

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
 Field: WELD COUNTY (KERR MCGEE) Well: UNDERHILL 15S-8HZ
 Facility: SEC.17-T1N-R67W Wellbore: UNDERHILL 15S-8HZ PWB

Plot reference wellpath is UNDERHILL 15S-8HZ (PERMIT REV-4) PWP

True vertical depths are referenced to ENSIGN 145 (RKB) Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
 Measured depths are referenced to ENSIGN 145 (RKB) North Reference: True north
 ENSIGN 145 (RKB) to Mean Sea Level: 5125 feet Scale: True distance
 Mean Sea Level to Mud line (At Slot: SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)): 0 feet Depths are in feet
 Coordinates are in feet referenced to Slot Created by: pretrain on 5/7/2013

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.17-T1N-R67W		3163889.720	1261989.210	40°03'03.831"N	104°54'52.468"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)	-1739.84	1139.44	3165040.576	1260256.997	40°02'46.637"N	104°54'37.757"W
ENSIGN 145 (RKB) to Mud line (At Slot: SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17))				5125R		
Mean Sea Level to Mud line (At Slot: SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17))				0R		
ENSIGN 145 (RKB) to Mean Sea Level				5125R		

Survey Program

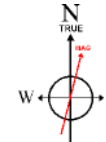
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	5248.07	NavTrak	NavTrak (MagCorr)		UNDERHILL 15S-8HZ PWB
5248.07	9768.00	OnTrak	OnTrak (MagCorr)		UNDERHILL 15S-8HZ PWB

Well Profile Data

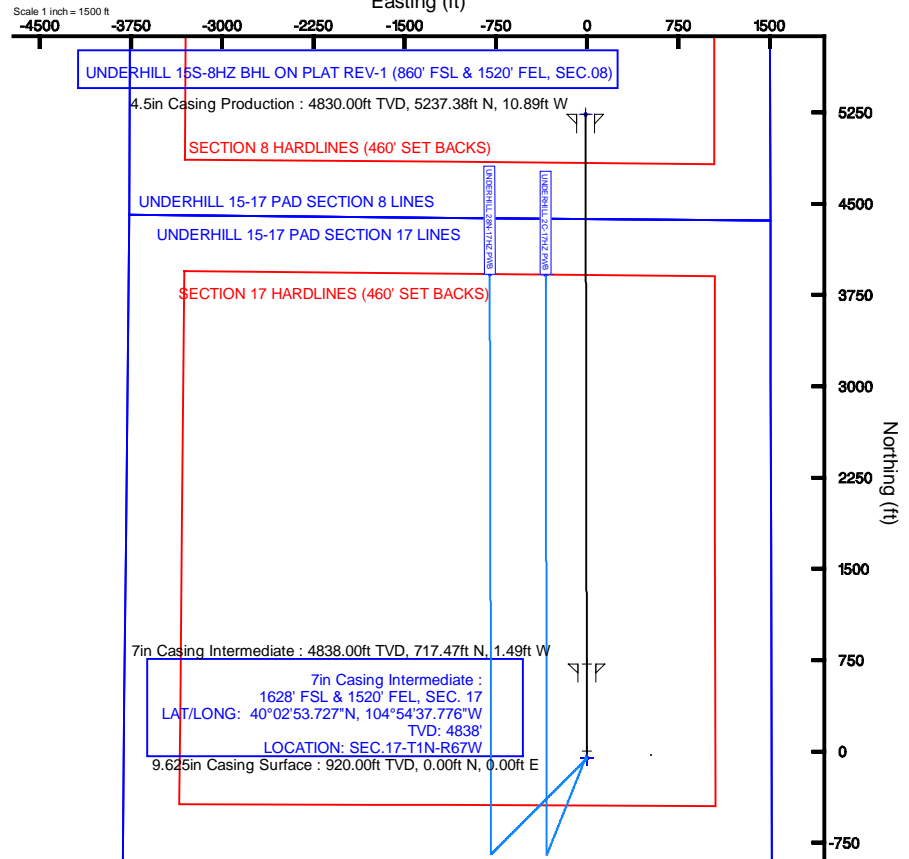
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-ON	13.00	0.000	359.881	13.00	0.00	0.00	0.00	0.00
KOP, BUILD @ 8°/100	4121.80	0.000	359.881	4121.80	0.00	0.00	0.00	0.00
LANDING POINT	5248.07	90.101	359.881	4838.00	717.46	-1.49	8.00	717.46
TOTAL DEPTH	9768.00	90.101	359.881	4838.00	5237.38	-10.89	0.00	5237.39

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
UNDERHILL 15S-8HZ BHL ON PLAT REV-1 (860' FSL & 1520' FEL, SEC.08)	9768.00	4830.00	5237.38	-10.89	3164964.87	1260493.98	40°03'38.394"N	104°54'37.897"W
UNDERHILL 15-17 PAD SECTION 17 HARDLINES (460' SET BACKS)	5125.00	-	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W
UNDERHILL 15-17 PAD SECTION 17 LINES	5125.00	-	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W
UNDERHILL 15-17 PAD SECTION 8 HARDLINES (460' SET BACKS)	5125.00	-	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W
UNDERHILL 15-17 PAD SECTION 8 LINES	5125.00	-	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W



BGGM (1945.0 to 2014.0) Dip: 66.65° Field: 52630.2 nT
 Magnetic North is 8.71 degrees East of True North (at 5/6/2013)
 To correct azimuth from Magnetic to True add 8.71 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the True North Azimuth = 90 + 8.71 = 98.71

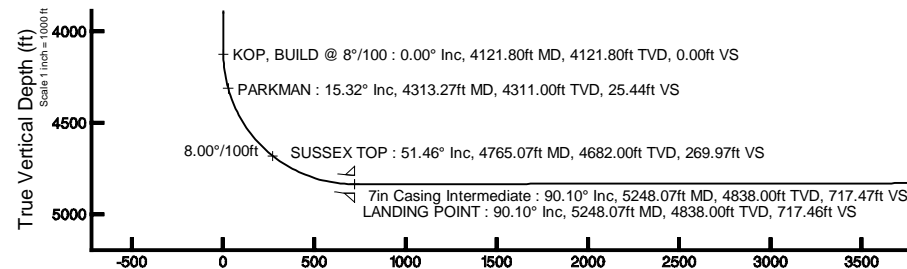


SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)

UNDERHILL 15S-8HZ BHL ON PLAT REV-1 (860' FSL & 1520' FEL, SEC.08)

4.5in Casing Production : 90.10° Inc, 9768.00ft MD, 4830.00ft TVD, 5237.39ft VS
 TOTAL DEPTH : 90.10° Inc, 9768.00ft MD, 4830.00ft TVD, 5237.39ft VS

7in Casing Intermediate : 90.10° Inc, 5248.07ft MD, 4838.00ft TVD, 717.47ft VS
 LANDING POINT : 90.10° Inc, 5248.07ft MD, 4838.00ft TVD, 717.46ft VS



Vertical Section (ft)

Azimuth 359.88° with reference 0.00 N, 0.00 E

Scale 1 inch = 1000 ft



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP
Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect@ 3.0.2
North Reference	True	User	Precain
Scale	0.999963	Report Generated	5/7/2013 at 8:38:16 AM
Convergence at slot	0.38° East	Database/Source file	WellArchitectDB/UNDERHILL_15S-8HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1739.84	1139.44	3165040.58	1260257.00	40°02'46.637"N	104°54'37.757"W
Facility Reference Pt			3163889.72	1261989.21	40°03'03.831"N	104°54'52.408"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 145 (RKB) to Facility Vertical Datum	5125.00ft
Horizontal Reference Pt	Slot	ENSIGN 145 (RKB) to Mean Sea Level	5125.00ft
Vertical Reference Pt	ENSIGN 145 (RKB)	ENSIGN 145 (RKB) to Mud Line at Slot (SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17))	5125.00ft
MD Reference Pt	ENSIGN 145 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.88°



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

WELLPATH DATA (104 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	359.881	0.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
13.00	0.000	359.881	13.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	TIE-ON
113.00†	0.000	359.881	113.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
213.00†	0.000	359.881	213.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
313.00†	0.000	359.881	313.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
413.00†	0.000	359.881	413.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
513.00†	0.000	359.881	513.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
613.00†	0.000	359.881	613.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
713.00†	0.000	359.881	713.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
813.00†	0.000	359.881	813.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
913.00†	0.000	359.881	913.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1013.00†	0.000	359.881	1013.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1113.00†	0.000	359.881	1113.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1213.00†	0.000	359.881	1213.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1313.00†	0.000	359.881	1313.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1413.00†	0.000	359.881	1413.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1513.00†	0.000	359.881	1513.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1613.00†	0.000	359.881	1613.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1713.00†	0.000	359.881	1713.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1813.00†	0.000	359.881	1813.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
1913.00†	0.000	359.881	1913.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2013.00†	0.000	359.881	2013.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2113.00†	0.000	359.881	2113.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2213.00†	0.000	359.881	2213.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2313.00†	0.000	359.881	2313.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2413.00†	0.000	359.881	2413.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2513.00†	0.000	359.881	2513.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2613.00†	0.000	359.881	2613.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2713.00†	0.000	359.881	2713.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2813.00†	0.000	359.881	2813.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
2913.00†	0.000	359.881	2913.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3013.00†	0.000	359.881	3013.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3113.00†	0.000	359.881	3113.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3213.00†	0.000	359.881	3213.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3313.00†	0.000	359.881	3313.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3413.00†	0.000	359.881	3413.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3513.00†	0.000	359.881	3513.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3613.00†	0.000	359.881	3613.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3713.00†	0.000	359.881	3713.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3813.00†	0.000	359.881	3813.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
3913.00†	0.000	359.881	3913.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
4013.00†	0.000	359.881	4013.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
4113.00†	0.000	359.881	4113.00	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	
4121.80	0.000	359.881	4121.80	0.00	0.00	0.00	40°02'46.637"N	104°54'37.757"W	0.00	KOP, BUILD @ 8°/100
4213.00†	7.296	359.881	4212.75	5.80	5.80	-0.01	40°02'46.694"N	104°54'37.757"W	8.00	



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP
Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

WELLPATH DATA (104 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4313.00†	15.296	359.881	4310.74	25.37	25.37	-0.05	40°02'46.888"N	104°54'37.758"W	8.00	
4313.27†	15.318	359.881	4311.00	25.44	25.44	-0.05	40°02'46.888"N	104°54'37.758"W	8.00	PARKMAN
4413.00†	23.296	359.881	4405.04	58.39	58.39	-0.12	40°02'47.214"N	104°54'37.759"W	8.00	
4513.00†	31.296	359.881	4493.84	104.21	104.21	-0.22	40°02'47.667"N	104°54'37.760"W	8.00	
4613.00†	39.296	359.881	4575.39	161.94	161.94	-0.34	40°02'48.237"N	104°54'37.761"W	8.00	
4713.00†	47.296	359.881	4648.11	230.46	230.46	-0.48	40°02'48.915"N	104°54'37.763"W	8.00	
4765.07†	51.461	359.881	4682.00	269.97	269.97	-0.56	40°02'49.305"N	104°54'37.764"W	8.00	SUSSEX TOP
4813.00†	55.296	359.881	4710.59	308.44	308.44	-0.64	40°02'49.685"N	104°54'37.765"W	8.00	
4913.00†	63.296	359.881	4761.61	394.35	394.35	-0.82	40°02'50.534"N	104°54'37.768"W	8.00	
5013.00†	71.296	359.881	4800.17	486.53	486.53	-1.01	40°02'51.445"N	104°54'37.770"W	8.00	
5113.00†	79.296	359.881	4825.54	583.17	583.17	-1.21	40°02'52.400"N	104°54'37.773"W	8.00	
5213.00†	87.296	359.881	4837.20	682.41	682.41	-1.42	40°02'53.381"N	104°54'37.775"W	8.00	
5248.07	90.101	359.881	4838.00	717.46	717.46	-1.49	40°02'53.727"N	104°54'37.776"W	8.00	LANDING POINT
5313.00†	90.101	359.881	4837.88	782.40	782.40	-1.63	40°02'54.369"N	104°54'37.778"W	0.00	
5413.00†	90.101	359.881	4837.70	882.40	882.40	-1.83	40°02'55.357"N	104°54'37.781"W	0.00	
5513.00†	90.101	359.881	4837.53	982.40	982.39	-2.04	40°02'56.345"N	104°54'37.783"W	0.00	
5613.00†	90.101	359.881	4837.35	1082.40	1082.39	-2.25	40°02'57.333"N	104°54'37.786"W	0.00	
5713.00†	90.101	359.881	4837.17	1182.40	1182.39	-2.46	40°02'58.322"N	104°54'37.789"W	0.00	
5813.00†	90.101	359.881	4837.00	1282.40	1282.39	-2.67	40°02'59.310"N	104°54'37.791"W	0.00	
5913.00†	90.101	359.881	4836.82	1382.40	1382.39	-2.87	40°03'00.298"N	104°54'37.794"W	0.00	
6013.00†	90.101	359.881	4836.64	1482.40	1482.39	-3.08	40°03'01.286"N	104°54'37.797"W	0.00	
6113.00†	90.101	359.881	4836.47	1582.40	1582.39	-3.29	40°03'02.275"N	104°54'37.799"W	0.00	
6213.00†	90.101	359.881	4836.29	1682.40	1682.39	-3.50	40°03'03.263"N	104°54'37.802"W	0.00	
6313.00†	90.101	359.881	4836.11	1782.40	1782.39	-3.70	40°03'04.251"N	104°54'37.805"W	0.00	
6413.00†	90.101	359.881	4835.94	1882.40	1882.39	-3.91	40°03'05.239"N	104°54'37.807"W	0.00	
6513.00†	90.101	359.881	4835.76	1982.40	1982.39	-4.12	40°03'06.227"N	104°54'37.810"W	0.00	
6613.00†	90.101	359.881	4835.58	2082.40	2082.39	-4.33	40°03'07.216"N	104°54'37.813"W	0.00	
6713.00†	90.101	359.881	4835.40	2182.39	2182.39	-4.54	40°03'08.204"N	104°54'37.815"W	0.00	
6813.00†	90.101	359.881	4835.23	2282.39	2282.39	-4.74	40°03'09.192"N	104°54'37.818"W	0.00	
6913.00†	90.101	359.881	4835.05	2382.39	2382.39	-4.95	40°03'10.180"N	104°54'37.821"W	0.00	
7013.00†	90.101	359.881	4834.87	2482.39	2482.39	-5.16	40°03'11.169"N	104°54'37.823"W	0.00	
7113.00†	90.101	359.881	4834.70	2582.39	2582.39	-5.37	40°03'12.157"N	104°54'37.826"W	0.00	
7213.00†	90.101	359.881	4834.52	2682.39	2682.39	-5.58	40°03'13.145"N	104°54'37.829"W	0.00	
7313.00†	90.101	359.881	4834.34	2782.39	2782.39	-5.78	40°03'14.133"N	104°54'37.831"W	0.00	
7413.00†	90.101	359.881	4834.17	2882.39	2882.39	-5.99	40°03'15.121"N	104°54'37.834"W	0.00	
7513.00†	90.101	359.881	4833.99	2982.39	2982.39	-6.20	40°03'16.110"N	104°54'37.837"W	0.00	
7613.00†	90.101	359.881	4833.81	3082.39	3082.39	-6.41	40°03'17.098"N	104°54'37.839"W	0.00	
7713.00†	90.101	359.881	4833.64	3182.39	3182.39	-6.61	40°03'18.086"N	104°54'37.842"W	0.00	
7813.00†	90.101	359.881	4833.46	3282.39	3282.39	-6.82	40°03'19.074"N	104°54'37.845"W	0.00	
7913.00†	90.101	359.881	4833.28	3382.39	3382.39	-7.03	40°03'20.063"N	104°54'37.847"W	0.00	
8013.00†	90.101	359.881	4833.10	3482.39	3482.39	-7.24	40°03'21.051"N	104°54'37.850"W	0.00	
8113.00†	90.101	359.881	4832.93	3582.39	3582.39	-7.45	40°03'22.039"N	104°54'37.853"W	0.00	
8213.00†	90.101	359.881	4832.75	3682.39	3682.38	-7.65	40°03'23.027"N	104°54'37.855"W	0.00	
8313.00†	90.101	359.881	4832.57	3782.39	3782.38	-7.86	40°03'24.015"N	104°54'37.858"W	0.00	
8413.00†	90.101	359.881	4832.40	3882.39	3882.38	-8.07	40°03'25.004"N	104°54'37.861"W	0.00	



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP
Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

WELLPATH DATA (104 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8513.00†	90.101	359.881	4832.22	3982.39	3982.38	-8.28	40°03'25.992"N	104°54'37.863"W	0.00	
8613.00†	90.101	359.881	4832.04	4082.39	4082.38	-8.49	40°03'26.980"N	104°54'37.866"W	0.00	
8713.00†	90.101	359.881	4831.87	4182.39	4182.38	-8.69	40°03'27.968"N	104°54'37.869"W	0.00	
8813.00†	90.101	359.881	4831.69	4282.39	4282.38	-8.90	40°03'28.957"N	104°54'37.871"W	0.00	
8913.00†	90.101	359.881	4831.51	4382.39	4382.38	-9.11	40°03'29.945"N	104°54'37.874"W	0.00	
9013.00†	90.101	359.881	4831.34	4482.39	4482.38	-9.32	40°03'30.933"N	104°54'37.877"W	0.00	
9113.00†	90.101	359.881	4831.16	4582.39	4582.38	-9.52	40°03'31.921"N	104°54'37.879"W	0.00	
9213.00†	90.101	359.881	4830.98	4682.39	4682.38	-9.73	40°03'32.909"N	104°54'37.882"W	0.00	
9313.00†	90.101	359.881	4830.80	4782.39	4782.38	-9.94	40°03'33.898"N	104°54'37.885"W	0.00	
9413.00†	90.101	359.881	4830.63	4882.39	4882.38	-10.15	40°03'34.886"N	104°54'37.888"W	0.00	
9513.00†	90.101	359.881	4830.45	4982.39	4982.38	-10.36	40°03'35.874"N	104°54'37.890"W	0.00	
9613.00†	90.101	359.881	4830.27	5082.39	5082.38	-10.56	40°03'36.862"N	104°54'37.893"W	0.00	
9713.00†	90.101	359.881	4830.10	5182.39	5182.38	-10.77	40°03'37.850"N	104°54'37.896"W	0.00	
9768.00	90.101	359.881	4830.00 [†]	5237.39	5237.38	-10.89	40°03'38.394"N	104°54'37.897"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: UNDERHILL 15S-8HZ PWB Ref Wellpath: UNDERHILL 15S-8HZ (PERMIT REV-4) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	13.00	920.00	907.00	13.00	920.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	13.00	920.00	907.00	13.00	920.00	0.00	0.00	0.00	0.00
8.75in Open Hole	920.00	5248.07	4328.07	920.00	4838.00	0.00	0.00	717.47	-1.49
7in Casing Intermediate	13.00	5248.07	5235.07	13.00	4838.00	0.00	0.00	717.47	-1.49
6.125in Open Hole	5248.07	9768.00	4519.93	4838.00	4830.00	717.47	-1.49	5237.38	-10.89
4.5in Casing Production	13.00	9768.00	9755.00	13.00	4830.00	0.00	0.00	5237.38	-10.89



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP
Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) UNDERHILL 15S-8HZ BHL ON PLAT REV-1 (860' FSL & 1520' FEL, SEC.08)	9768.00	4830.00	5237.38	-10.89	3164994.87	1265493.98	40°03'38.394"N	104°54'37.897"W	point
UNDERHILL 15-17 PAD SECTION 17 HARDLINES (460' SET BACKS)		5125.00	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W	polygon
UNDERHILL 15-17 PAD SECTION 17 LINES		5125.00	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W	polygon
UNDERHILL 15-17 PAD SECTION 8 HARDLINES (460' SET BACKS)		5125.00	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W	polygon
UNDERHILL 15-17 PAD SECTION 8 LINES		5125.00	-60.49	-0.26	3165040.71	1260196.51	40°02'46.039"N	104°54'37.760"W	polygon

SURVEY PROGRAM - Ref Wellbore: UNDERHILL 15S-8HZ PWB Ref Wellpath: UNDERHILL 15S-8HZ (PERMIT REV-4) PWP					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
13.00	5248.07	NaviTrak (MagCorr)		UNDERHILL 15S-8HZ PWB	
5248.07	9768.00	OnTrak (MagCorr)		UNDERHILL 15S-8HZ PWB	



Planned Wellpath Report

UNDERHILL 15S-8HZ (PERMIT REV-4) PWP
Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 UNDERHILL 15S-8HZ (910' FSL & 1520' FEL, SEC.17)
Area	COLORADO	Well	UNDERHILL 15S-8HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	UNDERHILL 15S-8HZ PWB
Facility	SEC.17-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
4313.27	15.318	359.881	4311.00	PARKMAN
4765.07	51.461	359.881	4682.00	SUSSEX TOP