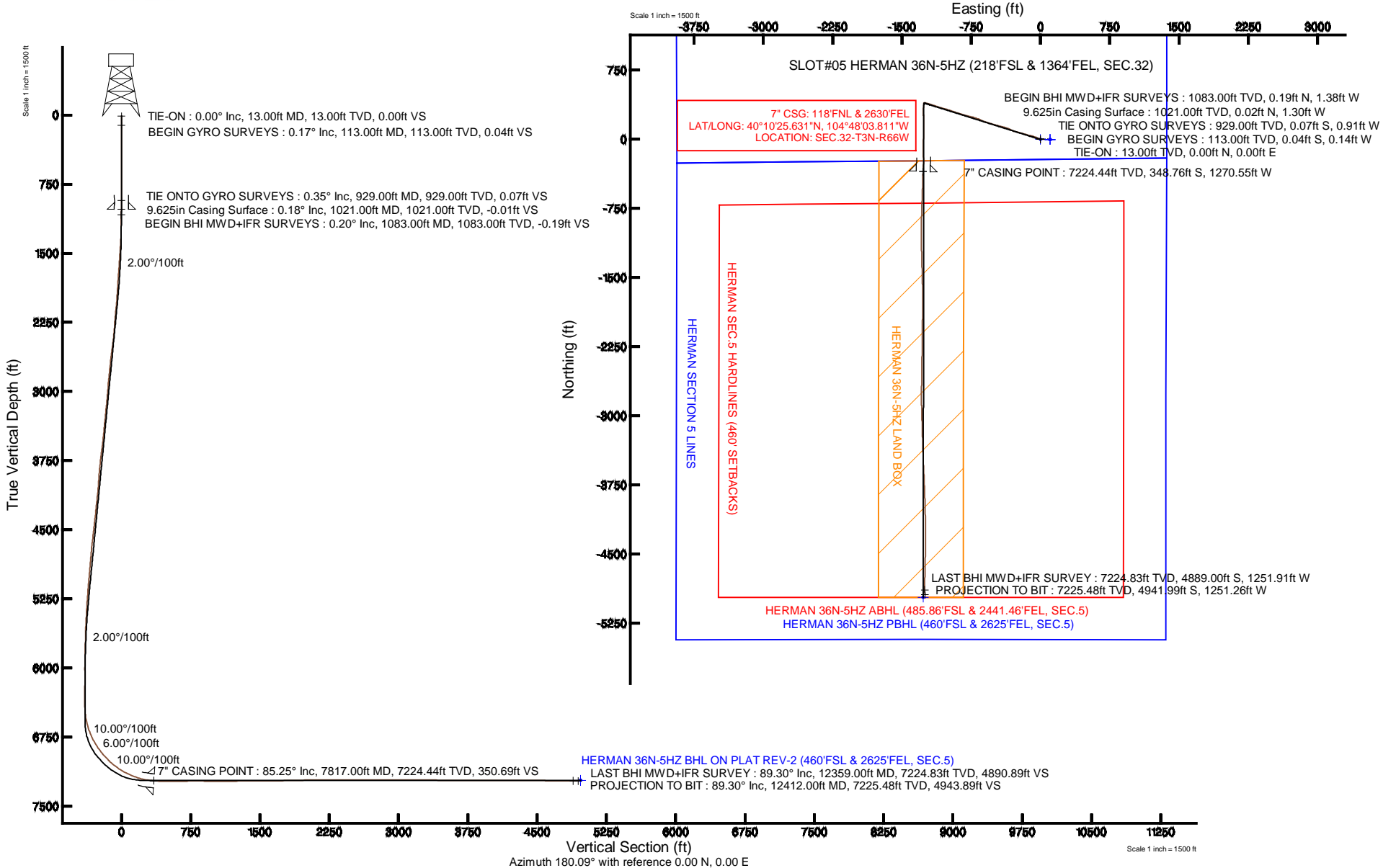


KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
 Field: WELD COUNTY (KERR MCGEE) Well: HERMAN 36N-5HZ
 Facility: SEC.32-T3N-R66W Wellbore: HERMAN 36N-5HZ PWB

Plot reference wellpath is HERMAN 36N-5HZ (REV-A.0) PWP

True vertical depths are referenced to ENSIGN 138 (13' RKB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 138 (13' RKB) (RKB)	North Reference: True north
ENSGN 138 (13' RKB) (RKB) to Mean Sea Level: 4884 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robale01 on 14/Oct/2013





Actual Wellpath Report

HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Robiale01
Scale	0.999958	Report Generated	14/Oct/2013 at 15:03
Convergence at slot	n/a	Database/Source file	WA_ANADARKO/HERMAN_36N-5HZ_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	24.89	16.07	3196577.64	1307281.87	40°10'29.078"N	104°47'47.443"W
Facility Reference Pt			3196561.77	1307256.85	40°10'28.832"N	104°47'47.650"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	ENSIGN 138 (13' RKB) (RKB) to Facility Vertical Datum	4884.00ft
Horizontal Reference Pt	Slot	ENSIGN 138 (13' RKB) (RKB) to Mean Sea Level	4884.00ft
Vertical Reference Pt	ENSIGN 138 (13' RKB) (RKB)	ENSIGN 138 (13' RKB) (RKB) to Mud Line at Slot (SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32))	4884.00ft
MD Reference Pt	ENSIGN 138 (13' RKB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	194.21°



Actual Wellpath Report

HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

WELLPATH DATA (128 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	255.230	0.00	0.00	0.00	0.00	40°10'29.078"N	104°47'47.443"W	0.00	
13.00	0.000	255.230	13.00	0.00	0.00	0.00	40°10'29.078"N	104°47'47.443"W	0.00	TIE-ON
113.00	0.170	255.230	113.00	0.07	-0.04	-0.14	40°10'29.078"N	104°47'47.445"W	0.17	BEGIN GYRO SURVEYS
213.00	0.130	267.280	213.00	0.18	-0.08	-0.40	40°10'29.077"N	104°47'47.448"W	0.05	
313.00	0.210	234.830	313.00	0.35	-0.19	-0.66	40°10'29.076"N	104°47'47.452"W	0.12	
413.00	0.020	359.520	413.00	0.47	-0.28	-0.81	40°10'29.075"N	104°47'47.453"W	0.22	
513.00	0.070	239.020	513.00	0.50	-0.29	-0.87	40°10'29.075"N	104°47'47.454"W	0.08	
613.00	0.110	87.940	613.00	0.51	-0.32	-0.82	40°10'29.075"N	104°47'47.454"W	0.17	
713.00	0.050	338.350	713.00	0.45	-0.28	-0.74	40°10'29.075"N	104°47'47.453"W	0.14	
813.00	0.140	4.100	813.00	0.30	-0.12	-0.75	40°10'29.077"N	104°47'47.453"W	0.10	
913.00	0.140	238.710	913.00	0.26	-0.06	-0.85	40°10'29.077"N	104°47'47.454"W	0.25	
929.00	0.350	268.430	929.00	0.29	-0.07	-0.91	40°10'29.077"N	104°47'47.455"W	1.49	TIE ONTO GYRO SURVEYS
1083.00	0.200	0.100	1083.00	0.16	0.19	-1.38	40°10'29.080"N	104°47'47.461"W	0.27	BEGIN BHI MWD+IFR SURVEYS
1176.00	1.700	277.700	1175.98	0.16	0.53	-2.75	40°10'29.083"N	104°47'47.478"W	1.81	
1267.00	4.100	296.100	1266.86	-0.36	2.15	-7.01	40°10'29.099"N	104°47'47.533"W	2.80	
1357.00	6.700	298.100	1356.45	-2.28	6.04	-14.53	40°10'29.138"N	104°47'47.630"W	2.90	
1449.00	8.500	294.800	1447.64	-4.82	11.42	-25.44	40°10'29.191"N	104°47'47.771"W	2.01	
1540.00	10.200	289.500	1537.43	-6.80	16.93	-39.14	40°10'29.245"N	104°47'47.947"W	2.09	
1648.00	11.500	291.600	1643.50	-9.07	24.08	-58.16	40°10'29.316"N	104°47'48.192"W	1.26	
1740.00	13.000	290.300	1733.40	-11.35	31.05	-76.40	40°10'29.385"N	104°47'48.427"W	1.66	
1833.00	14.700	283.800	1823.70	-12.37	37.49	-97.67	40°10'29.449"N	104°47'48.701"W	2.48	
1924.00	16.000	281.200	1911.45	-11.63	42.68	-121.19	40°10'29.500"N	104°47'49.004"W	1.62	
2014.00	16.300	285.700	1997.91	-11.31	48.51	-145.51	40°10'29.557"N	104°47'49.318"W	1.43	
2106.00	17.600	288.400	2085.91	-12.66	56.40	-171.14	40°10'29.635"N	104°47'49.648"W	1.65	
2197.00	18.100	284.900	2172.53	-13.84	64.37	-197.86	40°10'29.714"N	104°47'49.992"W	1.30	
2288.00	18.200	284.300	2259.00	-14.03	71.52	-225.29	40°10'29.785"N	104°47'50.345"W	0.23	
2379.00	18.600	284.700	2345.35	-14.18	78.71	-253.10	40°10'29.856"N	104°47'50.704"W	0.46	
2469.00	17.800	287.300	2430.85	-15.05	86.44	-280.12	40°10'29.932"N	104°47'51.052"W	1.27	
2561.00	17.300	295.600	2518.58	-18.51	96.54	-305.88	40°10'30.032"N	104°47'51.384"W	2.77	
2652.00	18.200	295.000	2605.25	-23.84	108.39	-330.96	40°10'30.149"N	104°47'51.707"W	1.01	
2743.00	17.200	290.200	2691.94	-27.91	119.04	-356.47	40°10'30.254"N	104°47'52.035"W	1.94	
2834.00	19.100	287.000	2778.41	-30.04	128.04	-383.34	40°10'30.343"N	104°47'52.381"W	2.36	
2925.00	20.400	284.500	2864.06	-30.84	136.37	-412.94	40°10'30.426"N	104°47'52.763"W	1.70	
3017.00	19.600	284.300	2950.51	-30.95	144.19	-443.41	40°10'30.503"N	104°47'53.155"W	0.87	
3107.00	19.100	283.600	3035.43	-30.82	151.39	-472.35	40°10'30.574"N	104°47'53.528"W	0.61	
3199.00	18.100	286.400	3122.62	-31.20	158.96	-500.69	40°10'30.649"N	104°47'53.893"W	1.46	
3294.00	19.000	287.200	3212.69	-32.58	167.70	-529.62	40°10'30.735"N	104°47'54.266"W	0.98	
3388.00	18.400	287.200	3301.72	-34.15	176.61	-558.41	40°10'30.823"N	104°47'54.637"W	0.64	
3483.00	17.500	288.900	3392.10	-36.10	185.67	-586.25	40°10'30.913"N	104°47'54.995"W	1.10	
3578.00	17.400	288.400	3482.73	-38.31	194.78	-613.24	40°10'31.003"N	104°47'55.343"W	0.19	
3672.00	17.200	295.600	3572.48	-42.08	205.23	-639.12	40°10'31.106"N	104°47'55.676"W	2.29	
3767.00	17.000	292.900	3663.29	-46.95	216.70	-664.58	40°10'31.219"N	104°47'56.004"W	0.86	
3861.00	17.700	289.900	3753.01	-50.45	226.91	-690.67	40°10'31.320"N	104°47'56.341"W	1.21	
3956.00	19.500	286.300	3843.05	-52.46	236.28	-719.47	40°10'31.413"N	104°47'56.712"W	2.25	
4050.00	16.000	284.500	3932.56	-53.10	243.93	-747.08	40°10'31.488"N	104°47'57.067"W	3.77	

Actual Wellpath Report

HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

WELLPATH DATA (128 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4145.00	17.200	282.300	4023.60	-52.70	250.20	-773.48	40°10'31.550"N	104°47'57.408"W	1.43	
4239.00	21.300	285.700	4112.33	-52.68	257.78	-803.51	40°10'31.625"N	104°47'57.794"W	4.52	
4333.00	21.500	285.800	4199.85	-53.60	267.09	-836.52	40°10'31.717"N	104°47'58.220"W	0.22	
4428.00	18.700	287.400	4289.05	-54.93	276.39	-867.81	40°10'31.809"N	104°47'58.623"W	3.00	
4522.00	19.900	288.700	4377.77	-57.02	286.02	-897.35	40°10'31.904"N	104°47'59.003"W	1.36	
4617.00	19.100	288.300	4467.32	-59.40	296.09	-927.42	40°10'32.004"N	104°47'59.391"W	0.85	
4712.00	19.800	289.300	4556.90	-61.94	306.29	-957.36	40°10'32.105"N	104°47'59.776"W	0.82	
4807.00	20.900	287.500	4645.97	-64.34	316.70	-988.71	40°10'32.207"N	104°48'00.180"W	1.33	
4903.00	18.900	285.800	4736.23	-65.75	326.08	-1020.00	40°10'32.300"N	104°48'00.583"W	2.17	
4998.00	18.600	285.300	4826.19	-66.47	334.27	-1049.42	40°10'32.381"N	104°48'00.962"W	0.36	
5094.00	17.000	286.400	4917.59	-67.30	342.27	-1077.65	40°10'32.460"N	104°48'01.326"W	1.70	
5189.00	16.000	286.600	5008.68	-68.38	349.93	-1103.52	40°10'32.536"N	104°48'01.659"W	1.05	
5284.00	14.800	288.200	5100.27	-69.77	357.47	-1127.60	40°10'32.610"N	104°48'01.970"W	1.34	
5378.00	12.600	290.200	5191.59	-71.67	364.76	-1148.63	40°10'32.682"N	104°48'02.240"W	2.39	
5474.00	11.500	289.700	5285.47	-73.68	371.60	-1167.47	40°10'32.750"N	104°48'02.483"W	1.15	
5568.00	11.400	287.500	5377.60	-75.11	377.55	-1185.15	40°10'32.809"N	104°48'02.711"W	0.48	
5663.00	9.400	287.700	5471.03	-76.12	382.73	-1201.49	40°10'32.860"N	104°48'02.922"W	2.11	
5757.00	8.900	284.200	5563.84	-76.59	386.85	-1215.86	40°10'32.901"N	104°48'03.107"W	0.80	
5851.00	7.500	281.100	5656.88	-76.26	389.82	-1228.93	40°10'32.930"N	104°48'03.275"W	1.56	
5945.00	5.600	282.400	5750.26	-75.78	391.98	-1239.43	40°10'32.951"N	104°48'03.410"W	2.03	
6040.00	4.400	287.100	5844.90	-75.82	394.05	-1247.44	40°10'32.972"N	104°48'03.513"W	1.33	
6134.00	2.300	293.000	5938.73	-76.29	395.85	-1252.62	40°10'32.989"N	104°48'03.580"W	2.26	
6229.00	0.900	250.100	6033.69	-76.16	396.34	-1255.08	40°10'32.994"N	104°48'03.612"W	1.84	
6514.00	1.300	315.300	6318.65	-76.57	397.87	-1259.46	40°10'33.009"N	104°48'03.668"W	0.43	
6608.00	2.200	208.500	6412.62	-75.38	397.05	-1261.07	40°10'33.001"N	104°48'03.689"W	3.04	
6702.00	6.000	179.800	6506.37	-68.87	390.54	-1261.91	40°10'32.937"N	104°48'03.700"W	4.47	
6796.00	13.800	187.400	6598.90	-52.95	374.49	-1263.34	40°10'32.778"N	104°48'03.718"W	8.40	
6893.00	20.800	185.500	6691.46	-24.40	345.84	-1266.49	40°10'32.495"N	104°48'03.759"W	7.24	
6987.00	27.300	179.400	6777.27	12.98	307.62	-1267.86	40°10'32.118"N	104°48'03.776"W	7.39	
7081.00	34.000	177.600	6858.09	59.06	259.75	-1266.53	40°10'31.645"N	104°48'03.759"W	7.19	
7176.00	39.800	177.700	6934.03	113.71	202.78	-1264.20	40°10'31.082"N	104°48'03.729"W	6.11	
7271.00	46.000	179.300	7003.59	175.94	138.17	-1262.56	40°10'30.443"N	104°48'03.708"W	6.63	
7366.00	52.600	182.500	7065.51	246.00	66.22	-1263.79	40°10'29.732"N	104°48'03.724"W	7.40	
7462.00	59.700	183.200	7118.95	324.12	-13.36	-1267.77	40°10'28.946"N	104°48'03.775"W	7.42	
7509.00	63.900	182.000	7141.16	364.68	-54.73	-1269.64	40°10'28.537"N	104°48'03.799"W	9.21	
7556.00	66.600	180.200	7160.83	406.24	-97.40	-1270.45	40°10'28.115"N	104°48'03.810"W	6.72	
7603.00	68.800	178.200	7178.67	448.24	-140.87	-1269.84	40°10'27.686"N	104°48'03.802"W	6.12	
7651.00	71.800	174.500	7194.85	491.23	-185.96	-1266.95	40°10'27.240"N	104°48'03.764"W	9.58	
7682.00	75.700	179.400	7203.53	519.64	-215.66	-1265.38	40°10'26.947"N	104°48'03.744"W	19.71	
7714.00	78.900	181.800	7210.57	549.98	-246.87	-1265.71	40°10'26.638"N	104°48'03.748"W	12.39	
7745.00	81.000	182.600	7215.98	579.83	-277.37	-1266.88	40°10'26.337"N	104°48'03.763"W	7.24	
7773.00	82.900	183.200	7219.90	607.02	-305.06	-1268.29	40°10'26.063"N	104°48'03.782"W	7.11	
7817.00†	85.246	182.721	7224.44	649.94	-348.76	-1270.55	40°10'25.631"N	104°48'03.811"W	5.44	7" CASING POINT
7893.00	89.300	181.900	7228.05	724.21	-424.59	-1273.61	40°10'24.882"N	104°48'03.850"W	5.44	
7988.00	89.800	181.600	7228.80	816.97	-519.55	-1276.51	40°10'23.943"N	104°48'03.887"W	0.61	

Actual Wellpath Report

HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

WELLPATH DATA (128 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8083.00	90.800	182.100	7228.30	909.76	-614.49	-1279.57	40°10'23.005"N	104°48'03.927"W	1.18	
8177.00	90.400	181.900	7227.32	1001.63	-708.43	-1282.85	40°10'22.077"N	104°48'03.969"W	0.48	
8367.00	89.600	181.200	7227.32	1187.01	-898.36	-1287.99	40°10'20.200"N	104°48'04.035"W	0.56	
8461.00	89.300	180.800	7228.22	1278.52	-992.34	-1289.63	40°10'19.271"N	104°48'04.056"W	0.53	
8556.00	89.500	179.300	7229.22	1370.63	-1087.33	-1289.72	40°10'18.333"N	104°48'04.057"W	1.59	
8650.00	91.200	178.300	7228.64	1461.24	-1181.31	-1287.75	40°10'17.404"N	104°48'04.032"W	2.10	
8745.00	91.000	178.300	7226.82	1552.59	-1276.25	-1284.93	40°10'16.466"N	104°48'03.995"W	0.21	
8934.00	90.100	178.400	7225.00	1734.38	-1465.16	-1279.49	40°10'14.599"N	104°48'03.925"W	0.48	
9028.00	89.900	178.400	7225.00	1824.83	-1559.12	-1276.86	40°10'13.670"N	104°48'03.891"W	0.21	
9122.00	91.000	179.600	7224.27	1915.53	-1653.10	-1275.22	40°10'12.742"N	104°48'03.870"W	1.73	
9311.00	91.100	180.300	7220.80	2098.68	-1842.07	-1275.06	40°10'10.874"N	104°48'03.868"W	0.37	
9406.00	91.800	181.300	7218.40	2191.06	-1937.03	-1276.38	40°10'09.936"N	104°48'03.885"W	1.28	
9501.00	90.400	181.200	7216.57	2283.62	-2031.98	-1278.46	40°10'08.998"N	104°48'03.911"W	1.48	
9596.00	90.400	180.200	7215.91	2375.99	-2126.97	-1279.62	40°10'08.059"N	104°48'03.926"W	1.05	
9692.00	89.200	180.400	7216.25	2469.17	-2222.97	-1280.12	40°10'07.110"N	104°48'03.933"W	1.27	
9788.00	90.200	180.900	7216.75	2562.49	-2318.96	-1281.21	40°10'06.162"N	104°48'03.947"W	1.16	
9883.00	89.900	180.700	7216.67	2654.90	-2413.95	-1282.53	40°10'05.223"N	104°48'03.964"W	0.38	
9978.00	90.200	181.000	7216.58	2747.33	-2508.94	-1283.94	40°10'04.284"N	104°48'03.982"W	0.45	
10167.00	90.700	180.800	7215.10	2931.25	-2697.91	-1286.91	40°10'02.417"N	104°48'04.020"W	0.28	
10263.00	90.700	180.200	7213.93	3024.51	-2793.90	-1287.75	40°10'01.468"N	104°48'04.031"W	0.62	
10357.00	89.500	178.400	7213.76	3115.34	-2887.89	-1286.60	40°10'00.539"N	104°48'04.016"W	2.30	
10452.00	89.300	178.200	7214.76	3206.69	-2982.84	-1283.78	40°09'59.601"N	104°48'03.979"W	0.30	
10546.00	89.700	178.400	7215.58	3297.09	-3076.79	-1281.00	40°09'58.673"N	104°48'03.943"W	0.48	
10640.00	89.800	178.500	7215.99	3387.56	-3170.76	-1278.45	40°09'57.744"N	104°48'03.911"W	0.15	
10734.00	90.300	178.300	7215.90	3478.00	-3264.72	-1275.83	40°09'56.816"N	104°48'03.877"W	0.57	
10829.00	89.000	178.200	7216.49	3569.34	-3359.67	-1272.93	40°09'55.877"N	104°48'03.839"W	1.37	
11018.00	88.700	177.400	7220.28	3750.60	-3548.49	-1265.67	40°09'54.011"N	104°48'03.746"W	0.45	
11112.00	90.300	177.400	7221.10	3840.58	-3642.39	-1261.41	40°09'53.083"N	104°48'03.691"W	1.70	
11207.00	90.800	177.700	7220.19	3931.59	-3737.30	-1257.35	40°09'52.146"N	104°48'03.638"W	0.61	
11303.00	90.300	178.000	7219.27	4023.70	-3833.23	-1253.75	40°09'51.198"N	104°48'03.592"W	0.61	
11397.00	89.800	178.200	7219.18	4114.01	-3927.17	-1250.63	40°09'50.269"N	104°48'03.552"W	0.57	
11585.00	90.200	179.000	7219.18	4295.07	-4115.12	-1246.04	40°09'48.412"N	104°48'03.492"W	0.48	
11682.00	89.000	179.800	7219.86	4388.84	-4212.11	-1245.02	40°09'47.454"N	104°48'03.479"W	1.49	
11870.00	90.300	180.200	7221.01	4571.09	-4400.10	-1245.02	40°09'45.596"N	104°48'03.479"W	0.72	
12060.00	88.900	181.700	7222.34	4756.01	-4590.06	-1248.17	40°09'43.719"N	104°48'03.520"W	1.08	
12251.00	90.000	180.600	7224.17	4942.05	-4781.00	-1252.00	40°09'41.832"N	104°48'03.569"W	0.81	
12359.00	89.300	179.300	7224.83	5046.72	-4889.00	-1251.91	40°09'40.764"N	104°48'03.568"W	1.37	LAST BHI MWD+IFR SURVEY
12412.00	89.300	179.300	7225.48	5097.93	-4941.99	-1251.26	40°09'40.241"N	104°48'03.559"W	0.00	PROJECTION TO BIT



Actual Wellpath Report

HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWP
Facility	SEC.32-T3N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: HERMAN 36N-5HZ AWP Ref Wellpath: HERMAN 36N-5HZ 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]
13.5in Open Hole	13.00	1021.00	1008.00	13.00	1021.00	0.00	0.00	0.02	-1.30
9.625in Casing Surface	13.00	1021.00	1008.00	13.00	1021.00	0.00	0.00	0.02	-1.30
8.75in Open Hole	1021.00	7830.00	6809.00	1021.00	7225.44	0.02	-1.30	-361.71	-1271.15
7in Casing Intermediate	13.00	7817.00	7804.00	13.00	7224.44	0.00	0.00	-348.76	-1270.55
6.125in Open Hole	7830.00	12412.00	4582.00	7225.44	7225.48	-361.71	-1271.15	-4941.99	-1251.26



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HERMAN 36N-5HZ AWP

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Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BLUFFS RED W 5-3 (150' RADIUS)		0.00	-869.50	-1814.72	3194769.96	1306398.03	40°10'20.485"N	104°48'10.820"W	circle
BLUFFS RED W 5-6 (150' RADIUS)		0.00	-2149.64	-1824.32	3194770.52	1305117.92	40°10'07.835"N	104°48'10.943"W	circle
HERMAN 32-15K (150' RADIUS)		0.00	430.97	-810.81	3195763.47	1307706.37	40°10'33.337"N	104°47'57.889"W	circle
HERMAN 32-16K (150' RADIUS)		0.00	456.83	774.53	3197348.49	1307744.80	40°10'33.592"N	104°47'37.465"W	circle
HERMAN L 32-14 (150' RADIUS)		0.00	381.14	-1923.61	3194651.16	1307647.71	40°10'32.844"N	104°48'12.224"W	circle
KUNZMAN W 05-09 (150' RADIUS)		0.00	-3278.99	868.93	3197472.52	1304010.01	40°09'56.675"N	104°47'36.251"W	circle
UPRC 5-10K6 (150' RADIUS)		0.00	-3599.23	-839.75	3195766.51	1303676.24	40°09'53.510"N	104°47'58.260"W	circle
UPRC 5-15K6 (150' RADIUS)		0.00	-4915.43	-855.73	3195760.97	1302360.02	40°09'40.503"N	104°47'58.465"W	circle
UPRC 5-160 (150' RADIUS)		0.00	-4958.07	496.28	3197113.22	1302328.10	40°09'40.082"N	104°47'41.051"W	circle
UPRC 5-90 (150' RADIUS)		0.00	-3821.84	367.69	3196975.63	1303463.23	40°09'51.310"N	104°47'42.707"W	circle
UPRC W 5-10 JI (150' RADIUS)		0.00	-3287.76	-786.35	3195817.43	1303988.11	40°09'56.588"N	104°47'57.572"W	circle
HERMAN 36N-5HZ BHL ON PLAT (460'FSL & 2460'FEL, SEC.5) REV-1	7144.00		-4967.88	-1104.90	3195512.24	1302305.60	40°09'39.985"N	104°48'01.674"W	point
HERMAN 36N-5HZ BHL ON PLAT REV-2 (460'FSL & 2625'FEL, SEC.5)	7219.00		-4967.85	-1269.80	3195347.35	1302304.32	40°09'39.985"N	104°48'03.798"W	point
HERMAN 36N-5HZ LAND BOX	7500.00	0.00	0.00		3196577.64	1307281.86	40°10'29.078"N	104°47'47.443"W	polygon
HERMAN SEC.5 HARDLINES (460' SETBACKS)	7500.00	-0.71	103.94		3196681.58	1307281.98	40°10'29.071"N	104°47'46.104"W	polygon
HERMAN SECTION 32 LINES	7500.00	-0.71	103.94		3196681.58	1307281.98	40°10'29.071"N	104°47'46.104"W	polygon
HERMAN SECTION 5 LINES	7500.00	-0.71	103.94		3196681.58	1307281.98	40°10'29.071"N	104°47'46.104"W	polygon



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HERMAN 36N-5HZ AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 HERMAN 36N-5HZ (218'FSL & 1364'FEL, SEC.32)
Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWB
Facility	SEC.32-T3N-R66W		

WELLPATH COMPOSITION - Ref Wellbore: HERMAN 36N-5HZ AWB Ref Wellpath: HERMAN 36N-5HZ AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	929.00	Generic gyro - continuous (Standard)	MS GYRODATA SURVEYS <113-929>	HERMAN 36N-5HZ AWB
929.00	7773.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 8 3/4" <1083-7773>	HERMAN 36N-5HZ AWB
7773.00	12359.00	NaviTrak (MAGCORR,IFR)	BHI NAVITRAK MWD+IFR 6 1/8" <7893-12359>	HERMAN 36N-5HZ AWB
12359.00	12412.00	Blind Drilling (std)	Projection to bit	HERMAN 36N-5HZ AWB



Actual Wellpath Report

HERMAN 36N-5HZ AWP

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Area	COLORADO	Well	HERMAN 36N-5HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HERMAN 36N-5HZ AWP
Facility	SEC.32-T3N-R66W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	255.230	13.00	TIE-ON
113.00	0.170	255.230	113.00	BEGIN GYRO SURVEYS
929.00	0.350	268.430	929.00	TIE ONTO GYRO SURVEYS
1083.00	0.200	0.100	1083.00	BEGIN BHI MWD+IFR SURVEYS
7817.00	85.246	182.721	7224.44	7" CASING POINT
12359.00	89.300	179.300	7224.83	LAST BHI MWD+IFR SURVEY
12412.00	89.300	179.300	7225.48	PROJECTION TO BIT