

ACTUAL WELLPATH REPORT (CSV version)
 Prepared by Baker Hughes
 Software System: WellArchitect® 4.0.1

RECEIVED Gas
 Office of Oil and Gas
 FEB 20 2018
 M D D
 Department of Environmental Protection

REFERENCE WELLPATH IDENTIFICATION

Operator NOBLE ENERGY
 Area Tyler County, WV
 Field Tyler
 Facility SHR-4D Pad
 Slot Slot F
 Well SHR-40F-HS
 Wellbore SHR-40F-HS AWB
 Wellpath SHR-40F-HS AWP Proj: 16181'
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
 North Refe Grid
 Scale 0.999947
 Convergen 0.85° West
 Software S WellArchitect® 4.0.1
 User Edsaryar
 Report Ger 14/Jul/2015 at 17:03
 DataBase:/ WellArchitectEasternDB/ev3839.xml

WELLPATH	Local North	Local East	Easting	Northing	Latitude	Longitude
	[ft]	[ft]	[US ft]	[US ft]		
Slot Locatir	-28.8	9.27	1622932	336013.7	39°24'53.5	80°50'04.746°W
Facility Ref			1622923	336042.5	39°24'53.8	80°50'04.870°W
Field Refer			609601.2	0	38°23'48.7	84°21'09.765°W

WELLPATH DATUM

Calculation Minimum curvature
 Horizontal Slot
 Vertical Re Precision 542 (RKB)
 MD Refere Precision 542 (RKB)
 Field Vertic Mean Sea Level
 Precision 5 788.80ft
 Precision 5 788.80ft
 Precision 5 19.40ft
 Section Ori N 0.00, E 0.00 ft
 Section Azi 160.00°

WELLPATH DATA † = interpolated/extrapolated station

	MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dis	Closure Dir	DLS	Build Rate	Turn Rate
	[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
†	0	0	209.14	0	0	0	0	0	1622932	336013.7	39°24'53.5	80°50'04.7	0	0	0	0
SHL	19.4	0	209.14	19.4	0	0	0	0	1622932	336013.7	39°24'53.5	80°50'04.7	0	0	0	0
	119.4	0.28	209.14	119.4	0.16	-0.21	-0.12	1622932	336013.5	39°24'53.5	80°50'04.7	0.24	209.14	0.28	0.28	0
	219.4	0.25	256.29	219.4	0.3	-0.48	-0.45	1622931	336013.2	39°24'53.5	80°50'04.7	0.66	223.234	0.21	-0.03	47.15
	319.4	0.26	295.81	319.4	0.11	-0.43	-0.87	1622931	336013.2	39°24'53.5	80°50'04.7	0.97	243.519	0.17	0.01	39.52
	419.4	0.28	110.57	419.4	0.11	-0.42	-0.84	1622931	336013.2	39°24'53.5	80°50'04.7	0.94	243.559	0.54	0.02	174.76
	519.4	0.43	114.26	519.4	0.53	-0.66	-0.27	1622932	336013	39°24'53.5	80°50'04.7	0.71	202.348	0.15	0.15	3.69
	619.4	0.6	132.05	619.39	1.25	-1.16	0.46	1622932	336012.5	39°24'53.5	80°50'04.7	1.25	158.42	0.23	0.17	17.79

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719.4	0.7	146.21	719.39	2.31	-2.02	1.19	1622933	3360116	3924534	805004.7	2.35	149.547	0.19	0.1	14.16	
819.4	0.8	142.37	819.38	3.56	-3.08	1.95	1622934	3360106	3924534	805004.7	3.65	147.619	0.11	0.1	-3.84	
919.4	0.88	151.43	919.37	4.99	-4.31	2.75	1622935	3360094	3924534	805004.7	5.11	147.476	0.15	0.08	9.06	
1019.4	0.93	175.37	1019.35	6.53	-5.79	3.18	1622935	3360079	3924534	805004.7	6.61	151.229	0.38	0.05	23.94	
1119.4	1.01	184.7	1119.34	8.11	-7.48	3.17	1622935	3360062	3924534	805004.7	8.13	157.006	0.18	0.08	9.33	
1219.4	0.93	192.16	1219.33	9.6	-9.15	2.93	1622935	3360045	3924534	805004.7	9.61	162.242	0.15	-0.08	7.46	
1319.4	0.68	187.57	1319.32	10.82	-10.53	2.68	1622935	3360031	3924534	805004.7	10.87	165.716	0.26	-0.25	-4.59	
1419.4	0.67	183.63	1419.31	11.88	-11.71	2.57	1622934	336002	3924534	805004.7	11.98	167.632	0.05	-0.01	-3.94	
1519.4	0.72	181.68	1519.3	13	-12.92	2.51	1622934	3360004	3924534	805004.7	13.16	168.998	0.06	0.05	-1.95	
1619.4	0.84	170.75	1619.29	14.3	-14.27	2.61	1622934	3359994	3924534	805004.7	14.51	169.631	0.19	0.12	-10.93	
1719.4	0.81	154.06	1719.28	15.72	-15.63	3.04	1622935	335998	3924534	805004.7	15.92	169	0.24	-0.03	-16.69	
1819.4	0.59	139.63	1819.27	16.91	-16.66	3.68	1622936	335997	3924534	805004.6	17.06	167.539	0.28	-0.22	-14.43	
1919.4	0.31	164.68	1919.27	17.66	-17.31	4.09	1622936	3359964	3924534	805004.6	17.78	166.719	0.34	-0.28	25.05	
2019.4	0.83	176.01	2019.27	18.63	-18.29	4.21	1622936	3359954	3924534	805004.6	18.77	167.047	0.53	0.52	11.33	
2119.4	0.81	163.76	2119.26	20.03	-19.69	4.46	1622936	335994	3924534	805004.6	20.19	167.252	0.18	-0.02	-12.25	
2264	0.75	172.93	2263.84	21.97	-21.61	4.86	1622937	335992.1	3924534	805004.6	22.15	167.333	0.1	-0.04	6.34	
2354	2.86	76.69	2353.8	22.81	-21.68	7.12	1622939	335992	3924534	805004.6	22.82	161.831	3.37	2.34	-106.93	
2443	6.09	66.2	2442.52	22.75	-19.26	13.6	1622945	3359944	3924534	805004.5	23.58	144.784	3.73	3.63	-11.79	
2533	8.51	63.15	2531.79	21.64	-14.33	23.91	1622956	3359993	3924534	805004.4	27.87	120.936	2.72	2.69	-3.39	
2623	9.91	68.71	2620.62	20.67	-8.51	37.07	1622969	336005	2	3924534	805004.2	38.03	102.929	1.84	1.56	6.18
2712	13.15	72.75	2707.82	20.99	-2.72	53.88	1622986	336010.9	3924534	805004.0	53.94	92.895	3.75	3.64	4.54	
2802	16.92	74.9	2794.72	22.6	3.73	76.31	1623008	3360174	3924534	805003.7	76.4	87.205	4.23	4.19	2.39	
2891	20.89	76.57	2878.91	25.52	10.79	104.25	1623036	3360245	3924534	805003.4	104.81	84.093	4.5	4.46	1.88	
2981	25.1	74.27	2961.74	28.78	19.69	138.25	1623070	3360334	3924534	805002.9	139.65	81.893	4.78	4.68	-2.56	
3071	28.88	71.3	3041.92	30.69	31.84	177.23	1623109	336045.5	3924534	805002.4	180.07	79.815	4.46	4.2	-3.3	
3161	31.89	71.96	3119.55	32	46.18	220.43	1623152	336059.8	3924534	805001.9	225.21	78.169	3.36	3.34	0.73	
3250	34.96	73.9	3193.83	34.54	60.53	267.29	1623199	336074.2	3924534	805001.3	274.06	77.24	3.65	3.45	2.18	
3340	38.5	76.52	3265.95	39.48	74.22	319.33	1623251	336087.9	3924534	805000.6	327.84	76.916	4.3	3.93	2.91	
3430	43.05	75.69	3334.09	45.71	88.35	376.37	1623308	336102	3924534	804999.9	386.6	76.79	5.09	5.06	-0.92	
3519	45.76	72.75	3397.67	50.25	105.31	436.27	1623368	336119	3924534	804999.2	448.8	76.429	3.82	3.04	-5.1	
3609	46.3	68.16	3460.18	50.75	126.98	497.27	1623429	336140.6	3924534	804998.4	513.23	75.675	3.72	0.6	-3.05	
3789	30.55	62.67	3600.79	42.77	172.49	598.98	1623531	336186.1	3924534	804997.1	623.32	75.935	8.95	-8.75	0.67	
3878	30.96	63.27	3677.27	37.2	193.17	639.52	1623571	336206.8	3924534	804995.6	668.06	73.192	0.58	0.46	0.56	
3967	31.71	64.52	3753.29	32.29	213.53	681.08	1623613	336227.2	3924534	804995.1	713.77	72.593	1.12	0.84	1.4	
4057	31.55	69.52	3829.93	29.83	231.95	724.5	1623656	336245.6	3924534	804995.5	780.72	72.247	2.92	-0.18	5.56	
4147	30.42	71.38	3907.09	30.58	247.09	768.28	1623700	336260.7	3924534	804995.0	807.03	72.172	2.06	-1.26	3.18	
4236	30.89	67.63	3983.67	30.57	262.6	810.88	1623743	336276.3	3924534	804995.4	852.35	72.055	2.77	0.53	-5.34	
4326	33.22	68.53	4059.94	28.98	280.42	852.2	1623787	336294.1	3924534	804995.9	900	71.845	2.64	2.59	1	
4415	36.68	69.78	4132.88	28.26	298.54	902.84	1623835	336312.2	3924534	804995.3	950.92	71.703	3.97	3.89	1.4	
4505	37.74	69.93	4204.56	28.12	317.28	953.94	1623886	336330.9	3924534	804995.6	1005.32	71.603	1.18	1.18	0.17	
4594	37.01	70.23	4275.28	28.19	335.69	1004.73	1623937	336349.3	3924534	804995.2	1059.33	71.525	0.85	-0.82	0.34	
4684	35.71	72.99	4347.77	29.67	352.54	1055.35	1623987	336366.2	3924534	804995.1	1112.67	71.528	2.32	-1.44	3.07	
4773	36.42	72.82	4419.71	33.33	385.19	1105.42	1624037	336383.8	3924534	804995.0	1165.05	71.59	0.81	0.8	-0.19	
4863	36.04	69.31	4492.31	31.81	404.15	1155.42	1624088	336401.6	3924534	804994.9	1218.22	71.567	2.34	-0.42	-3.9	
4952	34.38	67.27	4565.03	31.81	423.15	1203.4	1624135	336417.8	3924534	804994.4	1269.45	71.436	2.29	-1.87	-2.29	
5042	31.7	67.16	4640.47	29.43	439.9	1248.64	1624180	336436.8	3924534	804994.8	1318.39	71.279	2.98	-2.98	-0.12	
5132	32.04	71.51	4716.91	28.88	452.2	1298.07	1624225	336453.5	3924534	804994.3	1365.85	71.212	2.58	0.38	4.83	
5221	31.4	78.04	4792.64	33.75	461.07	1338.16	1624270	336465.8	3924534	804994.7	1412.5	71.329	3.92	-0.72	7.34	
5311	32.22	80.38	4869.13	40.35	461.07	1384.75	1624317	336474.7	3924534	804994.7	1459.49	71.584	1.65	0.91	2.6	
5400	34.2	75.64	4943.6	47.09	471.24	1432.39	1624364	336484.9	3924534	804994.6	1507.91	71.789	3.67	2.22	-5.33	
5490	35.51	68.77	5017.48	49.01	486.98	1481.28	1624413	336500.6	3924534	804994.5	1559.27	71.801	4.6	1.46	-7.63	
5580	37.56	66.31	5089.79	46.69	507.47	1530.77	1624463	336521.1	3924534	804994.3	1612.7	71.659	2.8	2.28	-2.73	
5669	37.58	67.8	5160.34	43.9	528.63	1580.74	1624513	336542.3	3924534	804994.4	1666.79	71.509	1.02	0.02	1.67	
5759	36.9	69.74	5231.99	42.72	548.35	1631.5	1624563	336562	3924534	804994.0	1721.19	71.422	1.51	-0.76	2.16	
5848	35.55	65.25	5303.8	40.46	568.44	1680.07	1624612	336582.1	3924534	804994.4	1773.63	71.307	3.34	-1.52	-5.04	

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5938	33.35	64.31	5378.01	35.84	590.12	1726.13	1624658	336603.8	39°24'59.6	80°49'42.8	1824.22	71.126	2.51	-2.44	-1.04
6027	29.39	67.78	5453.99	32.57	608.99	1768.41	1624700	336622.6	39°24'59.7	80°49'42.3	1870.34	70.998	4.89	-4.45	3.9
6085	28.22	69.93	5504.81	32	619.08	1794.47	1624726	336632.7	39°24'59.8	80°49'42.0	1898.26	70.966	2.69	-2.02	3.71
6127	28.36	70.25	5541.8	32.03	625.86	1813.19	1624745	336639.5	39°24'59.9	80°49'41.7	1918.16	70.957	0.49	0.33	0.76
6216	34.13	67.96	5617.86	31.23	642.39	1856.26	1624788	336656	39°25'00.1	80°49'41.2	1964.27	70.911	6.62	6.48	-2.57
6306	39.47	70.2	5689.9	30.43	661.57	1906.62	1624838	336675.2	39°25'00.3	80°49'40.5	2018.13	70.864	6.12	5.93	2.49
6395	39.81	70.92	5758.44	30.99	680.46	1960.16	1624892	336694.1	39°25'00.5	80°49'39.9	2074.91	70.856	0.64	0.38	0.81
6485	39.89	71.43	5827.53	32.17	699.07	2014.75	1624947	336712.7	39°25'00.7	80°49'39.2	2132.58	70.864	0.37	0.09	0.57
6575	40.92	79.8	5896.12	37.91	713.49	2071.15	1625003	336727.1	39°25'00.8	80°49'38.4	2190.61	70.992	6.13	1.14	9.3
6665	41.49	87.5	5963.87	51.9	720.02	2129.99	1625062	336733.6	39°25'00.9	80°49'37.7	2248.39	71.323	5.67	0.63	8.56
6754	44.87	93.37	6028.79	73.24	719.46	2190.82	1625123	336733.1	39°25'00.9	80°49'36.9	2305.93	71.82	5.9	3.8	6.6
6844	50.42	94.38	6089.4	100.17	714.94	2257.15	1625189	336728.6	39°25'00.9	80°49'36.1	2367.67	72.425	6.22	6.17	1.12
6934	52.28	97.49	6145.62	130.92	707.65	2327.04	1625259	336721.3	39°25'00.8	80°49'35.2	2432.26	73.086	3.4	2.07	3.46
7023	54.25	106.02	6198.91	168.46	693.07	2396.74	1625328	336706.7	39°25'00.7	80°49'34.3	2494.94	73.872	7.99	2.21	9.58
7113	59.34	116.19	6248.27	217.99	665.84	2466.75	1625398	336679.5	39°25'00.4	80°49'33.4	2555.04	74.894	11.01	5.66	11.3
7203	66.76	123.2	6289.07	279.18	626.02	2536.25	1625468	336639.7	39°25'00.0	80°49'32.5	2612.37	76.135	10.77	8.24	7.79
7292	72.47	130.21	6320.1	348.88	576.14	2603	1625535	336589.8	39°24'59.5	80°49'31.6	2666	77.52	9.78	6.42	7.88
7382	74.64	135.54	6345.59	425.68	517.42	2666.21	1625598	336531.1	39°24'59.0	80°49'30.8	2715.96	79.017	6.17	2.41	5.92
7471	78.66	143.11	6366.16	506.63	451.78	2722.56	1625654	336465.4	39°24'58.3	80°49'30.1	2759.79	80.578	9.43	4.52	8.51
7561	83.43	151.11	6380.19	593.21	377.19	2770.75	1625702	336390.8	39°24'57.6	80°49'29.5	2796.31	82.248	10.25	5.3	8.89
7650	87.07	156.58	6387.57	681.34	297.62	2809.81	1625742	336311.3	39°24'56.8	80°49'29.0	2825.53	83.954	7.36	4.09	6.15
7740	90.15	158.94	6389.75	771.23	214.35	2843.86	1625776	336228	39°24'56.0	80°49'28.5	2851.93	85.69	4.31	3.42	2.62
7830	90.15	162.57	6389.51	861.21	129.4	2873.52	1625805	336143.1	39°24'55.2	80°49'28.1	2876.43	87.422	4.03	0	4.03
7919	90.15	163.44	6389.28	950.08	44.29	2899.53	1625831	336057.9	39°24'54.3	80°49'27.8	2899.87	89.125	0.98	0	0.98
8009	89.91	161.57	6389.23	1039.99	-41.55	2926.59	1625858	335972.1	39°24'53.5	80°49'27.4	2926.88	90.813	2.09	-0.27	-2.08
8098	89.75	160.7	6389.5	1128.97	-125.76	2955.36	1625887	335887.9	39°24'52.7	80°49'27.0	2958.04	92.437	0.99	-0.18	-0.98
8188	89.75	160.1	6389.89	1218.97	-210.55	2985.55	1625917	335803.1	39°24'51.8	80°49'26.6	2992.97	94.034	0.67	0	-0.67
8278	89.57	156.99	6390.42	1308.93	-294.3	3018.47	1625950	335719.4	39°24'51.0	80°49'26.2	3032.78	95.569	3.46	-0.2	-3.46
8367	89.48	156.42	6391.16	1397.78	-376.04	3053.66	1625985	335637.6	39°24'50.2	80°49'25.7	3076.73	97.02	0.65	-0.1	-0.64
8457	89.78	160.81	6391.74	1487.73	-459.82	3086.47	1626018	335553.9	39°24'49.4	80°49'25.3	3120.54	98.474	4.89	0.33	4.88
8546	89.91	162.91	6391.98	1576.68	-544.39	3114.18	1626046	335469.3	39°24'48.5	80°49'24.9	3161.41	99.916	2.36	0.15	2.36
8636	89.85	168.2	6392.17	1666.22	-631.52	3136.62	1626068	335382.2	39°24'47.7	80°49'24.6	3199.57	101.384	5.88	-0.07	5.88
8725	90.4	166.93	6391.98	1754.44	-718.43	3155.79	1626087	335295.3	39°24'46.8	80°49'24.4	3236.53	102.825	1.56	0.62	-1.43
8815	90.28	156.96	6391.44	1844.28	-803.89	3183.65	1626115	335209.8	39°24'46.0	80°49'24.0	3283.57	104.171	11.08	-0.13	-11.08
8904	90.37	155.48	6390.94	1933.08	-885.33	3219.53	1626151	335128.4	39°24'45.2	80°49'23.5	3339.04	105.376	1.67	0.1	-1.66
8994	90	159.1	6390.65	2022.96	-968.34	3254.27	1626186	335045.4	39°24'44.4	80°49'23.1	3395.28	106.571	4.04	-0.41	4.02
9084	89.78	156.56	6390.82	2112.89	-1051.67	3288.23	1626220	334962	39°24'43.6	80°49'22.6	3452.31	107.736	2.83	-0.24	-2.82
9173	89.75	157.75	6391.19	2201.78	-1133.69	3322.78	1626254	334880	39°24'42.7	80°49'22.2	3510.86	108.839	1.34	-0.03	1.34
9262	89.75	159.32	6391.57	2290.75	-1216.51	3355.35	1626287	334797.2	39°24'41.9	80°49'21.7	3569.07	109.929	1.76	0	1.76
9352	89.94	163.83	6391.82	2380.69	-1301.88	3383.79	1626315	334711.9	39°24'41.1	80°49'21.3	3625.59	111.044	5.02	0.21	5.01
9441	90.62	162.94	6391.38	2469.53	-1387.16	3409.23	1626341	334626.6	39°24'40.3	80°49'21.0	3680.64	112.141	1.26	0.76	-1
9531	90.12	159.11	6390.8	2559.5	-1472.25	3438.49	1626370	334541.5	39°24'39.4	80°49'20.6	3740.42	113.179	4.29	-0.56	-4.26
9620	90.18	158.17	6390.57	2648.47	-1555.14	3470.91	1626403	334458.6	39°24'38.6	80°49'20.2	3803.37	114.135	1.06	0.07	-1.06
9710	90.15	157.86	6390.31	2738.42	-1638.59	3504.6	1626436	334375.2	39°24'37.8	80°49'19.7	3868.75	115.059	0.35	-0.03	-0.34
9799	90.15	158.88	6390.08	2827.38	-1721.32	3537.41	1626469	334292.4	39°24'37.0	80°49'19.3	3933.98	115.948	1.15	0	1.15
9889	90.18	158.88	6389.82	2917.36	-1805.28	3569.84	1626502	334208.5	39°24'36.1	80°49'18.9	4000.34	116.826	0.03	0.03	0
9978	90.22	158.67	6389.51	3006.34	-1888.24	3602.06	1626534	334125.5	39°24'35.3	80°49'18.5	4066.97	117.664	0.24	0.04	-0.24
10068	90.18	159.85	6389.19	3096.33	-1972.41	3633.93	1626566	334041.4	39°24'34.5	80°49'18.0	4134.71	118.492	1.31	-0.04	1.31
10157	90.15	160.33	6388.94	3185.33	-2056.09	3664.24	1626596	333957.7	39°24'33.7	80°49'17.6	4201.68	119.298	0.54	-0.03	0.54
10247	90.15	158.21	6388.7	3275.32	-2140.25	3696.09	1626628	333873.5	39°24'32.9	80°49'17.2	4271.04	120.073	2.36	0	-2.36
10336	89.88	159.07	6388.68	3364.29	-2223.14	3728.51	1626660	333790.6	39°24'32.0	80°49'16.8	4340.98	120.806	1.01	-0.3	0.97
10426	89.82	160.43	6388.91	3454.29	-2307.57	3759.66	1626691	333706.2	39°24'31.2	80°49'16.4	4411.34	121.54	1.51	-0.07	1.51
10515	89.97	160.82	6389.08	3543.28	-2391.53	3789.18	1626721	333622.3	39°24'30.4	80°49'16.0	4480.77	122.258	0.47	0.17	0.44
10605	89.72	160.23	6389.32	3633.28	-2476.38	3819.19	1626751	333537.4	39°24'29.6	80°49'15.6	4551.78	122.96	0.71	-0.28	-0.66
10695	89.66	158.25	6389.81	3723.27	-2560.54	3851.09	1626783	333453.3	39°24'28.7	80°49'15.2	4624.63	123.619	2.2	-0.07	-2.2

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10785	89.63	156.31	6390.36	3813.16	-2643.55	3885.84	1626817	333370.3	39°24'27.9	80°49'14.7	4699.8	124.228	2.16	-0.03	-2.16
10874	89.85	158.13	6390.77	3902.05	-2725.6	3920.3	1626852	333288.2	39°24'27.1	80°49'14.2	4774.69	124.809	2.06	0.25	2.04
10963	89.82	159.85	6391.02	3991.03	-2808.68	3952.21	1626884	333205.1	39°24'26.3	80°49'13.8	4848.57	125.4	1.93	-0.03	1.93
11053	89.72	160.82	6391.39	4081.03	-2893.43	3982.5	1626914	333120.4	39°24'25.5	80°49'13.4	4922.62	126	1.08	-0.11	1.08
11143	89.78	162.9	6391.78	4170.97	-2978.95	4010.51	1626942	333034.9	39°24'24.6	80°49'13.0	4995.84	126.604	2.31	0.07	2.31
11232	89.78	159.27	6392.12	4259.94	-3063.13	4039.36	1626971	332950.7	39°24'23.8	80°49'12.7	5069.44	127.174	4.08	0	-4.08
11321	89.78	158.96	6392.46	4348.93	-3146.28	4071.09	1627003	332867.6	39°24'23.0	80°49'12.2	5145.18	127.698	0.35	0	-0.35
11411	89.72	158.17	6392.85	4438.9	-3230.05	4103.98	1627036	332783.8	39°24'22.1	80°49'11.8	5222.63	128.205	0.88	-0.07	-0.88
11501	89.72	158.78	6393.29	4528.87	-3313.78	4137	1627069	332700.1	39°24'21.3	80°49'11.4	5300.55	128.695	0.68	0	0.68
11591	89.75	159.29	6393.71	4618.85	-3397.82	4169.2	1627101	332616	39°24'20.5	80°49'10.9	5378.42	129.179	0.57	0.03	0.57
11680	89.66	161.44	6394.17	4707.85	-3481.64	4199.1	1627131	332532.2	39°24'19.7	80°49'10.5	5454.75	129.663	2.42	-0.1	2.42
11770	89.75	163.62	6394.63	4797.75	-3567.48	4226.12	1627158	332446.4	39°24'18.8	80°49'10.2	5530.55	130.169	2.42	0.1	2.42
11859	89.78	164.23	6395	4886.54	-3653	4250.76	1627182	332360.9	39°24'18.0	80°49'09.9	5604.76	130.675	0.69	0.03	0.69
11949	90.22	163	6395	4976.36	-3739.34	4276.15	1627208	332274.5	39°24'17.1	80°49'09.5	5680.51	131.169	1.45	0.49	-1.37
12038	90.34	158.83	6394.56	5065.33	-3823.43	4305.25	1627237	332190.4	39°24'16.3	80°49'09.1	5757.93	131.608	4.69	0.13	-4.69
12128	90.31	156.94	6394.05	5155.26	-3906.8	4339.13	1627271	332107.1	39°24'15.5	80°49'08.7	5838.76	131.999	2.1	-0.03	-2.1
12217	89.91	159.36	6393.88	5244.21	-3989.4	4372.25	1627304	332024.5	39°24'14.7	80°49'08.2	5918.77	132.379	2.76	-0.45	2.72
12307	89.88	158.96	6394.05	5334.2	-4073.51	4404.26	1627336	331940.4	39°24'13.9	80°49'07.8	5999.26	132.766	0.45	-0.03	-0.44
12397	89.82	158.66	6394.28	5424.18	-4157.43	4436.8	1627368	331856.5	39°24'13.0	80°49'07.4	6080.24	133.138	0.34	-0.07	-0.33
12486	89.78	160.42	6394.59	5513.17	-4240.81	4467.91	1627400	331773.1	39°24'12.2	80°49'07.0	6160.09	133.506	1.98	-0.04	1.98
12576	89.82	161.83	6394.91	5603.15	-4325.97	4497.02	1627429	331687.9	39°24'11.4	80°49'06.6	6239.97	133.889	1.57	0.04	1.57
12666	89.88	163.41	6395.14	5693.05	-4411.86	4523.9	1627456	331602	39°24'10.5	80°49'06.2	6319.03	134.282	1.76	0.07	1.76
12755	89.94	164.25	6395.28	5781.85	-4497.33	4548.69	1627480	331516.6	39°24'09.7	80°49'05.9	6396.61	134.675	0.95	0.07	0.94
12845	89.91	162.56	6395.4	5871.69	-4583.58	4574.39	1627506	331430.3	39°24'08.8	80°49'05.6	6475.67	135.058	1.88	-0.03	-1.88
12934	89.85	159.57	6395.59	5960.67	-4667.76	4603.27	1627535	331346.2	39°24'08.0	80°49'05.2	6555.76	135.399	3.36	-0.07	-3.36
13024	89.88	157.22	6395.8	6050.62	-4751.43	4636.4	1627568	331262.5	39°24'07.2	80°49'04.7	6638.7	135.702	2.61	0.03	-2.61
13114	89.91	158.67	6395.96	6140.56	-4834.84	4670.2	1627602	331179.1	39°24'06.4	80°49'04.3	6722.08	135.992	1.61	0.03	1.61
13203	90.31	163.37	6395.79	6229.52	-4918.98	4699.14	1627631	331095	39°24'05.5	80°49'03.9	6802.81	136.309	5.3	0.45	5.28
13293	90.46	158.68	6395.19	6319.48	-5004.06	4728.39	1627660	331009.9	39°24'04.7	80°49'03.5	6884.64	136.622	5.21	0.17	-5.21
13382	90.34	158.88	6394.57	6408.46	-5087.02	4760.6	1627692	330926.9	39°24'03.9	80°49'03.1	6967.15	136.898	0.26	-0.13	0.22
13472	90.46	157.24	6393.94	6498.4	-5170.5	4794.23	1627726	330843.4	39°24'03.1	80°49'02.7	7051.15	137.162	1.83	0.13	-1.82
13562	90.34	157.81	6393.31	6588.32	-5253.66	4828.63	1627760	330760.3	39°24'02.3	80°49'02.2	7135.59	137.414	0.67	-0.13	0.63
13651	90.4	160.74	6392.73	6677.3	-5336.89	4860.12	1627792	330677.1	39°24'01.4	80°49'01.8	7218.26	137.677	3.29	0.07	3.29
13741	90.8	164.27	6391.79	6767.19	-5422.71	4887.17	1627819	330591.2	39°24'00.6	80°49'01.4	7300.02	137.973	3.95	0.44	3.92
13830	90.92	164.91	6390.46	6855.9	-5508.5	4910.82	1627842	330505.5	39°23'59.7	80°49'01.1	7379.69	138.283	0.73	0.13	0.72
13919	91.05	161.61	6388.93	6944.73	-5593.7	4936.45	1627868	330420.3	39°23'58.9	80°49'00.8	7460.43	138.572	3.71	0.15	-3.71
14009	91.39	163.35	6387.01	7034.62	-5679.51	4963.54	1627895	330334.5	39°23'58.1	80°49'00.4	7542.78	138.849	1.97	0.38	1.93
14099	90.83	157.13	6385.26	7124.56	-5764.15	4993.94	1627926	330249.8	39°23'57.2	80°49'00.0	7626.59	139.095	6.94	-0.62	-6.91
14189	90.77	155.87	6384.01	7214.38	-5846.68	5029.83	1627961	330167.3	39°23'56.4	80°48'59.5	7712.51	139.295	1.4	-0.07	-1.4
14278	90.74	155.46	6382.83	7303.12	-5927.76	5066.5	1627998	330086.2	39°23'55.6	80°48'59.0	7797.93	139.479	0.46	-0.03	-0.46
14367	90.83	157.86	6381.61	7391.95	-6009.46	5101.75	1628033	330004.5	39°23'54.8	80°48'58.6	7882.99	139.67	2.7	0.1	2.7
14457	90.74	159.3	6380.38	7481.91	-6093.24	5134.62	1628066	329920.8	39°23'54.0	80°48'58.1	7968.18	139.88	1.6	-0.1	1.6
14547	90.37	158.87	6379.51	7571.9	-6177.3	5166.74	1628098	329836.7	39°23'53.2	80°48'57.7	8053.22	140.091	0.63	-0.41	-0.48
14636	90.46	159.9	6378.87	7660.89	-6260.6	5198.08	1628130	329754.3	39°23'52.4	80°48'57.3	8137.27	140.298	1.16	0.1	1.16
14726	90.95	161.63	6377.76	7750.87	-6345.57	5227.72	1628159	329668.4	39°23'51.5	80°48'56.9	8221.64	140.517	2	0.54	1.92
14816	90.25	159.8	6376.82	7840.85	-6430.51	5257.44	1628189	329583.5	39°23'50.7	80°48'56.5	8306.15	140.731	2.18	-0.78	-2.03
14905	89.14	152.21	6377.29	7929.57	-6511.75	5293.61	1628225	329502.3	39°23'49.9	80°48'56.0	8391.98	140.891	8.62	-1.25	-8.53
14995	89.75	153.09	6378.16	8018.82	-6591.69	5334.95	1628267	329422.3	39°23'49.1	80°48'55.5	8480.1	141.015	1.19	0.68	0.98
15085	88.58	159.24	6379.47	8108.57	-6673.96	5371.3	1628303	329340.1	39°23'48.3	80°48'55.0	8566.95	141.172	6.96	-1.3	6.83
15174	89.05	162.77	6381.32	8197.52	-6758.09	5400.26	1628332	329255.9	39°23'47.5	80°48'54.6	8650.7	141.372	4	0.53	3.97
15265	89.32	168.24	6382.61	8288.06	-6846.15	5423.03	1628355	329167.9	39°23'46.6	80°48'54.3	8733.78	141.616	6.02	0.3	6.01
15353	89.35	165.29	6383.63	8375.43	-6931.79	5443.17	1628375	329082.2	39°23'45.8	80°48'54.1	8813.5	141.859	3.35	0.03	-3.35
15443	89.72	163.14	6384.36	8465.18	-7018.39	5467.65	1628399	328995.7	39°23'44.9	80°48'53.7	8896.8	142.08	2.42	0.41	-2.39
15533	89.78	161.15	6384.76	8555.11	-7104.05	5495.24	1628427	328910	39°23'44.1	80°48'53.4	8981.38	142.277	2.21	0.07	-2.21
15622	89.82	158.55	6385.07	8644.1	-7187.6	5525.9	1628457	328826.5	39°23'43.2	80°48'53.0	9066.26	142.447	2.92	0.04	-2.92

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	15712	89.75	158.8	6385.4	8734.08	-7271.43	5558.63	1628490	328742.6	39°23'42.4	80°48'52.5	9152.71	142.604	0.29	-0.08	0.28
	15801	89.75	158.86	6385.79	8823.06	-7354.43	5590.77	1628522	328659.6	39°23'41.6	80°48'52.1	9238.2	142.758	0.07	0	0.07
	15891	89.97	160.1	6386.01	8913.05	-7438.72	5622.32	1628554	328575.4	39°23'40.8	80°48'51.7	9324.43	142.917	1.4	0.24	1.38
	15980	90.31	162.76	6385.79	9002.01	-7523.07	5650.66	1628582	328491	39°23'39.9	80°48'51.3	9408.85	143.089	3.01	0.38	2.99
	16070	90.22	160.07	6385.38	9091.98	-7608.37	5679.34	1628611	328405.7	39°23'39.1	80°48'50.9	9494.32	143.26	2.99	-0.1	-2.99
	16157	90.31	159.28	6384.98	9178.97	-7689.95	5709.56	1628641	328324.1	39°23'38.3	80°48'50.5	9577.81	143.407	0.91	0.1	-0.91
BHL	16181	90.31	159.28	6384.85	9202.97	-7712.4	5718.05	1628650	328301.7	39°23'38.1	80°48'50.4	9600.89	143.446	0	0	0

T A R G E T S

Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape	Comment
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]				
SHR-40F-HS BHL Rev-1		6376	-7710.47	5720.81	1628652	328303.6	39°23'38.1	80°48'50.4	point	
SHR-40F-HS LP Rev-1		6376	269.39	2816.37	1625748	336283	39°24'56.5	80°49'28.9	point	
SHR-40F-HS BHL Rev-2		6378.18	-7710.47	5720.81	1628652	328303.6	39°23'38.1	80°48'50.4	point	
SHR-40F-HS LP Rev-2		6393	269.39	2816.37	1625748	336283	39°24'56.5	80°49'28.9	point	
SHR-40 Pad LL		6599.3	28.8	-9.27	1622923	336042.5	39°24'53.8	80°50'04.8	polygon	

WELLPATH COMPOSITION Ref Wellbore: SHR-40F-HS AWB Ref Wellpath: SHR-40F-HS AWP Proj: 16181'

Log Name/	Start MD	End MD	Pos	Unc	Model
	[ft]	[ft]			
02_MS	Rat	19.4	2119.4		Generic gyro - continuous (Standard)
03_BHI	Mv	2119.4	6027		NaviTrak (MagCorr)
04_BHI	AT	6027	16157		NaviTrak (MagCorr)
Projection		16157	16181		Blind Drilling (std)

C O M M E N T S

Wellpath general comments

API: 47-095-02214-0000

BHI Job #: 7238988

Rig: Precision 542

Duration: 6/29/2015-7/9/2015

MS Gyro <12-1/4> (100'-2100")

BHI MWD <8-3/4> (2119.4')(2264'-6027")

BHI AT Curve <8-1/2> (6027')(6085'-16157")

Projected MD at TD: 16181'

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