

ACTUAL WELLPATH REPORT (CSV version)

Prepared by Baker Hughes

Software System: WellArchitect® 5.1

REFERENCE WELLPATH IDENTIFICATION

Operator CHEVRON APPALACHIA, LLC  
Area Marshall County, WV  
Field Marshall County  
Facility Taylor C Pad  
Slot Slot #09  
Well Taylor C 9H  
Wellbore Taylor C 9H AWB  
Wellpath Taylor C 9H AWP Proj: 17054'  
Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet  
North Refe TRUE  
Scale 0.999948  
Convergen 0.77° West  
Software S WellArchitect® 5.1  
User Edsaryar  
Report Ger 15/Jan/2018 at 17:11  
DataBase/5 WA\_MPL\_EASTERNUS\_Defn/ev4821.xml

WELLPATH	Local North [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Locatic	18.86	56.96	1632374	494630.5	39°51'06.6"	80°41'50.159"W
Facility Ref			1632317	494612.4	39°51'06.5"	80°41'50.889"W
Field Refer			1644569	516963.8	39°54'48.9"	80°39'17.476"W

WELLPATH DATUM

Calculation Minimum curvature  
Horizontal Slot  
Vertical Re Precision 560 (RKB)  
MD Refere Precision 560 (RKB)  
Field Vertic Mean Sea Level  
Precision 5 25.00ft  
Precision 5 1260.00ft

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Precision 5 25.00ft  
 Section Ori N 0.00, E 0.00 ft  
 Section Azi 140.74°

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WELLPATH DATA † = interpolated/extrapolated station

	MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure [ft]	Dis [°]	Closure Dir [°/100ft]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
†	0	0	308.95	0	0	0	0	1632374	494630.5	39°51'06.6"	80°41'50.1"	0	0	0	0	0	
	25	0	308.95	25	0	0	0	1632374	494630.5	39°51'06.6"	80°41'50.1"	0	0	0	0	0	
	58.33	0.37	308.95	58.33	-0.11	0.07	-0.08	1632374	494630.6	39°51'06.6"	80°41'50.1"	0.11	308.95	1.11	1.11	-153.17	
	83.33	0.42	316.48	83.33	-0.28	0.18	-0.21	1632374	494630.7	39°51'06.6"	80°41'50.1"	0.28	311.413	0.29	0.2	30.12	
	108.33	0.54	323.73	108.33	-0.48	0.35	-0.34	1632373	494630.8	39°51'06.6"	80°41'50.1"	0.49	315.325	0.54	0.48	29	
	133.33	0.59	327.18	133.33	-0.73	0.55	-0.48	1632373	494631	39°51'06.6"	80°41'50.1"	0.73	318.751	0.24	0.2	13.8	
	158.33	0.6	324.03	158.33	-0.99	0.76	-0.63	1632373	494631.3	39°51'06.7"	80°41'50.1"	0.99	320.542	0.14	0.04	-12.6	
	183.33	0.59	324.82	183.32	-1.25	0.97	-0.78	1632373	494631.5	39°51'06.7"	80°41'50.1"	1.25	321.348	0.05	-0.04	3.16	
	208.33	0.59	341.87	208.32	-1.5	1.2	-0.89	1632373	494631.7	39°51'06.7"	80°41'50.1"	1.5	323.373	0.7	0	68.2	
	233.33	0.64	350.34	233.32	-1.74	1.46	-0.96	1632373	494632	39°51'06.7"	80°41'50.1"	1.75	326.789	0.41	0.2	33.88	
	258.33	0.64	350.24	258.32	-1.98	1.74	-1	1632373	494632.2	39°51'06.7"	80°41'50.1"	2.01	329.97	0	0	-0.4	
	283.33	0.63	357.2	283.32	-2.21	2.01	-1.03	1632373	494632.5	39°51'06.7"	80°41'50.1"	2.26	332.789	0.31	-0.04	27.84	
	308.33	0.58	7.48	308.32	-2.41	2.28	-1.02	1632373	494632.8	39°51'06.7"	80°41'50.1"	2.5	335.748	0.48	-0.2	41.12	
	333.33	0.52	17.65	333.32	-2.56	2.51	-0.97	1632373	494633	39°51'06.7"	80°41'50.1"	2.69	338.779	0.46	-0.24	40.68	
	358.33	0.39	34.34	358.32	-2.64	2.69	-0.89	1632373	494633.2	39°51'06.7"	80°41'50.1"	2.83	341.642	0.74	-0.52	66.76	
	383.33	0.47	43.97	383.31	-2.68	2.83	-0.77	1632373	494633.3	39°51'06.7"	80°41'50.1"	2.93	344.738	0.43	0.32	38.52	
	408.33	0.45	47.69	408.31	-2.7	2.97	-0.63	1632373	494633.5	39°51'06.7"	80°41'50.1"	3.04	348.052	0.14	-0.08	14.88	
	433.33	0.45	54.45	433.31	-2.7	3.09	-0.48	1632373	494633.6	39°51'06.7"	80°41'50.1"	3.13	351.25	0.21	0	27.04	
	458.33	0.34	42.7	458.31	-2.7	3.21	-0.35	1632373	494633.7	39°51'06.7"	80°41'50.1"	3.22	353.839	0.54	-0.44	-47	
	483.33	0.3	53.46	483.31	-2.71	3.3	-0.24	1632374	494633.8	39°51'06.7"	80°41'50.1"	3.31	355.785	0.29	-0.16	43.04	
	506.33	0.2	81.31	506.31	-2.69	3.34	-0.16	1632374	494633.8	39°51'06.7"	80°41'50.1"	3.34	357.342	0.67	-0.43	121.09	
	603.33	0.34	82.79	603.31	-2.45	3.4	0.3	1632374	494633.9	39°51'06.7"	80°41'50.1"	3.42	5.002	0.14	0.14	1.53	
	634.33	0.34	52.52	634.31	-2.39	3.47	0.46	1632374	494633.9	39°51'06.7"	80°41'50.1"	3.5	7.584	0.57	0	-97.65	
	665.33	0.42	75.74	665.31	-2.34	3.55	0.65	1632374	494634	39°51'06.7"	80°41'50.1"	3.61	10.288	0.55	0.26	74.9	
	697.33	0.37	63.37	697.31	-2.27	3.63	0.85	1632375	494634.1	39°51'06.7"	80°41'50.1"	3.73	13.199	0.31	-0.16	-38.66	
	728.33	0.31	36.2	728.31	-2.27	3.74	0.99	1632375	494634.2	39°51'06.7"	80°41'50.1"	3.87	14.822	0.55	-0.19	-87.65	
	759.33	0.67	46.56	759.31	-2.3	3.93	1.17	1632375	494634.4	39°51'06.7"	80°41'50.1"	4.1	16.58	1.19	1.16	33.42	
	790.33	0.68	25.8	790.3	-2.4	4.22	1.38	1632375	494634.7	39°51'06.7"	80°41'50.1"	4.45	18.127	0.79	0.03	-66.97	
	821.33	0.95	40.26	821.3	-2.52	4.59	1.63	1632375	494635	39°51'06.7"	80°41'50.1"	4.87	19.556	1.09	0.87	46.65	
	852.33	1.3	39.58	852.3	-2.63	5.05	2.02	1632376	494635.5	39°51'06.7"	80°41'50.1"	5.44	21.781	1.13	1.13	-2.19	
	884.33	1.52	46.66	884.29	-2.74	5.62	2.56	1632376	494636.1	39°51'06.7"	80°41'50.1"	6.18	24.467	0.88	0.69	22.12	

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915.33	2	41.52	915.27	-2.85	6.31	3.22	1632377	494636.8	39°51'06.7	80°41'50.1	7.08	27.007	1.63	1.55	-16.58
946.33	2.44	41.95	946.25	-3.04	7.21	4.02	1632378	494637.6	39°51'06.7	80°41'50.1	8.25	29.13	1.42	1.42	1.39
977.33	3.05	44.31	977.21	-3.23	8.29	5.03	1632379	494638.7	39°51'06.7	80°41'50.0	9.7	31.272	2	1.97	7.61
1008.33	3.62	44.29	1008.16	-3.43	9.58	6.29	1632380	494640	39°51'06.7	80°41'50.0	11.46	33.304	1.84	1.84	-0.06
1039.33	4.3	46	1039.09	-3.64	11.09	7.81	1632382	494641.5	39°51'06.8	80°41'50.0	13.56	35.171	2.23	2.19	5.52
1071.33	4.63	43.51	1070.99	-3.9	12.86	9.56	1632383	494643.2	39°51'06.8	80°41'50.0	16.02	36.647	1.2	1.03	-7.78
1102.33	5.4	44.79	1101.87	-4.21	14.8	11.45	1632385	494645.1	39°51'06.8	80°41'50.0	18.71	37.737	2.51	2.48	4.13
1133.33	6.07	44.9	1132.71	-4.53	17	13.64	1632388	494647.3	39°51'06.8	80°41'49.9	21.79	38.746	2.16	2.16	0.35
1164.33	6.67	45.41	1163.52	-4.86	19.42	16.08	1632390	494649.7	39°51'06.8	80°41'49.9	25.21	39.62	1.94	1.94	1.65
1195.33	7.37	47.26	1194.29	-5.15	22.03	18.82	1632393	494652.3	39°51'06.9	80°41'49.9	28.98	40.502	2.37	2.26	5.97
1226.33	7.09	44.89	1225.04	-5.47	24.74	21.63	1632396	494654.9	39°51'06.9	80°41'49.8	32.86	41.165	1.32	-0.9	-7.65
1258.33	6.74	45.39	1256.81	-5.84	27.46	24.36	1632398	494657.6	39°51'06.9	80°41'49.8	36.71	41.581	1.11	-1.09	1.56
1289.33	5.84	45.43	1287.62	-6.16	29.84	26.78	1632401	494660	39°51'06.9	80°41'49.8	40.1	41.905	2.9	-2.9	0.13
1320.33	4.74	45.41	1318.49	-6.42	31.85	28.82	1632403	494661.9	39°51'07.0	80°41'49.7	42.95	42.139	3.55	-3.55	-0.06
1351.33	4.81	46.78	1349.38	-6.63	33.64	30.67	1632405	494663.7	39°51'07.0	80°41'49.7	45.52	42.363	0.43	0.23	4.42
1382.33	4.95	44.43	1380.27	-6.87	35.48	32.56	1632407	494665.5	39°51'07.0	80°41'49.7	48.16	42.54	0.79	0.45	-7.58
1413.33	4.58	44.77	1411.16	-7.14	37.32	34.37	1632409	494667.3	39°51'07.0	80°41'49.7	50.73	42.644	1.2	-1.19	1.1
1444.33	4.25	44.12	1442.07	-7.41	39.02	36.04	1632410	494669	39°51'07.0	80°41'49.6	53.11	42.725	1.08	-1.06	-2.1
1475.33	3.21	43.24	1473.01	-7.65	40.48	37.43	1632412	494670.5	39°51'07.0	80°41'49.6	55.13	42.763	3.36	-3.35	-2.84
1507.33	2.73	41.79	1504.96	-7.89	41.7	38.55	1632413	494671.7	39°51'07.1	80°41'49.6	56.79	42.757	1.52	-1.5	-4.53
1538.33	2.39	42.87	1535.93	-8.09	42.72	39.49	1632414	494672.7	39°51'07.1	80°41'49.6	58.17	42.746	1.11	-1.1	3.48
1569.33	2.24	41.32	1566.91	-8.28	43.65	40.32	1632415	494673.6	39°51'07.1	80°41'49.6	59.43	42.733	0.52	-0.48	-5
1600.33	2.35	38.63	1597.88	-8.51	44.6	41.12	1632415	494674.5	39°51'07.1	80°41'49.6	60.66	42.676	0.5	0.35	-8.68
1631.33	2.38	39.46	1628.86	-8.77	45.59	41.93	1632416	494675.5	39°51'07.1	80°41'49.6	61.94	42.601	0.15	0.1	2.68
1663.33	2.61	37.54	1660.83	-9.07	46.68	42.79	1632417	494676.6	39°51'07.1	80°41'49.6	63.33	42.51	0.76	0.72	-6
1694.33	2.75	38.46	1691.79	-9.39	47.83	43.69	1632418	494677.7	39°51'07.1	80°41'49.5	64.78	42.409	0.47	0.45	2.97
1725.33	2.38	35.67	1722.76	-9.71	48.93	44.52	1632419	494678.8	39°51'07.1	80°41'49.5	66.16	42.3	1.26	-1.19	-9
1756.33	1.84	37.76	1753.74	-9.99	49.85	45.2	1632420	494679.7	39°51'07.1	80°41'49.5	67.29	42.203	1.76	-1.74	6.74
1788.33	0.91	30.49	1785.73	-10.19	50.47	45.65	1632420	494680.3	39°51'07.1	80°41'49.5	68.05	42.126	2.95	-2.91	-22.72
1850.33	0.21	216.28	1847.73	-10.34	50.81	45.83	1632420	494680.7	39°51'07.1	80°41'49.5	68.42	42.052	1.81	-1.13	-280.98
1912.33	0.52	216.94	1909.73	-10.24	50.49	45.59	1632420	494680.4	39°51'07.1	80°41'49.5	68.03	42.083	0.5	0.5	1.06
1975.33	1.13	225.93	1972.72	-10.12	49.83	44.98	1632419	494679.7	39°51'07.1	80°41'49.5	67.13	42.069	0.99	0.97	14.27
2037.33	1.39	222.36	2034.7	-9.96	48.85	44.03	1632418	494678.7	39°51'07.1	80°41'49.5	65.76	42.03	0.44	0.42	-5.76
2100.33	2.15	214.8	2097.67	-9.52	47.31	42.84	1632417	494677.2	39°51'07.1	80°41'49.6	63.83	42.16	1.26	1.21	-12
2162.33	1.88	214.02	2159.64	-8.91	45.52	41.61	1632416	494675.4	39°51'07.1	80°41'49.6	61.67	42.432	0.44	-0.44	-1.26
2193.33	1.48	205.95	2190.62	-8.6	44.73	41.15	1632416	494674.7	39°51'07.1	80°41'49.6	60.78	42.609	1.5	-1.29	-26.03
2293	1.25	189.32	2290.26	-7.34	42.5	40.41	1632415	494672.4	39°51'07.1	80°41'49.6	58.65	43.553	0.46	-0.23	-16.69
2382	1.12	183.03	2379.24	-6.05	40.68	40.21	1632415	494670.6	39°51'07.0	80°41'49.6	57.19	44.666	0.21	-0.15	-7.07
2472	0.98	196.4	2469.23	-4.97	39.06	39.94	1632414	494669	39°51'07.0	80°41'49.6	55.87	45.639	0.31	-0.16	14.86

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2561	0.65	201.3	2558.22	-4.29	37.86	39.54	1632414	494667.8	39°51'07.0	80°41'49.6	54.75	46.246	0.38	-0.37	5.51
2650	0.47	189.17	2647.22	-3.8	37.03	39.3	1632414	494667	39°51'07.0	80°41'49.6	54	46.705	0.24	-0.2	-13.63
2739	0.28	194.41	2736.21	-3.43	36.46	39.19	1632413	494666.4	39°51'07.0	80°41'49.6	53.53	47.068	0.22	-0.21	5.89
2828	0.25	134.37	2825.21	-3.11	36.11	39.27	1632414	494666.1	39°51'07.0	80°41'49.6	53.35	47.402	0.3	-0.03	-67.46
2917	0.28	193.57	2914.21	-2.78	35.76	39.36	1632414	494665.7	39°51'07.0	80°41'49.6	53.18	47.742	0.3	0.03	66.52
3006	1.31	35.34	3003.21	-2.92	36.38	39.9	1632414	494666.3	39°51'07.0	80°41'49.6	54	47.639	1.77	1.16	-177.79
3095	1.09	26.46	3092.19	-3.54	37.97	40.87	1632415	494667.9	39°51'07.0	80°41'49.6	55.78	47.103	0.32	-0.25	-9.98
3185	0.86	6.72	3182.17	-4.36	39.41	41.33	1632416	494669.3	39°51'07.0	80°41'49.6	57.1	46.361	0.45	-0.26	-21.93
3274	0.73	7.21	3271.17	-5.22	40.63	41.48	1632416	494670.6	39°51'07.0	80°41'49.6	58.06	45.587	0.15	-0.15	0.55
3363	0.81	351.75	3360.16	-6.14	41.82	41.46	1632416	494671.7	39°51'07.1	80°41'49.6	58.88	44.75	0.25	0.09	-17.37
3452	0.53	341.3	3449.15	-7.07	42.83	41.23	1632416	494672.8	39°51'07.1	80°41'49.6	59.45	43.911	0.34	-0.31	-11.74
3542	0.73	328.59	3539.15	-8.03	43.72	40.8	1632415	494673.7	39°51'07.1	80°41'49.6	59.8	43.026	0.27	0.22	-14.12
3631	0.72	313.49	3628.14	-9.14	44.58	40.1	1632414	494674.5	39°51'07.1	80°41'49.6	59.96	41.969	0.21	-0.01	-16.97
3721	0.59	327.55	3718.13	-10.16	45.36	39.44	1632414	494675.3	39°51'07.1	80°41'49.6	60.11	41.005	0.23	-0.14	15.62
3810	0.59	326.16	3807.13	-11.08	46.13	38.94	1632413	494676.1	39°51'07.1	80°41'49.6	60.37	40.168	0.02	0	-1.56
3899	0.31	355.38	3896.13	-11.73	46.75	38.67	1632413	494676.7	39°51'07.1	80°41'49.6	60.67	39.592	0.4	-0.31	32.83
3989	0.28	336.35	3986.12	-12.14	47.2	38.56	1632413	494677.2	39°51'07.1	80°41'49.6	60.94	39.248	0.11	-0.03	-21.14
4078	0.46	293.79	4075.12	-12.67	47.54	38.14	1632413	494677.5	39°51'07.1	80°41'49.6	60.95	38.742	0.36	0.2	-47.82
4167	0.25	317.88	4164.12	-13.18	47.83	37.69	1632412	494677.8	39°51'07.1	80°41'49.6	60.89	38.237	0.28	-0.24	27.07
4257	0.45	303.1	4254.12	-13.72	48.17	37.26	1632412	494678.1	39°51'07.1	80°41'49.6	60.9	37.724	0.24	0.22	-16.42
4346	0.45	316.05	4343.12	-14.4	48.61	36.72	1632411	494678.6	39°51'07.1	80°41'49.6	60.92	37.071	0.11	0	14.55
4435	0.21	301.83	4432.12	-14.9	48.95	36.34	1632411	494678.9	39°51'07.1	80°41'49.6	60.96	36.594	0.28	-0.27	-15.98
4525	0.28	301.37	4522.11	-15.26	49.15	36.01	1632410	494679.1	39°51'07.1	80°41'49.6	60.93	36.233	0.08	0.08	-0.51
4614	0.32	280.21	4611.11	-15.66	49.31	35.58	1632410	494679.3	39°51'07.1	80°41'49.7	60.8	35.819	0.13	0.04	-23.78
4703	0.39	283.97	4700.11	-16.09	49.42	35.05	1632409	494679.4	39°51'07.1	80°41'49.7	60.59	35.341	0.08	0.08	4.22
4792	0.48	298.08	4789.11	-16.67	49.67	34.42	1632409	494679.7	39°51'07.1	80°41'49.7	60.43	34.723	0.16	0.1	15.85
4882	0.39	296.43	4879.11	-17.3	49.98	33.82	1632408	494680	39°51'07.1	80°41'49.7	60.35	34.08	0.1	-0.1	-1.83
4956	0.44	286.48	4953.1	-17.77	50.18	33.32	1632408	494680.2	39°51'07.1	80°41'49.7	60.23	33.584	0.12	0.07	-13.45
5045	4.09	47.61	5042.03	-18.22	52.42	35.34	1632410	494682.4	39°51'07.2	80°41'49.7	63.21	33.986	4.87	4.1	136.1
5135	10.57	47.28	5131.25	-18.9	60.19	43.78	1632418	494690.1	39°51'07.2	80°41'49.5	74.43	36.032	7.2	7.2	-0.37
5224	13.75	54.25	5218.25	-18.74	71.91	58.37	1632433	494701.6	39°51'07.4	80°41'49.4	92.61	39.065	3.93	3.57	7.83
5314	20.51	56.28	5304.2	-16.56	86.93	80.19	1632455	494716.3	39°51'07.5	80°41'49.1	118.26	42.69	7.54	7.51	2.26
5403	27.08	56.68	5385.59	-12.96	106.73	110.11	1632485	494735.7	39°51'07.7	80°41'48.7	153.35	45.893	7.38	7.38	0.45
5493	34.51	55.1	5462.85	-8.89	132.61	148.2	1632524	494761.1	39°51'08.0	80°41'48.2	198.86	48.177	8.3	8.26	-1.76
5582	41.73	53.85	5532.82	-5.36	164.55	192.85	1632569	494792.4	39°51'08.3	80°41'47.6	253.51	49.528	8.16	8.11	-1.4
5671	50.28	53.1	5594.59	-2.34	202.64	244.24	1632621	494829.8	39°51'08.6	80°41'47.0	317.36	50.317	9.63	9.61	-0.84
5761	56.55	51.28	5648.2	-0.56	246.96	301.27	1632678	494873.4	39°51'09.1	80°41'46.2	389.55	50.657	7.15	6.97	-2.02
5850	56.48	49.25	5697.31	-1.18	294.41	358.35	1632736	494920.1	39°51'09.6	80°41'45.5	463.78	50.595	1.9	-0.08	-2.28
5940	56.55	47.85	5746.97	-4.04	344.09	414.61	1632793	494969	39°51'10.0	80°41'44.8	538.79	50.31	1.3	0.08	-1.56

6029	56.68	48.48	5795.94	-7.38	393.66	469.98	1632849	495017.8	39°51'10.5	80°41'44.1	613.06	50.05	0.61	0.15	0.71
6119	56.44	49.76	5845.54	-9.51	442.81	526.76	1632906	495066.2	39°51'11.0	80°41'43.4	688.15	49.948	1.22	-0.27	1.42
6208	56.5	50.96	5894.7	-10	490.14	583.89	1632964	495112.8	39°51'11.5	80°41'42.6	762.34	49.988	1.13	0.07	1.35
6297	56.52	51.73	5943.81	-9.22	536.5	641.85	1633023	495158.4	39°51'11.9	80°41'41.9	836.54	50.109	0.72	0.02	0.87
6387	56.44	51.43	5993.51	-8.11	583.13	700.64	1633082	495204.2	39°51'12.4	80°41'41.1	911.55	50.23	0.29	-0.09	-0.33
6476	56.38	51.43	6042.75	-7.22	629.35	758.6	1633141	495249.6	39°51'12.9	80°41'40.4	985.68	50.32	0.07	-0.07	0
6565	56.37	50.43	6092.03	-6.98	676.06	816.14	1633199	495295.6	39°51'13.3	80°41'39.6	1059.78	50.363	0.94	-0.01	-1.12
6655	56.44	51.1	6141.83	-6.94	723.47	874.2	1633257	495342.2	39°51'13.8	80°41'38.9	1134.74	50.389	0.62	0.08	0.74
6744	56.74	52.11	6190.84	-5.82	769.61	932.43	1633316	495387.6	39°51'14.2	80°41'38.2	1209.02	50.464	1.01	0.34	1.13
6834	56.85	62.51	6240.22	2.78	810.19	995.67	1633380	495427.3	39°51'14.6	80°41'37.3	1283.65	50.864	9.67	0.12	11.56
6923	59.14	70.28	6287.44	23.18	840.32	1064.76	1633450	495456.5	39°51'14.9	80°41'36.5	1356.41	51.719	7.84	2.57	8.73
7012	59.06	78.07	6333.2	53.52	861.12	1138.15	1633523	495476.3	39°51'15.2	80°41'35.5	1427.2	52.889	7.51	-0.09	8.75
7102	60.74	87.05	6378.4	94.55	871.14	1215.24	1633600	495485.3	39°51'15.3	80°41'34.5	1495.22	54.365	8.83	1.87	9.98
7191	63.39	93.48	6420.13	144.59	870.72	1293.8	1633679	495483.8	39°51'15.2	80°41'33.5	1559.51	56.06	7.04	2.98	7.22
7281	66.79	100.86	6458.07	203.72	860.47	1374.7	1633760	495472.5	39°51'15.1	80°41'32.5	1621.79	57.956	8.34	3.78	8.2
7370	70.2	108.3	6490.73	270.54	839.58	1454.74	1633839	495450.6	39°51'14.9	80°41'31.5	1679.63	60.009	8.67	3.83	8.36
7459	74.07	114.99	6518.06	344.52	808.32	1533.38	1633918	495418.3	39°51'14.6	80°41'30.4	1733.39	62.204	8.37	4.35	7.52
7549	77.37	121.1	6540.27	424.95	767.31	1610.29	1633994	495376.2	39°51'14.2	80°41'29.5	1783.76	64.522	7.53	3.67	6.79
7638	81.35	126.96	6556.72	508.68	718.36	1682.72	1634066	495326.3	39°51'13.7	80°41'28.5	1829.64	66.882	7.86	4.47	6.58
7728	86.12	135.75	6566.55	596.83	659.31	1749.76	1634132	495266.4	39°51'13.2	80°41'27.7	1869.86	69.354	11.06	5.3	9.77
7817	86.95	138.81	6571.93	685.5	594.05	1810.02	1634191	495200.3	39°51'12.5	80°41'26.9	1905.01	71.83	3.56	0.93	3.44
7907	86.89	140.01	6576.77	775.34	525.8	1868.5	1634249	495131.3	39°51'11.8	80°41'26.2	1941.07	74.283	1.33	-0.07	1.33
7996	87.78	143.06	6580.91	864.22	456.2	1923.79	1634303	495061	39°51'11.2	80°41'25.4	1977.14	76.659	3.57	1	3.43
8085	88.09	143.86	6584.12	953.06	384.74	1976.74	1634355	494988.8	39°51'10.4	80°41'24.8	2013.84	78.986	0.96	0.35	0.9
8175	88.55	145.07	6586.76	1042.83	311.54	2029.03	1634407	494914.9	39°51'09.7	80°41'24.1	2052.81	81.271	1.44	0.51	1.34
8264	89.42	144.68	6588.33	1131.59	238.76	2080.23	1634457	494841.5	39°51'09.0	80°41'23.4	2093.88	83.453	1.07	0.98	-0.44
8354	89.6	143.36	6589.1	1221.43	165.93	2133.1	1634509	494768	39°51'08.3	80°41'22.8	2139.54	85.552	1.48	0.2	-1.47
8443	89.57	139.87	6589.75	1310.41	96.18	2188.35	1634563	494697.5	39°51'07.6	80°41'22.1	2190.47	87.483	3.92	-0.03	-3.92
8533	89.72	138.05	6590.3	1400.36	28.3	2247.44	1634621	494628.8	39°51'06.9	80°41'21.3	2247.62	89.279	2.03	0.17	-2.02
8622	89.6	133.62	6590.83	1489.01	-35.52	2309.43	1634682	494564.2	39°51'06.3	80°41'20.5	2309.71	90.881	4.98	-0.13	-4.98
8712	89.6	133.09	6591.46	1578.26	-97.31	2374.87	1634747	494501.5	39°51'05.7	80°41'19.7	2376.87	92.346	0.59	0	-0.59
8801	88.61	136.7	6592.85	1666.77	-160.11	2437.9	1634809	494437.9	39°51'05.1	80°41'18.9	2443.15	93.757	4.21	-1.11	4.06
8891	89.6	142.42	6594.26	1756.7	-228.57	2496.25	1634867	494368.7	39°51'04.4	80°41'18.1	2506.69	95.232	6.45	1.1	6.36
8980	89.72	143.5	6594.79	1845.63	-299.61	2549.86	1634919	494296.9	39°51'03.7	80°41'17.4	2567.4	96.701	1.22	0.13	1.21
9070	90.03	141.8	6594.98	1935.58	-371.15	2604.46	1634973	494224.7	39°51'03.0	80°41'16.7	2630.77	98.11	1.92	0.34	-1.89
9159	89.91	137.1	6595.03	2024.53	-438.76	2662.3	1635030	494156.3	39°51'02.3	80°41'16.0	2698.21	99.358	5.28	-0.13	-5.28
9249	89.69	136.78	6595.34	2114.33	-504.51	2723.75	1635090	494089.7	39°51'01.7	80°41'15.2	2770.08	100.494	0.43	-0.24	-0.36
9339	89.91	138.59	6595.66	2204.2	-571.06	2784.33	1635150	494022.4	39°51'01.0	80°41'14.4	2842.29	101.59	2.03	0.24	2.01
9428	90.03	138.91	6595.7	2293.15	-637.97	2843.02	1635208	493954.7	39°51'00.3	80°41'13.7	2913.72	102.648	0.38	0.13	0.36

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9518	89.94	140.59	6595.73	2383.13	-706.66	2901.16	1635265	493885.3	39°50'59.7	80°41'12.9	2985.99	103.689	1.87	-0.1	1.87
9607	89.97	141.04	6595.8	2472.13	-775.65	2957.4	1635320	493815.5	39°50'59.0	80°41'12.2	3057.42	104.696	0.51	0.03	0.51
9697	89.94	142.66	6595.87	2562.11	-846.42	3012.99	1635375	493744	39°50'58.3	80°41'11.5	3129.62	105.691	1.8	-0.03	1.8
9786	89.94	142.18	6595.96	2651.07	-916.95	3067.27	1635428	493672.8	39°50'57.6	80°41'10.8	3201.4	106.644	0.54	0	-0.54
9875	89.02	138.65	6596.77	2740.05	-985.53	3123.97	1635484	493603.5	39°50'56.9	80°41'10.1	3275.74	107.509	4.1	-1.03	-3.97
9965	88.68	138.2	6598.58	2829.96	-1052.84	3183.68	1635543	493535.4	39°50'56.2	80°41'09.3	3353.25	108.299	0.63	-0.38	-0.5
10054	89.08	144.37	6600.32	2918.9	-1122.24	3239.31	1635598	493465.2	39°50'55.5	80°41'08.6	3428.2	109.108	6.95	0.45	6.93
10143	89.11	145.46	6601.72	3007.65	-1195.06	3290.46	1635648	493391.7	39°50'54.8	80°41'07.9	3500.75	109.96	1.23	0.03	1.22
10233	89.14	145.76	6603.1	3097.31	-1269.32	3341.29	1635698	493316.8	39°50'54.1	80°41'07.3	3574.26	110.801	0.33	0.03	0.33
10322	88.86	144.31	6604.65	3186.05	-1342.24	3392.28	1635748	493243.2	39°50'53.4	80°41'06.6	3648.17	111.587	1.66	-0.31	-1.63
10412	88.89	143.49	6606.42	3275.89	-1414.95	3445.3	1635800	493169.8	39°50'52.7	80°41'05.9	3724.53	112.327	0.91	0.03	-0.91
10501	88.83	144	6608.19	3364.75	-1486.7	3497.92	1635851	493097.4	39°50'51.9	80°41'05.3	3800.75	113.027	0.58	-0.07	0.57
10590	89.45	145.16	6609.52	3453.54	-1559.22	3549.49	1635902	493024.2	39°50'51.2	80°41'04.6	3876.86	113.715	1.48	0.7	1.3
10680	89.54	144.86	6610.32	3543.28	-1632.95	3601.1	1635953	492949.8	39°50'50.5	80°41'03.9	3954.04	114.392	0.35	0.1	-0.33
10769	89.48	140.29	6611.08	3632.21	-1703.61	3655.17	1636006	492878.4	39°50'49.8	80°41'03.2	4032.69	114.989	5.14	-0.07	-5.13
10859	89.38	137.14	6611.97	3722.14	-1771.22	3714.54	1636064	492810	39°50'49.1	80°41'02.5	4115.22	115.493	3.5	-0.11	-3.5
10948	89.35	137.15	6612.96	3810.96	-1836.46	3775.07	1636124	492744	39°50'48.5	80°41'01.7	4198.07	115.942	0.04	-0.03	0.01
11038	89.48	137.35	6613.88	3900.79	-1902.55	3836.16	1636184	492677.1	39°50'47.8	80°41'00.9	4282.04	116.379	0.27	0.14	0.22
11127	89.23	139.13	6614.88	3989.69	-1968.93	3895.43	1636242	492609.9	39°50'47.2	80°41'00.2	4364.75	116.814	2.02	-0.28	2
11217	89.41	138.96	6615.95	4079.65	-2036.9	3954.42	1636300	492541.2	39°50'46.5	80°40'59.4	4448.19	117.253	0.28	0.2	-0.19
11307	89.35	138.91	6616.92	4169.6	-2104.75	4013.54	1636359	492472.6	39°50'45.8	80°40'58.7	4531.94	117.673	0.09	-0.07	-0.06
11396	89.2	139.71	6618.05	4258.56	-2172.23	4071.56	1636416	492404.3	39°50'45.2	80°40'57.9	4614.77	118.08	0.91	-0.17	0.9
11485	89.23	141.02	6619.27	4347.55	-2240.76	4128.32	1636472	492335	39°50'44.5	80°40'57.2	4697.24	118.492	1.47	0.03	1.47
11575	89.23	142.7	6620.48	4437.52	-2311.54	4183.9	1636526	492263.5	39°50'43.8	80°40'56.5	4779.98	118.92	1.87	0	1.87
11664	89.32	143.35	6621.61	4526.44	-2382.63	4237.42	1636579	492191.7	39°50'43.1	80°40'55.8	4861.35	119.348	0.74	0.1	0.73
11754	89.45	143.34	6622.57	4616.35	-2454.83	4291.15	1636632	492118.8	39°50'42.4	80°40'55.1	4943.7	119.773	0.14	0.14	-0.01
11843	89.08	143.26	6623.71	4705.25	-2526.18	4344.33	1636684	492046.8	39°50'41.7	80°40'54.4	5025.42	120.178	0.43	-0.42	-0.09
11933	89.05	141.88	6625.18	4795.19	-2597.64	4399.03	1636738	491974.6	39°50'41.0	80°40'53.7	5108.74	120.562	1.53	-0.03	-1.53
12022	89.01	140.39	6626.69	4884.17	-2666.93	4454.86	1636792	491904.6	39°50'40.3	80°40'53.0	5192.14	120.907	1.67	-0.04	-1.67
12112	89.08	139.49	6628.19	4974.15	-2735.8	4512.78	1636849	491834.9	39°50'39.6	80°40'52.3	5277.29	121.226	1	0.08	-1
12201	89.54	138.83	6629.26	5063.11	-2803.13	4570.98	1636907	491766.8	39°50'38.9	80°40'51.5	5362.03	121.518	0.9	0.52	-0.74
12291	89.42	136.82	6630.08	5152.98	-2869.82	4631.4	1636966	491699.4	39°50'38.3	80°40'50.7	5448.46	121.784	2.24	-0.13	-2.23
12381	89.45	134.43	6630.96	5242.61	-2934.14	4694.33	1637028	491634.2	39°50'37.6	80°40'49.9	5535.87	122.007	2.66	0.03	-2.66
12471	88.09	136.2	6632.9	5332.19	-2998.11	4757.6	1637091	491569.4	39°50'37.0	80°40'49.1	5623.47	122.218	2.48	-1.51	1.97
12560	89.02	143.12	6635.14	5421.09	-3065.88	4815.16	1637147	491500.9	39°50'36.3	80°40'48.4	5708.36	122.486	7.84	1.04	7.78
12650	89.26	146.61	6636.5	5510.83	-3139.47	4866.94	1637198	491426.6	39°50'35.6	80°40'47.7	5791.66	122.824	3.89	0.27	3.88
12740	90.09	146.08	6637.01	5600.4	-3214.38	4916.81	1637247	491351	39°50'34.9	80°40'47.1	5874.29	123.175	1.09	0.92	-0.59
12829	90.12	140.58	6636.84	5689.27	-3285.74	4969.94	1637299	491279	39°50'34.2	80°40'46.4	5957.89	123.47	6.18	0.03	-6.18
12918	89.82	136.04	6636.89	5778.17	-3352.18	5029.12	1637358	491211.8	39°50'33.5	80°40'45.6	6043.94	123.686	5.11	-0.34	-5.1

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13008	89.51	134.17	6637.42	5867.73	-3415.93	5092.64	1637420	491147.2	39°50'32.9	80°40'44.8	6132.18	123.852	2.11	-0.34	-2.08
13097	89.2	133.89	6638.42	5956.11	-3477.79	5156.63	1637483	491084.5	39°50'32.3	80°40'44.0	6219.79	123.997	0.47	-0.35	-0.31
13187	89.45	137.31	6639.48	6045.73	-3542.08	5219.58	1637545	491019.4	39°50'31.6	80°40'43.2	6307.96	124.161	3.81	0.28	3.8
13277	89.35	138.72	6640.42	6135.62	-3608.97	5279.78	1637605	490951.7	39°50'31.0	80°40'42.4	6395.37	124.354	1.57	-0.11	1.57
13366	89.6	142.17	6641.24	6224.6	-3677.58	5336.45	1637660	490882.3	39°50'30.3	80°40'41.7	6480.91	124.572	3.89	0.28	3.88
13455	89.54	142.92	6641.9	6313.56	-3748.23	5390.57	1637714	490811	39°50'29.6	80°40'41.0	6565.63	124.812	0.85	-0.07	0.84
13545	89.72	142.08	6642.49	6403.51	-3819.62	5445.36	1637767	490738.8	39°50'28.9	80°40'40.3	6651.42	125.048	0.95	0.2	-0.93
13635	89.66	144.86	6642.97	6493.4	-3891.94	5498.92	1637820	490665.8	39°50'28.2	80°40'39.6	6736.86	125.289	3.09	-0.07	3.09
13725	89.69	145.25	6643.48	6583.14	-3965.71	5550.47	1637871	490591.4	39°50'27.4	80°40'39.0	6821.63	125.545	0.43	0.03	0.43
13814	89.63	143.13	6644.01	6671.97	-4037.88	5602.54	1637922	490518.5	39°50'26.7	80°40'38.3	6906.01	125.781	2.38	-0.07	-2.38
13904	89.69	138.67	6644.55	6761.95	-4107.7	5659.29	1637978	490448	39°50'26.0	80°40'37.6	6992.91	125.973	4.96	0.07	-4.96
13993	89.51	136.06	6645.17	6850.78	-4173.17	5719.56	1638037	490381.7	39°50'25.4	80°40'36.8	7080.17	126.116	2.94	-0.2	-2.93
14083	89.35	139.88	6646.06	6940.66	-4240.01	5779.81	1638096	490314.1	39°50'24.7	80°40'36.0	7168.25	126.263	4.25	-0.18	4.24
14173	89.42	140.36	6647.03	7030.65	-4309.07	5837.51	1638153	490244.2	39°50'24.1	80°40'35.3	7255.66	126.434	0.54	0.08	0.53
14262	89.57	142.07	6647.81	7119.64	-4378.44	5893.25	1638208	490174.1	39°50'23.4	80°40'34.6	7341.74	126.611	1.93	0.17	1.92
14352	89.57	141.62	6648.49	7209.62	-4449.21	5948.85	1638262	490102.6	39°50'22.7	80°40'33.8	7428.61	126.793	0.5	0	-0.5
14441	89.48	139.42	6649.23	7298.61	-4517.89	6005.44	1638318	490033.2	39°50'22.0	80°40'33.1	7515.09	126.954	2.47	-0.1	-2.47
14531	89.63	138.16	6649.93	7388.55	-4585.6	6064.73	1638377	489964.7	39°50'21.3	80°40'32.4	7603.2	127.093	1.41	0.17	-1.4
14621	89.63	140.22	6650.51	7478.51	-4653.71	6123.54	1638434	489895.8	39°50'20.6	80°40'31.6	7691.22	127.234	2.29	0	2.29
14710	89.54	144.13	6651.15	7567.46	-4724	6178.11	1638488	489824.8	39°50'19.9	80°40'30.9	7777.22	127.403	4.39	-0.1	4.39
14799	89.51	143.7	6651.89	7656.32	-4795.92	6230.53	1638539	489752.2	39°50'19.2	80°40'30.2	7862.59	127.587	0.48	-0.03	-0.48
14889	89.51	141.92	6652.66	7746.26	-4867.61	6284.92	1638593	489679.8	39°50'18.5	80°40'29.5	7949.46	127.757	1.98	0	-1.98
14979	89.14	139.5	6653.72	7836.25	-4937.26	6341.91	1638649	489609.4	39°50'17.8	80°40'28.8	8037.18	127.901	2.72	-0.41	-2.69
15068	88.58	142.81	6655.49	7925.21	-5006.55	6397.71	1638704	489539.4	39°50'17.2	80°40'28.1	8123.81	128.045	3.77	-0.63	3.72
15158	89.02	147.25	6657.38	8014.92	-5080.27	6449.27	1638754	489465	39°50'16.4	80°40'27.4	8209.88	128.228	4.96	0.49	4.93
15247	89.6	144.09	6658.45	8103.57	-5153.75	6499.45	1638804	489390.9	39°50'15.7	80°40'26.8	8294.82	128.413	3.61	0.65	-3.55
15337	88.86	137.82	6659.66	8193.52	-5223.6	6556.11	1638859	489320.3	39°50'15.0	80°40'26.1	8382.64	128.546	7.01	-0.82	-6.97
15427	88.86	138.3	6661.45	8283.4	-5290.54	6616.25	1638919	489252.5	39°50'14.3	80°40'25.3	8471.4	128.647	0.53	0	0.53
15516	89.2	136.45	6662.96	8372.23	-5356.01	6676.51	1638978	489186.3	39°50'13.7	80°40'24.5	8559.36	128.737	2.11	0.38	-2.08
15606	89.2	137.55	6664.21	8462.03	-5421.83	6737.88	1639038	489119.6	39°50'13.1	80°40'23.7	8648.43	128.823	1.22	0	1.22
15695	89.23	142.9	6665.43	8550.98	-5490.2	6794.8	1639094	489050.5	39°50'12.4	80°40'23.0	8735.65	128.938	6.01	0.03	6.01
15785	89.48	142.03	6666.45	8640.94	-5561.56	6849.63	1639148	488978.4	39°50'11.7	80°40'22.3	8823.17	129.075	1.01	0.28	-0.97
15874	89.29	140.99	6667.4	8729.92	-5631.22	6905.01	1639203	488908.1	39°50'11.0	80°40'21.6	8910.1	129.198	1.19	-0.21	-1.17
15964	89.14	141.29	6668.63	8819.91	-5701.29	6961.48	1639258	488837.2	39°50'10.3	80°40'20.9	8998.16	129.317	0.37	-0.17	0.33
16053	89.11	143.18	6669.99	8908.87	-5771.64	7015.97	1639312	488766.2	39°50'09.6	80°40'20.2	9084.91	129.442	2.12	-0.03	2.12
16143	89.32	140.97	6671.23	8998.83	-5842.62	7071.28	1639366	488694.5	39°50'08.9	80°40'19.5	9172.74	129.565	2.47	0.23	-2.46
16232	89.23	138.18	6672.35	9087.79	-5910.36	7128.98	1639423	488626	39°50'08.2	80°40'18.7	9260.39	129.661	3.14	-0.1	-3.13
16321	89.23	138.8	6673.55	9176.72	-5977	7187.96	1639481	488558.6	39°50'07.6	80°40'18.0	9348.33	129.745	0.7	0	0.7
16411	89.2	141.41	6674.78	9266.7	-6046.04	7245.68	1639538	488488.8	39°50'06.9	80°40'17.2	9436.86	129.843	2.9	-0.03	2.9

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16500	89.57	143.15	6675.74	9355.65	-6116.43	7300.12	1639591	488417.6	39°50'06.2	80°40'16.5	9523.78	129.958	2	0.42	1.96
16590	89.17	142.99	6676.73	9445.57	-6188.37	7354.19	1639644	488345	39°50'05.5	80°40'15.8	9611.45	130.08	0.48	-0.44	-0.18
16679	90.28	140.5	6677.16	9534.55	-6258.25	7409.29	1639699	488274.4	39°50'04.8	80°40'15.1	9698.62	130.186	3.06	1.25	-2.8
16768	88	139.98	6678.49	9623.53	-6326.65	7466.2	1639755	488205.2	39°50'04.1	80°40'14.4	9786.25	130.277	2.63	-2.56	-0.58
16858	87.91	141.3	6681.7	9713.47	-6396.19	7523.24	1639811	488134.9	39°50'03.4	80°40'13.7	9874.74	130.371	1.47	-0.1	1.47
16947	88.12	142.19	6684.79	9802.4	-6466.04	7578.32	1639865	488064.4	39°50'02.7	80°40'13.0	9961.95	130.472	1.03	0.24	1
17029	88.15	143.56	6687.45	9884.3	-6531.38	7627.78	1639913	487998.4	39°50'02.1	80°40'12.3	10042.01	130.572	1.67	0.04	1.67
17054	88.15	143.56	6688.26	9909.26	-6551.49	7642.62	1639928	487978.1	39°50'01.9	80°40'12.1	10066.36	130.604	0	0	0

HOLE AND CASING SECTIONS Ref Wellbore: Taylor C 9H AWB Ref Wellpath: Taylor C 9H AWP Proj: 17054'

String/Dian	Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]	[ft]
17.5in Ope	25	558.33	533.33	25	558.31	0	0	3.37	0.06
13.375in C:	25	558.33	533.33	25	558.31	0	0	3.37	0.06
12.25in Op	558.33	2273.33	1715	558.31	2270.6	3.37	0.06	42.93	40.49
9.625in Cas	25	2211	2186	25	2208.29	0	0	44.33	40.96
8.5in Open	2273.3	17054	14780.7	2270.57	6688.26	42.93	40.49	-6551.49	7642.62
5.5in Casin	25	17054	17029	25	6688.26	0	0	-6551.49	7642.62

T A R G E T S

Name	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape	Comment
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			
Taylor C 9H	6575	603.31	1800.47	1634182	495209.7	39°51'12.6	80°41'27.0	point	
Taylor C 9H	6687.86	-6548.69	7645.96	1639931	487980.8	39°50'01.9	80°40'12.1	point	
Taylor C LL	7008.33	-18.86	-56.96	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	
Taylor C LL	7008.33	-18.86	-56.96	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	
Taylor C LL	7008.33	-18.86	-56.96	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	

WELLPATH COMPOSITION Ref Wellbore: Taylor C 9H AWB Ref Wellpath: Taylor C 9H AWP Proj: 17054'

Log Name/	Start MD	End MD	Pos Unc	Model
	[ft]	[ft]		
01_Gyroda	25	506.33	BHI	Generic gyro - northseeking (Standard)
02_APS EM	506.33	2193.33	BHI	NaviTrak (Axial)
03_BHI Na	2193.33	4882	BHI	NaviTrak (Magcorr+IFR1)
04_BH AT C	4882	17029	BHI	AutoTrak Curve (IFR1, Short)
Projection	17029	17054		Blind Drilling (std)

C O M M E N T S



Wellpath general comments

API: 47-051-01826-0000

BH Job #: 8951503

Rig: Precision 560

Duration: 1/2/2018-1/9/2018

Gyrodata MS Gyro <17-1/2> (50'-498')"

APS EM <12-1/4> (498')(595'-2185')"

BH NaviTrak+IFR <8-1/2> (2193.33')(2293'-4882')"

BH AT Curve+IFR <8-1/2> (4882')(4956'-17029')"

Projected MD at TD: 17054'

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