Results of Directional Survey

API number:	30-025-40681		
OGRID:		Operator:	DEVON ENERGY PRODUCTION COMPANY, LP
		Property:	PENNYPACKER 17 STATE # 1H

surface	ULSTR:	O	17	T	21S	R	34E
				330	FSL	1980	FEL
BH Loc	ULSTR:	B	17	T	21S	R	34E
15318 MD		10836.0 TVD		330	FNL	2003	FEL
				4950	FSL		
Top Perf/OH	ULSTR:	O	17	T	21S	R	34E
11044 MD		11407.5 TVD		685	FSL	1842	FEL
Bot Perf/OH	ULSTR:	B	17	T	21S	R	34E
15268 MD		10836.5 TVD		380	FNL	2002	FEL
				4900	FSL		

	MD	N/S	E/W	VD
	11028	340.48	139.53	10885.84
TOP PERFS/OH	**11044**	355.47	138.46	11407.45
	11059	369.52	137.45	11896.46
	15250	4552.22	-22.37	10836.70
BOT PERFS/OH	**15268**	4570.22	-22.49	10836.52
	15317.6	4619.77	-22.81	10836.03

NEXT TO LAST	15317.6	4619.77	-22.81	10836.03
LAST READING	15318	4620.22	-22.81	10836.02
TD	**15318**	4620.22	-22.81	10836.02

Surface Location	330	FS	1980	FE
Projected BHL	4950	FS	2003	FE
Location of				
Top Perfs/OH	685	FS	1842	FE
Bottom Perfs/OH	4900	FS	2002	FE

SUMMARY of Subsurface Locations

Surface Location	O-17-21S-34E	330	FS	1980	FE	Vert. Depth
Top Perfs/OH	O-17-21S-34E	685	FS	1842	FE	11407.45
Bottom Perfs/OH	B-17-21S-34E	4900	FS	2002	FE	10836.52
Projected TD	B-17-21S-34E	4950	FS	2003	FE	10836.02

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RECEIVED

Devon Energy, Inc.

Lea County (NAD83)
Pennypacker 17 state
#1H

ST01

Design: ST01

Standard Survey Report

31 August, 2013

devon

Project: Lea County (NAD83)
Site: Pennypacker 17 state
Well: #1H
ST01
ST01

Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.95°

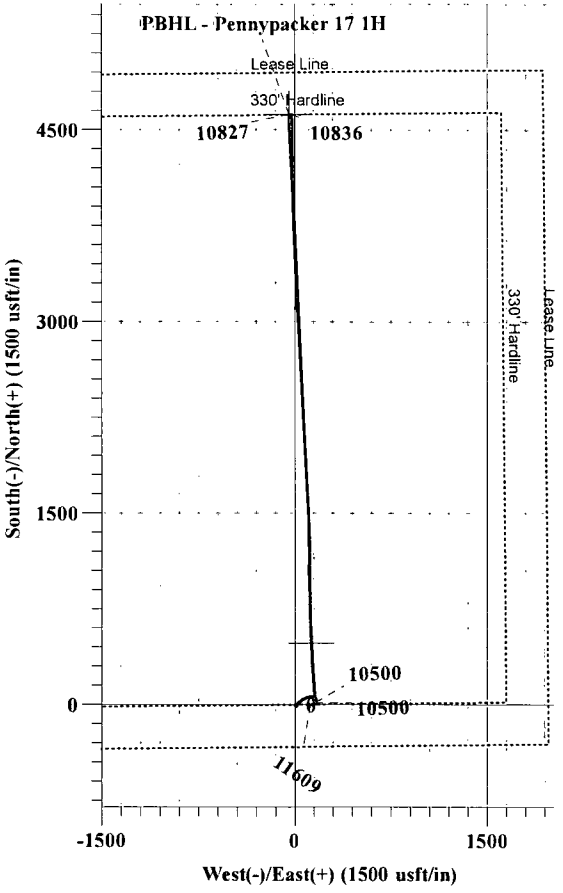
Magnetic Field
Strength: 48521.8snT
Dip Angle: 60.33°
Date: 8/21/2013
Model: BGGM2012

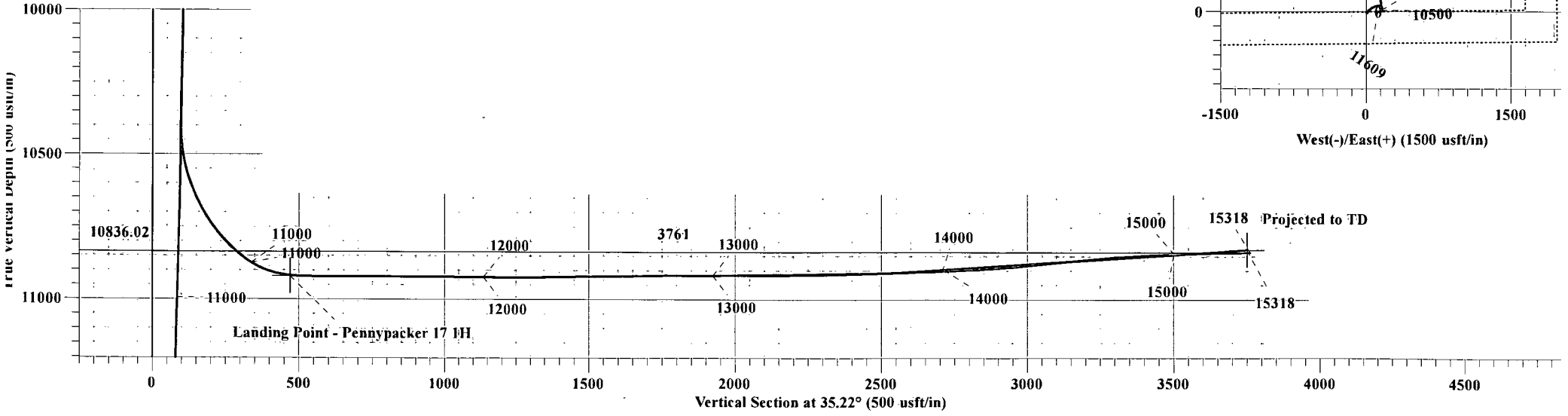
PATHFINDER®
A Schlumberger Company

WELL DETAILS: #1H

KB = 19 @ 3775.10usft (Patterson 228) 3756.10

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	536660.40	801457.70	32° 28' 21.060 N	103° 29' 23.504 W	





Design: ST01 (#1H/ST01)

Pathfinder - A Schlumberger Company

Survey Report

Company:	Devon Energy, Inc.	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County (NAD83)	**TVD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Site:	Pennypacker 17 state	**MD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Project	Lea County (NAD83)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Pennypacker 17 state				
Site Position:		**Northing:**	536,660.40 usft	**Latitude:**	32° 28' 21.060 N
From:	Map	**Easting:**	801,457.70 usft	**Longitude:**	103° 29' 23.504 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.45 °

Well	#1H				
Well Position	**+N/-S**	0.00 usft	**Northing:**	536,660.40 usft	**Latitude:**	32° 28' 21.060 N
	+E/-W	0.00 usft	**Easting:**	801,457.70 usft	**Longitude:**	103° 29' 23.504 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	3,775.10 usft	**Ground Level:**	3,756.10 usft

Wellbore	ST01			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2012	8/21/2013	7.40	60.33	48,522

Design	ST01			
Audit Notes:				
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	10,402.48

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.00	0.00	0.00	35.22

Survey Program **Date** 8/31/2013

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
148.28	10,402.48	#1 VES Gyro (OH)	GG ISCWSA	Good Gyro
10,463.00	15,318.00	#1 Pathfinder MWD (ST01)	MWD	MWD - Standard

Survey

Measured Depth (usft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Vertical Section (usft)**	**Dogleg Rate (°/100usft)**	**Build Rate (°/100usft)**	**Turn Rate (°/100usft)**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148.28	0.48	142.18	148.28	-0.49	0.38	-0.18	0.32	0.32	0.00
241.50	0.47	146.61	241.50	-1.12	0.83	-0.43	0.04	-0.01	4.75
334.72	0.74	144.85	334.71	-1.93	1.39	-0.78	0.29	0.29	-1.89
427.94	0.40	170.91	427.93	-2.74	1.79	-1.21	0.45	-0.36	27.96
521.16	0.66	168.17	521.14	-3.59	1.95	-1.81	0.28	0.28	-2.94
614.38	0.82	125.84	614.35	-4.51	2.60	-2.18	0.60	0.17	-45.41
707.60	0.55	157.90	707.57	-5.31	3.31	-2.43	0.49	-0.29	34.39
800.82	1.12	128.03	800.78	-6.29	4.19	-2.72	0.75	0.61	-32.04
894.04	0.68	156.61	893.99	-7.36	5.13	-3.05	0.66	-0.47	30.66

Company:	Devon Energy, Inc.	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County (NAD83)	**TVD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Site:	Pennypacker 17 state	**MD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
987.26	0.40	179.16	987.20	-8.19	5.35	-3.60	0.37	-0.30	24.19
1,080.48	0.73	132.82	1,080.42	-8.92	5.79	-3.94	0.58	0.35	-49.71
1,173.70	0.45	135.68	1,173.63	-9.58	6.49	-4.09	0.30	-0.30	3.07
1,266.92	0.40	156.14	1,266.85	-10.14	6.87	-4.32	0.17	-0.05	21.95
1,360.14	0.81	113.90	1,360.07	-10.71	7.61	-4.36	0.62	0.44	-45.31
1,453.36	0.61	134.31	1,453.28	-11.32	8.57	-4.31	0.34	-0.21	21.89
1,546.58	0.44	196.66	1,546.50	-12.01	8.82	-4.73	0.60	-0.18	66.88
1,639.80	0.55	156.45	1,639.71	-12.76	8.89	-5.30	0.38	0.12	-43.13
1,733.02	0.41	205.64	1,732.93	-13.47	8.93	-5.86	0.45	-0.15	52.77
1,826.24	0.25	260.70	1,826.15	-13.81	8.58	-6.33	0.36	-0.17	59.06
1,919.46	0.53	107.03	1,919.37	-13.97	8.79	-6.34	0.82	0.30	-164.85
2,012.68	1.06	72.38	2,012.58	-13.83	10.03	-5.52	0.74	0.57	-37.17
2,105.90	0.50	70.44	2,105.79	-13.44	11.23	-4.50	0.60	-0.60	-2.08
2,199.12	1.55	68.56	2,198.99	-12.84	12.79	-3.11	1.13	1.13	-2.02
2,292.34	1.65	59.08	2,292.18	-11.69	15.12	-0.83	0.30	0.11	-10.17
2,385.56	1.16	44.82	2,385.37	-10.33	16.93	1.33	0.64	-0.53	-15.30
2,478.78	1.17	5.91	2,478.57	-8.71	17.70	3.09	0.83	0.01	-41.74
2,572.00	1.46	3.22	2,571.77	-6.58	17.86	4.92	0.32	0.31	-2.89
2,665.22	1.95	340.50	2,664.95	-3.90	17.40	6.85	0.89	0.53	-24.37
2,758.44	1.39	350.45	2,758.13	-1.29	16.68	8.57	0.67	-0.60	10.67
2,851.66	1.57	17.97	2,851.32	1.04	16.89	10.59	0.78	0.19	29.52
2,944.88	1.78	30.80	2,944.50	3.50	18.02	13.25	0.46	0.23	13.76
3,038.10	1.18	54.53	3,037.69	5.30	19.55	15.60	0.91	-0.64	25.46
3,131.32	1.57	47.22	3,130.88	6.72	21.26	17.76	0.46	0.42	-7.84
3,224.54	2.51	50.24	3,224.04	8.90	23.77	20.98	1.01	1.01	3.24
3,317.76	2.97	38.83	3,317.15	12.08	26.85	25.36	0.76	0.49	-12.24
3,410.98	3.17	43.53	3,410.24	15.83	30.14	30.32	0.34	0.21	5.04
3,504.20	3.52	60.24	3,503.30	19.12	34.40	35.46	1.11	0.38	17.93
3,597.42	3.47	55.43	3,596.35	22.14	39.21	40.70	0.32	-0.05	-5.16
3,690.64	4.14	59.62	3,689.36	25.45	44.44	46.41	0.78	0.72	4.49
3,783.86	3.63	50.24	3,782.37	29.04	49.61	52.33	0.87	-0.55	-10.06
3,877.08	3.10	54.96	3,875.43	32.37	53.94	57.55	0.64	-0.57	5.06
3,970.30	2.64	50.82	3,968.53	35.17	57.67	61.99	0.54	-0.49	-4.44
4,063.52	3.24	39.25	4,061.63	38.57	61.00	66.69	0.90	0.64	-12.41
4,156.74	2.97	53.97	4,154.71	42.03	64.62	71.60	0.90	-0.29	15.79
4,249.96	2.06	63.45	4,247.84	44.20	68.07	75.37	1.07	-0.98	10.17
4,343.18	2.09	78.00	4,341.00	45.30	71.23	78.09	0.56	0.03	15.61
4,436.40	1.88	79.14	4,434.17	45.94	74.40	80.44	0.23	-0.23	1.22
4,529.62	1.96	55.11	4,527.34	47.14	77.21	83.04	0.86	0.09	-25.78
4,622.84	1.67	68.28	4,620.51	48.56	79.78	85.68	0.54	-0.31	14.13
4,716.06	1.74	69.16	4,713.69	49.56	82.36	87.99	0.08	0.08	0.94
4,809.28	2.62	69.36	4,806.84	50.82	85.68	90.93	0.94	0.94	0.21
4,902.50	2.77	63.04	4,899.96	52.59	89.68	94.68	0.36	0.16	-6.78

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Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,995.72	2.22	68.15	4,993.09	54.28	93.36	98.19	0.64	-0.59	5.48
5,088.94	1.77	65.90	5,086.25	55.54	96.35	100.94	0.49	-0.48	-2.41
5,182.16	1.77	77.30	5,179.43	56.45	99.07	103.25	0.38	0.00	12.23
5,275.38	2.30	65.94	5,272.59	57.53	102.18	105.93	0.71	0.57	-12.19
5,368.60	1.97	64.98	5,365.74	58.97	105.34	108.93	0.36	-0.35	-1.03
5,461.82	1.41	76.18	5,458.92	59.92	107.91	111.18	0.69	-0.60	12.01
5,555.04	0.97	98.87	5,552.12	60.07	109.80	112.40	0.68	-0.47	24.34
5,648.26	0.91	90.79	5,645.33	59.94	111.32	113.17	0.16	-0.06	-8.67
5,741.48	1.02	98.52	5,738.54	59.81	112.88	113.96	0.18	0.12	8.29
5,834.70	0.75	108.99	5,831.75	59.49	114.28	114.50	0.34	-0.29	11.23
5,927.92	1.35	84.86	5,924.95	59.39	115.95	115.38	0.79	0.64	-25.89
6,021.14	1.06	98.59	6,018.15	59.35	117.90	116.48	0.44	-0.31	14.73
6,114.36	1.08	75.87	6,111.35	59.44	119.60	117.53	0.45	0.02	-24.37
6,207.58	0.69	96.54	6,204.56	59.59	121.01	118.47	0.53	-0.42	22.17
6,300.80	1.45	69.81	6,297.77	59.93	122.68	119.71	0.95	0.82	-28.67
6,394.02	1.60	86.89	6,390.95	60.41	125.08	121.49	0.51	0.16	18.32
6,487.24	0.95	79.30	6,484.15	60.63	127.14	122.85	0.72	-0.70	-8.14
6,580.46	1.01	78.54	6,577.36	60.93	128.71	124.00	0.07	0.06	-0.82
6,673.68	2.07	93.91	6,670.54	60.98	131.19	125.48	1.21	1.14	16.49
6,766.90	1.57	94.94	6,763.72	60.76	134.14	127.00	0.54	-0.54	1.10
6,860.12	1.37	91.84	6,856.90	60.61	136.53	128.25	0.23	-0.21	-3.33
6,953.34	1.62	83.27	6,950.09	60.73	138.95	129.75	0.36	0.27	-9.19
7,046.56	1.44	99.17	7,043.28	60.70	141.42	131.14	0.49	-0.19	17.06
7,139.78	2.18	106.19	7,136.45	60.02	144.28	132.23	0.83	0.79	7.53
7,233.00	2.06	88.76	7,229.61	59.56	147.65	133.81	0.70	-0.13	-18.70
7,326.22	2.12	107.87	7,322.77	59.07	150.97	135.32	0.75	0.06	20.50
7,419.44	2.14	128.69	7,415.93	57.45	153.97	135.73	0.83	0.02	22.33
7,512.66	2.05	122.45	7,509.08	55.47	156.73	135.70	0.26	-0.10	-6.69
7,605.88	1.43	139.28	7,602.26	53.69	158.90	135.50	0.86	-0.67	18.05
7,699.10	1.31	127.06	7,695.45	52.17	160.51	135.18	0.34	-0.13	-13.11
7,792.32	1.10	123.78	7,788.65	51.03	162.10	135.17	0.24	-0.23	-3.52
7,885.54	1.55	139.37	7,881.85	49.57	163.67	134.88	0.61	0.48	16.72
7,978.76	1.28	140.66	7,975.04	47.81	165.15	134.30	0.29	-0.29	1.38
8,071.98	1.11	158.42	8,068.24	46.16	166.14	133.53	0.43	-0.18	19.05
8,165.20	1.31	162.33	8,161.44	44.31	166.80	132.39	0.23	0.21	4.19
8,258.42	1.11	176.13	8,254.64	42.39	167.18	131.05	0.38	-0.21	14.80
8,351.64	0.89	188.38	8,347.85	40.78	167.14	129.70	0.33	-0.24	13.14
8,444.86	1.07	198.12	8,441.05	39.23	166.76	128.22	0.26	0.19	10.45
8,538.08	0.81	217.02	8,534.26	37.88	166.09	126.73	0.43	-0.28	20.27
8,631.30	0.87	191.32	8,627.47	36.66	165.56	125.43	0.41	0.06	-27.57
8,724.52	0.98	139.11	8,720.68	35.36	165.94	124.59	0.88	0.12	-56.01
8,817.74	1.51	174.31	8,813.88	33.54	166.58	123.47	0.97	0.57	37.76
8,910.96	1.26	190.75	8,907.07	31.31	166.51	121.61	0.50	-0.27	17.64

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Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,004.18	1.31	181.02	9,000.27	29.24	166.30	119.79	0.24	0.05	-10.44
9,097.40	0.21	192.97	9,093.48	28.00	166.25	118.75	1.19	-1.18	12.82
9,190.62	0.53	203.84	9,186.70	27.44	166.03	118.17	0.35	0.34	11.66
9,283.84	1.07	196.82	9,279.91	26.22	165.61	116.92	0.59	0.58	-7.53
9,377.06	1.63	202.58	9,373.10	24.16	164.85	114.80	0.62	0.60	6.18
9,470.28	0.77	188.19	9,466.30	22.31	164.25	112.95	0.97	-0.92	-15.44
9,563.50	1.07	165.58	9,559.51	20.85	164.38	111.83	0.50	0.32	-24.25
9,656.72	0.97	169.54	9,652.71	19.23	164.74	110.72	0.13	-0.11	4.25
9,749.94	1.24	167.46	9,745.92	17.47	165.10	109.49	0.29	0.29	-2.23
9,843.16	1.57	201.21	9,839.11	15.30	164.86	107.57	0.94	0.35	36.20
9,936.38	1.23	192.56	9,932.30	13.13	164.18	105.41	0.43	-0.36	-9.28
10,029.60	1.04	196.90	10,025.50	11.34	163.71	103.68	0.22	-0.20	4.66
10,122.82	1.05	175.54	10,118.71	9.68	163.53	102.22	0.42	0.01	-22.91
10,216.04	1.03	191.14	10,211.91	8.01	163.44	100.80	0.30	-0.02	16.73
10,309.26	1.14	193.11	10,305.12	6.28	163.07	99.17	0.12	0.12	2.11
10,402.48	0.92	243.37	10,398.32	5.05	162.19	97.65	0.96	-0.24	53.92
10,463.00	7.03	355.46	10,458.70	8.52	161.46	100.08	12.27	10.10	185.21
10,495.00	10.55	356.95	10,490.31	13.40	161.15	103.88	11.02	11.00	4.66
10,526.00	14.51	358.56	10,520.57	20.12	160.90	109.23	12.82	12.77	5.19
10,557.00	18.11	359.54	10,550.32	28.82	160.76	116.26	11.65	11.61	3.16
10,589.00	22.07	358.11	10,580.36	39.81	160.52	125.10	12.47	12.38	-4.47
10,620.00	26.38	354.78	10,608.63	52.50	159.70	134.99	14.58	13.90	-10.74
10,652.00	29.99	353.55	10,636.83	67.53	158.16	146.38	11.43	11.28	-3.84
10,683.00	33.24	353.21	10,663.23	83.67	156.28	158.48	10.50	10.48	-1.10
10,714.00	36.32	352.75	10,688.69	101.22	154.12	171.57	9.97	9.94	-1.48
10,746.00	38.78	354.28	10,714.05	120.59	151.92	186.13	8.22	7.69	4.78
10,777.00	41.50	356.38	10,737.75	140.51	150.31	201.47	9.80	8.77	6.77
10,808.00	44.76	357.15	10,760.37	161.66	149.12	218.07	10.65	10.52	2.48
10,840.00	47.57	357.25	10,782.53	184.72	147.99	236.25	8.78	8.78	0.31
10,871.00	50.39	357.33	10,802.88	208.08	146.88	254.70	9.10	9.10	0.26
10,902.00	53.29	357.04	10,822.03	232.42	145.69	273.89	9.38	9.35	-0.94
10,934.00	55.40	356.82	10,840.68	258.38	144.29	294.30	6.62	6.59	-0.69
10,965.00	59.00	357.04	10,857.47	284.40	142.90	314.75	11.63	11.61	0.71
10,996.00	63.14	356.77	10,872.46	311.48	141.43	336.03	13.38	13.35	-0.87
11,028.00	67.44	355.73	10,885.84	340.48	139.53	358.63	13.76	13.44	-3.25
11,059.00	72.46	356.07	10,896.46	369.52	137.45	381.15	16.23	16.19	1.10
11,090.00	76.94	357.06	10,904.64	399.36	135.66	404.50	14.78	14.45	3.19
11,122.00	79.67	358.31	10,911.13	430.67	134.40	429.34	9.35	8.53	3.91
11,153.00	82.39	359.06	10,915.96	461.28	133.69	453.94	9.09	8.77	2.42
11,173.59	84.85	358.87	10,918.25	481.74	133.32	470.45	11.97	11.94	-0.91
Landing Point - Pennypacker 17 1H									
11,184.00	86.09	358.78	10,919.07	492.11	133.11	478.80	11.97	11.94	-0.90
11,216.00	88.20	358.28	10,920.66	524.06	132.29	504.43	6.78	6.59	-1.56
11,310.00	89.87	357.56	10,922.25	617.98	128.88	579.19	1.93	1.78	-0.77

Company:	Devon Energy, Inc.	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County (NAD83)	**TVD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Site:	Pennypacker 17 state	**MD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,404.00	90.04	358.19	10,922.32	711.91	125.40	653.92	0.69	0.18	0.67
11,498.00	90.04	358.22	10,922.26	805.87	122.45	728.98	0.03	0.00	0.03
11,592.00	89.78	358.92	10,922.40	899.84	120.10	804.39	0.79	-0.28	0.74
11,686.00	90.13	359.24	10,922.48	993.83	118.60	880.31	0.50	0.37	0.34
11,780.00	90.04	359.82	10,922.34	1,087.82	117.82	956.65	0.62	-0.10	0.62
11,874.00	89.60	0.30	10,922.63	1,181.82	117.92	1,033.50	0.69	-0.47	0.51
11,969.00	89.69	359.10	10,923.22	1,276.82	117.43	1,110.82	1.27	0.09	-1.26
12,063.00	89.25	358.96	10,924.09	1,370.80	115.83	1,186.68	0.49	-0.47	-0.15
12,157.00	90.57	357.31	10,924.24	1,464.74	112.78	1,261.67	2.25	1.40	-1.76
12,251.00	90.75	357.82	10,923.16	1,558.65	108.78	1,336.08	0.58	0.19	0.54
12,345.00	90.48	356.24	10,922.15	1,652.52	103.91	1,409.96	1.71	-0.29	-1.68
12,439.00	90.57	356.29	10,921.29	1,746.31	97.79	1,483.06	0.11	0.10	0.05
12,533.00	90.57	356.56	10,920.35	1,840.13	91.93	1,556.32	0.29	0.00	0.29
12,628.00	90.75	357.17	10,919.26	1,934.98	86.73	1,630.81	0.67	0.19	0.64
12,722.00	91.10	357.39	10,917.74	2,028.86	82.27	1,704.93	0.44	0.37	0.23
12,817.00	89.87	357.21	10,916.93	2,123.75	77.80	1,779.87	1.31	-1.29	-0.19
12,911.00	89.96	357.36	10,917.07	2,217.64	73.34	1,854.01	0.19	0.10	0.16
13,005.00	90.57	357.30	10,916.64	2,311.54	68.97	1,928.20	0.65	0.65	-0.06
13,099.00	89.96	356.84	10,916.20	2,405.41	64.16	2,002.12	0.81	-0.65	-0.49
13,193.00	90.04	356.89	10,916.20	2,499.27	59.02	2,075.83	0.10	0.09	0.05
13,287.00	89.78	357.45	10,916.35	2,593.16	54.38	2,149.86	0.66	-0.28	0.60
13,381.00	90.75	356.45	10,915.92	2,687.02	49.38	2,223.65	1.48	1.03	-1.06
13,475.00	91.01	355.88	10,914.47	2,780.80	43.09	2,296.64	0.67	0.28	-0.61
13,569.00	91.28	356.61	10,912.60	2,874.58	36.94	2,369.71	0.83	0.29	0.78
13,664.00	91.71	357.20	10,910.12	2,969.41	31.81	2,444.22	0.77	0.45	0.62
13,758.00	91.28	356.77	10,907.66	3,063.24	26.87	2,518.03	0.65	-0.46	-0.46
13,852.00	91.19	356.79	10,905.64	3,157.07	21.59	2,591.64	0.10	-0.10	0.02
13,946.00	91.80	357.54	10,903.19	3,250.93	16.94	2,665.63	1.03	0.65	0.80
14,039.00	91.89	357.22	10,900.19	3,343.78	12.69	2,739.04	0.36	0.10	-0.34
14,134.00	92.86	357.12	10,896.25	3,438.58	8.01	2,813.79	1.03	1.02	-0.11
14,229.00	92.86	357.56	10,891.51	3,533.36	3.60	2,888.68	0.46	0.00	0.46
14,322.00	93.91	357.30	10,886.02	3,626.10	-0.56	2,962.04	1.16	1.13	-0.28
14,416.00	94.62	358.03	10,879.03	3,719.76	-4.38	3,036.36	1.08	0.76	0.78
14,510.00	94.97	357.46	10,871.18	3,813.36	-8.07	3,110.70	0.71	0.37	-0.61
14,604.00	94.35	358.30	10,863.54	3,906.99	-11.53	3,185.19	1.11	-0.66	0.89
14,699.00	93.65	358.61	10,856.91	4,001.72	-14.09	3,261.11	0.81	-0.74	0.33
14,793.00	93.12	358.66	10,851.36	4,095.53	-16.32	3,336.45	0.57	-0.56	0.05
14,887.00	92.42	359.34	10,846.82	4,189.40	-17.96	3,412.20	1.04	-0.74	0.72
14,981.00	91.98	359.19	10,843.21	4,283.33	-19.16	3,488.24	0.49	-0.47	-0.16
15,075.00	91.71	359.27	10,840.18	4,377.27	-20.43	3,564.26	0.30	-0.29	0.09
15,169.00	91.10	359.29	10,837.88	4,471.23	-21.61	3,640.34	0.65	-0.65	0.02
15,250.00	90.57	359.63	10,836.70	4,552.22	-22.37	3,706.06	0.78	-0.65	0.42
15,317.56	90.57	359.63	10,836.03	4,619.77	-22.81	3,761.00	0.00	0.00	0.00

Pathfinder - A Schlumberger Company

Survey Report

Company:	Devon Energy, Inc.	**Local Co-ordinate Reference:**	Well #1H
Project:	Lea County (NAD83)	**TVD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Site:	Pennypacker 17 state	**MD Reference:**	KB = 19 @ 3775.10usft (Patterson 228)
Well:	#1H	**North Reference:**	Grid
Wellbore:	ST01	**Survey Calculation Method:**	Minimum Curvature
Design:	ST01	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
PBHL - Pennypacker 17 1H									
15,318.00	90.57	359.63	10,836.02	4,620.22	-22.81	3,761.36	0.00	0.00	0.00
Projected to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
15,318.00	10,836.02	4,620.22	-22.81	Projected to TD

Checked By: _____ Approved By: _____ Date: _____

VES
VAUGHN ENERGY SERVICES
A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

HOBBS OCD
NOV 01 2013
RECEIVED

August 26, 2013

Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

Attn: Patti Riechers

Re: **PennyPacker 17 State No 001H**

Please find enclosed a copy of the survey from 0' to 11,614.34' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 26th day of August, A.D., 2013, by Keith Havelka.

Meredith Darden
Notary Public, State of Texas

MEREDITH DARDEN
Notary Public, State of Texas
My Commission Expires
July 25, 2017

Company: Devon Energy
Lease/Well: PennyPacker 17 State/No 001H
Location: S17 T21s R34e
Rig Name: Patterson 228
State/County: New Mexico/Lea
Latitude: 32.47, Longitude: -103.49
GRID North is 0.45 Degrees East of True North
VS-Azi: 0.00 Degrees

RKB : 25 Feet

RECEIVED
NOV 01 2013
HOBBS OCD

DRILLOG MS GYRO SURVEY CALCULATIONS
Filename: ... 17 state # 1h gyro survey.ut
Minimum Curvature Method
Report Date/Time: 8/26/2013 / 13:13

Vaughn Energy Services
(432) 563-5444
Gardendale, TX
Surveyor: Dustin Wedel

PennyPacker 17 State No 001H / API 30-025-40681

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
148.28	0.48	142.18	148.28	-0.50	0.38	-0.50	0.63	142.18	0.33
241.50	0.47	146.61	241.50	-1.13	0.84	-1.13	1.40	143.39	0.04
334.72	0.74	144.85	334.71	-1.94	1.39	-1.94	2.39	144.27	0.29
427.94	0.40	170.91	427.93	-2.75	1.79	-2.75	3.29	146.94	0.45
521.16	0.66	168.17	521.14	-3.60	1.95	-3.60	4.10	151.52	0.28
614.38	0.82	125.84	614.35	-4.52	2.60	-4.52	5.21	150.03	0.59
707.60	0.55	157.90	707.57	-5.32	3.31	-5.32	6.27	148.09	0.49
800.82	1.12	128.03	800.78	-6.29	4.20	-6.29	7.56	146.30	0.75
894.04	0.68	156.61	893.99	-7.36	5.13	-7.36	8.97	145.11	0.66
987.26	0.40	179.16	987.20	-8.19	5.35	-8.19	9.78	146.82	0.37
1080.48	0.73	132.82	1080.42	-8.92	5.79	-8.92	10.64	146.99	0.58
1173.70	0.45	135.68	1173.63	-9.58	6.49	-9.58	11.57	145.91	0.31
1266.92	0.40	156.14	1266.85	-10.14	6.87	-10.14	12.25	145.88	0.17
1360.14	0.81	113.90	1360.07	-10.71	7.60	-10.71	13.13	144.62	0.62
1453.36	0.61	134.31	1453.28	-11.32	8.56	-11.32	14.19	142.90	0.34
1546.58	0.44	196.66	1546.50	-12.01	8.81	-12.01	14.89	143.74	0.60
1639.80	0.55	156.45	1639.71	-12.76	8.88	-12.76	15.55	145.16	0.38
1733.02	0.41	205.64	1732.93	-13.47	8.92	-13.47	16.16	146.50	0.45

VES Survey Date: 08/19/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1826.24	0.25	260.70	1826.15	-13.81	8.57	-13.81	16.25	148.16	0.36
1919.46	0.53	107.03	1919.37	-13.97	8.79	-13.97	16.50	147.82	0.81
2012.68	1.06	72.38	2012.58	-13.83	10.02	-13.83	17.08	144.08	0.74
2105.90	0.50	70.44	2105.79	-13.44	11.23	-13.44	17.51	140.12	0.60
2199.12	1.55	68.56	2198.99	-12.84	12.78	-12.84	18.12	135.14	1.12
2292.34	1.65	59.08	2292.18	-11.69	15.10	-11.69	19.10	127.76	0.30
2385.56	1.16	44.82	2385.37	-10.34	16.91	-10.34	19.82	121.43	0.64
2478.78	1.17	5.91	2478.57	-8.72	17.68	-8.72	19.71	116.25	0.83
2572.00	1.46	3.22	2571.77	-6.58	17.84	-6.58	19.02	110.25	0.32
2665.22	1.95	340.50	2664.95	-3.90	17.38	-3.90	17.81	102.64	0.89
2758.44	1.39	350.45	2758.13	-1.29	16.66	-1.29	16.71	94.42	0.67
2851.66	1.57	17.97	2851.32	1.04	16.87	1.04	16.90	86.46	0.78
2944.88	1.78	30.80	2944.50	3.50	18.00	3.50	18.34	78.99	0.46
3038.10	1.18	54.53	3037.69	5.30	19.52	5.30	20.23	74.81	0.91
3131.32	1.57	47.22	3130.88	6.72	21.24	6.72	22.28	72.43	0.46
3224.54	2.51	50.24	3224.04	8.90	23.75	8.90	25.36	69.46	1.01
3317.76	2.97	38.83	3317.15	12.09	26.83	12.09	29.43	65.75	0.76
3410.98	3.17	43.53	3410.24	15.83	30.12	15.83	34.03	62.27	0.34
3504.20	3.52	60.24	3503.30	19.12	34.37	19.12	39.33	60.92	1.11
3597.42	3.47	55.43	3596.35	22.14	39.18	22.14	45.00	60.53	0.32
3690.64	4.14	59.62	3689.36	25.44	44.40	25.44	51.17	60.19	0.78
3783.86	3.63	50.24	3782.37	29.03	49.58	29.03	57.45	59.65	0.88
3877.08	3.10	54.96	3875.43	32.37	53.91	32.37	62.88	59.02	0.64
3970.30	2.64	50.82	3968.53	35.17	57.64	35.17	67.53	58.61	0.55
4063.52	3.24	39.25	4061.63	38.57	60.97	38.57	72.15	57.69	0.90
4156.74	2.97	53.97	4154.71	42.03	64.59	42.03	77.06	56.95	0.90
4249.96	2.06	63.45	4247.84	44.20	68.05	44.20	81.14	57.00	1.08
4343.18	2.09	78.00	4341.00	45.30	71.20	45.30	84.39	57.54	0.56
4436.40	1.88	79.14	4434.17	45.94	74.37	45.94	87.41	58.29	0.23
4529.62	1.96	55.11	4527.34	47.14	77.17	47.14	90.43	58.58	0.86
4622.84	1.67	68.28	4620.51	48.55	79.74	48.55	93.36	58.66	0.54
4716.06	1.74	69.16	4713.69	49.56	82.32	49.56	96.09	58.95	0.07
4809.28	2.62	69.36	4806.84	50.81	85.64	50.81	99.58	59.32	0.95
4902.50	2.77	63.04	4899.96	52.59	89.65	52.59	103.93	59.60	0.36
4995.72	2.22	68.15	4993.09	54.28	93.33	54.28	107.97	59.82	0.65
5088.94	1.77	65.90	5086.25	55.54	96.32	55.54	111.18	60.03	0.49
5182.16	1.77	77.30	5179.43	56.44	99.03	56.44	113.99	60.32	0.38
5275.38	2.30	65.94	5272.59	57.52	102.15	57.52	117.23	60.62	0.71
5368.60	1.97	64.98	5365.74	58.96	105.31	58.96	120.69	60.76	0.35

VES Survey Date: 08/19/2013

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5461.82	1.41	76.18	5458.92	59.91	107.88	59.91	123.40	60.95	0.69
5555.04	0.97	98.87	5552.12	60.07	109.78	60.07	125.13	61.31	0.69
5648.26	0.91	90.79	5645.33	59.94	111.29	59.94	126.40	61.70	0.16
5741.48	1.02	98.52	5738.54	59.80	112.85	59.80	127.71	62.08	0.19
5834.70	0.75	108.99	5831.75	59.48	114.25	59.48	128.80	62.50	0.34
5927.92	1.35	84.86	5924.95	59.38	115.92	59.38	130.24	62.88	0.79
6021.14	1.06	98.59	6018.15	59.35	117.87	59.35	131.97	63.27	0.44
6114.36	1.08	75.87	6111.35	59.43	119.58	59.43	133.54	63.57	0.45
6207.58	0.69	96.54	6204.56	59.59	121.00	59.59	134.87	63.78	0.53
6300.80	1.45	69.81	6297.77	59.93	122.66	59.93	136.52	63.96	0.95
6394.02	1.60	86.89	6390.95	60.40	125.07	60.40	138.89	64.22	0.51
6487.24	0.95	79.30	6484.15	60.62	127.13	60.62	140.84	64.51	0.72
6580.46	1.01	78.54	6577.36	60.92	128.69	60.92	142.38	64.67	0.06
6673.68	2.07	93.91	6670.54	60.97	131.16	60.97	144.64	65.07	1.21
6766.90	1.57	94.94	6763.72	60.75	134.11	60.75	147.23	65.63	0.53
6860.12	1.37	91.84	6856.91	60.60	136.50	60.60	149.35	66.06	0.24
6953.34	1.62	83.27	6950.09	60.72	138.92	60.72	151.61	66.39	0.36
7046.56	1.44	99.17	7043.28	60.69	141.38	60.69	153.85	66.77	0.49
7139.78	2.18	106.19	7136.45	60.01	144.23	60.01	156.22	67.41	0.83
7233.00	2.06	88.76	7229.61	59.55	147.61	59.55	159.17	68.03	0.70
7326.22	2.12	107.87	7322.77	59.06	150.93	59.06	162.07	68.63	0.75
7419.44	2.14	128.69	7415.93	57.44	153.92	57.44	164.29	69.54	0.82
7512.66	2.05	122.45	7509.09	55.46	156.69	55.46	166.21	70.51	0.26
7605.88	1.43	139.28	7602.26	53.68	158.85	53.68	167.68	71.33	0.86
7699.10	1.31	127.06	7695.46	52.16	160.46	52.16	168.73	71.99	0.34
7792.32	1.10	123.78	7788.66	51.02	162.05	51.02	169.89	72.52	0.24
7885.54	1.55	139.37	7881.85	49.57	163.62	49.57	170.96	73.15	0.62
7978.76	1.28	140.66	7975.04	47.80	165.10	47.80	171.88	73.85	0.29
8071.98	1.11	158.42	8068.24	46.15	166.09	46.15	172.39	74.47	0.44
8165.20	1.31	162.33	8161.44	44.30	166.75	44.30	172.53	75.12	0.23
8258.42	1.11	176.13	8254.64	42.38	167.14	42.38	172.42	75.77	0.37
8351.64	0.89	188.38	8347.85	40.76	167.09	40.76	171.99	76.29	0.33
8444.86	1.07	198.12	8441.05	39.22	166.71	39.22	171.27	76.76	0.27
8538.08	0.81	217.02	8534.26	37.86	166.05	37.86	170.31	77.15	0.44
8631.30	0.87	191.32	8627.47	36.65	165.51	36.65	169.52	77.52	0.41
8724.52	0.98	139.11	8720.68	35.35	165.90	35.35	169.62	77.97	0.88
8817.74	1.51	174.31	8813.88	33.52	166.54	33.52	169.88	78.62	0.98
8910.96	1.26	190.75	8907.07	31.29	166.47	31.29	169.39	79.35	0.50
9004.18	1.31	181.02	9000.27	29.22	166.26	29.22	168.81	80.03	0.24

VES Survey Date: 08/19/2013

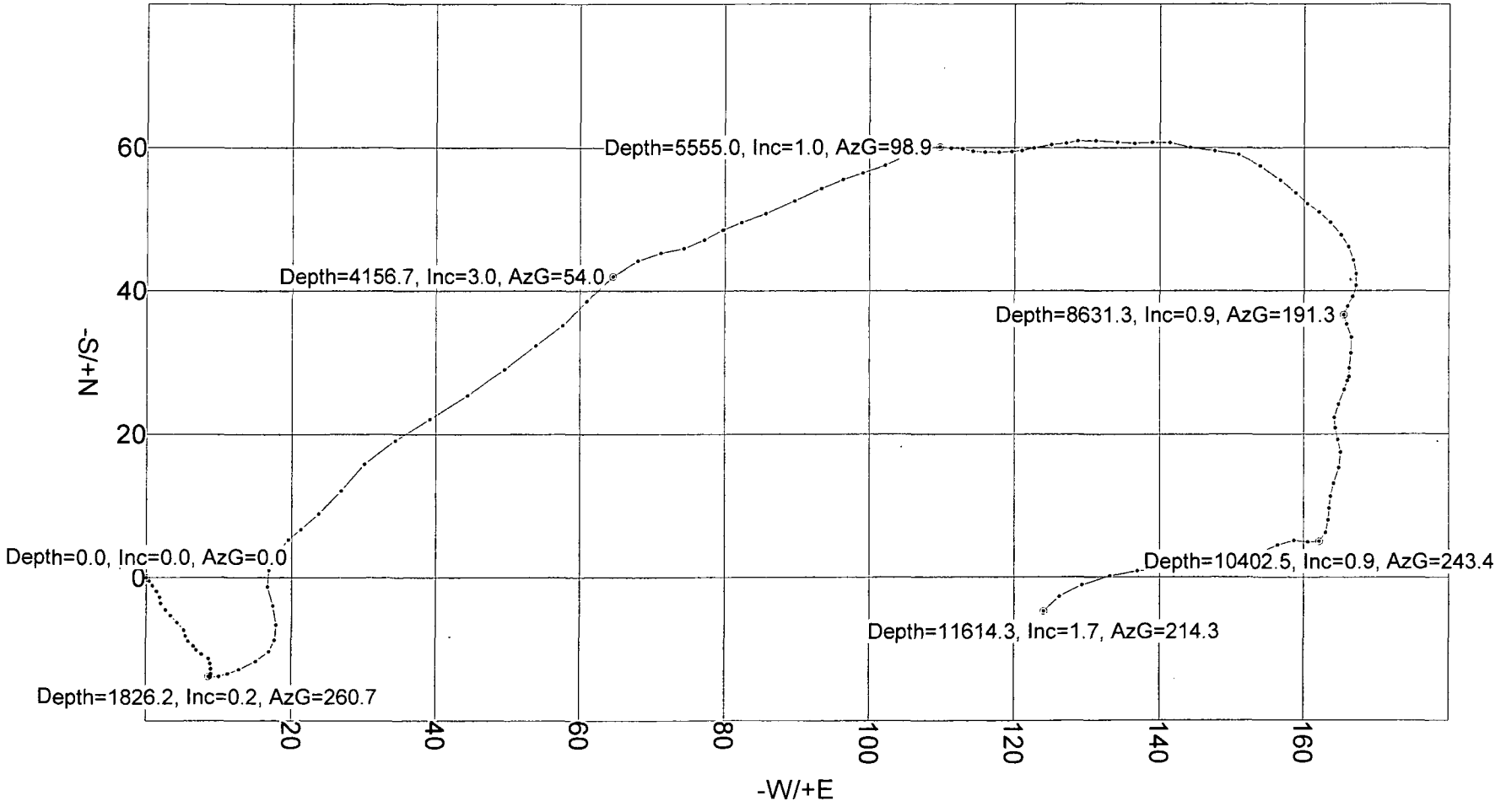
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
9097.40	0.21	192.97	9093.48	27.99	166.20	27.99	168.54	80.44	1.19
9190.62	0.53	203.84	9186.70	27.43	165.99	27.43	168.24	80.62	0.35
9283.84	1.07	196.82	9279.91	26.20	165.56	26.20	167.63	81.01	0.59
9377.06	1.63	202.58	9373.10	24.15	164.80	24.15	166.56	81.66	0.62
9470.28	0.77	188.19	9466.30	22.31	164.21	22.31	165.72	82.26	0.97
9563.50	1.07	165.58	9559.51	20.85	164.34	20.85	165.65	82.77	0.50
9656.72	0.97	169.54	9652.71	19.24	164.69	19.24	165.81	83.34	0.13
9749.94	1.24	167.46	9745.92	17.47	165.06	17.47	165.98	83.96	0.30
9843.16	1.57	201.21	9839.11	15.29	164.81	15.29	165.52	84.70	0.94
9936.38	1.23	192.56	9932.30	13.12	164.13	13.12	164.66	85.43	0.43
10029.60	1.04	196.90	10025.50	11.33	163.67	11.33	164.06	86.04	0.23
10122.82	1.05	175.54	10118.71	9.68	163.49	9.68	163.78	86.61	0.41
10216.04	1.03	191.14	10211.91	8.01	163.39	8.01	163.59	87.19	0.30
10309.26	1.14	193.11	10305.12	6.29	163.02	6.29	163.14	87.79	0.13
10402.48	0.92	243.37	10398.32	5.05	162.14	5.05	162.22	88.22	0.96
10495.70	1.15	285.64	10491.53	4.96	160.57	4.96	160.65	88.23	0.83
10588.92	1.27	267.04	10584.73	5.16	158.65	5.16	158.73	88.14	0.44
10682.14	1.68	245.40	10677.92	4.54	156.38	4.54	156.44	88.34	0.74
10775.36	1.93	245.82	10771.09	3.33	153.70	3.33	153.73	88.76	0.27
10868.58	2.21	259.09	10864.25	2.34	150.50	2.34	150.52	89.11	0.59
10961.80	2.40	270.24	10957.40	2.01	146.79	2.01	146.80	89.22	0.52
11055.02	2.13	250.22	11050.55	1.43	143.20	1.43	143.21	89.43	0.89
11148.24	1.77	273.47	11143.71	0.93	140.14	0.93	140.14	89.62	0.93
11241.46	2.17	265.48	11236.88	0.88	136.95	0.88	136.95	89.63	0.52
11334.68	2.63	254.80	11330.02	0.18	133.13	0.18	133.13	89.92	0.69
11427.90	2.31	247.59	11423.15	-1.09	129.33	-1.09	129.34	90.49	0.48
11521.12	2.01	237.30	11516.30	-2.69	126.22	-2.69	126.25	91.22	0.52
11614.34	1.71	214.30	11609.48	-4.73	124.06	-4.73	124.15	92.18	0.86

VES Survey Date: 08/19/2013

devon

Vaughn Energy Services
(432) 563-5444
Gardendale, TX
Surveyor: Dustin Wedel
PennyPacker 17 State No 001H / API 30-025-40681

VES
VAUGHN ENERGY SERVICES



VES Survey Date: 08/19/2013

Stimulations Summary

District	County	Field Name	Project Group	State/Province
PERMIAN BASIN	LEA	OUTLAND AREA UNASSIG...	DELAWARE BASIN	NM

Surface Legal Location	API/UWI	Latitude (°)	Longitude (°)	Ground Elev...	KB - GL (ft)	Orig KB Elev (ft)	Tubing Head Elevation (ft)
SEC17 T21S R34E	3002540681	32° 28' 21.06" N	103° 29' 23.5" W	3,756.10	26.50	3,782.60	

HYBRID , 9/23/2013 08:07 , BONE SPRING 2ND, ST01 , 14,934.0 ftKB - 15,268.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 63060 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6230.69				3,144.0	5,606.0	5,606	6,482.0	87	4.00

HYBRID , 9/23/2013 13:20 , BONE SPRING 2ND, ST01 , 14,502.0 ftKB - 14,836.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 62916 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6241.91				3,468.0	5,468.0	80	6,196.0	83	4.00

HYBRID , 9/24/2013 06:48 , BONE SPRING 2ND, ST01 , 14,069.0 ftKB - 14,404.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 64012 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6229.83				3,601.0	6,015.0	80	7,155.0	82	4.00

HYBRID , 9/24/2013 14:50 , BONE SPRING 2ND, ST01 , 13,637.0 ftKB - 13,971.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 63528 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6196.52				3,695.0	6,384.0	81	7,276.0	83	4.00

HYBRID , 9/24/2013 19:02 , BONE SPRING 2ND, ST01 , 13,205.0 ftKB - 13,539.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 63623 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6185.57				4,046.0	6,741.0	80	7,795.0	83	4.00

HYBRID , 9/25/2013 06:10 , BONE SPRING 2ND, ST01 , 12,773.0 ftKB - 13,107.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 62708 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6185.57				3,717.0	6,516.0	81	7,247.0	83	4.00

HYBRID , 9/25/2013 09:46 , BONE SPRING 2ND, ST01 , 12,340.0 ftKB - 12,675.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 61862 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6217.33				3,816.0	6,072.0	80	6,901.0	83	4.00

HYBRID , 9/25/2013 13:22 , BONE SPRING 2ND, ST01 , 11,908.0 ftKB - 12,242.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 62399 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6173.48				3,679.0	5,936.0	80	6,684.0	83	4.00

HYBRID , 9/25/2013 17:18 , BONE SPRING 2ND, ST01 , 11,476.0 ftKB - 11,810.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 50148 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6015.05				3,867.0	6,643.0	78	7,841.0	81	4.00

HYBRID , 9/25/2013 20:49 , BONE SPRING 2ND, ST01 , 11,044.0 ftKB - 11,378.0 ftKB, HALLIBURTON , CRC Resin Coated Sand (Santrol) 73075 LB;

Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...
355,000.0	6428.60				3,679.0	6,421.0	79	7,228.0	84	4.00