

Actual Wellpath Report (CSV ver.)  
 Prepared by Baker Hughes  
 Software System: WellArchitect 4.0.1

REFERENCE WELLPATH IDENTIFICATION													
Operator	GASTAR EXPLORATION USA INC.						Slot	Slot #3					
Area	Marshall County, WV						Well	Lackawanna U-3H					
Field	Marshall						Wellbore	Lackawanna U-3H (AWB)					
Facility	Lackawanna Unit						Wellpath	Lackawanna U-3H (AWP) Proj; 2,480'					
							Sidetrack	(none)					
WELLPATH DATA † = interpolated/extrapolated station													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude (N)	Longitude (W)	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0	0	0	0	0.00	0.00	0.00	512301.6	4384049.34	39-36-21.95	-80 51 24.14	0.00	0.00	****
100	0.38	241.31	100	-0.16	-0.16	-0.29	512301.51	4384049.291	39-36-21.95	-80-51-24.14	0.33	241.31	0.38
200	0.29	245.89	200	-0.42	-0.42	-0.81	512301.51	4384049.212	39-36-21.95	-80-51-24.14	0.91	242.56	0.10
300	0.37	246.86	300	-0.65	-0.65	-1.33	512301.2	4384049.142	39-36-21.94	-80-51-24.16	1.48	244.05	0.08
400	0.27	251.99	399.99	-0.85	-0.85	-1.85	512301.04	4384049.081	39-36-21.94	-80-51-24.17	2.03	245.41	0.10
500	0.15	268.98	499.99	-0.92	-0.92	-2.20	512300.93	4384049.06	39-36-21.94	-80-51-24.17	2.38	247.28	0.13
600	0.11	253.79	599.99	-0.95	-0.95	-2.42	512300.86	4384049.051	39-36-21.94	-80-51-24.17	2.60	248.57	0.05
700	0.23	243.48	699.99	-1.07	-1.07	-2.69	512300.78	4384049.014	39-36-21.94	-80-51-24.17	2.89	248.40	0.12
800	0.26	240.44	799.99	-1.26	-1.26	-3.06	512300.67	4384048.956	39-36-21.94	-80-51-24.18	3.31	247.57	0.03
900	0.12	245.99	899.99	-1.42	-1.42	-3.35	512300.58	4384048.907	39-36-21.94	-80-51-24.18	3.64	247.09	0.14
1000	0.05	246.17	999.99	-1.48	-1.48	-3.49	512300.48	4384048.889	39-36-21.94	-80-51-24.19	3.79	247.05	0.07
1100	0.16	250.06	1099.99	-1.55	-1.55	-3.67	512300.48	4384048.868	39-36-21.94	-80-51-24.19	3.98	247.14	0.10
1200	0.12	254.67	1199.99	-1.62	-1.62	-3.90	512300.41	4384048.846	39-36-21.94	-80-51-24.19	4.23	247.43	0.04
1290	0.09	247.71	1289.99	-1.67	-1.67	-4.06	512300.36	4384048.831	39-36-21.94	-80-51-24.19	4.39	247.59	0.05
Note: Well was drilled to 2480' TVD. Hole came in while running 13-3/8" casing. Pulled casing and loaded hole with 9.1 high viscosity gel.													
So no survey data is available past 1290 TVD.													

RECEIVED  
 Office of Oil and Gas  
 DEC 4 2017  
 WV Department of  
 Environmental Protection