

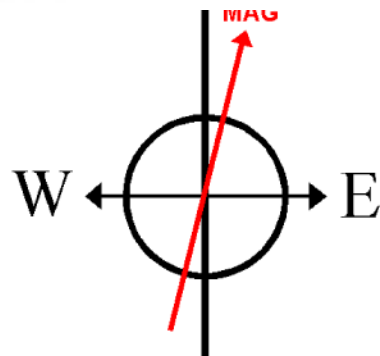
EXTRACTION OIL & GAS

Location:	COLORADO	Slot:	SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26)
Field:	WELD COUNTY (NAD83/TRUE NORTH)	Well:	LAUNER 6
Facility:	SEC.26-T07N-R67W	Wellbore:	LAUNER 6 PWB

Plot reference wellpath is LAUNER 6 (REV-C.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to CYCLONE 37 (28'KB) (RKB)	North Reference: True north
Measured depths are referenced to CYCLONE 37 (28'KB) (RKB)	Scale: True distance
CYCLONE 37 (28'KB) (RKB) to Mean Sea Level: 4955 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26)): 0 feet	Created by: ingmjamm on 2017-08-25
Coordinates are in feet referenced to Slot	Database: WA_DEN_Denver_Defn

Location Information					
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.26-T07N-R67W		3179860.101	1444245.219	40°33'03.784"N	104°51'09.932"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26)	-4070.60	105.59	3179995.393	1440175.626	40°32'23.561"N
CYCLONE 37 (28'KB) (RKB) to Mud line (At Slot: SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26))				4955ft	
Mean Sea Level to Mud line (At Slot: SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26))				0ft	
CYCLONE 37 (28'KB) (RKB) to Mean Sea Level				4955ft	

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
28.00	14652.79	ISCWSA MWD, Rev. 4	ISCWSA MWD, Rev. 4 (Standard)		LAUNER 6 PWB



BGGM (1900.0 to 2019.0) Dip: 66.95° Field: 52463.9 nT
Magnetic North is 8.42 degrees East of True North (at 8/22/2017)

To correct azimuth from Magnetic to True add 8.42 degrees

Scale 1 inch = 500

True Vertical Depth (ft)

End of Tangent : 0.00° Inc, 1800.00ft MD, 1800.00ft TVD, 0.00ft VS
2.00°/100ft
End of Build : 10.25° Inc, 2312.65ft MD, 2309.91ft TVD, -17.90ft VS

End of Tangent : 10.25° Inc, 6357.71ft MD, 6290.38ft TVD, -299.70ft VS
10.00°/100ft

End of 3D Arc : 90.00° Inc, 7307.08ft MD, 6905.00ft TVD, 278.09ft VS

LAUNER 6 LANDING REV-2 (1491'FSL & 591'FEL, SEC.26)

End of Tangent : 90.00° Inc, 14562.79ft MD, 6905.00ft TVD, 7495.66ft VS
LAUNER 6 BHL ON PLAT REV-2 (1554'FSL & 2562'FEL,SEC.27)

Vertical Section (ft)
Azimuth 276.30° with reference 0.00°N, 0.00°E

Well Profile Data

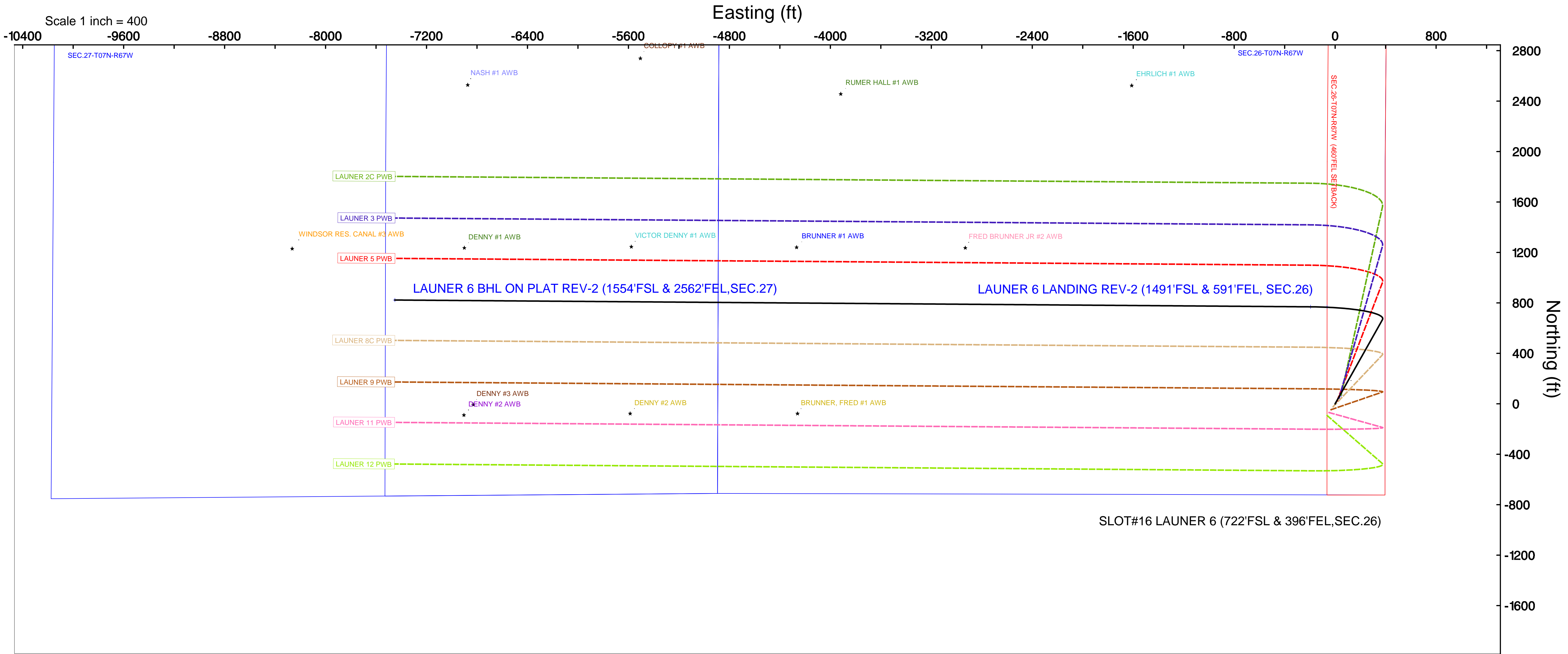
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	28.00	0.000	29.344	28.00	0.00	0.00	0.00	0.00
End of Tangent	1800.00	0.000	29.344	1800.00	0.00	0.00	0.00	0.00
End of Build	2312.65	10.253	29.344	2309.91	39.88	22.42	2.00	-17.90
End of Tangent	6357.71	10.253	29.344	6290.38	667.49	375.26	0.00	-299.70
End of 3D Arc	7307.08	90.000	270.426	6905.00	769.04	-194.83	10.00	278.09
End of Tangent	14562.79	90.000	270.426	6905.00	822.99	-7450.34	0.00	7495.66

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.26-T07N-R67W		-17.00	4070.56	-105.60	3179860.07	1444245.18	40°33'03.784"N	104°51'09.932"W
SEC.27-T07N-R67W		-17.00	4070.56	-105.60	3179860.07	1444245.18	40°33'03.784"N	104°51'09.932"W
LAUNER 6 BHL ON PLAT REV-2 (1554'FSL & 2562'FEL,SEC.27)	14562.79	6905.00	822.99	-7450.34	3172539.49	1440944.16	40°32'31.682"N	104°52'45.066"W
LAUNER 6 LANDING REV-2 (1491'FSL & 591'FEL, SEC.26)	7307.08	6905.00	769.04	-194.83	3179794.95	1440943.20	40°32'31.160"N	104°51'11.088"W
LAUNER 6 BHL ON PLAT REV-1(1554'FSL & 2561'FEL,SEC.27)		7035.00	823.03	-7450.34	3172539.49	1440944.20	40°32'31.682"N	104°52'45.066"W
LAUNER 6 LANDING		7035.00	769.08	-63.65	3179926.13	1440944.20	40°32'31.160"N	104°51'09.389"W
LAUNER 6 LANDING REV-1		7035.00	769.04	-194.75	3179795.04	1440943.20	40°32'31.160"N	104°51'11.087"W
SEC.26-T07N-R67W 460'FEL SETBACK		7258.00	69.22	47.25	3180042.13	1440245.19	40°32'24.245"N	104°51'07.952"W
SEC.27-T07N-R67W (MIDDLE SECTION)		7258.00	69.22	47.25	3180042.13	1440245.19	40°32'24.245"N	104°51'07.952"W

Bottom Hole Location

MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
14562.79	90.000	270.426	6905.00	822.99	-7450.34	3172539.49	1440944.16	40°32'31.682"N	104°52'45.066"W



Northing (ft)

Scale 1 inch = 500



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 1 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Ingmjmr
Scale	0.999970	Report Generated	8/25/2017 at 10:07:00 AM
Convergence at slot	0.42° East	Database/Source file	WA_DEN_Denver_Defn/LAUNER_6__REV-C.0__PWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-4070.60	105.59	3179995.39	1440175.63	40°32'23.561"N	104°51'08.564"W
Facility Reference Pt			3179860.10	1444245.22	40°33'03.784"N	104°51'09.932"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

WELLPATH DATUM

Calculation method	Minimum curvature	CYCLONE 37 (28'KB) (RKB) to Facility Vertical Datum	4955.00ft
Horizontal Reference Pt	Slot	CYCLONE 37 (28'KB) (RKB) to Mean Sea Level	4955.00ft
Vertical Reference Pt	CYCLONE 37 (28'KB) (RKB)	CYCLONE 37 (28'KB) (RKB) to Mud Line at Slot (SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26))	4955.00ft
MD Reference Pt	CYCLONE 37 (28'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	276.30°



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 2 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 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	29.344	0.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
28.00	0.000	29.344	28.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	Tie On
128.00†	0.000	29.344	128.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
228.00†	0.000	29.344	228.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
328.00†	0.000	29.344	328.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
428.00†	0.000	29.344	428.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
528.00†	0.000	29.344	528.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
628.00†	0.000	29.344	628.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
728.00†	0.000	29.344	728.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
828.00†	0.000	29.344	828.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
928.00†	0.000	29.344	928.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1028.00†	0.000	29.344	1028.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1128.00†	0.000	29.344	1128.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1228.00†	0.000	29.344	1228.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1328.00†	0.000	29.344	1328.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1428.00†	0.000	29.344	1428.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1528.00†	0.000	29.344	1528.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1628.00†	0.000	29.344	1628.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1728.00†	0.000	29.344	1728.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	
1800.00	0.000	29.344	1800.00	0.00	0.00	0.00	40°32'23.561"N	104°51'08.564"W	0.00	End of Tangent
1828.00†	0.560	29.344	1828.00	-0.05	0.12	0.07	40°32'23.562"N	104°51'08.564"W	2.00	
1928.00†	2.560	29.344	1927.96	-1.12	2.49	1.40	40°32'23.585"N	104°51'08.546"W	2.00	
2028.00†	4.560	29.344	2027.76	-3.55	7.90	4.44	40°32'23.639"N	104°51'08.507"W	2.00	
2128.00†	6.560	29.344	2127.28	-7.34	16.35	9.19	40°32'23.722"N	104°51'08.445"W	2.00	
2228.00†	8.560	29.344	2226.41	-12.49	27.82	15.64	40°32'23.836"N	104°51'08.362"W	2.00	
2312.65	10.253	29.344	2309.91	-17.90	39.88	22.42	40°32'23.955"N	104°51'08.274"W	2.00	End of Build
2328.00†	10.253	29.344	2325.02	-18.97	42.26	23.76	40°32'23.978"N	104°51'08.257"W	0.00	
2428.00†	10.253	29.344	2423.43	-25.94	57.77	32.48	40°32'24.132"N	104°51'08.144"W	0.00	
2528.00†	10.253	29.344	2521.83	-32.91	73.29	41.20	40°32'24.285"N	104°51'08.031"W	0.00	
2628.00†	10.253	29.344	2620.23	-39.87	88.81	49.93	40°32'24.438"N	104°51'07.918"W	0.00	



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP
Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2728.00†	10.253	29.344	2718.64	-46.84	104.32	58.65	40°32'24.592"N	104°51'07.805"W	0.00	
2828.00†	10.253	29.344	2817.04	-53.81	119.84	67.37	40°32'24.745"N	104°51'07.692"W	0.00	
2928.00†	10.253	29.344	2915.44	-60.77	135.35	76.09	40°32'24.898"N	104°51'07.579"W	0.00	
3028.00†	10.253	29.344	3013.85	-67.74	150.87	84.82	40°32'25.052"N	104°51'07.466"W	0.00	
3128.00†	10.253	29.344	3112.25	-74.71	166.38	93.54	40°32'25.205"N	104°51'07.353"W	0.00	
3228.00†	10.253	29.344	3210.65	-81.67	181.90	102.26	40°32'25.358"N	104°51'07.240"W	0.00	
3328.00†	10.253	29.344	3309.05	-88.64	197.41	110.99	40°32'25.512"N	104°51'07.127"W	0.00	
3428.00†	10.253	29.344	3407.46	-95.61	212.93	119.71	40°32'25.665"N	104°51'07.014"W	0.00	
3528.00†	10.253	29.344	3505.86	-102.57	228.44	128.43	40°32'25.818"N	104°51'06.901"W	0.00	
3628.00†	10.253	29.344	3604.26	-109.54	243.96	137.15	40°32'25.971"N	104°51'06.788"W	0.00	
3728.00†	10.253	29.344	3702.67	-116.50	259.48	145.88	40°32'26.125"N	104°51'06.675"W	0.00	
3828.00†	10.253	29.344	3801.07	-123.47	274.99	154.60	40°32'26.278"N	104°51'06.562"W	0.00	
3928.00†	10.253	29.344	3899.47	-130.44	290.51	163.32	40°32'26.431"N	104°51'06.449"W	0.00	
4028.00†	10.253	29.344	3997.88	-137.40	306.02	172.04	40°32'26.585"N	104°51'06.336"W	0.00	
4128.00†	10.253	29.344	4096.28	-144.37	321.54	180.77	40°32'26.738"N	104°51'06.223"W	0.00	
4228.00†	10.253	29.344	4194.68	-151.34	337.05	189.49	40°32'26.891"N	104°51'06.110"W	0.00	
4328.00†	10.253	29.344	4293.09	-158.30	352.57	198.21	40°32'27.045"N	104°51'05.997"W	0.00	
4428.00†	10.253	29.344	4391.49	-165.27	368.08	206.94	40°32'27.198"N	104°51'05.884"W	0.00	
4528.00†	10.253	29.344	4489.89	-172.24	383.60	215.66	40°32'27.351"N	104°51'05.771"W	0.00	
4628.00†	10.253	29.344	4588.30	-179.20	399.12	224.38	40°32'27.505"N	104°51'05.658"W	0.00	
4728.00†	10.253	29.344	4686.70	-186.17	414.63	233.10	40°32'27.658"N	104°51'05.545"W	0.00	
4828.00†	10.253	29.344	4785.10	-193.14	430.15	241.83	40°32'27.811"N	104°51'05.432"W	0.00	
4928.00†	10.253	29.344	4883.51	-200.10	445.66	250.55	40°32'27.965"N	104°51'05.319"W	0.00	
5028.00†	10.253	29.344	4981.91	-207.07	461.18	259.27	40°32'28.118"N	104°51'05.206"W	0.00	
5128.00†	10.253	29.344	5080.31	-214.04	476.69	267.99	40°32'28.271"N	104°51'05.093"W	0.00	
5228.00†	10.253	29.344	5178.71	-221.00	492.21	276.72	40°32'28.424"N	104°51'04.980"W	0.00	
5328.00†	10.253	29.344	5277.12	-227.97	507.72	285.44	40°32'28.578"N	104°51'04.867"W	0.00	
5428.00†	10.253	29.344	5375.52	-234.93	523.24	294.16	40°32'28.731"N	104°51'04.754"W	0.00	
5528.00†	10.253	29.344	5473.92	-241.90	538.76	302.89	40°32'28.884"N	104°51'04.641"W	0.00	
5628.00†	10.253	29.344	5572.33	-248.87	554.27	311.61	40°32'29.038"N	104°51'04.528"W	0.00	



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5728.00†	10.253	29.344	5670.73	-255.83	569.79	320.33	40°32'29.191"N	104°51'04.415"W	0.00	
5828.00†	10.253	29.344	5769.13	-262.80	585.30	329.05	40°32'29.344"N	104°51'04.302"W	0.00	
5928.00†	10.253	29.344	5867.54	-269.77	600.82	337.78	40°32'29.498"N	104°51'04.189"W	0.00	
6028.00†	10.253	29.344	5965.94	-276.73	616.33	346.50	40°32'29.651"N	104°51'04.076"W	0.00	
6128.00†	10.253	29.344	6064.34	-283.70	631.85	355.22	40°32'29.804"N	104°51'03.963"W	0.00	
6228.00†	10.253	29.344	6162.75	-290.67	647.36	363.94	40°32'29.958"N	104°51'03.850"W	0.00	
6328.00†	10.253	29.344	6261.15	-297.63	662.88	372.67	40°32'30.111"N	104°51'03.737"W	0.00	
6357.71	10.253	29.344	6290.38	-299.70	667.49	375.26	40°32'30.156"N	104°51'03.704"W	0.00	End of Tangent
6428.00†	9.235	347.281	6359.75	-300.31	678.46	377.09	40°32'30.265"N	104°51'03.680"W	10.00	
6528.00†	15.031	306.554	6457.64	-286.46	694.05	364.87	40°32'30.419"N	104°51'03.838"W	10.00	
6628.00†	23.768	291.497	6551.92	-255.73	709.19	335.63	40°32'30.569"N	104°51'04.217"W	10.00	
6728.00†	33.199	284.428	6639.74	-209.07	723.44	290.25	40°32'30.709"N	104°51'04.805"W	10.00	
6828.00†	42.866	280.248	6718.43	-147.87	736.34	230.11	40°32'30.837"N	104°51'05.584"W	10.00	
6928.00†	52.639	277.369	6785.59	-74.02	747.52	157.04	40°32'30.947"N	104°51'06.530"W	10.00	
7028.00†	62.464	275.161	6839.18	10.26	756.63	73.26	40°32'31.037"N	104°51'07.615"W	10.00	
7128.00†	72.319	273.319	6877.58	102.39	763.39	-18.69	40°32'31.104"N	104°51'08.806"W	10.00	
7228.00†	82.190	271.670	6899.62	199.59	767.60	-116.01	40°32'31.146"N	104°51'10.067"W	10.00	
7307.08	90.000	270.426	6905.00†	278.09	769.04	-194.83	40°32'31.160"N	104°51'11.088"W	10.00	End of 3D Arc
7328.00†	90.000	270.426	6905.00	298.90	769.20	-215.75	40°32'31.162"N	104°51'11.359"W	0.00	
7428.00†	90.000	270.426	6905.00	398.37	769.94	-315.75	40°32'31.169"N	104°51'12.654"W	0.00	
7528.00†	90.000	270.426	6905.00	497.85	770.68	-415.74	40°32'31.176"N	104°51'13.949"W	0.00	
7628.00†	90.000	270.426	6905.00	597.32	771.43	-515.74	40°32'31.184"N	104°51'15.245"W	0.00	
7728.00†	90.000	270.426	6905.00	696.80	772.17	-615.74	40°32'31.191"N	104°51'16.540"W	0.00	
7828.00†	90.000	270.426	6905.00	796.27	772.92	-715.73	40°32'31.198"N	104°51'17.835"W	0.00	
7928.00†	90.000	270.426	6905.00	895.75	773.66	-815.73	40°32'31.205"N	104°51'19.130"W	0.00	
8028.00†	90.000	270.426	6905.00	995.22	774.40	-915.73	40°32'31.213"N	104°51'20.425"W	0.00	
8128.00†	90.000	270.426	6905.00	1094.69	775.15	-1015.73	40°32'31.220"N	104°51'21.721"W	0.00	
8228.00†	90.000	270.426	6905.00	1194.17	775.89	-1115.72	40°32'31.227"N	104°51'23.016"W	0.00	
8328.00†	90.000	270.426	6905.00	1293.64	776.63	-1215.72	40°32'31.235"N	104°51'24.311"W	0.00	
8428.00†	90.000	270.426	6905.00	1393.12	777.38	-1315.72	40°32'31.242"N	104°51'25.606"W	0.00	



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8528.00†	90.000	270.426	6905.00	1492.59	778.12	-1415.72	40°32'31.249"N	104°51'26.902"W	0.00	
8628.00†	90.000	270.426	6905.00	1592.07	778.86	-1515.71	40°32'31.257"N	104°51'28.197"W	0.00	
8728.00†	90.000	270.426	6905.00	1691.54	779.61	-1615.71	40°32'31.264"N	104°51'29.492"W	0.00	
8828.00†	90.000	270.426	6905.00	1791.01	780.35	-1715.71	40°32'31.271"N	104°51'30.787"W	0.00	
8928.00†	90.000	270.426	6905.00	1890.49	781.09	-1815.70	40°32'31.278"N	104°51'32.083"W	0.00	
9028.00†	90.000	270.426	6905.00	1989.96	781.84	-1915.70	40°32'31.286"N	104°51'33.378"W	0.00	
9128.00†	90.000	270.426	6905.00	2089.44	782.58	-2015.70	40°32'31.293"N	104°51'34.673"W	0.00	
9228.00†	90.000	270.426	6905.00	2188.91	783.33	-2115.70	40°32'31.300"N	104°51'35.968"W	0.00	
9328.00†	90.000	270.426	6905.00	2288.39	784.07	-2215.69	40°32'31.308"N	104°51'37.263"W	0.00	
9428.00†	90.000	270.426	6905.00	2387.86	784.81	-2315.69	40°32'31.315"N	104°51'38.559"W	0.00	
9528.00†	90.000	270.426	6905.00	2487.33	785.56	-2415.69	40°32'31.322"N	104°51'39.854"W	0.00	
9628.00†	90.000	270.426	6905.00	2586.81	786.30	-2515.69	40°32'31.329"N	104°51'41.149"W	0.00	
9728.00†	90.000	270.426	6905.00	2686.28	787.04	-2615.68	40°32'31.337"N	104°51'42.444"W	0.00	
9828.00†	90.000	270.426	6905.00	2785.76	787.79	-2715.68	40°32'31.344"N	104°51'43.740"W	0.00	
9928.00†	90.000	270.426	6905.00	2885.23	788.53	-2815.68	40°32'31.351"N	104°51'45.035"W	0.00	
10028.00†	90.000	270.426	6905.00	2984.71	789.27	-2915.67	40°32'31.358"N	104°51'46.330"W	0.00	
10128.00†	90.000	270.426	6905.00	3084.18	790.02	-3015.67	40°32'31.365"N	104°51'47.625"W	0.00	
10228.00†	90.000	270.426	6905.00	3183.65	790.76	-3115.67	40°32'31.373"N	104°51'48.921"W	0.00	
10328.00†	90.000	270.426	6905.00	3283.13	791.50	-3215.67	40°32'31.380"N	104°51'50.216"W	0.00	
10428.00†	90.000	270.426	6905.00	3382.60	792.25	-3315.66	40°32'31.387"N	104°51'51.511"W	0.00	
10528.00†	90.000	270.426	6905.00	3482.08	792.99	-3415.66	40°32'31.394"N	104°51'52.806"W	0.00	
10628.00†	90.000	270.426	6905.00	3581.55	793.74	-3515.66	40°32'31.402"N	104°51'54.101"W	0.00	
10728.00†	90.000	270.426	6905.00	3681.03	794.48	-3615.65	40°32'31.409"N	104°51'55.397"W	0.00	
10828.00†	90.000	270.426	6905.00	3780.50	795.22	-3715.65	40°32'31.416"N	104°51'56.692"W	0.00	
10928.00†	90.000	270.426	6905.00	3879.97	795.97	-3815.65	40°32'31.423"N	104°51'57.987"W	0.00	
11028.00†	90.000	270.426	6905.00	3979.45	796.71	-3915.65	40°32'31.430"N	104°51'59.282"W	0.00	
11128.00†	90.000	270.426	6905.00	4078.92	797.45	-4015.64	40°32'31.438"N	104°52'00.578"W	0.00	
11228.00†	90.000	270.426	6905.00	4178.40	798.20	-4115.64	40°32'31.445"N	104°52'01.873"W	0.00	
11328.00†	90.000	270.426	6905.00	4277.87	798.94	-4215.64	40°32'31.452"N	104°52'03.168"W	0.00	
11428.00†	90.000	270.426	6905.00	4377.35	799.68	-4315.64	40°32'31.459"N	104°52'04.463"W	0.00	



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11528.00†	90.000	270.426	6905.00	4476.82	800.43	-4415.63	40°32'31.466"N	104°52'05.758"W	0.00	
11628.00†	90.000	270.426	6905.00	4576.29	801.17	-4515.63	40°32'31.473"N	104°52'07.054"W	0.00	
11728.00†	90.000	270.426	6905.00	4675.77	801.92	-4615.63	40°32'31.481"N	104°52'08.349"W	0.00	
11828.00†	90.000	270.426	6905.00	4775.24	802.66	-4715.62	40°32'31.488"N	104°52'09.644"W	0.00	
11928.00†	90.000	270.426	6905.00	4874.72	803.40	-4815.62	40°32'31.495"N	104°52'10.939"W	0.00	
12028.00†	90.000	270.426	6905.00	4974.19	804.15	-4915.62	40°32'31.502"N	104°52'12.235"W	0.00	
12128.00†	90.000	270.426	6905.00	5073.67	804.89	-5015.62	40°32'31.509"N	104°52'13.530"W	0.00	
12228.00†	90.000	270.426	6905.00	5173.14	805.63	-5115.61	40°32'31.516"N	104°52'14.825"W	0.00	
12328.00†	90.000	270.426	6905.00	5272.61	806.38	-5215.61	40°32'31.523"N	104°52'16.120"W	0.00	
12428.00†	90.000	270.426	6905.00	5372.09	807.12	-5315.61	40°32'31.531"N	104°52'17.416"W	0.00	
12528.00†	90.000	270.426	6905.00	5471.56	807.86	-5415.60	40°32'31.538"N	104°52'18.711"W	0.00	
12628.00†	90.000	270.426	6905.00	5571.04	808.61	-5515.60	40°32'31.545"N	104°52'20.006"W	0.00	
12728.00†	90.000	270.426	6905.00	5670.51	809.35	-5615.60	40°32'31.552"N	104°52'21.301"W	0.00	
12828.00†	90.000	270.426	6905.00	5769.99	810.09	-5715.60	40°32'31.559"N	104°52'22.596"W	0.00	
12928.00†	90.000	270.426	6905.00	5869.46	810.84	-5815.59	40°32'31.566"N	104°52'23.892"W	0.00	
13028.00†	90.000	270.426	6905.00	5968.93	811.58	-5915.59	40°32'31.573"N	104°52'25.187"W	0.00	
13128.00†	90.000	270.426	6905.00	6068.41	812.33	-6015.59	40°32'31.580"N	104°52'26.482"W	0.00	
13228.00†	90.000	270.426	6905.00	6167.88	813.07	-6115.59	40°32'31.588"N	104°52'27.777"W	0.00	
13328.00†	90.000	270.426	6905.00	6267.36	813.81	-6215.58	40°32'31.595"N	104°52'29.073"W	0.00	
13428.00†	90.000	270.426	6905.00	6366.83	814.56	-6315.58	40°32'31.602"N	104°52'30.368"W	0.00	
13528.00†	90.000	270.426	6905.00	6466.31	815.30	-6415.58	40°32'31.609"N	104°52'31.663"W	0.00	
13628.00†	90.000	270.426	6905.00	6565.78	816.04	-6515.57	40°32'31.616"N	104°52'32.958"W	0.00	
13728.00†	90.000	270.426	6905.00	6665.25	816.79	-6615.57	40°32'31.623"N	104°52'34.254"W	0.00	
13828.00†	90.000	270.426	6905.00	6764.73	817.53	-6715.57	40°32'31.630"N	104°52'35.549"W	0.00	
13928.00†	90.000	270.426	6905.00	6864.20	818.27	-6815.57	40°32'31.637"N	104°52'36.844"W	0.00	
14028.00†	90.000	270.426	6905.00	6963.68	819.02	-6915.56	40°32'31.644"N	104°52'38.139"W	0.00	
14128.00†	90.000	270.426	6905.00	7063.15	819.76	-7015.56	40°32'31.651"N	104°52'39.434"W	0.00	
14228.00†	90.000	270.426	6905.00	7162.63	820.50	-7115.56	40°32'31.658"N	104°52'40.730"W	0.00	
14328.00†	90.000	270.426	6905.00	7262.10	821.25	-7215.56	40°32'31.665"N	104°52'42.025"W	0.00	
14428.00†	90.000	270.426	6905.00	7361.57	821.99	-7315.55	40°32'31.672"N	104°52'43.320"W	0.00	



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP
Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL, SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

WELLPATH DATA (152 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14528.00†	90.000	270.426	6905.00	7461.05	822.74	-7415.55	40°32'31.680"N	104°52'44.615"W	0.00	
14562.79	90.000	270.426	6905.00 ²	7495.66	822.99	-7450.34	40°32'31.682"N	104°52'45.066"W	0.00	End of Tangent

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.26-T07N-R67W		-17.00	4070.56	-105.60	3179860.07	1444245.18	40°33'03.784"N	104°51'09.932"W	polygon
SEC.27-T07N-R67W		-17.00	4070.56	-105.60	3179860.07	1444245.18	40°33'03.784"N	104°51'09.932"W	polygon
2) LAUNER 6 BHL ON PLAT REV-2 (1554'FSL & 2562'FEL, SEC.27)	14562.79	6905.00	822.99	-7450.34	3172539.49	1440944.16	40°32'31.682"N	104°52'45.066"W	point
1) LAUNER 6 LANDING REV-2 (1491'FSL & 591'FEL, SEC.26)	7307.08	6905.00	769.04	-194.83	3179794.95	1440943.20	40°32'31.160"N	104°51'11.088"W	point
LAUNER 6 BHL ON PLAT REV-1 (1554'FSL & 2561'FEL, SEC.27)		7035.00	823.03	-7450.34	3172539.49	1440944.20	40°32'31.682"N	104°52'45.066"W	point
LAUNER 6 LANDING		7035.00	769.08	-63.65	3179926.13	1440944.20	40°32'31.160"N	104°51'09.389"W	point
LAUNER 6 LANDING REV-1		7035.00	769.04	-194.75	3179795.04	1440943.20	40°32'31.160"N	104°51'11.087"W	point



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

SURVEY PROGRAM - Ref Wellbore: LAUNER 6 PWB Ref Wellpath: LAUNER 6 (REV-C.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
28.00	14652.79	ISCWSA MWD, Rev. 4 (Standard)		LAUNER 6 PWB



Planned Wellpath Report

LAUNER 6 (REV-C.0) PWP

Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#16 LAUNER 6 (722'FSL & 396'FEL,SEC.26)
Area	COLORADO	Well	LAUNER 6
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LAUNER 6 PWB
Facility	SEC.26-T07N-R67W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
28.00	0.000	29.344	28.00	Tie On
1800.00	0.000	29.344	1800.00	End of Tangent
2312.65	10.253	29.344	2309.91	End of Build
6357.71	10.253	29.344	6290.38	End of Tangent
7307.08	90.000	270.426	6905.00	End of 3D Arc
14562.79	90.000	270.426	6905.00	End of Tangent