 47' 49.200 W
Positional Uncertainty: 0.0
Convergence: 0.29
Local North: Grid