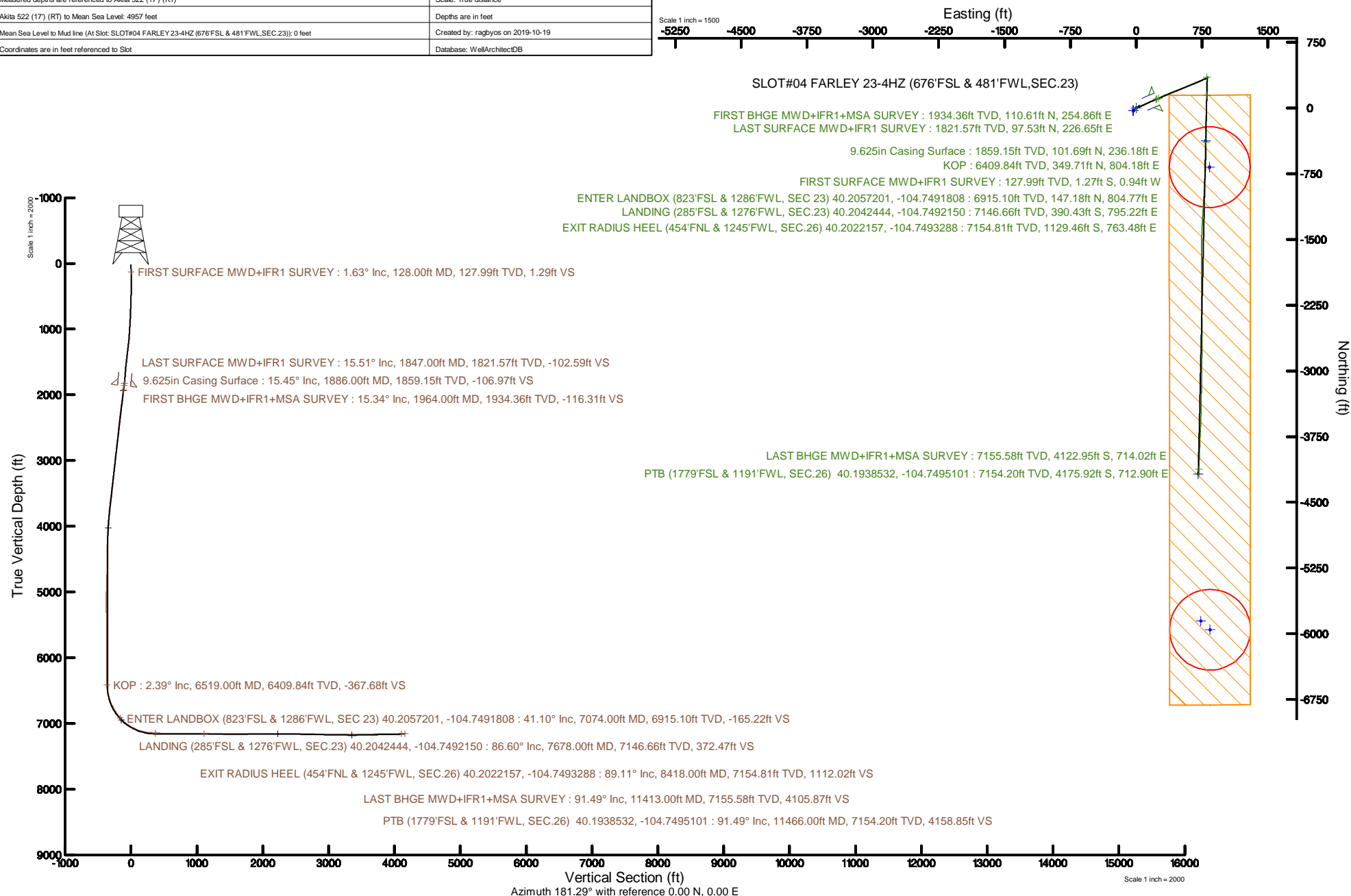


KERR-MCGEE OIL & GAS ONSHORE LP (WA)

Location: COLORADO Slot: SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23)
 Field: WELD COUNTY (UTM/TRUE NORTH) Well: FARLEY 23-4HZ
 Facility: SEC.23-T3N-R66W Wellbore: FARLEY 23-4HZ PWB

Plot reference wellpath is FARLEY 23-4HZ PWP Rev-A.0	Grid System: NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to Akita 522 (17) (RT)	North Reference: True north
Measured depths are referenced to Akita 522 (17) (RT)	Scale: True distance
Akita 522 (17) (RT) to Mean Sea Level: 4957 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23)): 0 feet	Created by: ragbyos on 2019-10-19
Coordinates are in feet referenced to Slot	Database: WellArchitectDB



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Ragbyos
Scale	0.999605	Report Generated	10/21/2019 at 10:38:38 AM
Convergence at slot	0.16° East	Database/Source file	WellArchitectDB/FARLEY_23-4HZ_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	30.26	33.29	1709643.58	14601595.39	40°12'19.138"N	104°45'07.423"W
Facility Reference Pt			1709610.40	14601565.05	40°12'18.839"N	104°45'07.852"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	Akita 522 (17') (RT) to Facility Vertical Datum	4957.00ft
Horizontal Reference Pt	Slot	Akita 522 (17') (RT) to Mean Sea Level	4957.00ft
Vertical Reference Pt	Akita 522 (17') (RT)	Akita 522 (17') (RT) to Mud Line at Slot (SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23))	4957.00ft
MD Reference Pt	Akita 522 (17') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.29°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL, SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

WELLPATH DATA (134 stations) † = 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	DLS [°/100ft]	Comments
0.00†	0.000	216.620	0.00	0.00	0.00	0.00	1709643.58	14601595.39	40°12'19.138"N	104°45'07.423"W	0.00	
17.00	0.000	216.620	17.00	0.00	0.00	0.00	1709643.58	14601595.39	40°12'19.138"N	104°45'07.423"W	0.00	
128.00	1.630	216.620	127.99	1.29	-1.27	-0.94	1709642.65	14601594.12	40°12'19.125"N	104°45'07.435"W	1.47	FIRST SURFACE MWD+IFR1 SURVEY
223.00	0.570	160.200	222.97	2.83	-2.80	-1.59	1709642.00	14601592.59	40°12'19.110"N	104°45'07.443"W	1.47	
318.00	0.970	78.020	317.96	3.09	-3.07	-0.64	1709642.95	14601592.31	40°12'19.108"N	104°45'07.431"W	1.11	
414.00	2.290	61.140	413.92	1.94	-1.98	1.83	1709645.42	14601593.41	40°12'19.118"N	104°45'07.399"W	1.45	
508.00	2.200	54.730	507.85	-0.08	-0.03	4.95	1709648.53	14601595.37	40°12'19.138"N	104°45'07.359"W	0.28	
604.00	3.820	58.420	603.71	-2.91	2.71	9.18	1709652.75	14601598.12	40°12'19.165"N	104°45'07.305"W	1.70	
698.00	4.750	60.000	697.45	-6.63	6.29	15.22	1709658.78	14601601.72	40°12'19.200"N	104°45'07.227"W	1.00	
793.00	6.680	71.600	791.98	-10.54	10.00	23.87	1709667.41	14601605.45	40°12'19.237"N	104°45'07.115"W	2.36	
888.00	7.870	70.370	886.21	-14.72	13.93	35.24	1709678.77	14601609.41	40°12'19.276"N	104°45'06.969"W	1.26	
984.00	9.360	68.440	981.12	-20.10	19.01	48.69	1709692.20	14601614.53	40°12'19.326"N	104°45'06.795"W	1.58	
1079.00	10.330	69.320	1074.72	-26.29	24.86	63.84	1709707.33	14601620.41	40°12'19.384"N	104°45'06.600"W	1.03	
1174.00	12.880	63.250	1167.78	-34.45	32.63	81.27	1709724.73	14601628.23	40°12'19.460"N	104°45'06.376"W	2.97	
1268.00	13.050	64.400	1259.38	-44.17	41.93	100.20	1709743.62	14601637.58	40°12'19.552"N	104°45'06.132"W	0.33	
1363.00	14.500	64.040	1351.65	-54.47	51.78	120.56	1709763.95	14601647.48	40°12'19.650"N	104°45'05.869"W	1.53	
1458.00	14.770	66.150	1443.57	-65.06	61.88	142.33	1709785.69	14601657.64	40°12'19.749"N	104°45'05.589"W	0.63	
1553.00	14.550	66.860	1535.47	-75.14	71.46	164.38	1709807.70	14601667.28	40°12'19.844"N	104°45'05.304"W	0.30	
1648.00	11.650	67.210	1627.99	-83.99	79.87	184.20	1709827.49	14601675.74	40°12'19.927"N	104°45'05.049"W	3.05	
1743.00	13.050	67.740	1720.79	-92.19	87.65	202.97	1709846.23	14601683.57	40°12'20.004"N	104°45'04.807"W	1.48	
1847.00	15.510	67.030	1821.57	-102.59	97.53	226.65	1709869.87	14601693.51	40°12'20.102"N	104°45'04.502"W	2.37	LAST SURFACE MWD+IFR1 SURVEY
1964.00	15.340	63.180	1934.36	-116.31	110.61	254.86	1709898.03	14601706.67	40°12'20.231"N	104°45'04.138"W	0.89	FIRST BHGE MWD+IFR1+MSA SURVEY
2052.00	16.980	64.810	2018.88	-127.52	121.33	276.88	1709920.01	14601717.45	40°12'20.337"N	104°45'03.854"W	1.93	
2139.00	16.150	62.900	2102.27	-138.94	132.25	299.14	1709942.24	14601728.42	40°12'20.445"N	104°45'03.568"W	1.14	
2227.00	16.190	68.570	2186.79	-149.50	142.31	321.46	1709964.52	14601738.54	40°12'20.544"N	104°45'03.280"W	1.79	
2314.00	15.470	66.580	2270.49	-159.03	151.36	343.40	1709986.42	14601747.64	40°12'20.634"N	104°45'02.997"W	1.04	
2401.00	16.360	65.580	2354.16	-169.20	161.03	365.20	1710008.19	14601757.38	40°12'20.729"N	104°45'02.716"W	1.07	
2489.00	16.760	69.550	2438.51	-179.27	170.59	388.38	1710031.33	14601766.99	40°12'20.824"N	104°45'02.417"W	1.36	
2577.00	15.170	68.370	2523.11	-188.45	179.27	410.97	1710053.89	14601775.73	40°12'20.909"N	104°45'02.126"W	1.84	
2664.00	15.940	69.230	2606.92	-197.37	187.70	432.72	1710075.61	14601784.22	40°12'20.993"N	104°45'01.846"W	0.92	
2752.00	15.970	67.950	2691.54	-206.71	196.53	455.24	1710098.09	14601793.11	40°12'21.080"N	104°45'01.556"W	0.40	
2839.00	16.810	69.510	2775.00	-216.11	205.43	478.12	1710120.94	14601802.07	40°12'21.168"N	104°45'01.261"W	1.09	
2926.00	16.190	68.480	2858.42	-225.48	214.28	501.19	1710143.97	14601810.98	40°12'21.255"N	104°45'00.963"W	0.79	
3014.00	15.590	68.210	2943.05	-234.87	223.17	523.58	1710166.33	14601819.93	40°12'21.343"N	104°45'00.675"W	0.69	
3101.00	16.410	69.040	3026.68	-244.11	231.91	545.91	1710188.63	14601828.72	40°12'21.430"N	104°45'00.387"W	0.98	
3189.00	15.410	68.260	3111.31	-253.39	240.68	568.38	1710211.06	14601837.56	40°12'21.516"N	104°45'00.097"W	1.16	
3277.00	14.970	69.100	3196.24	-262.25	249.07	589.86	1710232.51	14601846.00	40°12'21.599"N	104°44'59.821"W	0.56	
3364.00	16.230	69.080	3280.03	-271.09	257.42	611.71	1710254.33	14601854.41	40°12'21.682"N	104°44'59.539"W	1.45	
3451.00	14.220	69.050	3363.97	-279.73	265.58	633.05	1710275.64	14601862.63	40°12'21.762"N	104°44'59.264"W	2.31	
3539.00	14.610	68.420	3449.20	-288.14	273.53	653.47	1710296.02	14601870.63	40°12'21.841"N	104°44'59.001"W	0.48	
3626.00	15.120	67.370	3533.29	-297.00	281.93	674.14	1710316.67	14601879.09	40°12'21.924"N	104°44'58.734"W	0.66	
3714.00	16.780	65.900	3617.90	-307.10	291.53	696.33	1710338.82	14601888.75	40°12'22.019"N	104°44'58.448"W	1.94	
3802.00	14.790	65.180	3702.58	-317.49	301.44	718.13	1710360.58	14601898.71	40°12'22.117"N	104°44'58.167"W	2.27	
3889.00	12.980	64.120	3787.03	-326.84	310.36	737.00	1710379.42	14601907.68	40°12'22.205"N	104°44'57.924"W	2.10	
3977.00	11.790	63.490	3872.98	-335.54	318.69	753.93	1710396.33	14601916.05	40°12'22.287"N	104°44'57.706"W	1.36	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL, SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

WELLPATH DATA (134 stations) † = 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	DLS [°/100ft]	Comments
4064.00	10.610	62.450	3958.32	-343.55	326.36	768.99	1710411.35	14601923.77	40°12'22.363"N	104°44'57.512"W	1.38	
4151.00	9.460	70.300	4043.99	-349.98	332.48	782.82	1710425.16	14601929.92	40°12'22.423"N	104°44'57.334"W	2.05	
4239.00	7.240	71.500	4131.06	-354.44	336.68	794.89	1710437.22	14601934.15	40°12'22.465"N	104°44'57.178"W	2.53	
4326.00	5.470	74.310	4217.52	-357.51	339.54	804.08	1710446.40	14601937.03	40°12'22.493"N	104°44'57.060"W	2.07	
4414.00	2.990	68.730	4305.27	-359.62	341.50	810.26	1710452.57	14601939.02	40°12'22.513"N	104°44'56.980"W	2.85	
4501.00	1.460	73.680	4392.20	-360.82	342.64	813.44	1710455.74	14601940.16	40°12'22.524"N	104°44'56.939"W	1.77	
4588.00	0.780	330.730	4479.19	-361.67	343.47	814.21	1710456.51	14601940.99	40°12'22.532"N	104°44'56.929"W	2.07	
4676.00	0.810	347.860	4567.19	-362.79	344.60	813.79	1710456.08	14601942.12	40°12'22.543"N	104°44'56.934"W	0.27	
4763.00	0.850	356.450	4654.18	-364.03	345.84	813.62	1710455.91	14601943.36	40°12'22.555"N	104°44'56.937"W	0.15	
4851.00	1.220	1.480	4742.16	-365.62	347.43	813.60	1710455.89	14601944.95	40°12'22.571"N	104°44'56.937"W	0.43	
4939.00	1.310	2.820	4830.14	-367.56	349.37	813.68	1710455.96	14601946.89	40°12'22.590"N	104°44'56.936"W	0.11	
5052.00	1.690	3.770	4943.10	-370.51	352.32	813.85	1710456.12	14601949.84	40°12'22.620"N	104°44'56.934"W	0.34	
5140.00	2.060	7.430	5031.05	-373.38	355.19	814.14	1710456.41	14601952.71	40°12'22.648"N	104°44'56.930"W	0.44	
5227.00	0.710	150.110	5118.04	-374.48	356.27	814.61	1710456.87	14601953.79	40°12'22.659"N	104°44'56.924"W	3.06	
5315.00	0.860	136.690	5206.03	-373.54	355.32	815.34	1710457.60	14601952.84	40°12'22.649"N	104°44'56.915"W	0.27	
5402.00	0.800	137.740	5293.02	-372.64	354.39	816.19	1710458.46	14601951.92	40°12'22.640"N	104°44'56.903"W	0.07	
5490.00	0.670	148.540	5381.01	-371.76	353.50	816.87	1710459.14	14601951.03	40°12'22.631"N	104°44'56.895"W	0.22	
5577.00	0.780	154.170	5468.01	-370.80	352.53	817.40	1710459.67	14601950.06	40°12'22.622"N	104°44'56.888"W	0.15	
5665.00	0.780	154.310	5556.00	-369.74	351.45	817.92	1710460.19	14601948.98	40°12'22.611"N	104°44'56.881"W	0.00	
5752.00	1.130	267.520	5642.99	-369.15	350.88	817.32	1710459.59	14601948.41	40°12'22.605"N	104°44'56.889"W	1.85	
5839.00	1.250	258.530	5729.97	-368.89	350.66	815.53	1710457.81	14601948.18	40°12'22.603"N	104°44'56.912"W	0.25	
5927.00	1.210	262.110	5817.95	-368.53	350.34	813.67	1710455.95	14601947.86	40°12'22.600"N	104°44'56.936"W	0.10	
6015.00	1.190	264.960	5905.93	-368.28	350.13	811.84	1710454.12	14601947.64	40°12'22.598"N	104°44'56.960"W	0.07	
6102.00	1.350	259.060	5992.91	-367.96	349.86	809.93	1710452.22	14601947.36	40°12'22.595"N	104°44'56.984"W	0.24	
6189.00	1.050	270.660	6079.89	-367.73	349.67	808.13	1710450.41	14601947.17	40°12'22.593"N	104°44'57.007"W	0.44	
6277.00	1.130	270.350	6167.88	-367.71	349.69	806.46	1710448.74	14601947.18	40°12'22.593"N	104°44'57.029"W	0.09	
6365.00	0.600	337.820	6255.87	-368.12	350.12	805.41	1710447.70	14601947.61	40°12'22.598"N	104°44'57.042"W	1.20	
6452.00	0.720	303.840	6342.86	-368.83	350.84	804.79	1710447.07	14601948.34	40°12'22.605"N	104°44'57.050"W	0.46	
6519.00†	2.386	190.510	6409.84	-367.68	349.71	804.18	1710446.47	14601947.20	40°12'22.594"N	104°44'57.058"W	4.11	KOP
6539.00	3.190	186.960	6429.82	-366.72	348.75	804.04	1710446.33	14601946.24	40°12'22.584"N	104°44'57.060"W	4.11	
6627.00	10.600	180.330	6517.12	-356.17	338.21	803.70	1710446.01	14601935.70	40°12'22.480"N	104°44'57.065"W	8.45	
6714.00	15.840	176.890	6601.79	-336.32	318.33	804.30	1710446.67	14601915.84	40°12'22.284"N	104°44'57.057"W	6.09	
6802.00	22.610	176.870	6684.83	-307.44	289.42	805.87	1710448.33	14601886.94	40°12'21.998"N	104°44'57.037"W	7.69	
6890.00	27.680	178.170	6764.47	-270.15	252.07	807.45	1710450.01	14601849.61	40°12'21.629"N	104°44'57.016"W	5.80	
6977.00	35.120	181.530	6838.68	-224.88	206.79	807.43	1710450.11	14601804.35	40°12'21.181"N	104°44'57.017"W	8.78	
7065.00	40.300	183.310	6908.28	-171.08	153.04	805.11	1710447.94	14601750.61	40°12'20.650"N	104°44'57.046"W	6.01	
7074.00†	41.103	183.294	6915.10	-165.22	147.18	804.77	1710447.62	14601744.76	40°12'20.592"N	104°44'57.051"W	8.92	ENTER LANDBOX (823'FSL & 1286'FWL, SEC 23) 40.2057201, -104.7491808
7152.00	48.060	183.170	6970.62	-110.53	92.55	801.69	1710444.69	14601690.14	40°12'20.052"N	104°44'57.091"W	8.92	
7240.00	55.750	181.230	7024.88	-41.34	23.40	799.09	1710442.29	14601621.01	40°12'19.369"N	104°44'57.124"W	8.91	
7328.00	63.000	181.440	7069.68	34.33	-52.25	797.32	1710440.73	14601545.38	40°12'18.622"N	104°44'57.147"W	8.24	
7415.00	70.070	180.380	7104.30	114.08	-132.00	796.08	1710439.71	14601465.67	40°12'17.833"N	104°44'57.163"W	8.20	
7503.00	78.230	179.500	7128.31	198.64	-216.58	796.18	1710440.05	14601381.12	40°12'16.998"N	104°44'57.162"W	9.32	
7591.00	85.560	180.310	7140.71	285.68	-303.64	796.32	1710440.43	14601294.09	40°12'16.137"N	104°44'57.160"W	8.38	
7678.00	86.600	181.140	7146.66	372.47	-390.43	795.22	1710439.57	14601207.34	40°12'15.280"N	104°44'57.174"W	1.53	LANDING (285'FSL & 1276'FWL, SEC.23) 40.2042444, -104.7492150
7765.00	88.270	181.060	7150.55	459.38	-477.32	793.55	1710438.15	14601120.47	40°12'14.421"N	104°44'57.196"W	1.92	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL, SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

WELLPATH DATA (134 stations) † = 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	DLS °/100ft	Comments
7853.00	87.760	180.950	7153.60	547.32	-565.25	792.01	1710436.85	14601032.57	40°12'13.552"N	104°44'57.216"W	0.59	
7941.00	90.330	182.700	7155.07	635.29	-653.19	789.21	1710434.30	14600944.67	40°12'12.683"N	104°44'57.252"W	3.53	
8028.00	90.300	182.470	7154.59	722.27	-740.10	785.28	1710430.62	14600857.78	40°12'11.824"N	104°44'57.302"W	0.27	
8115.00	90.450	182.180	7154.02	809.25	-827.02	781.75	1710427.33	14600770.88	40°12'10.965"N	104°44'57.348"W	0.38	
8203.00	89.870	183.550	7153.78	897.22	-914.91	777.35	1710423.18	14600683.01	40°12'10.097"N	104°44'57.405"W	1.69	
8290.00	89.750	183.670	7154.06	984.15	-1001.74	771.88	1710417.95	14600596.21	40°12'09.239"N	104°44'57.475"W	0.20	
8378.00	89.780	183.840	7154.42	1072.06	-1089.55	766.11	1710412.43	14600508.42	40°12'08.371"N	104°44'57.550"W	0.20	
8418.00†	89.113	183.725	7154.81	1112.02	-1129.46	763.48	1710409.91	14600468.51	40°12'07.977"N	104°44'57.584"W	1.69	EXIT RADIUS HEEL (454'FNL & 1245'FWL, SEC.26) 40.2022157, -104.7493288
8465.00	88.330	183.590	7155.86	1158.97	-1176.35	760.48	1710407.04	14600421.63	40°12'07.513"N	104°44'57.622"W	1.69	
8553.00	88.360	183.030	7158.40	1246.88	-1264.17	755.40	1710402.21	14600333.84	40°12'06.645"N	104°44'57.688"W	0.64	
8640.00	88.210	182.650	7161.00	1333.81	-1351.02	751.09	1710398.15	14600247.01	40°12'05.787"N	104°44'57.743"W	0.47	
8728.00	87.740	182.270	7164.11	1421.73	-1438.88	747.32	1710394.62	14600159.17	40°12'04.919"N	104°44'57.792"W	0.69	
8815.00	88.960	180.940	7166.62	1508.69	-1525.81	744.88	1710392.43	14600072.27	40°12'04.060"N	104°44'57.823"W	2.07	
8902.00	90.730	180.400	7166.85	1595.68	-1612.80	743.86	1710391.65	14599985.31	40°12'03.200"N	104°44'57.836"W	2.13	
8989.00	90.980	179.840	7165.56	1682.66	-1699.79	743.68	1710391.71	14599898.36	40°12'02.341"N	104°44'57.839"W	0.70	
9077.00	91.550	179.280	7163.61	1770.59	-1787.76	744.36	1710392.63	14599810.42	40°12'01.471"N	104°44'57.830"W	0.91	
9164.00	91.100	180.420	7161.60	1857.54	-1874.74	744.58	1710393.10	14599723.48	40°12'00.612"N	104°44'57.827"W	1.41	
9252.00	91.660	180.280	7159.48	1945.50	-1962.71	744.05	1710392.81	14599635.54	40°11'59.742"N	104°44'57.834"W	0.66	
9339.00	90.250	180.060	7158.03	2032.47	-2049.70	743.79	1710392.80	14599548.59	40°11'58.883"N	104°44'57.838"W	1.64	
9427.00	89.850	179.890	7157.96	2120.45	-2137.70	743.83	1710393.08	14599460.62	40°11'58.013"N	104°44'57.837"W	0.49	
9514.00	89.680	179.430	7158.31	2207.41	-2224.69	744.34	1710393.84	14599373.66	40°11'57.154"N	104°44'57.831"W	0.56	
9601.00	89.790	179.170	7158.71	2294.36	-2311.69	745.41	1710395.15	14599286.71	40°11'56.294"N	104°44'57.817"W	0.32	
9689.00	89.270	179.160	7159.44	2382.30	-2399.67	746.69	1710396.67	14599198.76	40°11'55.424"N	104°44'57.800"W	0.59	
9777.00	88.820	179.080	7160.90	2470.22	-2487.65	748.04	1710398.27	14599110.82	40°11'54.555"N	104°44'57.783"W	0.52	
9864.00	89.780	180.610	7161.97	2557.18	-2574.64	748.27	1710398.75	14599023.87	40°11'53.695"N	104°44'57.780"W	2.08	
9952.00	89.620	180.250	7162.43	2645.17	-2662.64	747.61	1710398.33	14598935.90	40°11'52.826"N	104°44'57.789"W	0.45	
10039.00	89.620	179.560	7163.00	2732.15	-2749.63	747.76	1710398.72	14598848.94	40°11'51.966"N	104°44'57.787"W	0.79	
10127.00	89.670	181.350	7163.55	2820.13	-2837.63	747.06	1710398.27	14598760.98	40°11'51.097"N	104°44'57.796"W	2.03	
10214.00	89.760	181.190	7163.98	2907.13	-2924.60	745.13	1710396.58	14598674.03	40°11'50.237"N	104°44'57.821"W	0.21	
10301.00	89.580	180.760	7164.48	2994.13	-3011.59	743.65	1710395.35	14598587.08	40°11'49.377"N	104°44'57.840"W	0.54	
10389.00	89.530	180.490	7165.17	3082.12	-3099.58	742.69	1710394.63	14598499.12	40°11'48.508"N	104°44'57.852"W	0.31	
10476.00	89.920	179.970	7165.58	3169.10	-3186.58	742.34	1710394.53	14598412.16	40°11'47.648"N	104°44'57.857"W	0.75	
10564.00	89.530	181.600	7166.01	3257.09	-3274.57	741.14	1710393.57	14598324.20	40°11'46.779"N	104°44'57.872"W	1.90	
10651.00	89.650	181.100	7166.63	3344.09	-3361.54	739.09	1710391.76	14598237.26	40°11'45.919"N	104°44'57.899"W	0.59	
10739.00	89.040	180.550	7167.64	3432.08	-3449.52	737.82	1710390.74	14598149.30	40°11'45.050"N	104°44'57.915"W	0.93	
10826.00	91.120	182.370	7167.51	3519.07	-3536.49	735.60	1710388.77	14598062.37	40°11'44.190"N	104°44'57.944"W	3.18	
10914.00	91.500	182.080	7165.50	3607.04	-3624.40	732.19	1710385.60	14597974.48	40°11'43.322"N	104°44'57.988"W	0.54	
11001.00	91.360	182.770	7163.33	3693.99	-3711.29	728.51	1710382.16	14597887.61	40°11'42.463"N	104°44'58.035"W	0.81	
11088.00	90.840	182.450	7161.66	3780.95	-3798.19	724.55	1710378.45	14597800.74	40°11'41.604"N	104°44'58.086"W	0.70	
11176.00	90.730	182.120	7160.45	3868.93	-3886.11	721.04	1710375.18	14597712.85	40°11'40.735"N	104°44'58.131"W	0.40	
11263.00	91.160	181.930	7159.02	3955.91	-3973.04	717.97	1710372.35	14597625.94	40°11'39.876"N	104°44'58.171"W	0.54	
11350.00	91.330	181.380	7157.13	4042.89	-4059.98	715.45	1710370.09	14597539.03	40°11'39.017"N	104°44'58.204"W	0.66	
11413.00	91.490	181.220	7155.58	4105.87	-4122.95	714.02	1710368.83	14597476.08	40°11'38.395"N	104°44'58.222"W	0.36	LAST BHGE MWD+IFR1+MSA SURVEY
11466.00	91.490	181.220	7154.20	4158.85	-4175.92	712.90	1710367.85	14597423.13	40°11'37.872"N	104°44'58.236"W	0.00	PTB (1779'FSL & 1191'FWL, SEC.26)

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: FARLEY 23-4HZ AWB Ref Wellpath: FARLEY 23-4HZ AWP

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	17.00	1886.00	1869.00	17.00	1859.15	0.00	0.00	101.69	236.18

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.22-T3N-R66W	0.00	-30.26	-33.29	1709610.39	14601565.05	40°12'18.839"N	104°45'07.852"W	polygon
SEC.23-T3N-R66W	0.00	-30.26	-33.29	1709610.39	14601565.05	40°12'18.839"N	104°45'07.852"W	polygon
SEC.26-T3N-R66W	0.00	-30.26	-33.29	1709610.39	14601565.05	40°12'18.839"N	104°45'07.852"W	polygon
SEC.27-T3N-R66W	0.00	-30.26	-33.29	1709610.39	14601565.05	40°12'18.839"N	104°45'07.852"W	polygon
FARLEY 23-4HZ HEEL REV-1 (300'FSL & 1272'FWL,SEC.23)	7157.00	-375.62	791.35	1710435.66	14601222.13	40°12'15.426"N	104°44'57.224"W	point
FARLEY 23-4HZ BHL REV-1 (100'FSL & 1212'FWL,SEC.26)	7162.00	-5855.05	736.17	1710395.81	14595744.74	40°11'21.278"N	104°44'57.937"W	point
FARLEY 23-4HZ BHL REV-2 (1779'FSL & 1184'FWL,SEC.26)	7162.00	-4176.00	705.95	1710360.91	14597423.03	40°11'37.871"N	104°44'58.326"W	point
FARLEY 23-4HZ LANDBOX	7200.00	0.00	0.00	1709643.58	14601595.39	40°12'19.138"N	104°45'07.423"W	polygon
FARLEY 23-4HZ RADIUS 1	7200.00	-5954.62	840.13	1710500.00	14595645.50	40°11'20.294"N	104°44'56.598"W	polygon
FARLEY 23-4HZ RADIUS 2	7200.00	-675.79	836.06	1710481.20	14600922.20	40°12'12.460"N	104°44'56.648"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: FARLEY 23-4HZ AWB Ref Wellpath: FARLEY 23-4HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1847.00	Custom APC_ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <128 - 1847>	FARLEY 23-4HZ AWB
1847.00	11413.00	Custom APC_ISCWSA REV 2 MWD+IFR1+MSA (approximation)	BH Custom APC ISCWSA Rev-2 MWD+IFR1 <1964 - 11413>	FARLEY 23-4HZ AWB
11413.00	11466.00	Blind Drilling (std)	Projection to bit	FARLEY 23-4HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#04 FARLEY 23-4HZ (676'FSL & 481'FWL,SEC.23)
Area	COLORADO	Well	FARLEY 23-4HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	FARLEY 23-4HZ AWB
Facility	SEC.23-T3N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
128.00	1.630	216.620	127.99	FIRST SURFACE MWD+IFR1 SURVEY
1847.00	15.510	67.030	1821.57	LAST SURFACE MWD+IFR1 SURVEY
1964.00	15.340	63.180	1934.36	FIRST BHGE MWD+IFR1+MSA SURVEY
6519.00	2.386	190.510	6409.84	KOP
7074.00	41.103	183.294	6915.10	ENTER LANDBOX (823'FSL & 1286'FWL, SEC.23) 40.2057201, -104.7491808
7678.00	86.600	181.140	7146.66	LANDING (285'FSL & 1276'FWL, SEC.23) 40.2042444, -104.7492150
8418.00	89.113	183.725	7154.81	EXIT RADIUS HEEL (454'FNL & 1245'FWL, SEC.26) 40.2022157, -104.7493288
11413.00	91.490	181.220	7155.58	LAST BHGE MWD+IFR1+MSA SURVEY
11466.00	91.490	181.220	7154.20	PTB (1779'FSL & 1191'FWL, SEC.26)