

Location:	COLORADO	Slot:	SLOT#09 BUCKLEY 21-16-3NBH (640FSL & 2087FWL, SEC 20)
Field:	ADAMS COUNTY (NAD83/GRID)	Well:	BUCKLEY 21-16-3NBH
Facility:	SEC.20-T01S-R66W	Wellbore:	BUCKLEY 21-16-3NBH PWB

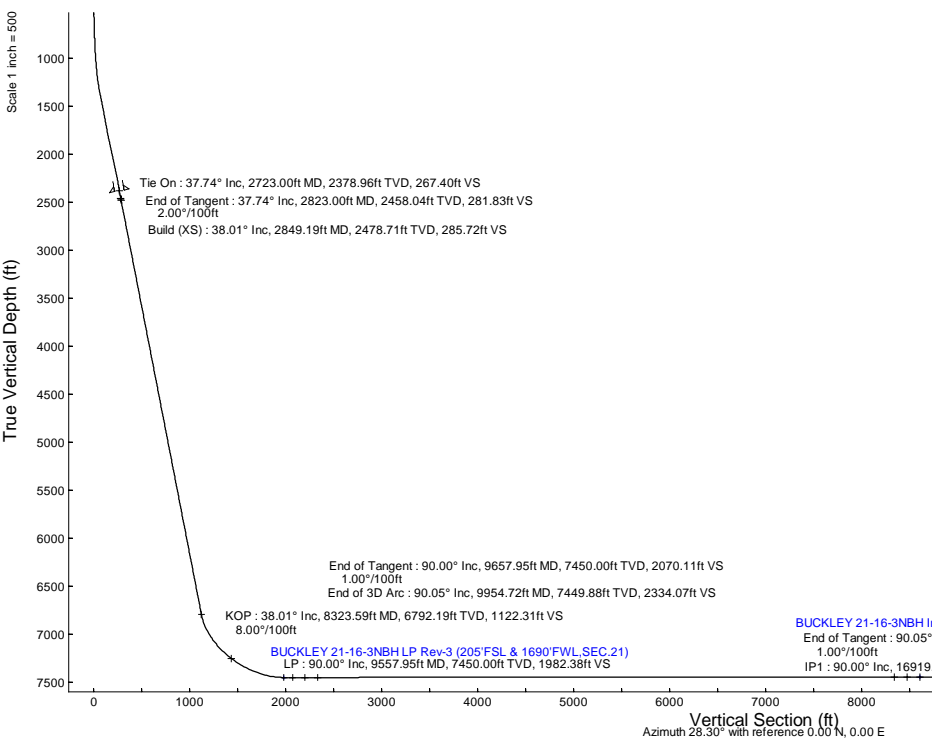
Facility: SEC.20-T01S-R66W Wellbore: BUCKLEY 21-16-3NBH PWB

Plot reference wellpath is BUCKLEY 21-16-3NBH (REV-D.0) PWP		Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to [5047GL+20KB = 5067RKB] (RKB)		North Reference: Grid north
Reference wellpath measured depths are referenced to [5047GL+20KB = 5067RKB] (RKB)		Scale: True distance
[5047GL+20KB = 5067RKB] (RKB) to Mean Sea Level: 5067 feet		Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: SLOTR09 BUCKLEY 21-16-3NBH (640FSL & 2087WFL SEC.20): 0 feet		Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum		Created by: martsam01 on 2014-12-20; Database: WA_Denier

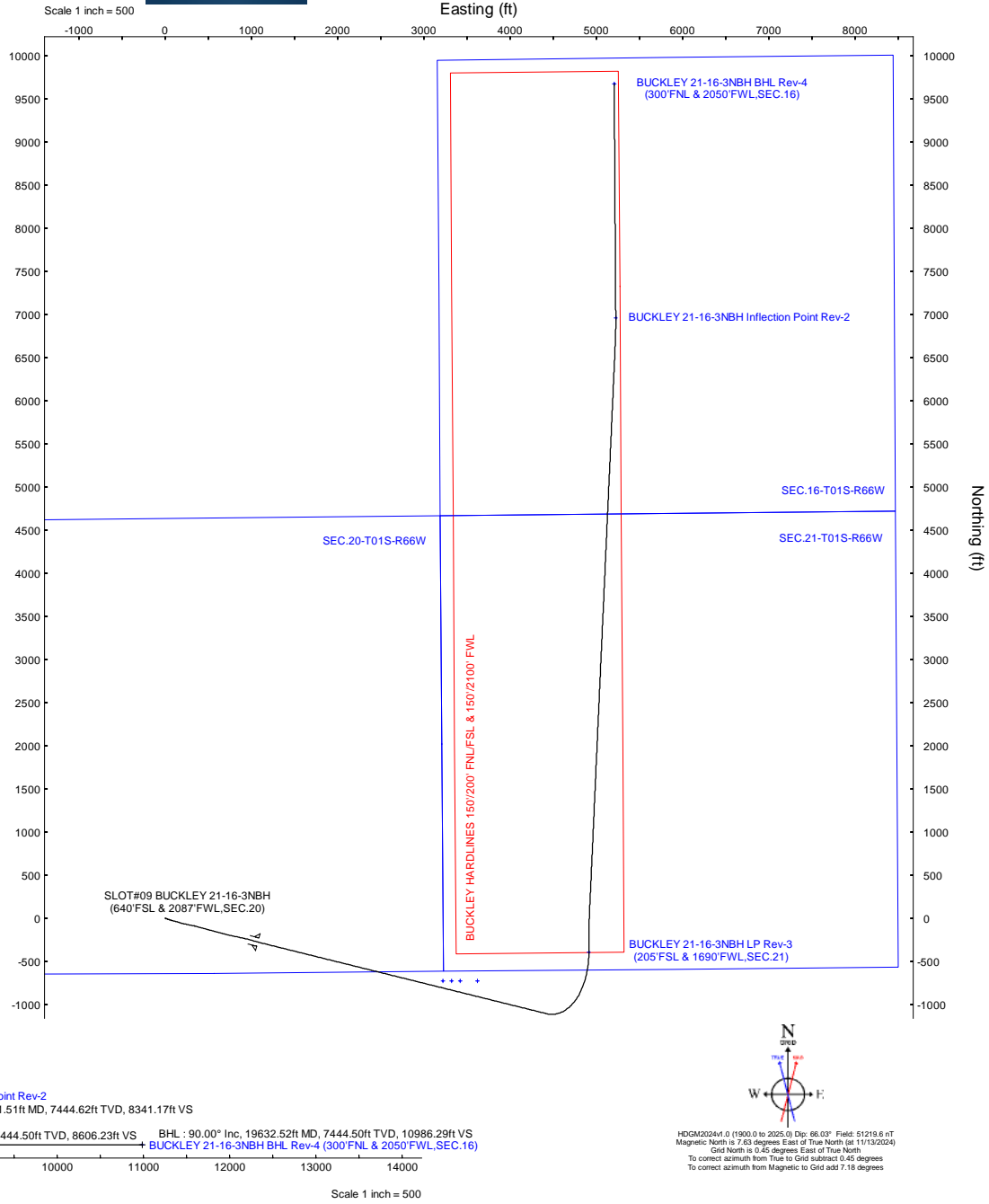
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 20-T015-R66W	3195846.350	1223487.742	39°56'41.0568"N	104°48'33.676"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT09 BUCKLEY21-16-3NBH (640FWL SEC 20)	125.18	28.74	3195875.085	1223612.917
SLOT09 BUCKLEY21-16-3NBH (640FWL SEC 20) to Ground level (At Slot: SLOT09 BUCKLEY21-16-3NBH (640FWL SEC 20))				
			5067ft	
Mean Sea Level to Ground level (At Slot: SLOT09 BUCKLEY21-16-3NBH (640FWL SEC 20))				
			0ft	
(5047GL+20KB = 5067RKB) (RKB) to Mean Sea Level				
			5067ft	

Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2723.00	37.740	104.660	2378.96	-274.33	1073.68	0.74	267.40
End of Tangent	2823.00	37.740	104.660	2458.04	-289.82	1132.89	0.00	281.83
Build (XS)	2849.19	38.007	103.926	2478.71	-293.79	1148.47	2.00	285.72
KOP	8323.59	38.007	103.926	6792.19	-1105.06	4420.29	0.00	1122.31
LP	9557.95	90.000	359.625	7450.00	-393.95	4913.77	8.00	1982.38
End of Tangent	9657.95	90.000	359.625	7450.00	-293.95	4913.12	0.00	2070.11
End of 3D Arc	9954.72	90.045	2.592	7449.88	2.73	4918.86	1.00	2334.07
End of Tangent	16621.51	90.045	2.592	7444.62	6662.69	5220.40	0.00	8341.17
IP1	16919.54	90.000	359.612	7444.50	6960.64	5226.13	1.00	8606.23
BHL	19632.52	90.000	359.612	7444.50	9673.55	5207.78	0.00	10986.29

Name	MD (R)	YTD (R)	Local (N (R))	Local (R)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SEC-16-T015-R66W	N/A	6.00	-725.18	3221.26	319906.25	1222887.76	39°56'34.8724"N	104°47'23.7029"W
SEC-20-T015-R66W	N/A	6.00	-725.18	321.26	3199196.25	1222887.76	39°56'34.8645"N	104°47'22.4191"W
SEC-21-T015-R66W	N/A	6.00	-725.18	3421.26	3199206.24	1222887.76	39°56'34.8566"N	104°47'21.1352"W
BUCKLEY21-16-3BNH Infection Point Rev2								
BUCKLEY21-16-3BNH Bldg. Rev4 (300FWL & 2050FWL-SEC.16)	16919.54	7444.50	6860.64	5226.13	320110.05	1230573.34	39°57'50.6649"N	104°46'15.7650"W
BUCKLEY21-16-3BNH Bldg. Rev4 (300FWL & 2050FWL-SEC.16)	19632.52	7444.50	8673.55	5207.78	320102.70	1233266.17	39°57'17.4756"N	104°46'56.1188"W
BUCKLEY21-16-3BNH LP Rev2 (205FWL & 1690FWL-SEC.21)	9557.95	8450.00	-339.95	4913.77	3200788.71	1223218.98	39°56'38.0112"N	104°47.19392"W
BUCKLEY HARDLINE 150°/200° FNL351 & 150°/2100° FWL	N/A	7400.00	-725.18	3621.26	3199206.24	1222887.76	39°56'34.8408"N	104°47.19392"W



Start MD (s)	End MD (s)	Tool	Model	Log Name/Comment	Walltime
20.00	2723.00	ORSS MMD v2.2	Custom ORSS MMD v2.2 + HRGM + Sag Correction + Superior QG FDIR approximation	13.9" Surface ORSS MMD v2.2+HRGM+SAG+FDIR <141-372>	BUCKLEY 21-16-36B91 A9B
2723.00	19652.51	BH AutoTrack Core v4/npres (2016)	BH AutoTrack Core v4/npres (2016) (HRGM, Short spacing)		BUCKLEY 21-16-36B91 P9B





Planned Wellpath Report

BUCKLEY 21-16-3NBH (REV-D.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Martsam01
Scale	0.999971	Report Generated	12/20/2024 at 3:20:43 PM
Convergence at slot	0.45° East	Database	WA_Denver

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	125.18	28.74	3195875.09	1223612.92	39.9450810°	-104.8013850°
Facility Reference Pt			3195846.35	1223487.74	39.9447380°	-104.8014910°
Field Reference Pt			2986049.83	1344849.24	40.2800000°	-105.5500000°

WELLPATH DATUM			
Calculation method	Minimum curvature	(5047'GL+20'KB = 5067'RKB) (RKB) to Facility Vertical Datum	5067.00ft
Horizontal Reference Pt	Slot	(5047'GL+20'KB = 5067'RKB) (RKB) to Mean Sea Level	5067.00ft
Vertical Reference Pt	(5047'GL+20'KB = 5067'RKB) (RKB)	(5047'GL+20'KB = 5067'RKB) (RKB) to Ground Level at Slot (SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20))	5067.00ft
MD Reference Pt	(5047'GL+20'KB = 5067'RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	28.30°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

WELLPATH DATA (209 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
0.00†	0.000	105.870	0.00	0.00	0.00	0.00	39.9450810	-104.8013850	0.00		
20.00	0.000	105.870	20.00	0.00	0.00	0.00	39.9450810	-104.8013850	0.00		
141.00	0.470	105.870	141.00	0.11	-0.14	0.48	39.9450806	-104.8013833	0.39		
231.00	0.760	108.120	230.99	0.29	-0.42	1.40	39.9450798	-104.8013800	0.32		
325.00	0.750	106.320	324.99	0.53	-0.79	2.58	39.9450788	-104.8013758	0.03		
417.00	2.610	110.530	416.94	0.94	-1.69	5.12	39.9450762	-104.8013668	2.02		
509.00	4.970	107.400	508.73	1.97	-3.62	10.89	39.9450708	-104.8013463	2.57		
602.00	7.350	106.710	601.19	3.93	-6.54	20.43	39.9450626	-104.8013123	2.56		
694.00	10.270	107.740	692.10	6.62	-10.73	33.88	39.9450508	-104.8012645	3.18		
787.00	12.090	107.870	783.33	9.90	-16.24	51.05	39.9450353	-104.8012034	1.96		
879.00	13.490	107.720	873.04	13.61	-22.46	70.44	39.9450178	-104.8011344	1.52		
973.00	16.230	106.540	963.89	18.30	-29.54	93.48	39.9449979	-104.8010524	2.93		
1066.00	19.930	104.590	1052.28	24.71	-37.24	121.29	39.9449762	-104.8009535	4.03		
1157.00	23.780	106.300	1136.73	32.20	-46.30	153.92	39.9449506	-104.8008374	4.29		
1250.00	28.980	105.250	1220.02	41.19	-57.49	193.68	39.9449190	-104.8006959	5.61		
1344.00	33.890	101.370	1300.20	53.96	-68.66	241.38	39.9448873	-104.8005261	5.65		
1435.00	34.500	101.450	1375.47	68.82	-78.78	291.51	39.9448584	-104.8003476	0.67		
1529.00	35.340	102.410	1452.55	83.98	-89.90	344.15	39.9448268	-104.8001602	1.07		
1623.00	38.460	104.420	1527.71	98.43	-103.03	399.03	39.9447895	-104.7999648	3.56		
1716.00	42.100	106.860	1598.65	111.55	-119.28	456.90	39.9447437	-104.7997589	4.27		
1810.00	40.000	106.000	1669.54	124.24	-136.75	516.10	39.9446944	-104.7995482	2.31		
1902.00	39.620	105.150	1740.21	137.21	-152.57	572.84	39.9446498	-104.7993463	0.72		
1995.00	40.670	103.690	1811.30	151.59	-167.49	630.91	39.9446076	-104.7991397	1.52		
2088.00	40.210	104.040	1882.08	166.63	-181.94	689.48	39.9445666	-104.7989312	0.55		
2182.00	39.990	103.550	1953.98	181.79	-196.38	748.28	39.9445257	-104.7987219	0.41		
2275.00	39.680	101.970	2025.40	197.74	-209.54	806.37	39.9444883	-104.7985151	1.14		
2369.00	37.700	102.600	2098.77	213.95	-222.04	863.79	39.9444528	-104.7983107	2.15		
2463.00	37.740	102.160	2173.12	229.72	-234.36	919.96	39.9444177	-104.7981107	0.29		
2557.00	37.750	104.990	2247.46	244.34	-247.87	975.88	39.9443794	-104.7979116	1.84		
2650.00	37.480	105.440	2321.13	257.19	-262.76	1030.65	39.9443374	-104.7977167	0.41		
2723.00	37.740	104.660	2378.96	267.40	-274.33	1073.68	39.9443047	-104.7975636	0.74	Tie On	
2800.00†	37.740	104.660	2439.85	278.51	-286.26	1119.27	39.9442709	-104.7974013	0.00		
2823.00	37.740	104.660	2458.04	281.83	-289.82	1132.89	39.9442609	-104.7973529	0.00	End of Tangent	
2849.19	38.007	103.926	2478.71	285.72	-293.79	1148.47	39.9442496	-104.7972974	2.00	Build (XS)	
2900.00†	38.007	103.926	2518.74	293.48	-301.32	1178.84	39.9442283	-104.7971893	0.00		
3000.00†	38.007	103.926	2597.54	308.76	-316.14	1238.60	39.9441863	-104.7969766	0.00		
3100.00†	38.007	103.926	2676.33	324.05	-330.96	1298.37	39.9441443	-104.7967639	0.00		
3200.00†	38.007	103.926	2755.13	339.33	-345.78	1358.14	39.9441024	-104.7965512	0.00		
3300.00†	38.007	103.926	2833.92	354.61	-360.60	1417.90	39.9440604	-104.7963384	0.00		
3400.00†	38.007	103.926	2912.71	369.89	-375.42	1477.67	39.9440184	-104.7961257	0.00		
3500.00†	38.007	103.926	2991.51	385.17	-390.24	1537.43	39.9439764	-104.7959130	0.00		
3600.00†	38.007	103.926	3070.30	400.46	-405.06	1597.20	39.9439344	-104.7957003	0.00		
3700.00†	38.007	103.926	3149.09	415.74	-419.87	1656.96	39.9438924	-104.7954875	0.00		
3800.00†	38.007	103.926	3227.89	431.02	-434.69	1716.73	39.9438505	-104.7952748	0.00		
3900.00†	38.007	103.926	3306.68	446.30	-449.51	1776.50	39.9438085	-104.7950621	0.00		



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REFERENCE WELLPATH IDENTIFICATION			
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Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

WELLPATH DATA (209 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
4000.00†	38.007	103.926	3385.48	461.58	-464.33	1836.26	39.9437665	-104.7948494	0.00		
4100.00†	38.007	103.926	3464.27	476.87	-479.15	1896.03	39.9437245	-104.7946367	0.00		
4200.00†	38.007	103.926	3543.06	492.15	-493.97	1955.79	39.9436825	-104.7944239	0.00		
4300.00†	38.007	103.926	3621.86	507.43	-508.79	2015.56	39.9436405	-104.7942112	0.00		
4400.00†	38.007	103.926	3700.65	522.71	-523.61	2075.32	39.9435986	-104.7939985	0.00		
4500.00†	38.007	103.926	3779.44	537.99	-538.43	2135.09	39.9435566	-104.7937858	0.00		
4600.00†	38.007	103.926	3858.24	553.27	-553.25	2194.86	39.9435146	-104.7935730	0.00		
4700.00†	38.007	103.926	3937.03	568.56	-568.07	2254.62	39.9434726	-104.7933603	0.00		
4800.00†	38.007	103.926	4015.82	583.84	-582.89	2314.39	39.9434306	-104.7931476	0.00		
4900.00†	38.007	103.926	4094.62	599.12	-597.71	2374.15	39.9433886	-104.7929349	0.00		
5000.00†	38.007	103.926	4173.41	614.40	-612.53	2433.92	39.9433466	-104.7927222	0.00		
5100.00†	38.007	103.926	4252.21	629.68	-627.34	2493.68	39.9433046	-104.7925094	0.00		
5200.00†	38.007	103.926	4331.00	644.97	-642.16	2553.45	39.9432627	-104.7922967	0.00		
5300.00†	38.007	103.926	4409.79	660.25	-656.98	2613.22	39.9432207	-104.7920840	0.00		
5400.00†	38.007	103.926	4488.59	675.53	-671.80	2672.98	39.9431787	-104.7918713	0.00		
5500.00†	38.007	103.926	4567.38	690.81	-686.62	2732.75	39.9431367	-104.7916586	0.00		
5600.00†	38.007	103.926	4646.17	706.09	-701.44	2792.51	39.9430947	-104.7914458	0.00		
5700.00†	38.007	103.926	4724.97	721.38	-716.26	2852.28	39.9430527	-104.7912331	0.00		
5800.00†	38.007	103.926	4803.76	736.66	-731.08	2912.04	39.9430107	-104.7910204	0.00		
5900.00†	38.007	103.926	4882.56	751.94	-745.90	2971.81	39.9429687	-104.7908077	0.00		
6000.00†	38.007	103.926	4961.35	767.22	-760.72	3031.58	39.9429267	-104.7905950	0.00		
6100.00†	38.007	103.926	5040.14	782.50	-775.54	3091.34	39.9428847	-104.7903823	0.00		
6200.00†	38.007	103.926	5118.94	797.79	-790.36	3151.11	39.9428428	-104.7901695	0.00		
6300.00†	38.007	103.926	5197.73	813.07	-805.18	3210.87	39.9428008	-104.7899568	0.00		
6400.00†	38.007	103.926	5276.52	828.35	-819.99	3270.64	39.9427588	-104.7897441	0.00		
6500.00†	38.007	103.926	5355.32	843.63	-834.81	3330.40	39.9427168	-104.7895314	0.00		
6600.00†	38.007	103.926	5434.11	858.91	-849.63	3390.17	39.9426748	-104.7893187	0.00		
6700.00†	38.007	103.926	5512.91	874.19	-864.45	3449.94	39.9426328	-104.7891060	0.00		
6800.00†	38.007	103.926	5591.70	889.48	-879.27	3509.70	39.9425908	-104.7888932	0.00		
6900.00†	38.007	103.926	5670.49	904.76	-894.09	3569.47	39.9425488	-104.7886805	0.00		
7000.00†	38.007	103.926	5749.29	920.04	-908.91	3629.23	39.9425068	-104.7884678	0.00		
7100.00†	38.007	103.926	5828.08	935.32	-923.73	3689.00	39.9424648	-104.7882551	0.00		
7200.00†	38.007	103.926	5906.87	950.60	-938.55	3748.76	39.9424228	-104.7880424	0.00		
7300.00†	38.007	103.926	5985.67	965.89	-953.37	3808.53	39.9423808	-104.7878297	0.00		
7400.00†	38.007	103.926	6064.46	981.17	-968.19	3868.30	39.9423388	-104.7876170	0.00		
7500.00†	38.007	103.926	6143.25	996.45	-983.01	3928.06	39.9422968	-104.7874042	0.00		
7600.00†	38.007	103.926	6222.05	1011.73	-997.83	3987.83	39.9422548	-104.7871915	0.00		
7700.00†	38.007	103.926	6300.84	1027.01	-1012.65	4047.59	39.9422128	-104.7869788	0.00		
7800.00†	38.007	103.926	6379.64	1042.30	-1027.46	4107.36	39.9421708	-104.7867661	0.00		
7900.00†	38.007	103.926	6458.43	1057.58	-1042.28	4167.12	39.9421288	-104.7865534	0.00		
8000.00†	38.007	103.926	6537.22	1072.86	-1057.10	4226.89	39.9420868	-104.7863407	0.00		
8100.00†	38.007	103.926	6616.02	1088.14	-1071.92	4286.66	39.9420448	-104.7861280	0.00		
8200.00†	38.007	103.926	6694.81	1103.42	-1086.74	4346.42	39.9420028	-104.7859153	0.00		
8300.00†	38.007	103.926	6773.60	1118.71	-1101.56	4406.19	39.9419608	-104.7857025	0.00		
8323.59	38.007	103.926	6792.19	1122.31	-1105.06	4420.29	39.9419509	-104.7856524	0.00	KOP	



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Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

WELLPATH DATA (209 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
8400.00†	37.215	93.986	6852.78	1137.68	-1112.33	4466.21	39.9419299	-104.7854888	8.00		
8500.00†	37.465	80.785	6932.41	1168.69	-1109.56	4526.50	39.9419362	-104.7852737	8.00		
8600.00†	39.138	68.144	7011.01	1211.51	-1092.91	4585.91	39.9419806	-104.7850614	8.00		
8700.00†	42.061	56.684	7087.03	1265.30	-1062.72	4643.29	39.9420622	-104.7848559	8.00		
8800.00†	45.990	46.641	7159.01	1329.00	-1019.56	4697.51	39.9421795	-104.7846613	8.00		
8900.00†	50.682	37.956	7225.54	1401.39	-964.28	4747.53	39.9423301	-104.7844813	8.00		
9000.00†	55.936	30.423	7285.32	1481.04	-897.96	4792.37	39.9425112	-104.7843195	8.00		
9100.00†	61.594	23.802	7337.20	1566.42	-821.88	4831.16	39.9427192	-104.7841790	8.00		
9200.00†	67.539	17.869	7380.16	1655.85	-737.52	4863.14	39.9429500	-104.7840625	8.00		
9300.00†	73.682	12.433	7413.37	1747.60	-646.54	4887.69	39.9431992	-104.7839723	8.00		
9400.00†	79.956	7.333	7436.17	1839.89	-550.69	4904.33	39.9434620	-104.7839102	8.00		
9500.00†	86.305	2.428	7448.13	1930.91	-451.84	4912.74	39.9437331	-104.7838774	8.00		
9557.95	90.000	359.625	7450.00†	1982.38	-393.95	4913.77	39.9438920	-104.7838720	8.00	LP	
9600.00†	90.000	359.625	7450.00	2019.27	-351.90	4913.50	39.9440074	-104.7838718	0.00		
9657.95	90.000	359.625	7450.00	2070.11	-293.95	4913.12	39.9441665	-104.7838715	0.00	End of Tangent	
9700.00†	90.006	0.045	7450.00	2107.08	-251.90	4913.00	39.9442819	-104.7838707	1.00		
9800.00†	90.022	1.045	7449.97	2195.58	-151.91	4913.95	39.9445564	-104.7838644	1.00		
9900.00†	90.037	2.045	7449.92	2284.87	-51.95	4916.65	39.9448307	-104.7838519	1.00		
9954.72	90.045	2.592	7449.88	2334.07	2.73	4918.86	39.9449808	-104.7838424	1.00	End of 3D Arc	
10000.00†	90.045	2.592	7449.85	2374.87	47.96	4920.91	39.9451049	-104.7838338	0.00		
10100.00†	90.045	2.592	7449.77	2464.97	147.86	4925.43	39.9453790	-104.7838148	0.00		
10200.00†	90.045	2.592	7449.69	2555.08	247.76	4929.96	39.9456531	-104.7837958	0.00		
10300.00†	90.045	2.592	7449.61	2645.18	347.66	4934.48	39.9459273	-104.7837768	0.00		
10400.00†	90.045	2.592	7449.53	2735.29	447.55	4939.00	39.9462014	-104.7837578	0.00		
10500.00†	90.045	2.592	7449.45	2825.39	547.45	4943.52	39.9464755	-104.7837388	0.00		
10600.00†	90.045	2.592	7449.37	2915.50	647.35	4948.05	39.9467496	-104.7837198	0.00		
10700.00†	90.045	2.592	7449.29	3005.60	747.25	4952.57	39.9470237	-104.7837008	0.00		
10800.00†	90.045	2.592	7449.22	3095.71	847.14	4957.09	39.9472979	-104.7836818	0.00		
10900.00†	90.045	2.592	7449.14	3185.81	947.04	4961.62	39.9475720	-104.7836627	0.00		
11000.00†	90.045	2.592	7449.06	3275.92	1046.94	4966.14	39.9478461	-104.7836437	0.00		
11100.00†	90.045	2.592	7448.98	3366.02	1146.84	4970.66	39.9481202	-104.7836247	0.00		
11200.00†	90.045	2.592	7448.90	3456.13	1246.73	4975.19	39.9483944	-104.7836057	0.00		
11300.00†	90.045	2.592	7448.82	3546.23	1346.63	4979.71	39.9486685	-104.7835867	0.00		
11400.00†	90.045	2.592	7448.74	3636.34	1446.53	4984.23	39.9489426	-104.7835677	0.00		
11500.00†	90.045	2.592	7448.66	3726.44	1546.43	4988.75	39.9492167	-104.7835487	0.00		
11600.00†	90.045	2.592	7448.58	3816.55	1646.32	4993.28	39.9494908	-104.7835297	0.00		
11700.00†	90.045	2.592	7448.50	3906.65	1746.22	4997.80	39.9497650	-104.7835107	0.00		
11800.00†	90.045	2.592	7448.43	3996.76	1846.12	5002.32	39.9500391	-104.7834917	0.00		
11900.00†	90.045	2.592	7448.35	4086.86	1946.02	5006.85	39.9503132	-104.7834726	0.00		
12000.00†	90.045	2.592	7448.27	4176.97	2045.92	5011.37	39.9505873	-104.7834536	0.00		
12100.00†	90.045	2.592	7448.19	4267.07	2145.81	5015.89	39.9508614	-104.7834346	0.00		
12200.00†	90.045	2.592	7448.11	4357.18	2245.71	5020.41	39.9511356	-104.7834156	0.00		
12300.00†	90.045	2.592	7448.03	4447.28	2345.61	5024.94	39.9514097	-104.7833966	0.00		
12400.00†	90.045	2.592	7447.95	4537.39	2445.51	5029.46	39.9516838	-104.7833776	0.00		
12500.00†	90.045	2.592	7447.87	4627.49	2545.40	5033.98	39.9519579	-104.7833586	0.00		



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BUCKLEY 21-16-3NBH (REV-D.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

WELLPATH DATA (209 stations) † = interpolated, ‡ = extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
12600.00†	90.045	2.592	7447.79	4717.60	2645.30	5038.51	39.9522320	-104.7833396	0.00		
12700.00†	90.045	2.592	7447.71	4807.70	2745.20	5043.03	39.9525062	-104.7833206	0.00		
12800.00†	90.045	2.592	7447.64	4897.81	2845.10	5047.55	39.9527803	-104.7833015	0.00		
12900.00†	90.045	2.592	7447.56	4987.91	2944.99	5052.08	39.9530544	-104.7832825	0.00		
13000.00†	90.045	2.592	7447.48	5078.02	3044.89	5056.60	39.9533285	-104.7832635	0.00		
13100.00†	90.045	2.592	7447.40	5168.12	3144.79	5061.12	39.9536027	-104.7832445	0.00		
13200.00†	90.045	2.592	7447.32	5258.23	3244.69	5065.64	39.9538768	-104.7832255	0.00		
13300.00†	90.045	2.592	7447.24	5348.33	3344.58	5070.17	39.9541509	-104.7832065	0.00		
13400.00†	90.045	2.592	7447.16	5438.44	3444.48	5074.69	39.9544250	-104.7831875	0.00		
13500.00†	90.045	2.592	7447.08	5528.54	3544.38	5079.21	39.9546991	-104.7831685	0.00		
13600.00†	90.045	2.592	7447.00	5618.65	3644.28	5083.74	39.9549733	-104.7831494	0.00		
13700.00†	90.045	2.592	7446.92	5708.75	3744.18	5088.26	39.9552474	-104.7831304	0.00		
13800.00†	90.045	2.592	7446.85	5798.86	3844.07	5092.78	39.9555215	-104.7831114	0.00		
13900.00†	90.045	2.592	7446.77	5888.96	3943.97	5097.30	39.9557956	-104.7830924	0.00		
14000.00†	90.045	2.592	7446.69	5979.07	4043.87	5101.83	39.9560697	-104.7830734	0.00		
14100.00†	90.045	2.592	7446.61	6069.17	4143.77	5106.35	39.9563439	-104.7830544	0.00		
14200.00†	90.045	2.592	7446.53	6159.28	4243.66	5110.87	39.9566180	-104.7830354	0.00		
14300.00†	90.045	2.592	7446.45	6249.38	4343.56	5115.40	39.9568921	-104.7830163	0.00		
14400.00†	90.045	2.592	7446.37	6339.49	4443.46	5119.92	39.9571662	-104.7829973	0.00		
14500.00†	90.045	2.592	7446.29	6429.59	4543.36	5124.44	39.9574403	-104.7829783	0.00		
14600.00†	90.045	2.592	7446.21	6519.70	4643.25	5128.97	39.9577145	-104.7829593	0.00		
14700.00†	90.045	2.592	7446.14	6609.80	4743.15	5133.49	39.9579886	-104.7829403	0.00		
14800.00†	90.045	2.592	7446.06	6699.91	4843.05	5138.01	39.9582627	-104.7829213	0.00		
14900.00†	90.045	2.592	7445.98	6790.01	4942.95	5142.53	39.9585368	-104.7829023	0.00		
15000.00†	90.045	2.592	7445.90	6880.12	5042.84	5147.06	39.9588110	-104.7828832	0.00		
15100.00†	90.045	2.592	7445.82	6970.22	5142.74	5151.58	39.9590851	-104.7828642	0.00		
15200.00†	90.045	2.592	7445.74	7060.33	5242.64	5156.10	39.9593592	-104.7828452	0.00		
15300.00†	90.045	2.592	7445.66	7150.43	5342.54	5160.63	39.9596333	-104.7828262	0.00		
15400.00†	90.045	2.592	7445.58	7240.54	5442.43	5165.15	39.9599074	-104.7828072	0.00		
15500.00†	90.045	2.592	7445.50	7330.64	5542.33	5169.67	39.9601816	-104.7827882	0.00		
15600.00†	90.045	2.592	7445.42	7420.75	5642.23	5174.19	39.9604557	-104.7827691	0.00		
15700.00†	90.045	2.592	7445.35	7510.85	5742.13	5178.72	39.9607298	-104.7827501	0.00		
15800.00†	90.045	2.592	7445.27	7600.96	5842.03	5183.24	39.9610039	-104.7827311	0.00		
15900.00†	90.045	2.592	7445.19	7691.06	5941.92	5187.76	39.9612780	-104.7827121	0.00		
16000.00†	90.045	2.592	7445.11	7781.17	6041.82	5192.29	39.9615522	-104.7826931	0.00		
16100.00†	90.045	2.592	7445.03	7871.27	6141.72	5196.81	39.9618263	-104.7826741	0.00		
16200.00†	90.045	2.592	7444.95	7961.38	6241.62	5201.33	39.9621004	-104.7826550	0.00		
16300.00†	90.045	2.592	7444.87	8051.48	6341.51	5205.86	39.9623745	-104.7826360	0.00		
16400.00†	90.045	2.592	7444.79	8141.59	6441.41	5210.38	39.9626486	-104.7826170	0.00		
16500.00†	90.045	2.592	7444.71	8231.69	6541.31	5214.90	39.9629228	-104.7825980	0.00		
16600.00†	90.045	2.592	7444.63	8321.80	6641.21	5219.42	39.9631969	-104.7825790	0.00		
16621.51	90.045	2.592	7444.62	8341.17	6662.69	5220.40	39.9632558	-104.7825749	0.00	End of Tangent	
16700.00†	90.033	1.808	7444.56	8411.66	6741.13	5223.41	39.9634711	-104.7825619	1.00		
16800.00†	90.018	0.808	7444.52	8500.77	6841.10	5225.69	39.9637455	-104.7825508	1.00		
16900.00†	90.003	359.808	7444.50	8589.08	6941.10	5226.23	39.9640199	-104.7825460	1.00		



Planned Wellpath Report
BUCKLEY 21-16-3NBH (REV-D.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

WELLPATH DATA (209 stations) † = interpolated, ‡ = extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16919.54	90.000	359.612	7444.50 ²	8606.23	6960.64	5226.13	39.9640736	-104.7825458	1.00	IP1
17000.00†	90.000	359.612	7444.50	8676.82	7041.09	5225.59	39.9642944	-104.7825454	0.00	
17100.00†	90.000	359.612	7444.50	8764.55	7141.09	5224.91	39.9645690	-104.7825450	0.00	
17200.00†	90.000	359.612	7444.50	8852.28	7241.09	5224.23	39.9648435	-104.7825445	0.00	
17300.00†	90.000	359.612	7444.50	8940.01	7341.09	5223.56	39.9651180	-104.7825440	0.00	
17400.00†	90.000	359.612	7444.50	9027.73	7441.08	5222.88	39.9653925	-104.7825436	0.00	
17500.00†	90.000	359.612	7444.50	9115.46	7541.08	5222.20	39.9656670	-104.7825431	0.00	
17600.00†	90.000	359.612	7444.50	9203.19	7641.08	5221.53	39.9659415	-104.7825426	0.00	
17700.00†	90.000	359.612	7444.50	9290.92	7741.08	5220.85	39.9662160	-104.7825421	0.00	
17800.00†	90.000	359.612	7444.50	9378.65	7841.08	5220.17	39.9664905	-104.7825417	0.00	
17900.00†	90.000	359.612	7444.50	9466.38	7941.07	5219.50	39.9667650	-104.7825412	0.00	
18000.00†	90.000	359.612	7444.50	9554.11	8041.07	5218.82	39.9670396	-104.7825407	0.00	
18100.00†	90.000	359.612	7444.50	9641.83	8141.07	5218.14	39.9673141	-104.7825402	0.00	
18200.00†	90.000	359.612	7444.50	9729.56	8241.07	5217.47	39.9675886	-104.7825398	0.00	
18300.00†	90.000	359.612	7444.50	9817.29	8341.06	5216.79	39.9678631	-104.7825393	0.00	
18400.00†	90.000	359.612	7444.50	9905.02	8441.06	5216.11	39.9681376	-104.7825388	0.00	
18500.00†	90.000	359.612	7444.50	9992.75	8541.06	5215.44	39.9684121	-104.7825384	0.00	
18600.00†	90.000	359.612	7444.50	10080.48	8641.06	5214.76	39.9686866	-104.7825379	0.00	
18700.00†	90.000	359.612	7444.50	10168.20	8741.05	5214.08	39.9689611	-104.7825374	0.00	
18800.00†	90.000	359.612	7444.50	10255.93	8841.05	5213.41	39.9692356	-104.7825369	0.00	
18900.00†	90.000	359.612	7444.50	10343.66	8941.05	5212.73	39.9695102	-104.7825365	0.00	
19000.00†	90.000	359.612	7444.50	10431.39	9041.05	5212.05	39.9697847	-104.7825360	0.00	
19100.00†	90.000	359.612	7444.50	10519.12	9141.05	5211.38	39.9700592	-104.7825355	0.00	
19200.00†	90.000	359.612	7444.50	10606.85	9241.04	5210.70	39.9703337	-104.7825350	0.00	
19300.00†	90.000	359.612	7444.50	10694.57	9341.04	5210.02	39.9706082	-104.7825346	0.00	
19400.00†	90.000	359.612	7444.50	10782.30	9441.04	5209.35	39.9708827	-104.7825341	0.00	
19500.00†	90.000	359.612	7444.50	10870.03	9541.04	5208.67	39.9711572	-104.7825336	0.00	
19600.00†	90.000	359.612	7444.50	10957.76	9641.03	5208.00	39.9714317	-104.7825332	0.00	
19632.52	90.000	359.612	7444.50 ³	10986.29	9673.55	5207.78	39.9715210	-104.7825330	0.00	BHL

HOLE & CASING SECTIONS - Ref Wellbore: BUCKLEY 21-16-3NBH PWB Ref Wellpath: BUCKLEY 21-16-3NBH (REV-D.0) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	20.00	2723.00	2703.00	20.00	2378.96	0.00	0.00	-274.33	1073.68
8.5in Open Hole	2723.00	19632.52	16909.52	2378.96	7444.50	-274.33	1073.68	9673.55	5207.78



Planned Wellpath Report

BUCKLEY 21-16-3NBH (REV-D.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.16-T01S-R66W	N/A	6.00	-725.18	3221.26	3199096.25	1222887.76	39.9430201	-104.7899175	polygon
	2D Polygon: dimensions not calculated								
SEC.20-T01S-R66W	N/A	6.00	-725.18	3321.26	3199196.25	1222887.76	39.9430179	-104.7895609	polygon
	2D Polygon: dimensions not calculated								
SEC.21-T01S-R66W	N/A	6.00	-725.18	3421.26	3199296.24	1222887.76	39.9430157	-104.7892042	polygon
	2D Polygon: dimensions not calculated								
2) BUCKLEY 21-16-3NBH Inflection Point Rev-2	16919.54	7444.50	6960.64	5226.13	3201101.05	1230573.34	39.9640736	-104.7825458	point
3) BUCKLEY 21-16-3NBH BHL Rev-4 (300'FNL & 2050'FWL,SEC.16)	19632.52	7444.50	9673.55	5207.78	3201082.70	1233286.17	39.9715210	-104.7825330	point
1) BUCKLEY 21-16-3NBH LP Rev-3 (205'FSL & 1690'FWL,SEC.21)	9557.95	7450.00	-393.95	4913.77	3200788.71	1223218.98	39.9438920	-104.7838720	point
BUCKLEY HARDLINES 150'/200' FNL/FSL & 150'/2100' FWL	N/A	8001.00	-725.18	3621.26	3199496.24	1222887.76	39.9430113	-104.7884910	polygon
	2D Polygon: dimensions not calculated								

SURVEY PROGRAM - Ref Wellbore: BUCKLEY 21-16-3NBH PWB Ref Wellpath: BUCKLEY 21-16-3NBH (REV-D.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	2723.00	Custom OWSG MWD rev2 + HRGM + Sag Correction + Superior QC FDIR approximation	13.5" Surface OWSG MWD rev2+HRGM+SAG+FDIR <141'-2723'>	BUCKLEY 21-16-3NBH AWB
2723.00	19652.51	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)		BUCKLEY 21-16-3NBH PWB



Planned Wellpath Report
BUCKLEY 21-16-3NBH (REV-D.0) PWP
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REFERENCE WELLPATH IDENTIFICATION			
Operator	POCO Operating	Well	BUCKLEY 21-16-3NBH
Field	ADAMS COUNTY (NAD83/GRID)	API/Legal	
Facility	SEC.20-T01S-R66W	Wellbore	BUCKLEY 21-16-3NBH PWB
Slot	SLOT#09 BUCKLEY 21-16-3NBH (640'FSL & 2087'FWL,SEC.20)		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
2723.00	37.740	104.660	2378.96	Tie On
2823.00	37.740	104.660	2458.04	End of Tangent
2849.19	38.007	103.926	2478.71	Build (XS)
8323.59	38.007	103.926	6792.19	KOP
9557.95	90.000	359.625	7450.00	LP
9657.95	90.000	359.625	7450.00	End of Tangent
9954.72	90.045	2.592	7449.88	End of 3D Arc
16621.51	90.045	2.592	7444.62	End of Tangent
16919.54	90.000	359.612	7444.50	IP1
19632.52	90.000	359.612	7444.50	BHL