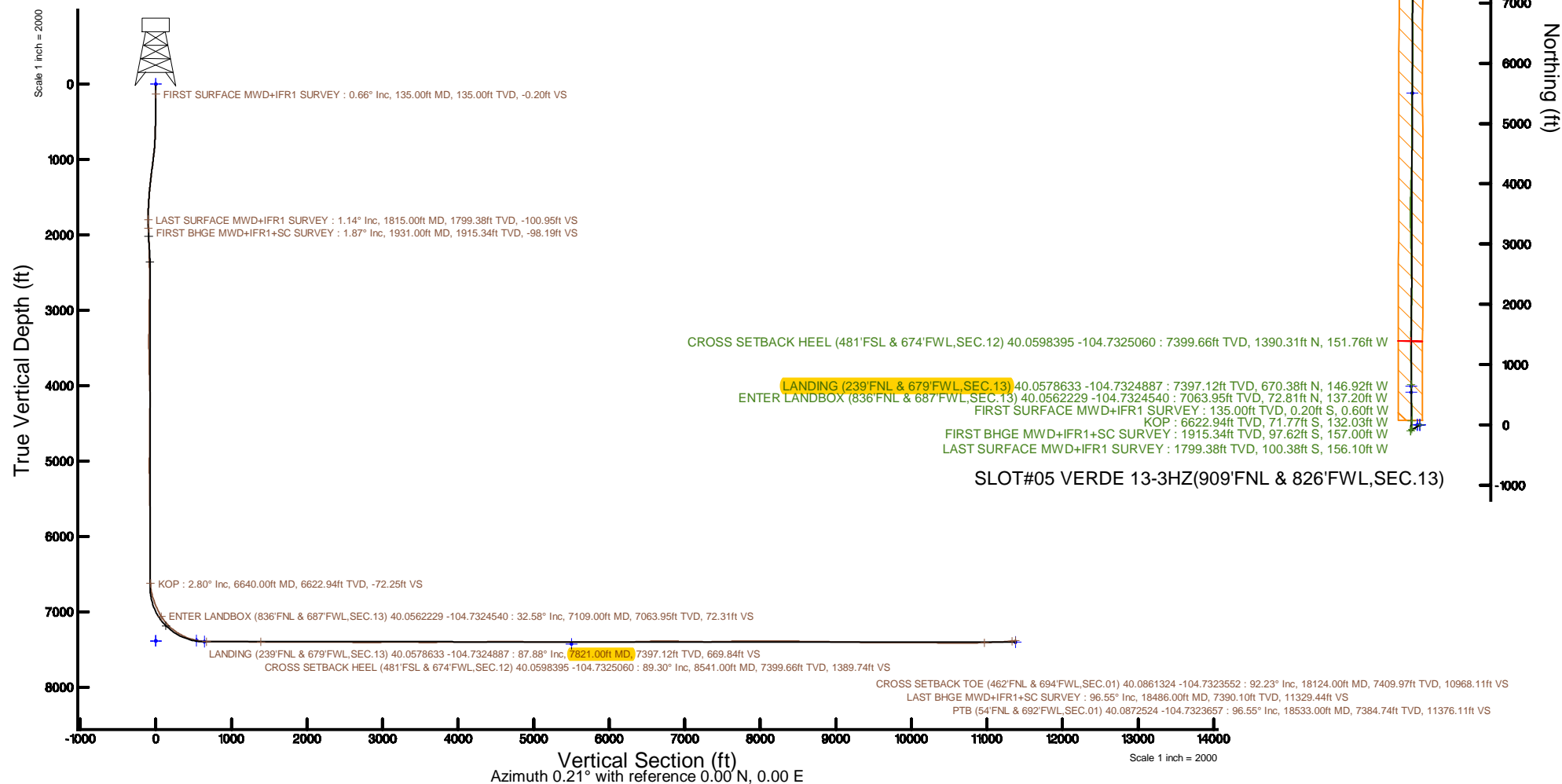


Location:	COLORADO	Slot:	SLOT#05 VERDE 13-3HZ(909°FNL & 826°FWL,SEC.13)
Field:	WELD COUNTY (UTM/TRUE NORTH)	Well:	VERDE 13-3HZ
Facility:	SEC.13-T1N-R66W	Wellbore:	VERDE 13-3HZ PWB
Plot reference wellbore is VERDE 13-3HZ PWP Rev-A.0		Grid System:	NAD83 / UTM Zone 13 North, US feet
True vertical depths are referenced to PD 564 (26) (RT)		* = Wellpath was transformed from a different geoidetic datum	
Measured depths are referenced to PD 564 (26) (RT)		North Reference:	True north
PD 564 (26) (RT) to Mean Sea Level: 5122 feet		Scale:	True distance
Mean Sea Level to Mud line (At Slot: SLOT#05 VERDE 13-3HZ@900°FNL & 826°FWL,SEC.13): 0 feet		Depths are in feet	
Coordinates are in feet referenced to Slot		Created by:	paimester on 2018-02-28
		Database:	WA, DEN, Anadarko, Delth



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Painsetr
Scale	0.999606	Report Generated	2/28/2018 at 8:54 AM
Convergence at slot	0.18° East	Database/Source file	WA_DEN_Anadarko_Defn/VERDE_13-3HZ_AWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-703.30	-2054.10	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W
Facility Reference Pt			1717470.20	14547956.10	40°03'28.634"N	104°43'28.654"W
Field Reference Pt			1698235.31	14552047.82	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PD 564 (26') (RT) to Facility Vertical Datum	5122.00ft
Horizontal Reference Pt	Slot	PD 564 (26') (RT) to Mean Sea Level	5122.00ft
Vertical Reference Pt	PD 564 (26') (RT)	PD 564 (26') (RT) to Mud Line at Slot (SLOT#05 VERDE 13-3HZ (909'FNL & 826'FWL,SEC.13))	5122.00ft
MD Reference Pt	PD 564 (26') (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.21°

Actual Wellpath Report

VERDE 13-3HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 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	251.830	0.00	0.00	0.00	0.00	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W	0.00	
26.00	0.000	251.830	26.00	0.00	0.00	0.00	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W	0.00	
135.00	0.660	251.830	135.00	-0.20	-0.20	-0.60	1715418.51	14547246.53	40°03'21.681"N	104°43'55.078"W	0.61	FIRST SURFACE MWD+IFR1 SURVEY
167.00	0.660	258.860	167.00	-0.29	-0.29	-0.95	1715418.15	14547246.44	40°03'21.680"N	104°43'55.082"W	0.25	
198.00	0.970	256.230	197.99	-0.39	-0.39	-1.38	1715417.72	14547246.34	40°03'21.679"N	104°43'55.088"W	1.01	
230.00	1.010	237.330	229.99	-0.61	-0.60	-1.88	1715417.22	14547246.12	40°03'21.677"N	104°43'55.094"W	1.02	
261.00	0.970	214.390	260.98	-0.97	-0.97	-2.26	1715416.84	14547245.76	40°03'21.673"N	104°43'55.099"W	1.28	
293.00	1.190	203.750	292.98	-1.50	-1.49	-2.55	1715416.56	14547245.23	40°03'21.668"N	104°43'55.103"W	0.93	
324.00	1.100	215.530	323.97	-2.04	-2.03	-2.85	1715416.26	14547244.69	40°03'21.663"N	104°43'55.107"W	0.81	
387.00	1.140	199.980	386.96	-3.12	-3.11	-3.42	1715415.70	14547243.61	40°03'21.652"N	104°43'55.114"W	0.49	
419.00	1.100	192.420	418.95	-3.72	-3.71	-3.59	1715415.52	14547243.01	40°03'21.646"N	104°43'55.116"W	0.48	
451.00	1.050	196.640	450.95	-4.31	-4.29	-3.74	1715415.37	14547242.43	40°03'21.641"N	104°43'55.118"W	0.29	
482.00	0.970	213.250	481.94	-4.80	-4.78	-3.97	1715415.15	14547241.94	40°03'21.636"N	104°43'55.121"W	0.98	
514.00	1.710	234.430	513.93	-5.30	-5.29	-4.50	1715414.62	14547241.43	40°03'21.631"N	104°43'55.128"W	2.75	
545.00	2.590	240.580	544.91	-5.92	-5.90	-5.49	1715413.63	14547240.82	40°03'21.625"N	104°43'55.141"W	2.93	
577.00	3.430	241.550	576.87	-6.74	-6.71	-6.96	1715412.16	14547240.00	40°03'21.617"N	104°43'55.160"W	2.63	
609.00	4.260	243.480	608.80	-7.73	-7.70	-8.87	1715410.26	14547239.01	40°03'21.607"N	104°43'55.184"W	2.62	
641.00	4.830	248.580	640.69	-8.76	-8.72	-11.18	1715407.95	14547237.98	40°03'21.597"N	104°43'55.214"W	2.18	
673.00	5.450	246.650	672.57	-9.87	-9.82	-13.83	1715405.30	14547236.88	40°03'21.586"N	104°43'55.248"W	2.01	
704.00	6.280	246.030	703.40	-11.15	-11.09	-16.73	1715402.41	14547235.60	40°03'21.573"N	104°43'55.285"W	2.69	
736.00	6.680	245.330	735.20	-12.65	-12.58	-20.02	1715399.12	14547234.10	40°03'21.559"N	104°43'55.328"W	1.27	
768.00	7.380	245.060	766.96	-14.31	-14.22	-23.58	1715395.57	14547232.45	40°03'21.542"N	104°43'55.373"W	2.19	
800.00	8.390	244.270	798.66	-16.20	-16.10	-27.55	1715391.61	14547230.55	40°03'21.524"N	104°43'55.424"W	3.17	
832.00	8.880	243.830	830.29	-18.32	-18.20	-31.87	1715387.30	14547228.44	40°03'21.503"N	104°43'55.480"W	1.55	
863.00	9.710	242.430	860.89	-20.60	-20.47	-36.33	1715382.85	14547226.16	40°03'21.481"N	104°43'55.537"W	2.77	
895.00	10.590	240.230	892.38	-23.33	-23.18	-41.28	1715377.91	14547223.44	40°03'21.454"N	104°43'55.601"W	3.00	
927.00	11.430	237.500	923.79	-26.51	-26.34	-46.50	1715372.70	14547220.26	40°03'21.423"N	104°43'55.668"W	3.09	
958.00	11.950	238.120	954.15	-29.87	-29.69	-51.82	1715367.39	14547216.90	40°03'21.390"N	104°43'55.736"W	1.73	
990.00	12.480	237.500	985.43	-33.50	-33.29	-57.55	1715361.68	14547213.28	40°03'21.354"N	104°43'55.810"W	1.71	
1022.00	13.450	237.860	1016.61	-37.36	-37.13	-63.61	1715355.62	14547209.42	40°03'21.316"N	104°43'55.888"W	3.04	
1054.00	14.110	237.770	1047.69	-41.45	-41.19	-70.07	1715349.19	14547205.35	40°03'21.276"N	104°43'55.971"W	2.06	
1085.00	13.750	237.680	1077.78	-45.45	-45.18	-76.38	1715342.89	14547201.34	40°03'21.237"N	104°43'56.052"W	1.16	
1117.00	13.540	236.890	1108.88	-49.56	-49.26	-82.73	1715336.56	14547197.25	40°03'21.196"N	104°43'56.134"W	0.88	
1149.00	12.700	236.980	1140.04	-53.54	-53.22	-88.81	1715330.48	14547193.27	40°03'21.157"N	104°43'56.212"W	2.63	
1180.00	12.260	236.190	1170.31	-57.25	-56.91	-94.41	1715324.90	14547189.56	40°03'21.121"N	104°43'56.284"W	1.52	
1212.00	12.480	236.360	1201.56	-61.08	-60.71	-100.11	1715319.22	14547185.74	40°03'21.083"N	104°43'56.357"W	0.70	
1244.00	11.650	234.690	1232.86	-64.88	-64.50	-105.62	1715313.71	14547181.94	40°03'21.046"N	104°43'56.428"W	2.81	
1276.00	11.070	234.340	1264.23	-68.56	-68.15	-110.76	1715308.59	14547178.27	40°03'21.009"N	104°43'56.494"W	1.83	
1308.00	11.070	233.900	1295.63	-72.18	-71.76	-115.73	1715303.63	14547174.66	40°03'20.974"N	104°43'56.558"W	0.26	
1339.00	10.110	233.200	1326.11	-75.58	-75.14	-120.32	1715299.06	14547171.26	40°03'20.940"N	104°43'56.617"W	3.12	
1371.00	9.540	232.930	1357.64	-78.87	-78.42	-124.68	1715294.70	14547167.97	40°03'20.908"N	104°43'56.673"W	1.79	
1403.00	9.450	233.990	1389.20	-82.03	-81.56	-128.92	1715290.47	14547164.81	40°03'20.877"N	104°43'56.728"W	0.61	
1435.00	8.390	232.230	1420.81	-85.02	-84.54	-132.89	1715286.51	14547161.83	40°03'20.848"N	104°43'56.779"W	3.42	
1466.00	8.090	234.600	1451.49	-87.68	-87.19	-136.46	1715282.96	14547159.17	40°03'20.821"N	104°43'56.825"W	1.46	
1498.00	7.470	235.570	1483.20	-90.18	-89.67	-140.01	1715279.42	14547156.68	40°03'20.797"N	104°43'56.871"W	1.98	

Actual Wellpath Report

VERDE 13-3HZ AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 stations)

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
1529.00	6.640	232.930	1513.96	-92.41	-91.89	-143.10	1715276.33	14547154.45	40°03'20.775"N	104°43'56.910"W	2.87	
1561.00	5.580	235.310	1545.78	-94.42	-93.89	-145.86	1715273.58	14547152.44	40°03'20.755"N	104°43'56.946"W	3.41	
1593.00	5.010	234.340	1577.64	-96.13	-95.59	-148.27	1715271.17	14547150.74	40°03'20.738"N	104°43'56.977"W	1.80	
1625.00	4.040	228.190	1609.54	-97.70	-97.15	-150.25	1715269.20	14547149.16	40°03'20.723"N	104°43'57.002"W	3.39	
1656.00	3.300	227.660	1640.48	-99.04	-98.48	-151.72	1715267.74	14547147.83	40°03'20.710"N	104°43'57.021"W	2.39	
1688.00	2.770	231.360	1672.43	-100.14	-99.59	-153.01	1715266.46	14547146.72	40°03'20.699"N	104°43'57.038"W	1.76	
1720.00	2.200	237.680	1704.40	-100.96	-100.40	-154.13	1715265.33	14547145.91	40°03'20.691"N	104°43'57.052"W	1.97	
1752.00	1.410	264.220	1736.39	-101.33	-100.76	-155.04	1715264.43	14547145.54	40°03'20.687"N	104°43'57.064"W	3.53	
1783.00	0.920	290.590	1767.38	-101.28	-100.72	-155.65	1715263.81	14547145.59	40°03'20.688"N	104°43'57.072"W	2.30	
1815.00	1.140	319.680	1799.38	-100.95	-100.38	-156.10	1715263.37	14547145.92	40°03'20.691"N	104°43'57.077"W	1.75	LAST SURFACE MWD+IFR1 SURVEY
1931.00	1.870	355.190	1915.34	-98.19	-97.62	-157.00	1715262.45	14547148.68	40°03'20.718"N	104°43'57.089"W	0.99	FIRST BHGE MWD+IFR1+SC SURVEY
2021.00	2.000	353.360	2005.29	-95.17	-94.59	-157.31	1715262.14	14547151.70	40°03'20.748"N	104°43'57.093"W	0.16	
2110.00	2.120	356.000	2094.23	-91.98	-91.41	-157.60	1715261.83	14547154.88	40°03'20.780"N	104°43'57.097"W	0.17	
2200.00	2.170	357.510	2184.17	-88.62	-88.05	-157.79	1715261.63	14547158.25	40°03'20.813"N	104°43'57.099"W	0.08	
2289.00	0.890	272.610	2273.14	-86.91	-86.33	-158.56	1715260.87	14547159.96	40°03'20.830"N	104°43'57.109"W	2.55	
2379.00	1.220	290.660	2363.13	-86.54	-85.96	-160.15	1715259.27	14547160.32	40°03'20.834"N	104°43'57.130"W	0.52	
2468.00	1.330	292.530	2452.10	-85.82	-85.23	-161.99	1715257.43	14547161.05	40°03'20.841"N	104°43'57.153"W	0.13	
2558.00	1.370	300.600	2542.08	-84.88	-84.28	-163.88	1715255.54	14547161.99	40°03'20.850"N	104°43'57.178"W	0.22	
2647.00	1.140	303.180	2631.06	-83.86	-83.26	-165.54	1715253.88	14547163.01	40°03'20.860"N	104°43'57.199"W	0.27	
2737.00	0.830	147.090	2721.05	-83.92	-83.31	-165.94	1715253.48	14547162.95	40°03'20.860"N	104°43'57.204"W	2.14	
2826.00	0.920	149.270	2810.04	-85.07	-84.47	-165.22	1715254.20	14547161.80	40°03'20.848"N	104°43'57.195"W	0.11	
2916.00	0.900	161.500	2900.03	-86.36	-85.76	-164.63	1715254.80	14547160.51	40°03'20.835"N	104°43'57.187"W	0.22	
3005.00	0.990	163.620	2989.02	-87.76	-87.16	-164.19	1715255.24	14547159.11	40°03'20.822"N	104°43'57.181"W	0.11	
3095.00	0.910	170.620	3079.01	-89.21	-88.61	-163.85	1715255.58	14547157.66	40°03'20.807"N	104°43'57.177"W	0.16	
3184.00	1.020	173.590	3167.99	-90.69	-90.10	-163.65	1715255.79	14547156.18	40°03'20.793"N	104°43'57.175"W	0.14	
3274.00	0.680	171.600	3257.98	-92.02	-91.42	-163.48	1715255.96	14547154.85	40°03'20.780"N	104°43'57.172"W	0.38	
3364.00	0.340	167.500	3347.98	-92.81	-92.21	-163.35	1715256.10	14547154.07	40°03'20.772"N	104°43'57.171"W	0.38	
3453.00	0.220	63.590	3436.98	-92.99	-92.39	-163.14	1715256.31	14547153.88	40°03'20.770"N	104°43'57.168"W	0.50	
3543.00	0.650	13.940	3526.98	-92.41	-91.82	-162.86	1715256.58	14547154.46	40°03'20.776"N	104°43'57.164"W	0.59	
3632.00	0.970	3.550	3615.97	-91.17	-90.58	-162.69	1715256.75	14547155.70	40°03'20.788"N	104°43'57.162"W	0.39	
3722.00	1.180	2.290	3705.95	-89.48	-88.89	-162.61	1715256.83	14547157.39	40°03'20.805"N	104°43'57.161"W	0.23	
3811.00	1.460	357.360	3794.93	-87.44	-86.84	-162.62	1715256.81	14547159.43	40°03'20.825"N	104°43'57.161"W	0.34	
3901.00	1.520	2.990	3884.90	-85.10	-84.51	-162.61	1715256.81	14547161.77	40°03'20.848"N	104°43'57.161"W	0.18	
3990.00	1.760	5.470	3973.86	-82.56	-81.97	-162.42	1715256.99	14547164.31	40°03'20.873"N	104°43'57.159"W	0.28	
4080.00	1.970	4.550	4063.81	-79.64	-79.05	-162.17	1715257.24	14547167.23	40°03'20.902"N	104°43'57.155"W	0.24	
4169.00	1.730	261.180	4152.79	-78.33	-77.73	-163.37	1715256.03	14547168.54	40°03'20.915"N	104°43'57.171"W	3.27	
4259.00	1.560	256.130	4242.75	-78.84	-78.23	-165.90	1715253.50	14547168.03	40°03'20.910"N	104°43'57.204"W	0.25	
4348.00	1.260	249.820	4331.72	-79.47	-78.86	-168.00	1715251.41	14547167.40	40°03'20.904"N	104°43'57.230"W	0.38	
4438.00	1.180	257.880	4421.70	-80.01	-79.40	-169.83	1715249.57	14547166.86	40°03'20.898"N	104°43'57.254"W	0.21	
4527.00	1.120	269.240	4510.68	-80.23	-79.60	-171.60	1715247.81	14547166.65	40°03'20.896"N	104°43'57.277"W	0.26	
4617.00	1.010	264.390	4600.67	-80.32	-79.69	-173.27	1715246.14	14547166.55	40°03'20.895"N	104°43'57.298"W	0.16	
4707.00	1.540	148.640	4690.66	-81.43	-80.80	-173.43	1715245.99	14547165.44	40°03'20.885"N	104°43'57.300"W	2.42	
4821.00	1.090	148.080	4804.63	-83.65	-83.03	-172.06	1715247.36	14547163.22	40°03'20.862"N	104°43'57.283"W	0.39	
4911.00	1.250	139.500	4894.61	-85.12	-84.50	-170.97	1715248.46	14547161.75	40°03'20.848"N	104°43'57.269"W	0.26	
5000.00	1.110	116.650	4983.59	-86.24	-85.63	-169.57	1715249.86	14547160.63	40°03'20.837"N	104°43'57.251"W	0.55	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 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
5089.00	1.030	81.360	5072.57	-86.50	-85.89	-168.00	1715251.42	14547160.37	40°03'20.834"N	104°43'57.231"W	0.73	
5179.00	1.100	58.380	5162.56	-85.92	-85.32	-166.47	1715252.95	14547160.95	40°03'20.840"N	104°43'57.211"W	0.48	
5268.00	1.140	44.100	5251.54	-84.84	-84.23	-165.13	1715254.29	14547162.03	40°03'20.851"N	104°43'57.194"W	0.32	
5358.00	1.170	42.690	5341.52	-83.51	-82.92	-163.88	1715255.54	14547163.36	40°03'20.864"N	104°43'57.178"W	0.05	
5448.00	1.210	32.130	5431.50	-82.03	-81.44	-162.75	1715256.66	14547164.84	40°03'20.878"N	104°43'57.163"W	0.25	
5537.00	1.100	32.040	5520.49	-80.51	-79.92	-161.80	1715257.61	14547166.36	40°03'20.893"N	104°43'57.151"W	0.12	
5626.00	1.070	29.180	5609.47	-79.05	-78.47	-160.94	1715258.46	14547167.81	40°03'20.908"N	104°43'57.140"W	0.07	
5716.00	1.100	31.320	5699.45	-77.58	-76.99	-160.08	1715259.32	14547169.29	40°03'20.922"N	104°43'57.129"W	0.06	
5805.00	1.180	42.890	5788.44	-76.17	-75.59	-159.01	1715260.38	14547170.69	40°03'20.936"N	104°43'57.115"W	0.27	
5895.00	1.200	55.960	5878.42	-74.96	-74.39	-157.60	1715261.79	14547171.90	40°03'20.948"N	104°43'57.097"W	0.30	
5985.00	1.490	67.370	5968.39	-73.98	-73.41	-155.74	1715263.64	14547172.88	40°03'20.958"N	104°43'57.073"W	0.44	
6074.00	1.680	79.580	6057.36	-73.29	-72.73	-153.39	1715265.99	14547173.57	40°03'20.964"N	104°43'57.043"W	0.43	
6164.00	1.850	84.530	6147.32	-72.90	-72.35	-150.65	1715268.73	14547173.96	40°03'20.968"N	104°43'57.007"W	0.25	
6253.00	2.070	87.980	6236.26	-72.69	-72.16	-147.61	1715271.77	14547174.16	40°03'20.970"N	104°43'56.968"W	0.28	
6343.00	2.320	92.490	6326.20	-72.70	-72.18	-144.17	1715275.21	14547174.15	40°03'20.970"N	104°43'56.924"W	0.34	
6432.00	2.380	89.580	6415.12	-72.76	-72.24	-140.52	1715278.86	14547174.09	40°03'20.969"N	104°43'56.877"W	0.15	
6522.00	2.400	91.350	6505.04	-72.77	-72.27	-136.77	1715282.61	14547174.07	40°03'20.969"N	104°43'56.829"W	0.08	
6611.00	2.370	90.290	6593.97	-72.81	-72.33	-133.06	1715286.31	14547174.03	40°03'20.968"N	104°43'56.781"W	0.06	
6640.00†	2.796	37.873	6622.94	-72.25	-71.77	-132.03	1715287.34	14547174.59	40°03'20.974"N	104°43'56.768"W	7.97	KOP
6701.00	6.880	2.780	6683.72	-67.42	-66.95	-130.94	1715288.42	14547179.42	40°03'21.021"N	104°43'56.754"W	7.97	
6791.00	14.890	351.000	6772.04	-50.59	-50.11	-132.49	1715286.82	14547196.24	40°03'21.188"N	104°43'56.774"W	9.19	
6880.00	19.210	354.150	6857.11	-24.73	-24.24	-135.77	1715283.46	14547222.09	40°03'21.443"N	104°43'56.816"W	4.96	
6970.00	23.350	359.810	6940.97	7.84	8.34	-137.34	1715281.79	14547254.66	40°03'21.765"N	104°43'56.836"W	5.13	
7059.00	28.660	0.030	7020.93	46.85	47.35	-137.39	1715281.63	14547293.65	40°03'22.151"N	104°43'56.837"W	5.97	
7109.00†	32.580	0.779	7063.95	72.31	72.81	-137.20	1715281.74	14547319.10	40°03'22.403"N	104°43'56.834"W	7.88	ENTER LANDBOX (836'FNL & 687'FWL,SEC.13) 40.0562229 -104.7324540
7148.00	35.640	1.260	7096.23	94.18	94.68	-136.80	1715282.07	14547340.96	40°03'22.619"N	104°43'56.829"W	7.88	
7238.00	43.140	359.780	7165.74	151.25	151.74	-136.35	1715282.35	14547398.00	40°03'23.183"N	104°43'56.823"W	8.40	
7327.00	49.880	359.770	7226.96	215.78	216.28	-136.60	1715281.91	14547462.51	40°03'23.820"N	104°43'56.827"W	7.57	
7416.00	57.060	358.200	7279.90	287.22	287.73	-137.91	1715280.38	14547533.93	40°03'24.526"N	104°43'56.844"W	8.19	
7506.00	64.570	358.340	7323.76	365.70	366.21	-140.28	1715277.78	14547612.37	40°03'25.302"N	104°43'56.874"W	8.35	
7595.00	72.140	359.150	7356.56	448.33	448.86	-142.07	1715275.73	14547694.98	40°03'26.119"N	104°43'56.897"W	8.55	
7685.00	77.540	358.800	7380.09	535.15	535.68	-143.63	1715273.92	14547781.76	40°03'26.977"N	104°43'56.917"W	6.01	
7774.00	84.480	358.270	7393.99	622.96	623.50	-145.88	1715271.40	14547869.54	40°03'27.845"N	104°43'56.946"W	7.82	
7821.00†	87.881	359.191	7397.12	669.84	670.38	-146.92	1715270.22	14547916.40	40°03'28.308"N	104°43'56.959"W	7.49	LANDING (239'FNL & 679'FWL,SEC.13) 40.0578633 -104.7324887
7863.00	90.920	0.010	7397.56	711.83	712.37	-147.21	1715269.81	14547958.37	40°03'28.723"N	104°43'56.963"W	7.49	
7953.00	90.860	0.310	7396.16	801.82	802.36	-146.96	1715269.79	14548048.33	40°03'29.612"N	104°43'56.960"W	0.34	
8042.00	89.510	359.570	7395.87	890.81	891.35	-147.05	1715269.42	14548137.29	40°03'30.492"N	104°43'56.961"W	1.73	
8132.00	89.720	359.180	7396.48	980.80	981.35	-148.03	1715268.17	14548227.24	40°03'31.381"N	104°43'56.974"W	0.49	
8221.00	89.140	359.850	7397.36	1069.79	1070.34	-148.79	1715267.15	14548316.19	40°03'32.260"N	104°43'56.984"W	1.00	
8311.00	89.230	359.380	7398.64	1159.77	1160.33	-149.39	1715266.28	14548406.14	40°03'33.150"N	104°43'56.991"W	0.53	
8400.00	90.030	359.010	7399.22	1248.76	1249.32	-150.64	1715264.76	14548495.09	40°03'34.029"N	104°43'57.007"W	0.99	
8490.00	89.880	359.510	7399.29	1338.74	1339.31	-151.80	1715263.33	14548585.05	40°03'34.918"N	104°43'57.022"W	0.58	
8541.00†	89.295	0.599	7399.66	1389.74	1390.31	-151.76	1715263.22	14548636.02	40°03'35.422"N	104°43'57.022"W	2.42	CROSS SETBACK HEEL (481'FSL & 674'FWL,SEC.12) 40.0598395 -104.7325060
8579.00	88.860	1.410	7400.27	1427.73	1428.29	-151.09	1715263.77	14548674.00	40°03'35.798"N	104°43'57.013"W	2.42	
8669.00	89.110	0.940	7401.86	1517.71	1518.26	-149.25	1715265.35	14548763.94	40°03'36.687"N	104°43'56.989"W	0.59	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 stations)

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
8758.00	90.310	0.880	7402.31	1606.70	1607.25	-147.83	1715266.49	14548852.89	40°03'37.566"N	104°43'56.971"W	1.35	
8848.00	91.080	0.700	7401.22	1696.68	1697.23	-146.59	1715267.46	14548942.84	40°03'38.455"N	104°43'56.955"W	0.88	
8937.00	89.570	1.870	7400.72	1785.66	1786.20	-144.60	1715269.19	14549031.78	40°03'39.335"N	104°43'56.930"W	2.15	
9027.00	89.660	0.970	7401.32	1875.64	1876.17	-142.36	1715271.15	14549121.72	40°03'40.224"N	104°43'56.901"W	1.00	
9116.00	90.370	1.340	7401.30	1964.63	1965.15	-140.57	1715272.67	14549210.68	40°03'41.103"N	104°43'56.878"W	0.90	
9205.00	90.310	359.850	7400.77	2053.62	2054.14	-139.65	1715273.33	14549299.63	40°03'41.983"N	104°43'56.866"W	1.68	
9294.00	90.890	0.370	7399.84	2142.62	2143.14	-139.48	1715273.23	14549388.59	40°03'42.862"N	104°43'56.864"W	0.88	
9383.00	89.780	359.470	7399.32	2231.61	2232.13	-139.60	1715272.84	14549477.55	40°03'43.741"N	104°43'56.865"W	1.61	
9472.00	89.880	0.590	7399.58	2320.61	2321.13	-139.55	1715272.62	14549566.52	40°03'44.621"N	104°43'56.866"W	1.26	
9562.00	88.490	359.020	7400.86	2410.59	2411.12	-139.86	1715272.04	14549656.46	40°03'45.510"N	104°43'56.869"W	2.33	
9651.00	88.640	359.290	7403.09	2499.55	2500.08	-141.17	1715270.46	14549745.39	40°03'46.389"N	104°43'56.886"W	0.35	
9741.00	88.460	358.550	7405.37	2589.50	2590.04	-142.87	1715268.50	14549835.30	40°03'47.278"N	104°43'56.907"W	0.85	
9830.00	88.300	359.170	7407.88	2678.44	2678.98	-144.64	1715266.46	14549924.21	40°03'48.157"N	104°43'56.930"W	0.72	
9920.00	90.490	359.090	7408.83	2768.41	2768.96	-146.00	1715264.82	14550014.14	40°03'49.046"N	104°43'56.948"W	2.43	
10009.00	90.740	359.170	7407.88	2857.39	2857.95	-147.36	1715263.20	14550103.09	40°03'49.926"N	104°43'56.965"W	0.29	
10099.00	90.920	358.840	7406.57	2947.36	2947.92	-148.92	1715261.37	14550193.03	40°03'50.815"N	104°43'56.985"W	0.42	
10188.00	90.960	359.200	7405.11	3036.33	3036.90	-150.44	1715259.58	14550281.96	40°03'51.694"N	104°43'57.005"W	0.41	
10278.00	91.630	358.350	7403.08	3126.28	3126.85	-152.36	1715257.39	14550371.87	40°03'52.583"N	104°43'57.030"W	1.20	
10367.00	90.650	357.980	7401.31	3215.20	3215.79	-155.21	1715254.27	14550460.77	40°03'53.462"N	104°43'57.066"W	1.18	
10457.00	88.770	358.790	7401.77	3305.15	3305.75	-157.75	1715251.47	14550550.68	40°03'54.351"N	104°43'57.099"W	2.27	
10547.00	88.340	357.930	7404.03	3395.07	3395.68	-160.32	1715248.62	14550640.57	40°03'55.240"N	104°43'57.132"W	1.07	
10636.00	89.260	0.660	7405.90	3484.03	3484.64	-161.42	1715247.26	14550729.50	40°03'56.119"N	104°43'57.146"W	3.24	
10726.00	89.570	1.290	7406.82	3574.02	3574.63	-159.89	1715248.52	14550819.45	40°03'57.008"N	104°43'57.126"W	0.78	
10815.00	90.620	0.580	7406.67	3663.01	3663.61	-158.43	1715249.70	14550908.40	40°03'57.888"N	104°43'57.108"W	1.42	
10905.00	91.720	0.700	7404.83	3752.99	3753.59	-157.43	1715250.44	14550998.34	40°03'58.777"N	104°43'57.095"W	1.23	
10994.00	90.920	1.430	7402.78	3841.95	3842.55	-155.78	1715251.82	14551087.27	40°03'59.656"N	104°43'57.074"W	1.22	
11084.00	90.990	1.730	7401.28	3931.91	3932.50	-153.29	1715254.03	14551177.20	40°04'00.545"N	104°43'57.042"W	0.34	
11173.00	89.320	1.990	7401.04	4020.87	4021.45	-150.41	1715256.65	14551266.12	40°04'01.424"N	104°43'57.005"W	1.90	
11263.00	89.820	2.600	7401.72	4110.81	4111.37	-146.80	1715259.98	14551356.02	40°04'02.312"N	104°43'56.958"W	0.88	
11352.00	89.910	1.900	7401.93	4199.75	4200.30	-143.31	1715263.21	14551444.92	40°04'03.191"N	104°43'56.913"W	0.79	
11441.00	90.890	2.390	7401.31	4288.70	4289.24	-139.98	1715266.27	14551533.83	40°04'04.070"N	104°43'56.870"W	1.23	
11531.00	91.690	1.930	7399.28	4378.62	4379.15	-136.59	1715269.39	14551623.72	40°04'04.959"N	104°43'56.827"W	1.03	
11620.00	91.050	1.020	7397.15	4467.57	4468.09	-134.30	1715271.41	14551712.63	40°04'05.838"N	104°43'56.797"W	1.25	
11710.00	90.660	359.940	7396.28	4557.57	4558.08	-133.54	1715271.90	14551802.59	40°04'06.727"N	104°43'56.788"W	1.63	
11799.00	90.550	0.010	7395.81	4646.56	4647.08	-133.58	1715271.59	14551891.55	40°04'07.606"N	104°43'56.788"W	0.56	
11889.00	89.260	1.020	7395.96	4736.56	4737.08	-132.77	1715272.13	14551981.51	40°04'08.496"N	104°43'56.778"W	1.82	
11982.00	88.120	358.940	7398.08	4829.53	4830.04	-132.80	1715271.81	14552074.44	40°04'09.415"N	104°43'56.778"W	2.55	
12074.00	87.970	359.070	7401.22	4921.45	4921.98	-134.40	1715269.94	14552166.33	40°04'10.323"N	104°43'56.799"W	0.22	
12166.00	88.060	358.480	7404.41	5013.37	5013.90	-136.37	1715267.70	14552258.22	40°04'11.231"N	104°43'56.824"W	0.65	
12260.00	90.620	0.430	7405.49	5107.34	5107.88	-137.26	1715266.52	14552352.15	40°04'12.160"N	104°43'56.836"W	3.42	
12352.00	91.080	0.610	7404.12	5199.33	5199.86	-136.42	1715267.08	14552444.10	40°04'13.069"N	104°43'56.825"W	0.54	
12443.00	91.940	0.650	7401.73	5290.30	5290.83	-135.42	1715267.81	14552535.03	40°04'13.968"N	104°43'56.812"W	0.95	
12536.00	90.680	0.860	7399.60	5383.27	5383.79	-134.20	1715268.75	14552627.96	40°04'14.887"N	104°43'56.796"W	1.37	
12628.00	89.410	1.020	7399.53	5475.26	5475.78	-132.69	1715269.99	14552719.92	40°04'15.796"N	104°43'56.777"W	1.39	
12720.00	90.000	1.190	7400.00	5567.24	5567.76	-130.92	1715271.48	14552811.87	40°04'16.705"N	104°43'56.754"W	0.67	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 stations)

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
12811.00	89.750	1.270	7400.20	5658.23	5658.74	-128.96	1715273.16	14552902.82	40°04'17.604"N	104°43'56.729"W	0.29	
12901.00	89.820	1.110	7400.54	5748.21	5748.72	-127.09	1715274.76	14552992.77	40°04'18.493"N	104°43'56.705"W	0.19	
12990.00	90.120	1.060	7400.59	5837.20	5837.70	-125.41	1715276.18	14553081.72	40°04'19.372"N	104°43'56.683"W	0.34	
13080.00	89.970	1.560	7400.51	5927.19	5927.68	-123.35	1715277.96	14553171.67	40°04'20.262"N	104°43'56.657"W	0.58	
13169.00	89.850	1.220	7400.65	6016.17	6016.65	-121.19	1715279.85	14553260.61	40°04'21.141"N	104°43'56.629"W	0.41	
13259.00	89.630	1.420	7401.06	6106.15	6106.63	-119.12	1715281.65	14553350.55	40°04'22.030"N	104°43'56.602"W	0.33	
13348.00	90.180	0.120	7401.21	6195.14	6195.61	-117.92	1715282.58	14553439.51	40°04'22.909"N	104°43'56.587"W	1.59	
13438.00	90.980	359.970	7400.30	6285.14	6285.61	-117.85	1715282.38	14553529.47	40°04'23.799"N	104°43'56.586"W	0.90	
13527.00	91.970	0.100	7398.01	6374.11	6374.58	-117.80	1715282.17	14553618.41	40°04'24.678"N	104°43'56.585"W	1.12	
13617.00	92.060	358.830	7394.84	6464.04	6464.52	-118.64	1715281.06	14553708.31	40°04'25.567"N	104°43'56.596"W	1.41	
13706.00	91.690	358.910	7391.93	6552.97	6553.45	-120.39	1715279.04	14553797.20	40°04'26.446"N	104°43'56.619"W	0.43	
13796.00	90.310	358.230	7390.36	6642.92	6643.41	-122.64	1715276.52	14553887.11	40°04'27.335"N	104°43'56.648"W	1.71	
13885.00	90.280	358.510	7389.90	6731.87	6732.37	-125.17	1715273.72	14553976.03	40°04'28.214"N	104°43'56.680"W	0.32	
13975.00	88.830	359.530	7390.60	6821.84	6822.35	-126.71	1715271.91	14554065.97	40°04'29.103"N	104°43'56.700"W	1.97	
14064.00	88.800	359.300	7392.44	6910.82	6911.33	-127.62	1715270.74	14554154.91	40°04'29.982"N	104°43'56.712"W	0.26	
14154.00	88.680	359.240	7394.42	7000.78	7001.30	-128.76	1715269.32	14554244.84	40°04'30.871"N	104°43'56.726"W	0.15	
14244.00	88.830	358.160	7396.38	7090.73	7091.25	-130.80	1715267.01	14554334.75	40°04'31.760"N	104°43'56.753"W	1.21	
14333.00	88.950	357.620	7398.10	7179.64	7180.18	-134.08	1715263.47	14554423.63	40°04'32.639"N	104°43'56.795"W	0.62	
14423.00	89.480	359.080	7399.33	7269.58	7270.13	-136.67	1715260.61	14554513.54	40°04'33.528"N	104°43'56.828"W	1.73	
14512.00	90.860	0.330	7399.07	7358.57	7359.12	-137.13	1715259.88	14554602.50	40°04'34.407"N	104°43'56.834"W	2.09	
14602.00	91.380	359.980	7397.31	7448.55	7449.10	-136.89	1715259.85	14554692.44	40°04'35.297"N	104°43'56.831"W	0.70	
14692.00	92.100	0.940	7394.58	7538.51	7539.06	-136.16	1715260.30	14554782.36	40°04'36.186"N	104°43'56.822"W	1.33	
14781.00	90.710	0.150	7392.40	7627.48	7628.02	-135.32	1715260.88	14554871.30	40°04'37.065"N	104°43'56.811"W	1.80	
14871.00	91.290	3.180	7390.82	7717.43	7717.96	-132.70	1715263.22	14554961.20	40°04'37.953"N	104°43'56.777"W	3.43	
14961.00	88.920	2.350	7390.66	7807.33	7807.85	-128.36	1715267.29	14555051.07	40°04'38.842"N	104°43'56.721"W	2.79	
15050.00	89.260	1.480	7392.07	7896.28	7896.79	-125.39	1715270.00	14555139.98	40°04'39.721"N	104°43'56.683"W	1.05	
15140.00	91.570	1.880	7391.42	7986.24	7986.74	-122.75	1715272.36	14555229.91	40°04'40.610"N	104°43'56.649"W	2.60	
15229.00	90.280	1.650	7389.98	8075.19	8075.68	-120.01	1715274.84	14555318.82	40°04'41.489"N	104°43'56.614"W	1.47	
15319.00	89.570	2.740	7390.10	8165.14	8165.62	-116.56	1715278.01	14555408.73	40°04'42.377"N	104°43'56.569"W	1.45	
15409.00	91.110	3.190	7389.57	8255.03	8255.49	-111.91	1715282.39	14555498.58	40°04'43.265"N	104°43'56.510"W	1.78	
15498.00	89.170	359.630	7389.35	8343.99	8344.44	-109.72	1715284.31	14555587.51	40°04'44.145"N	104°43'56.481"W	4.56	
15588.00	89.040	0.060	7390.76	8433.98	8434.43	-109.96	1715283.80	14555677.46	40°04'45.034"N	104°43'56.485"W	0.50	
15677.00	88.580	359.630	7392.61	8522.95	8523.41	-110.20	1715283.29	14555766.40	40°04'45.913"N	104°43'56.488"W	0.71	
15767.00	89.350	359.630	7394.23	8612.93	8613.40	-110.78	1715282.44	14555856.35	40°04'46.802"N	104°43'56.495"W	0.86	
15857.00	89.020	0.150	7395.51	8702.92	8703.39	-110.96	1715282.00	14555946.30	40°04'47.692"N	104°43'56.497"W	0.68	
15946.00	89.230	0.130	7396.87	8791.91	8792.38	-110.74	1715281.95	14556035.26	40°04'48.571"N	104°43'56.495"W	0.24	
16036.00	89.010	359.910	7398.25	8881.90	8882.37	-110.71	1715281.71	14556125.21	40°04'49.460"N	104°43'56.494"W	0.35	
16125.00	88.030	358.580	7400.55	8970.86	8971.32	-111.88	1715280.27	14556214.13	40°04'50.339"N	104°43'56.509"W	1.86	
16215.00	88.340	359.640	7403.40	9060.79	9061.27	-113.28	1715278.60	14556304.03	40°04'51.228"N	104°43'56.527"W	1.23	
16305.00	89.320	358.940	7405.24	9150.76	9151.24	-114.39	1715277.22	14556393.97	40°04'52.117"N	104°43'56.542"W	1.34	
16394.00	90.430	0.200	7405.43	9239.75	9240.23	-115.06	1715276.28	14556482.92	40°04'52.997"N	104°43'56.550"W	1.89	
16484.00	88.950	359.150	7405.92	9329.74	9330.23	-115.57	1715275.50	14556572.88	40°04'53.886"N	104°43'56.557"W	2.02	
16574.00	89.140	358.530	7407.42	9419.71	9420.20	-117.39	1715273.41	14556662.81	40°04'54.775"N	104°43'56.580"W	0.72	
16663.00	90.400	0.620	7407.78	9508.69	9509.19	-118.05	1715272.48	14556751.76	40°04'55.655"N	104°43'56.589"W	2.74	
16753.00	89.230	2.090	7408.07	9598.67	9599.16	-115.92	1715274.34	14556841.70	40°04'56.544"N	104°43'56.561"W	2.09	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH DATA (246 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
16842.00	89.970	3.920	7408.69	9687.56	9688.03	-111.26	1715278.73	14556930.55	40°04'57.422"N	104°43'56.501"W	2.22	
16932.00	90.340	3.870	7408.45	9777.37	9777.82	-105.15	1715284.57	14557020.32	40°04'58.309"N	104°43'56.423"W	0.41	
17021.00	89.230	3.780	7408.78	9866.19	9866.62	-99.21	1715290.24	14557109.10	40°04'59.187"N	104°43'56.346"W	1.25	
17111.00	90.490	3.230	7409.00	9956.04	9956.45	-93.71	1715295.47	14557198.91	40°05'00.075"N	104°43'56.275"W	1.53	
17200.00	90.120	2.150	7408.53	10044.95	10045.35	-89.53	1715299.38	14557287.79	40°05'00.953"N	104°43'56.222"W	1.28	
17290.00	89.020	1.800	7409.20	10134.91	10135.29	-86.43	1715302.21	14557377.71	40°05'01.842"N	104°43'56.182"W	1.28	
17380.00	89.750	0.120	7410.17	10224.89	10225.27	-84.92	1715303.44	14557467.65	40°05'02.731"N	104°43'56.162"W	2.04	
17469.00	88.180	0.040	7411.78	10313.87	10314.25	-84.80	1715303.30	14557556.60	40°05'03.611"N	104°43'56.161"W	1.77	
17558.00	88.800	358.000	7414.12	10402.82	10403.20	-86.32	1715301.51	14557645.51	40°05'04.490"N	104°43'56.180"W	2.39	
17648.00	90.250	356.210	7414.87	10492.68	10493.08	-90.86	1715296.70	14557735.34	40°05'05.378"N	104°43'56.239"W	2.56	
17737.00	89.230	357.440	7415.27	10581.52	10581.94	-95.79	1715291.50	14557824.15	40°05'06.256"N	104°43'56.302"W	1.80	
17827.00	89.660	358.000	7416.14	10671.43	10671.86	-99.37	1715287.65	14557914.02	40°05'07.144"N	104°43'56.348"W	0.78	
17916.00	91.450	356.960	7415.28	10760.32	10760.77	-103.29	1715283.47	14558002.88	40°05'08.023"N	104°43'56.399"W	2.33	
18006.00	91.080	358.110	7413.29	10850.20	10850.66	-107.15	1715279.34	14558092.73	40°05'08.911"N	104°43'56.448"W	1.34	
18095.00	91.870	359.200	7411.00	10939.13	10939.60	-109.24	1715276.98	14558181.63	40°05'09.790"N	104°43'56.475"W	1.51	
18124.00†	92.231	359.744	7409.97	10968.11	10968.58	-109.51	1715276.63	14558210.60	40°05'10.077"N	104°43'56.479"W	2.25	CROSS SETBACK TOE (462'FNL & 694'FWL,SEC.01) 40.0861324 -104.7323552
18185.00	92.990	0.890	7407.19	11029.05	11029.52	-109.17	1715276.78	14558271.51	40°05'10.679"N	104°43'56.474"W	2.25	
18274.00	91.630	359.540	7403.60	11117.97	11118.44	-108.84	1715276.85	14558360.40	40°05'11.558"N	104°43'56.470"W	2.15	
18364.00	92.840	359.920	7400.09	11207.90	11208.37	-109.26	1715276.15	14558450.29	40°05'12.446"N	104°43'56.476"W	1.41	
18486.00	96.550	358.350	7390.10	11329.44	11329.92	-111.09	1715273.95	14558571.78	40°05'13.648"N	104°43'56.499"W	3.30	LAST BHGE MWD+IFR1+SC SURVEY
18533.00	96.550	358.350	7384.74	11376.11	11376.59	-112.44	1715272.47	14558618.44	40°05'14.109"N	104°43'56.517"W	0.00	PTB (54'FNL & 692'FWL,SEC.01) 40.0872524 -104.7323657

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.01-T1N-R66W	0.00	0.30	-45.10	1715374.02	14547246.90	40°03'21.686"N	104°43'55.650"W	polygon
SEC.12-T1N-R66W	0.00	0.30	-45.10	1715374.02	14547246.90	40°03'21.686"N	104°43'55.650"W	polygon
VERDE 13-3HZ HEEL REV-1(368'FNL & 678'FWL,SEC.13)	7381.00	540.22	-146.15	1715271.38	14547786.30	40°03'27.022"N	104°43'56.950"W	point
VERDE 13-3HZ LANDBOX	7386.00	0.00	0.00	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W	polygon
VERDE 13-3HZ SETBACK 1	7386.00	0.00	0.00	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W	polygon
VERDE 13-3HZ SETBACK 2	7386.00	0.00	0.00	1715419.10	14547246.73	40°03'21.683"N	104°43'55.070"W	polygon
VERDE 13-3HZ HEEL REV-2(268'FNL & 678'FWL,SEC.13)	7397.00	640.22	-146.15	1715271.08	14547886.26	40°03'28.010"N	104°43'56.950"W	point
VERDE 13-3HZ BHL REV-1(53'FNL & 697'FWL,SEC.01)	7404.00	11378.24	-106.96	1715277.94	14558620.09	40°05'14.125"N	104°43'56.446"W	point
VERDE 13-3HZ INT. TARGET@5500'VS	7426.00	5500.50	-128.20	1715274.40	14552744.64	40°04'16.040"N	104°43'56.719"W	point

WELLPATH COMPOSITION - Ref Wellbore: VERDE 13-3HZ AWB Ref Wellpath: VERDE 13-3HZ AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	1815.00	Custom APC ISCWSA REV 2 MWD+IFR1 (approximation)	Custom APC ISCWSA Rev-2 MWD+IFR1 <135 - 1815>	VERDE 13-3HZ AWB
1815.00	18486.00	Custom APC ISCWSA REV 2 MWD+IFR1+SC (approximation)	BHGE Custom APC ISCWSA Rev-2 MWD+IFR1+SC <1931 - 18486>	VERDE 13-3HZ AWB
18486.00	18533.00	Blind Drilling (std)	Projection to bit	VERDE 13-3HZ AWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP (WA)	Slot	SLOT#05 VERDE 13-3HZ(909'FNL & 826'FWL,SEC.13)
Area	COLORADO	Well	VERDE 13-3HZ
Field	WELD COUNTY (UTM/TRUE NORTH)	Wellbore	VERDE 13-3HZ AWB
Facility	SEC.13-T1N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
135.00	0.660	251.830	135.00	FIRST SURFACE MWD+IFR1 SURVEY
1815.00	1.140	319.680	1799.38	LAST SURFACE MWD+IFR1 SURVEY
1931.00	1.870	355.190	1915.34	FIRST BHGE MWD+IFR1+SC SURVEY
6640.00	2.796	37.873	6622.94	KOP
7109.00	32.580	0.779	7063.95	ENTER LANDBOX (836'FNL & 687'FWL,SEC.13) 40.0562229 -104.7324540
7821.00	87.881	359.191	7397.12	LANDING (239'FNL & 679'FWL,SEC.13) 40.0578633 -104.7324887
8541.00	89.295	0.599	7399.66	CROSS SETBACK HEEL (481'FSL & 674'FWL,SEC.12) 40.0598395 -104.7325060
18124.00	92.231	359.744	7409.97	CROSS SETBACK TOE (462'FNL & 694'FWL,SEC.01) 40.0861324 -104.7323552
18486.00	96.550	358.350	7390.10	LAST BHGE MWD+IFR1+SC SURVEY
18533.00	96.550	358.350	7384.74	PTB (54'FNL & 692'FWL,SEC.01) 40.0872524 -104.7323657