

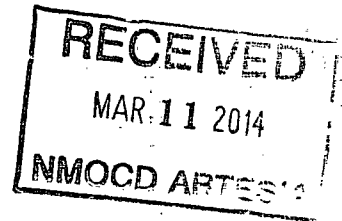


A GYRO TECHNOLOGIES INC. COMPANY

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

30-015-41537

January 7, 2014



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

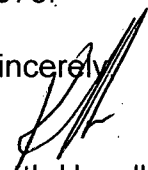
Attn: David Cook

Re: **Cotton Draw Unit No 214H**

Please find enclosed a copy of the survey from 0' to 4,247' 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.

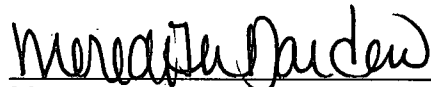
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 7th day of January
A.D., 2014, by Keith Havelka.




Meredith Darden
Notary Public, State of Texas

Company: DEVON ENERGY PRODUCTION CORP, LP

Lease/Well: COTTON DRAW UNIT/No 214H



Rig Name: H&P 212

State/County: NEW MEXICO/EDDY

Latitude: 32.18, Longitude: -103.73

GRID North is 0.32 Degrees East of True North

VS-Azi: 299.22 Degrees



DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro_run02-01.ut

Minimum Curvature Method

Report Date/Time: 1/7/2014 / 08:41

VAUGHN ENERGY SERVICES

CORPUS CHRISTI, TX

800-606-4976

SURVEYOR : JAVIER ESTRADA

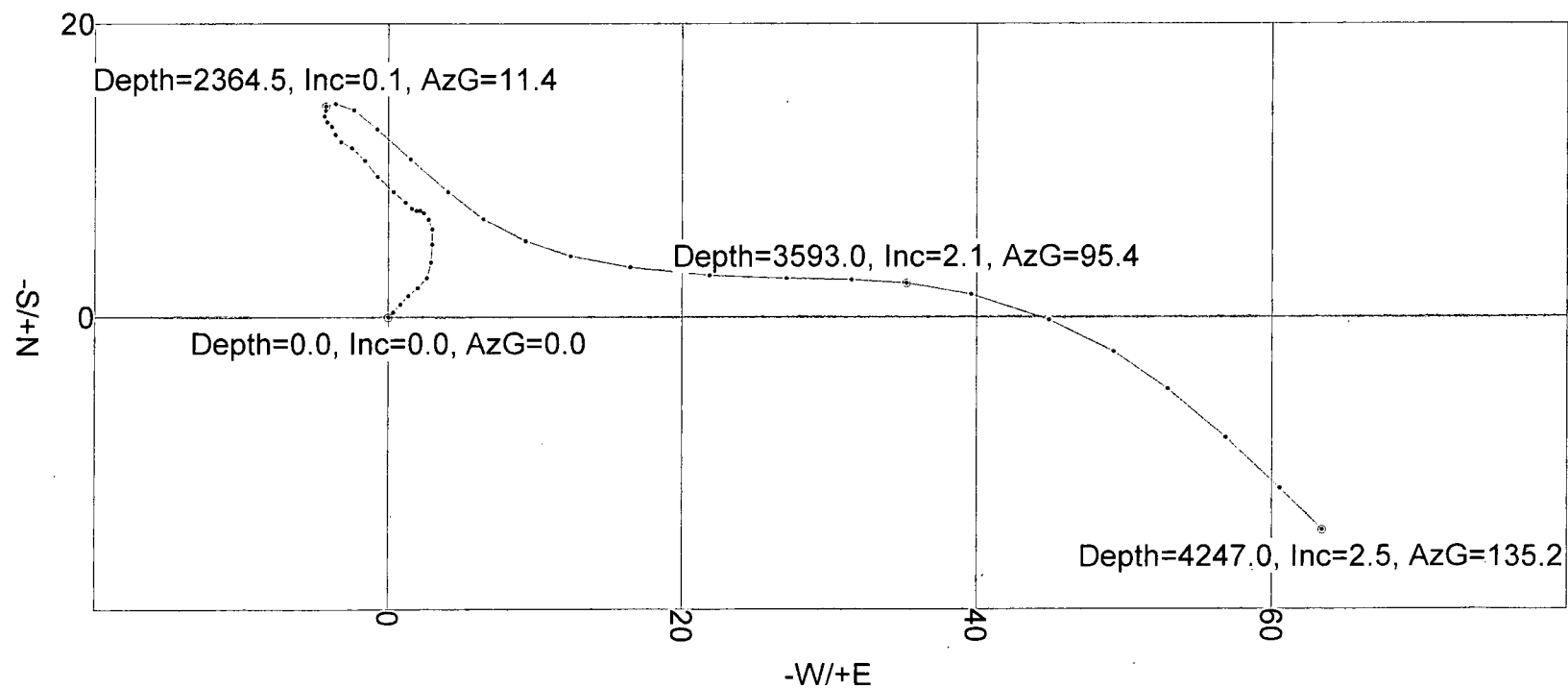
COTTON DRAW UNIT NO 214H / API 30-015-41537

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	****
132.50	0.39	44.37	132.50	0.32	0.32	-0.12	0.45	44.37	0.30
224.00	0.52	41.00	224.00	0.86	0.81	-0.28	1.18	43.18	0.14
315.50	0.49	45.43	315.49	1.45	1.36	-0.48	1.99	43.18	0.05
407.00	0.55	54.32	406.99	1.98	2.00	-0.78	2.82	45.22	0.11
498.50	0.65	32.36	498.48	2.68	2.63	-0.99	3.75	44.52	0.27
590.00	0.79	359.88	589.98	3.74	2.91	-0.71	4.74	37.83	0.46
681.50	0.76	9.20	681.47	4.97	3.00	-0.19	5.81	31.13	0.14
773.00	0.56	347.32	772.96	6.00	3.00	0.31	6.71	26.58	0.35
864.50	0.34	323.70	864.46	6.65	2.75	0.85	7.20	22.42	0.31
956.00	0.35	324.94	955.96	7.10	2.42	1.35	7.50	18.85	0.02
1047.50	0.15	243.70	1047.46	7.28	2.16	1.67	7.59	16.50	0.39
1139.00	0.20	282.67	1138.96	7.26	1.89	1.89	7.50	14.61	0.14
1230.50	0.24	311.21	1230.46	7.42	1.59	2.23	7.59	12.12	0.12
1325.00	0.48	314.05	1324.95	7.82	1.16	2.80	7.91	8.45	0.26
1419.50	0.85	308.90	1419.45	8.54	0.33	3.88	8.54	2.23	0.40
1514.00	0.97	317.94	1513.94	9.57	-0.75	5.33	9.60	355.53	0.20
1608.50	0.73	326.27	1608.43	10.67	-1.62	6.62	10.79	351.36	0.28
1703.00	0.79	302.78	1702.92	11.53	-2.51	7.81	11.80	347.73	0.33
1797.50	0.27	283.20	1797.41	11.93	-3.27	8.68	12.37	344.66	0.58

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
1892.00	0.58	339.84	1891.91	12.43	-3.66	9.26	12.96	343.61	0.52
1986.50	0.16	319.32	1986.41	12.98	-3.91	9.75	13.56	343.25	0.47
2081.00	0.40	310.93	2080.91	13.30	-4.24	10.19	13.96	342.31	0.26
2175.50	0.23	22.93	2175.41	13.69	-4.42	10.54	14.38	342.11	0.42
2270.00	0.26	0.48	2269.91	14.07	-4.34	10.66	14.73	342.85	0.10
2364.50	0.12	11.41	2364.40	14.38	-4.32	10.79	15.02	343.27	0.15
2459.00	0.79	84.26	2458.90	14.54	-3.65	10.29	14.99	345.90	0.81
2553.50	0.95	128.45	2553.39	14.12	-2.39	8.97	14.32	350.41	0.71
2648.00	1.56	129.55	2647.87	12.81	-0.78	6.93	12.83	356.51	0.64
2742.50	2.16	133.01	2742.32	10.78	1.51	3.94	10.88	7.97	0.65
2837.00	1.98	128.63	2836.76	8.55	4.08	0.61	9.47	25.53	0.25
2931.50	1.78	124.88	2931.21	6.69	6.56	-2.46	9.37	44.43	0.25
3026.00	2.12	112.27	3025.65	5.19	9.38	-5.65	10.72	61.04	0.58
3120.50	1.81	104.37	3120.10	4.16	12.45	-8.83	13.12	71.53	0.43
3215.00	3.18	98.46	3214.50	3.40	16.49	-12.73	16.84	78.35	1.48
3309.50	3.40	93.74	3308.85	2.83	21.88	-17.71	22.06	82.63	0.36
3404.00	2.96	90.30	3403.20	2.64	27.11	-22.37	27.24	84.45	0.51
3498.50	2.39	92.29	3497.60	2.54	31.51	-26.26	31.61	85.38	0.61
3593.00	2.12	95.36	3592.03	2.30	35.22	-29.61	35.29	86.26	0.31
3687.50	3.30	102.79	3686.42	1.54	39.62	-33.82	39.65	87.78	1.30
3782.00	3.51	113.36	3780.75	-0.21	44.92	-39.31	44.92	90.27	0.70
3876.50	2.44	120.48	3875.13	-2.38	49.31	-44.20	49.37	92.76	1.19
3971.00	2.96	128.44	3969.52	-4.92	52.95	-48.61	53.18	95.30	0.68
4065.50	3.29	132.10	4063.88	-8.25	56.88	-53.67	57.47	98.25	0.41
4160.00	2.82	134.84	4158.25	-11.71	60.54	-58.55	61.66	100.95	0.52
4247.00	2.51	135.17	4245.15	-14.57	63.40	-62.45	65.06	102.94	0.36



VAUGHN ENERGY SERVICES
CORPUS CHRISTI, TX
800-606-4976
SURVEYOR : JAVIER ESTRADA
COTTON DRAW UNIT NO 214H / API 30-015-41537



VES Survey Date: 12/14/2013

devon

Devon Energy

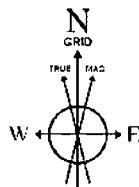
Location: Eddy County, NM
Field: (Cotton) Sec 10, T25S, R31E
Facility: Cotton Draw Unit No.214H

Slot: No.214H SHL
Well: No.214H
Wellbore: No.214H PWB

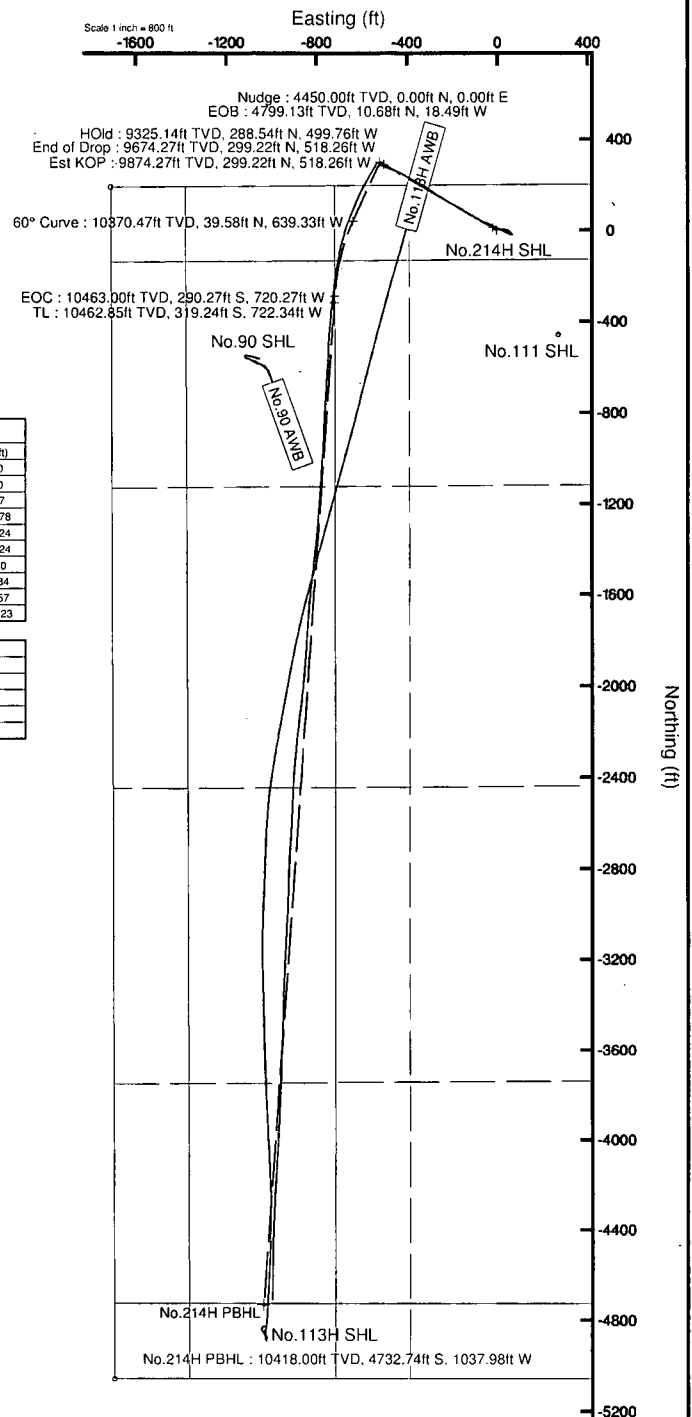
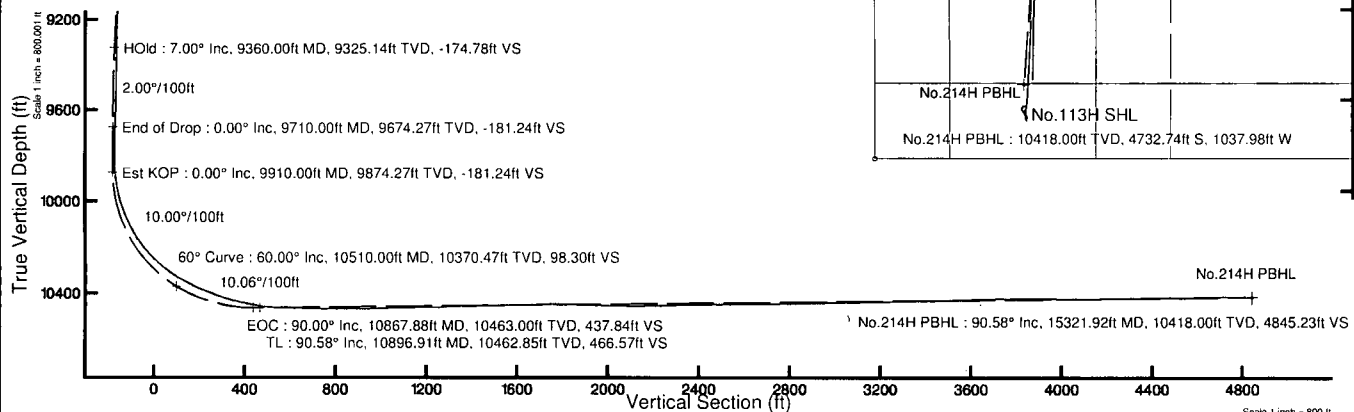


Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	28.00	0.000	300.000	28.00	0.00	0.00	0.00	0.00
Nudge	4450.00	0.000	300.000	4450.00	0.00	0.00	0.00	0.00
EOB	4800.00	7.000	300.000	4799.13	10.68	-18.49	2.00	-6.47
HOI	9360.00	7.000	300.000	9325.14	288.54	-499.76	0.00	-174.78
End of Drop	9710.00	0.000	205.000	9674.27	299.22	-518.26	2.00	-181.24
Est KOP	9910.00	0.000	205.000	9874.27	299.22	-518.26	0.00	-181.24
60° Curve	10510.00	60.000	205.000	10370.47	39.58	-639.33	10.00	98.30
EOC	10867.88	90.000	184.091	10463.00	-290.27	-720.27	10.06	437.84
TL	10896.91	90.581	184.091	10462.85	-319.24	-722.34	2.00	466.57
No.214H PWB	15321.92	90.581	184.091	10418.00	-4732.74	-1037.98	0.00	4845.23

Plot reference wellpath is Rev-C.0	
True vertical depths are referenced to Rig on No.214H SHL (KB)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.214H SHL (KB)	North Reference: Grid north
Rig on No.214H SHL (KB) to Mean Sea Level: 3535.6 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.214H SHL): -3507.6 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentry on 11/8/2013



BGGM (1945.0 to 2015.0) Dip: 60.05° Field: 48315.8 nT
Magnetic North is 7.47 degrees East of True North (at 11/7/2013)
Grid North is 0.32 degrees East of True North
To correct azimuth from True to Grid subtract 0.32 degrees
To correct azimuth from Magnetic to Grid add 7.15 degrees



Azimuth 192.37° with reference 0.00 N, 0.00 E

Scale 1 inch = 800 ft

Rev-C.0



Actual Wellpath Report

No. 214H AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Gentbry
Scale	0.999948	Report Generated	1/6/2014 at 4:14:32 PM
Convergence at slot	0.32° East	Database/Source file	MidlandDB/No._214H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	726601.24	429929.49	32°10'49.931"N	103°44'04.250"W
Facility Reference Pt			726601.24	429929.49	32°10'49.931"N	103°44'04.250"W
Field Reference Pt			718969.84	419273.98	32°09'04.900"N	103°45'33.707"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.214H SHL (KB) to Facility Vertical Datum	28.00ft
Horizontal Reference Pt	Slot	Rig on No.214H SHL (KB) to Mean Sea Level	3535.60ft
Vertical Reference Pt	Rig on No.214H SHL (KB)	Rig on No.214H SHL (KB) to Mud Line at Slot (No.214H SHL)	28.00ft
MD Reference Pt	Rig on No.214H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	192.37°



Actual Wellpath Report

No. 214H AWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	44.370	0.00	0.00	0.00	0.00	726601.24	429929.49	32°10'49.931"N	103°44'04.250"W	0.00	
132.50	0.390	44.370	132.50	-0.38	0.32	0.32	726601.56	429929.81	32°10'49.934"N	103°44'04.246"W	0.29	
224.00	0.520	41.000	224.00	-1.01	0.86	0.81	726602.05	429930.35	32°10'49.940"N	103°44'04.240"W	0.14	
315.50	0.490	45.430	315.49	-1.70	1.45	1.36	726602.60	429930.94	32°10'49.945"N	103°44'04.234"W	0.05	
407.00	0.550	54.320	406.99	-2.36	1.98	1.99	726603.23	429931.47	32°10'49.951"N	103°44'04.226"W	0.11	
498.50	0.650	32.360	498.48	-3.17	2.67	2.63	726603.87	429932.16	32°10'49.958"N	103°44'04.219"W	0.27	
590.00	0.790	359.880	589.98	-4.28	3.74	2.90	726604.14	429933.23	32°10'49.968"N	103°44'04.216"W	0.46	
681.50	0.760	9.200	681.47	-5.50	4.97	3.00	726604.24	429934.46	32°10'49.980"N	103°44'04.214"W	0.14	
773.00	0.560	347.320	772.96	-6.51	6.01	3.00	726604.24	429935.50	32°10'49.990"N	103°44'04.214"W	0.35	
864.50	0.340	323.700	864.46	-7.09	6.66	2.74	726603.98	429936.15	32°10'49.997"N	103°44'04.217"W	0.31	
956.00	0.350	324.940	955.96	-7.46	7.11	2.42	726603.66	429936.60	32°10'50.001"N	103°44'04.221"W	0.01	
1047.50	0.150	243.700	1047.46	-7.58	7.28	2.15	726603.39	429936.77	32°10'50.003"N	103°44'04.224"W	0.39	
1139.00	0.200	282.670	1138.96	-7.50	7.27	1.89	726603.13	429936.76	32°10'50.003"N	103°44'04.227"W	0.14	
1230.50	0.240	311.210	1230.46	-7.59	7.43	1.59	726602.83	429936.92	32°10'50.005"N	103°44'04.231"W	0.13	
1325.00	0.480	314.050	1324.95	-7.90	7.83	1.15	726602.39	429937.32	32°10'50.009"N	103°44'04.236"W	0.25	
1419.50	0.850	308.900	1419.45	-8.42	8.55	0.32	726601.56	429938.04	32°10'50.016"N	103°44'04.245"W	0.40	
1514.00	0.970	317.940	1513.94	-9.20	9.58	-0.76	726600.48	429939.07	32°10'50.026"N	103°44'04.258"W	0.20	
1608.50	0.730	326.270	1608.43	-10.08	10.68	-1.63	726599.61	429940.17	32°10'50.037"N	103°44'04.268"W	0.29	
1703.00	0.790	302.780	1702.92	-10.72	11.53	-2.51	726598.73	429941.02	32°10'50.045"N	103°44'04.278"W	0.33	
1797.50	0.270	283.200	1797.41	-10.96	11.93	-3.27	726597.97	429941.42	32°10'50.049"N	103°44'04.287"W	0.57	
1892.00	0.580	339.840	1891.91	-11.36	12.43	-3.66	726597.58	429941.92	32°10'50.054"N	103°44'04.291"W	0.52	
1986.50	0.160	319.320	1986.41	-11.84	12.98	-3.91	726597.33	429942.47	32°10'50.060"N	103°44'04.294"W	0.46	
2081.00	0.400	310.930	2080.91	-12.08	13.30	-4.24	726597.00	429942.79	32°10'50.063"N	103°44'04.298"W	0.26	
2175.50	0.230	22.930	2175.41	-12.43	13.69	-4.42	726596.82	429943.18	32°10'50.067"N	103°44'04.300"W	0.42	
2270.00	0.260	0.480	2269.91	-12.82	14.08	-4.34	726596.90	429943.57	32°10'50.071"N	103°44'04.299"W	0.11	
2364.50	0.120	11.410	2364.41	-13.13	14.39	-4.32	726596.92	429943.88	32°10'50.074"N	103°44'04.299"W	0.15	
2459.00	0.790	84.260	2458.90	-13.43	14.55	-3.65	726597.59	429944.04	32°10'50.075"N	103°44'04.291"W	0.81	
2553.50	0.950	128.450	2553.39	-13.29	14.13	-2.39	726598.85	429943.62	32°10'50.071"N	103°44'04.277"W	0.71	
2648.00	1.560	129.550	2647.87	-12.36	12.82	-0.79	726600.45	429942.31	32°10'50.058"N	103°44'04.258"W	0.65	
2742.50	2.160	133.010	2742.32	-10.86	10.79	1.51	726602.75	429940.28	32°10'50.038"N	103°44'04.231"W	0.65	
2837.00	1.980	128.630	2836.76	-9.23	8.56	4.09	726605.33	429938.05	32°10'50.016"N	103°44'04.202"W	0.25	
2931.50	1.780	124.880	2931.21	-7.95	6.70	6.56	726607.80	429936.19	32°10'49.997"N	103°44'04.173"W	0.25	
3026.00	2.120	112.270	3025.65	-7.09	5.20	9.39	726610.63	429934.69	32°10'49.982"N	103°44'04.140"W	0.58	
3120.50	1.810	104.370	3120.10	-6.73	4.16	12.45	726613.69	429933.65	32°10'49.972"N	103°44'04.104"W	0.43	
3215.00	3.180	98.460	3214.50	-6.86	3.41	16.49	726617.73	429932.90	32°10'49.964"N	103°44'04.058"W	1.47	
3309.50	3.400	93.740	3308.85	-7.46	2.84	21.88	726623.12	429932.33	32°10'49.958"N	103°44'03.995"W	0.37	
3404.00	2.960	90.300	3403.20	-8.39	2.64	27.11	726628.35	429932.13	32°10'49.956"N	103°44'03.934"W	0.51	
3498.50	2.390	92.290	3497.60	-9.25	2.55	31.52	726632.76	429932.04	32°10'49.955"N	103°44'03.883"W	0.61	
3593.00	2.120	95.360	3592.03	-9.80	2.31	35.23	726636.47	429931.80	32°10'49.952"N	103°44'03.840"W	0.31	
3687.50	3.300	102.790	3686.42	-10.00	1.54	39.62	726640.86	429931.03	32°10'49.944"N	103°44'03.788"W	1.30	
3782.00	3.510	113.360	3780.75	-9.43	-0.20	44.93	726646.17	429929.29	32°10'49.927"N	103°44'03.727"W	0.70	
3876.50	2.440	120.480	3875.13	-8.25	-2.37	49.32	726650.56	429927.12	32°10'49.905"N	103°44'03.676"W	1.20	
3971.00	2.960	128.440	3969.52	-6.55	-4.91	52.97	726654.20	429924.58	32°10'49.880"N	103°44'03.634"W	0.68	
4065.50	3.290	132.100	4063.88	-4.13	-8.24	56.89	726658.13	429921.25	32°10'49.847"N	103°44'03.588"W	0.41	
4160.00	2.820	134.840	4158.25	-1.54	-11.70	60.55	726661.79	429917.79	32°10'49.812"N	103°44'03.546"W	0.52	



Actual Wellpath Report

No. 214H AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4247.00	2.510	135.170	4245.15	0.64	-14.56	63.41	726664.65	429914.93	32°10'49.784"N	103°44'03.513"W	0.36	
4389.00	2.210	148.830	4387.03	4.31	-19.11	67.02	726668.26	429910.38	32°10'49.738"N	103°44'03.471"W	0.45	
4484.00	0.960	257.250	4482.01	5.97	-20.85	67.19	726668.43	429908.64	32°10'49.721"N	103°44'03.469"W	2.81	
4579.00	2.500	284.940	4576.96	6.22	-20.49	64.41	726665.65	429909.00	32°10'49.725"N	103°44'03.501"W	1.80	
4674.00	4.670	291.680	4671.77	5.50	-18.53	58.82	726660.05	429910.96	32°10'49.745"N	103°44'03.566"W	2.32	
4769.00	6.930	296.060	4766.28	3.52	-14.58	50.07	726651.31	429914.91	32°10'49.784"N	103°44'03.668"W	2.42	
4863.00	8.700	297.150	4859.40	0.36	-8.85	38.65	726639.89	429920.64	32°10'49.842"N	103°44'03.800"W	1.89	
4958.00	9.230	296.640	4953.24	-3.35	-2.15	25.45	726626.69	429927.34	32°10'49.909"N	103°44'03.954"W	0.56	
5053.00	9.100	296.380	5047.03	-7.05	4.60	11.91	726613.15	429934.09	32°10'49.976"N	103°44'04.111"W	0.14	
5148.00	9.170	295.010	5140.82	-10.52	11.14	-1.68	726599.56	429940.63	32°10'50.042"N	103°44'04.268"W	0.24	
5240.00	9.220	294.930	5231.64	-13.73	17.35	-15.01	726586.23	429946.83	32°10'50.104"N	103°44'04.423"W	0.06	
5335.00	9.240	294.720	5325.41	-17.01	23.74	-28.84	726572.40	429953.23	32°10'50.168"N	103°44'04.584"W	0.04	
5429.00	8.730	292.860	5418.26	-19.93	29.67	-42.27	726558.98	429959.16	32°10'50.227"N	103°44'04.739"W	0.62	
5523.00	8.710	291.950	5511.17	-22.41	35.10	-55.44	726545.80	429964.59	32°10'50.282"N	103°44'04.892"W	0.15	
5618.00	9.180	298.030	5605.02	-25.65	41.35	-68.80	726532.44	429970.84	32°10'50.344"N	103°44'05.047"W	1.11	
5713.00	9.220	300.130	5698.80	-30.02	48.73	-82.07	726519.17	429978.22	32°10'50.418"N	103°44'05.201"W	0.36	
5807.00	9.220	299.970	5791.58	-34.59	56.28	-95.11	726506.13	429985.76	32°10'50.493"N	103°44'05.353"W	0.03	
5902.00	9.240	300.310	5885.35	-39.24	63.93	-108.29	726492.96	429993.41	32°10'50.570"N	103°44'05.505"W	0.06	
5996.00	9.310	300.550	5978.12	-43.94	71.60	-121.35	726479.89	430001.09	32°10'50.646"N	103°44'05.657"W	0.09	
6091.00	8.860	300.360	6071.93	-48.60	79.20	-134.28	726466.96	430008.69	32°10'50.722"N	103°44'05.807"W	0.47	
6186.00	8.460	299.560	6165.85	-52.92	86.35	-146.67	726454.57	430015.83	32°10'50.794"N	103°44'05.951"W	0.44	
6281.00	8.550	299.040	6259.80	-57.01	93.22	-158.93	726442.32	430022.71	32°10'50.862"N	103°44'06.093"W	0.12	
6375.00	8.420	299.810	6352.77	-61.08	100.04	-171.01	726430.24	430029.52	32°10'50.931"N	103°44'06.233"W	0.18	
6470.00	8.570	299.600	6446.73	-65.26	106.99	-183.20	726418.05	430036.48	32°10'51.000"N	103°44'06.374"W	0.16	
6564.00	8.530	297.920	6539.69	-69.21	113.72	-195.45	726405.80	430043.20	32°10'51.067"N	103°44'06.516"W	0.27	
6659.00	8.110	298.040	6633.69	-72.90	120.16	-207.59	726393.66	430049.65	32°10'51.132"N	103°44'06.657"W	0.44	
6754.00	8.040	300.260	6727.75	-76.75	126.66	-219.24	726382.01	430056.15	32°10'51.197"N	103°44'06.792"W	0.34	
6849.00	7.570	298.530	6821.87	-80.54	133.00	-230.48	726370.78	430062.48	32°10'51.260"N	103°44'06.923"W	0.55	
6944.00	6.600	297.920	6916.14	-83.74	138.54	-240.80	726360.46	430068.03	32°10'51.315"N	103°44'07.042"W	1.02	
7039.00	6.930	299.940	7010.48	-86.94	143.96	-250.59	726350.67	430073.44	32°10'51.370"N	103°44'07.156"W	0.43	
7133.00	7.530	305.170	7103.73	-91.03	150.34	-260.54	726340.72	430079.82	32°10'51.433"N	103°44'07.271"W	0.95	
7228.00	7.170	305.370	7197.95	-95.76	157.36	-270.46	726330.79	430086.84	32°10'51.503"N	103°44'07.386"W	0.38	
7323.00	7.950	305.660	7292.12	-100.68	164.62	-280.63	726320.62	430094.10	32°10'51.576"N	103°44'07.504"W	0.82	
7418.00	8.050	306.410	7386.20	-105.98	172.40	-291.32	726309.93	430101.88	32°10'51.653"N	103°44'07.628"W	0.15	
7513.00	7.620	308.500	7480.31	-111.47	180.27	-301.61	726299.65	430109.75	32°10'51.732"N	103°44'07.747"W	0.54	
7608.00	8.030	302.020	7574.43	-116.47	187.70	-312.16	726289.10	430117.18	32°10'51.806"N	103°44'07.869"W	1.02	
7702.00	7.840	299.240	7667.53	-120.54	194.32	-323.32	726277.94	430123.80	32°10'51.872"N	103°44'07.999"W	0.46	
7797.00	7.310	299.390	7761.70	-124.19	200.45	-334.24	726267.02	430129.93	32°10'51.933"N	103°44'08.126"W	0.56	
7892.00	7.620	300.210	7855.89	-127.89	206.58	-344.95	726256.31	430136.06	32°10'51.994"N	103°44'08.250"W	0.35	
7986.00	7.160	298.740	7949.11	-131.45	212.54	-355.47	726245.79	430142.02	32°10'52.054"N	103°44'08.372"W	0.53	
8080.00	7.740	295.970	8042.32	-134.59	218.13	-366.30	726234.96	430147.60	32°10'52.110"N	103°44'08.497"W	0.73	
8175.00	7.420	297.080	8136.49	-137.65	223.72	-377.51	726223.75	430153.20	32°10'52.166"N	103°44'08.628"W	0.37	
8269.00	6.760	295.390	8229.77	-140.44	228.85	-387.92	726213.34	430158.33	32°10'52.217"N	103°44'08.748"W	0.74	
8363.00	7.140	297.720	8323.08	-143.23	233.94	-398.09	726203.18	430163.42	32°10'52.268"N	103°44'08.866"W	0.50	
8458.00	6.420	301.780	8417.42	-146.56	239.49	-407.83	726193.43	430168.96	32°10'52.323"N	103°44'08.979"W	0.91	



Actual Wellpath Report

No. 214H AWP

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8552.00	6.590	298.090	8510.81	-149.77	244.80	-417.05	726184.21	430174.27	32°10'52.376"N	103°44'09.086"W	0.48	
8647.00	6.670	296.820	8605.18	-152.62	249.85	-426.79	726174.48	430179.33	32°10'52.427"N	103°44'09.199"W	0.18	
8742.00	7.800	295.200	8699.42	-155.43	255.09	-437.54	726163.72	430184.56	32°10'52.479"N	103°44'09.324"W	1.21	
8837.00	6.360	290.770	8793.69	-157.63	259.70	-448.30	726152.97	430189.17	32°10'52.526"N	103°44'09.449"W	1.62	
8932.00	5.070	293.760	8888.22	-159.23	263.25	-457.06	726144.21	430192.73	32°10'52.561"N	103°44'09.550"W	1.39	
9027.00	4.920	295.170	8982.86	-160.96	266.68	-464.59	726136.68	430196.15	32°10'52.596"N	103°44'09.638"W	0.20	
9122.00	5.160	287.720	9077.49	-162.26	269.71	-472.34	726128.92	430199.19	32°10'52.626"N	103°44'09.728"W	0.73	
9217.00	6.440	286.840	9172.00	-163.07	272.55	-481.51	726119.75	430202.03	32°10'52.655"N	103°44'09.834"W	1.35	
9312.00	7.070	289.860	9266.34	-164.25	276.08	-492.11	726109.16	430205.56	32°10'52.690"N	103°44'09.957"W	0.76	
9407.00	6.860	291.820	9360.64	-165.94	280.18	-502.88	726098.39	430209.65	32°10'52.731"N	103°44'10.082"W	0.33	
9502.00	5.900	294.370	9455.05	-167.89	284.30	-512.59	726088.68	430213.78	32°10'52.773"N	103°44'10.195"W	1.05	
9597.00	4.870	296.850	9549.63	-169.92	288.14	-520.64	726080.63	430217.61	32°10'52.811"N	103°44'10.289"W	1.11	
9692.00	2.900	310.880	9644.41	-172.07	291.53	-526.05	726075.22	430221.01	32°10'52.845"N	103°44'10.351"W	2.29	
9787.00	1.370	331.280	9739.34	-174.07	294.10	-528.42	726072.85	430223.58	32°10'52.870"N	103°44'10.379"W	1.77	
9818.00	1.140	332.820	9770.34	-174.59	294.70	-528.73	726072.53	430224.18	32°10'52.876"N	103°44'10.382"W	0.75	
9850.00	1.380	323.640	9802.33	-175.09	295.30	-529.11	726072.16	430224.77	32°10'52.882"N	103°44'10.387"W	0.98	
9881.00	1.630	230.160	9833.32	-174.99	295.31	-529.67	726071.60	430224.79	32°10'52.882"N	103°44'10.393"W	7.09	
9913.00	4.730	224.700	9865.27	-173.51	294.08	-530.95	726070.32	430223.56	32°10'52.870"N	103°44'10.408"W	9.72	
9944.00	7.380	213.100	9896.09	-170.57	291.51	-532.93	726068.34	430220.98	32°10'52.845"N	103°44'10.431"W	9.37	
9976.00	10.870	210.590	9927.68	-165.78	287.19	-535.59	726065.68	430216.66	32°10'52.802"N	103°44'10.463"W	10.97	
10008.00	13.460	212.730	9958.96	-159.42	281.45	-539.14	726062.13	430210.93	32°10'52.746"N	103°44'10.504"W	8.21	
10039.00	16.250	209.770	9988.92	-151.90	274.65	-543.25	726058.02	430204.13	32°10'52.679"N	103°44'10.553"W	9.32	
10071.00	19.090	209.290	10019.41	-142.62	266.20	-548.03	726053.24	430195.68	32°10'52.595"N	103°44'10.609"W	8.89	
10103.00	22.130	209.630	10049.36	-131.85	256.40	-553.57	726047.70	430185.87	32°10'52.499"N	103°44'10.674"W	9.51	
10134.00	25.230	210.140	10077.75	-119.98	245.60	-559.78	726041.49	430175.08	32°10'52.392"N	103°44'10.747"W	10.02	
10166.00	28.320	209.670	10106.31	-106.24	233.11	-566.96	726034.31	430162.59	32°10'52.269"N	103°44'10.831"W	9.68	
10198.00	30.960	210.890	10134.12	-91.18	219.45	-574.95	726026.33	430148.93	32°10'52.134"N	103°44'10.925"W	8.46	
10229.00	34.310	209.670	10160.22	-75.28	205.01	-583.37	726017.90	430134.49	32°10'51.992"N	103°44'11.024"W	11.01	
10261.00	37.340	207.640	10186.17	-57.30	188.57	-592.34	726008.94	430118.05	32°10'51.830"N	103°44'11.129"W	10.17	
10293.00	40.710	206.400	10211.02	-37.81	170.62	-601.48	725999.79	430100.10	32°10'51.653"N	103°44'11.237"W	10.81	
10324.00	43.960	204.300	10233.94	-17.47	151.75	-610.41	725990.87	430081.24	32°10'51.466"N	103°44'11.342"W	11.43	
10356.00	47.850	203.760	10256.20	5.04	130.77	-619.76	725981.51	430060.25	32°10'51.259"N	103°44'11.452"W	12.22	
10388.00	50.890	203.880	10277.04	28.84	108.55	-629.57	725971.71	430038.04	32°10'51.040"N	103°44'11.568"W	9.50	
10419.00	54.150	203.170	10295.90	52.97	86.00	-639.38	725961.89	430015.48	32°10'50.817"N	103°44'11.683"W	10.67	
10451.00	56.520	201.470	10314.10	78.89	61.65	-649.37	725951.90	429991.14	32°10'50.577"N	103°44'11.801"W	8.60	
10482.00	59.360	200.060	10330.55	104.88	37.09	-658.68	725942.60	429966.57	32°10'50.334"N	103°44'11.911"W	9.94	
10514.00	61.760	198.530	10346.28	132.54	10.79	-667.88	725933.39	429940.28	32°10'50.075"N	103°44'12.020"W	8.58	
10546.00	64.170	196.880	10360.82	160.92	-16.37	-676.55	725924.73	429913.13	32°10'49.806"N	103°44'12.122"W	8.82	
10577.00	66.110	195.310	10373.86	188.98	-43.39	-684.34	725916.94	429886.10	32°10'49.540"N	103°44'12.215"W	7.76	
10609.00	67.460	193.820	10386.47	218.37	-71.85	-691.73	725909.54	429857.64	32°10'49.258"N	103°44'12.303"W	6.01	
10641.00	69.230	192.300	10398.28	248.11	-100.82	-698.45	725902.83	429828.67	32°10'48.972"N	103°44'12.383"W	7.08	
10673.00	70.750	191.550	10409.23	278.17	-130.24	-704.66	725896.61	429799.26	32°10'48.681"N	103°44'12.457"W	5.24	
10704.00	72.530	189.210	10419.00	307.57	-159.18	-709.96	725891.32	429770.32	32°10'48.395"N	103°44'12.520"W	9.18	
10736.00	74.870	188.290	10427.98	338.22	-189.53	-714.63	725886.65	429739.97	32°10'48.095"N	103°44'12.577"W	7.82	
10767.00	76.710	187.940	10435.59	368.19	-219.28	-718.87	725882.41	429710.22	32°10'47.801"N	103°44'12.628"W	6.04	



Actual Wellpath Report

No. 214H AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10799.00	78.280	187.060	10442.51	399.32	-250.25	-722.95	725878.33	429679.25	32°10'47.495"N	103°44'12.677"W	5.59	
10830.00	79.790	186.930	10448.41	429.62	-280.46	-726.66	725874.62	429649.04	32°10'47.196"N	103°44'12.722"W	4.89	
10861.00	81.400	186.670	10453.48	460.06	-310.83	-730.28	725871.00	429618.68	32°10'46.896"N	103°44'12.766"W	5.26	
10893.00	83.060	185.790	10457.80	491.58	-342.34	-733.72	725867.56	429587.16	32°10'46.584"N	103°44'12.808"W	5.86	
10924.00	85.000	185.110	10461.03	522.18	-373.04	-736.64	725864.63	429556.47	32°10'46.280"N	103°44'12.844"W	6.63	
10956.00	87.170	184.190	10463.21	553.82	-404.85	-739.23	725862.05	429524.66	32°10'45.966"N	103°44'12.877"W	7.36	
11017.00	89.020	183.830	10465.24	614.13	-465.67	-743.50	725857.78	429463.85	32°10'45.364"N	103°44'12.930"W	3.09	
11112.00	88.650	183.400	10467.17	708.01	-560.46	-749.48	725851.80	429369.06	32°10'44.427"N	103°44'13.006"W	0.60	
11207.00	89.880	184.130	10468.39	801.93	-655.24	-755.72	725845.56	429274.28	32°10'43.489"N	103°44'13.085"W	1.51	
11302.00	90.400	183.280	10468.16	895.84	-750.04	-761.86	725839.42	429179.49	32°10'42.551"N	103°44'13.162"W	1.05	
11397.00	91.230	182.890	10466.81	989.59	-844.90	-766.97	725834.31	429084.64	32°10'41.613"N	103°44'13.228"W	0.97	
11492.00	91.050	183.680	10464.92	1083.37	-939.72	-772.42	725828.87	428989.82	32°10'40.675"N	103°44'13.297"W	0.85	
11586.00	91.290	183.350	10463.00	1176.23	-1033.52	-778.18	725823.10	428896.02	32°10'39.747"N	103°44'13.370"W	0.43	
11681.00	91.820	183.950	10460.42	1270.10	-1128.29	-784.22	725817.06	428801.26	32°10'38.810"N	103°44'13.447"W	0.84	
11776.00	91.760	184.500	10457.45	1364.10	-1222.99	-791.22	725810.06	428706.57	32°10'37.873"N	103°44'13.534"W	0.58	
11871.00	91.450	185.310	10454.79	1458.25	-1317.60	-799.34	725801.95	428611.96	32°10'36.937"N	103°44'13.635"W	0.91	
11966.00	91.450	186.070	10452.39	1552.58	-1412.11	-808.75	725792.53	428517.46	32°10'36.003"N	103°44'13.750"W	0.80	
12060.00	91.700	186.560	10449.80	1646.02	-1505.50	-819.09	725782.19	428424.07	32°10'35.079"N	103°44'13.877"W	0.59	
12155.00	91.080	185.910	10447.50	1740.44	-1599.91	-829.40	725771.88	428329.67	32°10'34.146"N	103°44'14.003"W	0.95	
12249.00	87.660	184.120	10448.53	1833.65	-1693.53	-837.62	725763.67	428236.06	32°10'33.220"N	103°44'14.104"W	4.11	
12344.00	88.120	184.070	10452.03	1927.60	-1788.22	-844.40	725756.89	428141.37	32°10'32.283"N	103°44'14.189"W	0.49	
12438.00	88.770	184.290	10454.58	2020.60	-1881.93	-851.25	725750.04	428047.66	32°10'31.356"N	103°44'14.275"W	0.73	
12533.00	89.910	185.670	10455.67	2114.80	-1976.56	-859.49	725741.79	427953.03	32°10'30.420"N	103°44'14.377"W	1.88	
12627.00	91.020	186.900	10454.91	2208.27	-2069.99	-869.78	725731.50	427859.61	32°10'29.496"N	103°44'14.503"W	1.76	
12721.00	91.570	186.890	10452.79	2301.81	-2163.29	-881.07	725720.22	427766.32	32°10'28.574"N	103°44'14.640"W	0.59	
12816.00	90.740	185.860	10450.87	2396.27	-2257.68	-891.61	725709.68	427671.93	32°10'27.640"N	103°44'14.769"W	1.39	
12910.00	90.710	184.710	10449.68	2489.55	-2351.27	-900.27	725701.02	427578.34	32°10'26.715"N	103°44'14.876"W	1.22	
13005.00	90.430	183.020	10448.74	2583.49	-2446.05	-906.67	725694.62	427483.57	32°10'25.777"N	103°44'14.956"W	1.80	
13100.00	90.310	182.470	10448.12	2677.15	-2540.94	-911.22	725690.07	427388.69	32°10'24.839"N	103°44'15.015"W	0.59	
13195.00	90.800	183.700	10447.20	2770.90	-2635.79	-916.33	725684.96	427293.84	32°10'23.900"N	103°44'15.081"W	1.39	
13290.00	91.230	183.110	10445.52	2864.73	-2730.61	-921.97	725679.31	427199.03	32°10'22.962"N	103°44'15.153"W	0.77	
13385.00	91.140	182.010	10443.56	2958.32	-2825.49	-926.22	725675.07	427104.15	32°10'22.024"N	103°44'15.208"W	1.16	
13480.00	91.080	181.790	10441.72	3051.72	-2920.42	-929.37	725671.92	427009.22	32°10'21.084"N	103°44'15.251"W	0.24	
13575.00	90.860	182.810	10440.11	3145.24	-3015.33	-933.18	725668.11	426914.32	32°10'20.146"N	103°44'15.301"W	1.10	
13670.00	91.390	182.940	10438.24	3238.92	-3110.19	-937.94	725663.35	426819.46	32°10'19.207"N	103°44'15.363"W	0.57	
13765.00	91.720	182.550	10435.66	3332.55	-3205.05	-942.49	725658.80	426724.61	32°10'18.269"N	103°44'15.422"W	0.54	
13860.00	91.510	182.110	10432.99	3426.05	-3299.93	-946.35	725654.94	426629.74	32°10'17.330"N	103°44'15.473"W	0.51	
13955.00	91.850	182.110	10430.20	3519.49	-3394.83	-949.85	725651.44	426534.85	32°10'16.391"N	103°44'15.520"W	0.36	
14050.00	91.850	181.810	10427.13	3612.88	-3489.72	-953.09	725648.20	426439.96	32°10'15.453"N	103°44'15.564"W	0.32	
14145.00	90.830	181.730	10424.91	3706.23	-3584.65	-956.03	725645.26	426345.03	32°10'14.513"N	103°44'15.604"W	1.08	
14239.00	90.280	182.090	10424.00	3798.67	-3678.59	-959.16	725642.13	426251.10	32°10'13.584"N	103°44'15.646"W	0.70	
14334.00	89.570	182.470	10424.13	3892.20	-3773.51	-962.94	725638.35	426156.18	32°10'12.645"N	103°44'15.696"W	0.85	
14429.00	89.260	182.780	10425.10	3985.82	-3868.41	-967.29	725634.00	426061.29	32°10'11.706"N	103°44'15.753"W	0.46	
14523.00	90.120	182.980	10425.61	4078.53	-3962.29	-972.01	725629.28	425967.41	32°10'10.777"N	103°44'15.814"W	0.94	
14617.00	90.740	183.480	10424.90	4171.33	-4056.14	-977.31	725623.98	425873.57	32°10'09.849"N	103°44'15.882"W	0.85	



Actual Wellpath Report

No. 214H AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.214H SHL
Area	Eddy County, NM	Well	No.214H
Field	(Cotton) Sec 10, T25S, R31E	Wellbore	No. 214H AWB
Facility	Cotton Draw Unit No.214H		

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14711.00	90.770	183.040	10423.66	4264.14	-4149.98	-982.65	725618.64	425779.74	32°10'08.921"N	103°44'15.950"W	0.47	
14805.00	91.020	182.650	10422.19	4356.83	-4243.85	-987.32	725613.97	425685.87	32°10'07.992"N	103°44'16.010"W	0.49	
14899.00	90.920	182.350	10420.60	4449.43	-4337.75	-991.42	725609.87	425591.98	32°10'07.063"N	103°44'16.064"W	0.34	
14994.00	90.950	181.550	10419.05	4542.85	-4432.68	-994.65	725606.64	425497.05	32°10'06.124"N	103°44'16.108"W	0.84	
15088.00	90.740	181.020	10417.67	4635.08	-4526.64	-996.76	725604.53	425403.09	32°10'05.194"N	103°44'16.138"W	0.61	
15182.00	90.620	180.580	10416.55	4727.17	-4620.63	-998.07	725603.22	425309.11	32°10'04.265"N	103°44'16.160"W	0.49	
15214.00	90.550	180.360	10416.22	4758.48	-4652.62	-998.33	725602.96	425277.12	32°10'03.948"N	103°44'16.165"W	0.72	
15271.00	90.550	180.360	10415.68	4814.23	-4709.62	-998.69	725602.60	425220.12	32°10'03.384"N	103°44'16.173"W	0.00	Proj to Bit

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.214H PBHL		10418.00	-4732.74	-1037.98	725563.32	425197.00	32°10'03.157"N	103°44'16.631"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 214H AWB Ref Wellpath: No. 214H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	4247.00	Generic gyro - northseeking (Standard)	GTI Gyros	No. 214H AWB
4247.00	15214.00	NaviTrak (Standard)	BHI MWD NaviTrak <4389-XXXX>	No. 214H AWB
15214.00	15271.00	Blind Drilling (std)	Projection to bit	No. 214H AWB