

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: Compass Import Slot: SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)  
Field: WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH) Well: CARTER 35N-33HZ  
Facility: SEC.33-T2N-R66W Wellbore: CARTER 35N-33HZ PWB

## Plot reference wellpath is CARTER 35N-33HZ (PERMIT REV-1) PWP

True vertical depths are referenced to PERMIT (17'KB) (RKB) Grid System: NAD83 / UTM Zone 13 North, US feet  
Measured depths are referenced to PERMIT (17'KB) (RKB) North Reference: True north  
PERMIT (17'KB) (RKB) to Mean Sea Level: 4976ft Scale: Grid distance  
Mean Sea Level to Mud line (At Slot: SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)): 0 feet Depths are in feet  
Coordinates are in feet referenced to Slot Created by: robale01 on 12/15/2014

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T2N-R66W			1702750.847	14562570.870	40°05'53.524"N	104°46'37.556"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#05 CARTER 35N-33HZ (825FNL & 1440FWL, SEC.33)	502.97	-2623.70	1700125.905	14563067.260	40°05'58.495"N	104°47'11.332"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#05 CARTER 35N-33HZ (825FNL & 1440FWL, SEC.33))					4976ft	
Mean Sea Level to Mud line (At Slot: SLOT#05 CARTER 35N-33HZ (825FNL & 1440FWL, SEC.33))					0ft	
PERMIT (17KB) (RKB) to Mean Sea Level					4976ft	

## Survey Program

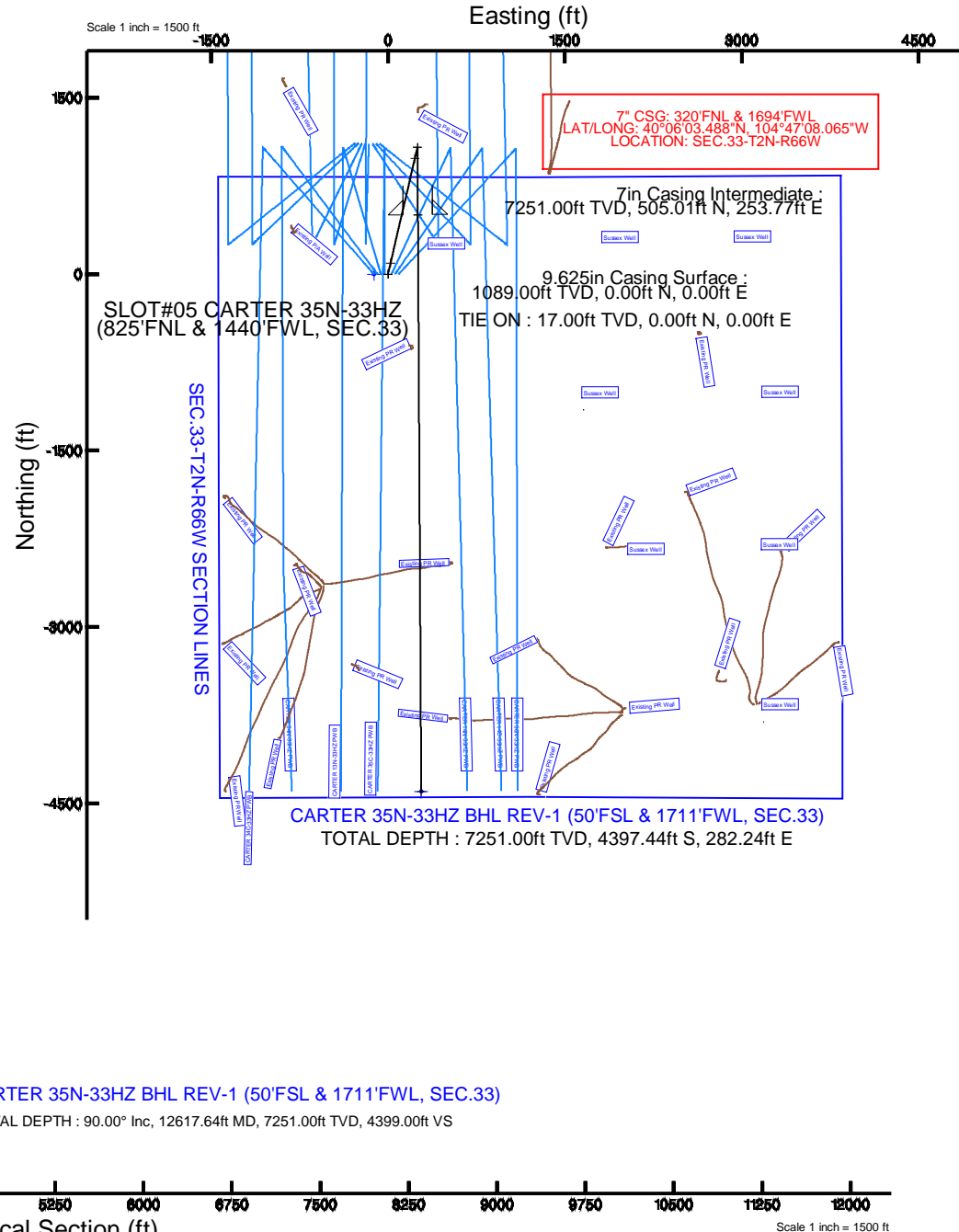
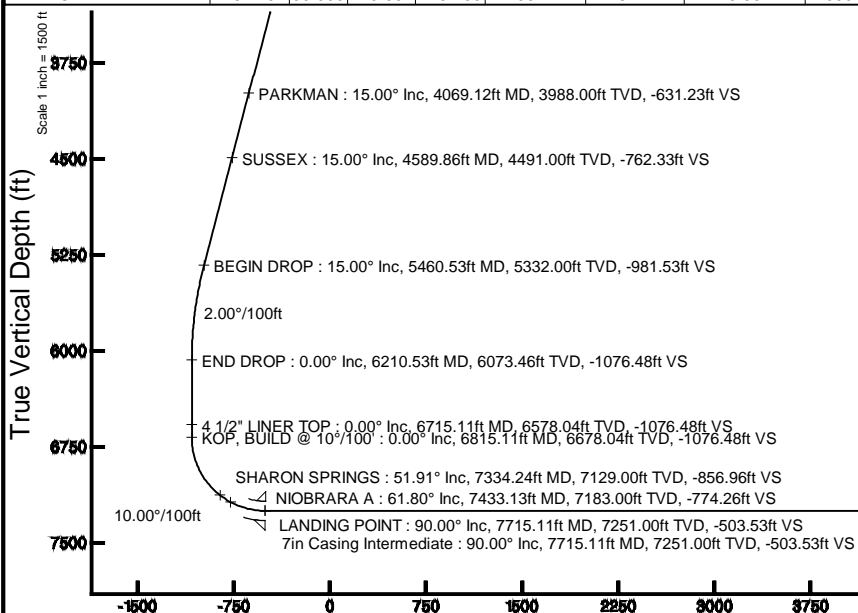
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12617.64	ISOWSA MWD, Rev 2, axial magnetic correction	ISOWSA MWD, Rev 2, axial magnetic correction (Standard) (Mag/Var IFR Wattenberg)		CARTER 35N-33HZ PWB

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T2N-R66W SECTION LINES		0.00	0.40	-119.63	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W
CARTER 35N-33HZ BHL REV-1 (50'FSL & 1711'FWL, SEC.33)	12617.64	7251.00	-4397.44	282.24	1700418.70	14558670.52	40°05'15.022"N	104°47'07.699"W

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ON	17.00	0.000	13.080	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1189.00	0.000	13.080	1189.00	0.00	0.00	0.00	0.00
END NUDGE	1939.00	15.000	13.080	1930.46	95.08	22.09	2.00	-94.95
BEGIN DROP	5460.53	15.000	13.080	5332.00	982.87	228.36	0.00	-981.53
END DROP	6210.53	0.000	179.668	6073.46	1077.96	250.45	2.00	-1076.48
KOP, BUILD @ 10°/100'	6815.11	0.000	179.668	6678.04	1077.96	250.45	0.00	-1076.48
LANDING POINT	7715.11	90.000	179.668	7251.00	505.01	253.77	10.00	-503.53
TOTAL DEPTH	12617.64	90.000	179.667	7251.00	-4397.44	282.24	0.00	4399.00



CARTER 35N-33HZ BHL REV-1 (50'FSL & 1711'FWL, SEC.33)

TOTAL DEPTH : 90.00° Inc, 12617.64ft MD, 7251.00ft TVD, 4399.00ft VS

Azimuth 179.67° with reference 0.00 N, 0.00 E

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Robiale01
Scale	0.999604	Report Generated	12/12/2014 at 2:17:53 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/CARTER_35N-33HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	502.97	-2623.70	1700125.91	14563067.26	40°05'58.495"N	104°47'11.332"W
Facility Reference Pt			1702750.85	14562570.87	40°05'53.524"N	104°46'37.556"W
Field Reference Pt			1700626.56	14568707.73	40°06'54.245"N	104°47'04.711"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to 2N-66W-33 Offsets vertical datum	4976.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4976.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33))	4976.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.67°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (141 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	13.080	0.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
17.00	0.000	13.080	17.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	TIE ON
117.00†	0.000	13.080	117.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
217.00†	0.000	13.080	217.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
317.00†	0.000	13.080	317.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
417.00†	0.000	13.080	417.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
517.00†	0.000	13.080	517.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
617.00†	0.000	13.080	617.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
717.00†	0.000	13.080	717.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
817.00†	0.000	13.080	817.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
917.00†	0.000	13.080	917.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
1017.00†	0.000	13.080	1017.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
1039.00†	0.000	13.080	1039.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	FOX HILLS BASE
1117.00†	0.000	13.080	1117.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	
1189.00	0.000	13.080	1189.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.332"W	0.00	BEGIN NUDGE
1217.00†	0.560	13.080	1217.00	-0.13	0.13	0.03	40°05'58.496"N	104°47'11.332"W	2.00	
1317.00†	2.560	13.080	1316.96	-2.78	2.78	0.65	40°05'58.523"N	104°47'11.324"W	2.00	
1417.00†	4.560	13.080	1416.76	-8.82	8.83	2.05	40°05'58.582"N	104°47'11.306"W	2.00	
1517.00†	6.560	13.080	1516.28	-18.24	18.27	4.24	40°05'58.676"N	104°47'11.277"W	2.00	
1617.00†	8.560	13.080	1615.41	-31.04	31.08	7.22	40°05'58.802"N	104°47'11.239"W	2.00	
1717.00†	10.560	13.080	1714.02	-47.20	47.26	10.98	40°05'58.962"N	104°47'11.191"W	2.00	
1817.00†	12.560	13.080	1811.98	-66.69	66.78	15.52	40°05'59.155"N	104°47'11.132"W	2.00	
1917.00†	14.560	13.080	1909.19	-89.49	89.62	20.82	40°05'59.381"N	104°47'11.064"W	2.00	
1939.00	15.000	13.080	1930.46	-94.95	95.08	22.09	40°05'59.435"N	104°47'11.048"W	2.00	END NUDGE
2017.00†	15.000	13.080	2005.80	-114.59	114.75	26.66	40°05'59.629"N	104°47'10.989"W	0.00	
2117.00†	15.000	13.080	2102.40	-139.77	139.96	32.52	40°05'59.879"N	104°47'10.913"W	0.00	
2217.00†	15.000	13.080	2198.99	-164.94	165.17	38.37	40°06'00.128"N	104°47'10.838"W	0.00	
2317.00†	15.000	13.080	2295.58	-190.12	190.38	44.23	40°06'00.377"N	104°47'10.763"W	0.00	
2417.00†	15.000	13.080	2392.17	-215.29	215.59	50.09	40°06'00.626"N	104°47'10.687"W	0.00	
2517.00†	15.000	13.080	2488.77	-240.47	240.80	55.95	40°06'00.876"N	104°47'10.612"W	0.00	
2617.00†	15.000	13.080	2585.36	-265.65	266.01	61.80	40°06'01.125"N	104°47'10.536"W	0.00	
2717.00†	15.000	13.080	2681.95	-290.82	291.22	67.66	40°06'01.374"N	104°47'10.461"W	0.00	
2817.00†	15.000	13.080	2778.54	-316.00	316.43	73.52	40°06'01.623"N	104°47'10.386"W	0.00	
2917.00†	15.000	13.080	2875.14	-341.17	341.64	79.38	40°06'01.872"N	104°47'10.310"W	0.00	
3017.00†	15.000	13.080	2971.73	-366.35	366.85	85.23	40°06'02.122"N	104°47'10.235"W	0.00	
3117.00†	15.000	13.080	3068.32	-391.53	392.06	91.09	40°06'02.371"N	104°47'10.159"W	0.00	
3217.00†	15.000	13.080	3164.92	-416.70	417.27	96.95	40°06'02.620"N	104°47'10.084"W	0.00	
3317.00†	15.000	13.080	3261.51	-441.88	442.48	102.81	40°06'02.869"N	104°47'10.009"W	0.00	
3417.00†	15.000	13.080	3358.10	-467.05	467.69	108.66	40°06'03.119"N	104°47'09.933"W	0.00	
3517.00†	15.000	13.080	3454.69	-492.23	492.90	114.52	40°06'03.368"N	104°47'09.858"W	0.00	
3617.00†	15.000	13.080	3551.29	-517.40	518.11	120.38	40°06'03.617"N	104°47'09.782"W	0.00	
3717.00†	15.000	13.080	3647.88	-542.58	543.32	126.24	40°06'03.866"N	104°47'09.707"W	0.00	
3817.00†	15.000	13.080	3744.47	-567.76	568.53	132.09	40°06'04.116"N	104°47'09.631"W	0.00	
3917.00†	15.000	13.080	3841.06	-592.93	593.74	137.95	40°06'04.365"N	104°47'09.556"W	0.00	
4017.00†	15.000	13.080	3937.66	-618.11	618.95	143.81	40°06'04.614"N	104°47'09.481"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4069.12†	15.000	13.080	3988.00	-631.23	632.09	146.86	40°06'04.744"N	104°47'09.441"W	0.00	PARKMAN
4117.00†	15.000	13.080	4034.25	-643.28	644.17	149.66	40°06'04.863"N	104°47'09.405"W	0.00	
4217.00†	15.000	13.080	4130.84	-668.46	669.38	155.52	40°06'05.112"N	104°47'09.330"W	0.00	
4317.00†	15.000	13.080	4227.43	-693.64	694.59	161.38	40°06'05.362"N	104°47'09.254"W	0.00	
4417.00†	15.000	13.080	4324.03	-718.81	719.80	167.24	40°06'05.611"N	104°47'09.179"W	0.00	
4517.00†	15.000	13.080	4420.62	-743.99	745.01	173.09	40°06'05.860"N	104°47'09.104"W	0.00	
4589.86†	15.000	13.080	4491.00	-762.33	763.38	177.36	40°06'06.042"N	104°47'09.049"W	0.00	SUSSEX
4617.00†	15.000	13.080	4517.21	-769.16	770.22	178.95	40°06'06.109"N	104°47'09.028"W	0.00	
4717.00†	15.000	13.080	4613.80	-794.34	795.43	184.81	40°06'06.359"N	104°47'08.953"W	0.00	
4817.00†	15.000	13.080	4710.40	-819.52	820.64	190.67	40°06'06.608"N	104°47'08.877"W	0.00	
4917.00†	15.000	13.080	4806.99	-844.69	845.85	196.52	40°06'06.857"N	104°47'08.802"W	0.00	
5017.00†	15.000	13.080	4903.58	-869.87	871.06	202.38	40°06'07.106"N	104°47'08.727"W	0.00	
5117.00†	15.000	13.080	5000.17	-895.04	896.27	208.24	40°06'07.356"N	104°47'08.651"W	0.00	
5217.00†	15.000	13.080	5096.77	-920.22	921.48	214.10	40°06'07.605"N	104°47'08.576"W	0.00	
5317.00†	15.000	13.080	5193.36	-945.40	946.69	219.95	40°06'07.854"N	104°47'08.500"W	0.00	
5417.00†	15.000	13.080	5289.95	-970.57	971.90	225.81	40°06'08.103"N	104°47'08.425"W	0.00	
5460.53	15.000	13.080	5332.00	-981.53	982.87	228.36	40°06'08.212"N	104°47'08.392"W	0.00	BEGIN DROP
5517.00†	13.871	13.080	5386.69	-995.22	996.59	231.55	40°06'08.347"N	104°47'08.351"W	2.00	
5617.00†	11.871	13.080	5484.17	-1016.89	1018.28	236.59	40°06'08.562"N	104°47'08.286"W	2.00	
5717.00†	9.871	13.080	5582.37	-1035.23	1036.65	240.85	40°06'08.743"N	104°47'08.231"W	2.00	
5817.00†	7.871	13.080	5681.17	-1050.23	1051.67	244.34	40°06'08.892"N	104°47'08.186"W	2.00	
5917.00†	5.871	13.080	5780.44	-1061.87	1063.32	247.05	40°06'09.007"N	104°47'08.151"W	2.00	
6017.00†	3.871	13.080	5880.08	-1070.13	1071.59	248.97	40°06'09.089"N	104°47'08.127"W	2.00	
6117.00†	1.871	13.080	5979.95	-1075.00	1076.47	250.11	40°06'09.137"N	104°47'08.112"W	2.00	
6210.53	0.000	179.668	6073.46	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	2.00	END DROP
6217.00†	0.000	179.668	6079.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6317.00†	0.000	179.668	6179.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6417.00†	0.000	179.668	6279.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6517.00†	0.000	179.668	6379.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6617.00†	0.000	179.668	6479.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6715.11†	0.000	179.668	6578.04	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	4 1/2" LINER TOP
6717.00†	0.000	179.668	6579.93	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	
6815.11	0.000	179.668	6678.04	-1076.48	1077.96	250.45	40°06'09.152"N	104°47'08.108"W	0.00	KOP, BUILD @ 10°/100'
6817.00†	0.189	179.668	6679.93	-1076.48	1077.95	250.45	40°06'09.152"N	104°47'08.108"W	10.00	
6917.00†	10.189	179.668	6779.39	-1067.45	1068.92	250.50	40°06'09.062"N	104°47'08.107"W	10.00	
7017.00†	20.189	179.668	6875.78	-1041.28	1042.76	250.66	40°06'08.804"N	104°47'08.105"W	10.00	
7117.00†	30.189	179.668	6966.15	-998.77	1000.25	250.90	40°06'08.384"N	104°47'08.102"W	10.00	
7217.00†	40.189	179.668	7047.78	-941.22	942.70	251.24	40°06'07.815"N	104°47'08.098"W	10.00	
7317.00†	50.189	179.668	7118.16	-870.37	871.84	251.65	40°06'07.114"N	104°47'08.092"W	10.00	
7334.24†	51.913	179.668	7129.00	-856.96	858.44	251.72	40°06'06.982"N	104°47'08.091"W	10.00	SHARON SPRINGS
7417.00†	60.189	179.668	7175.18	-788.37	789.85	252.12	40°06'06.303"N	104°47'08.086"W	10.00	
7433.13†	61.802	179.668	7183.00	-774.26	775.74	252.20	40°06'06.164"N	104°47'08.085"W	10.00	NIOBRARA A
7517.00†	70.189	179.668	7217.09	-697.71	699.19	252.65	40°06'05.407"N	104°47'08.079"W	10.00	
7617.00†	80.189	179.668	7242.62	-601.16	602.64	253.21	40°06'04.453"N	104°47'08.072"W	10.00	
7715.11	90.000	179.668	7251.00	-503.53	505.01	253.77	40°06'03.488"N	104°47'08.065"W	10.00	LANDING POINT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	90.000	179.668	7251.00	-501.64	503.12	253.78	40°06'03.469"N	104°47'08.065"W	0.00	
7817.00†	90.000	179.668	7251.00	-401.64	403.12	254.36	40°06'02.480"N	104°47'08.057"W	0.00	
7917.00†	90.000	179.668	7251.00	-301.64	303.12	254.94	40°06'01.492"N	104°47'08.050"W	0.00	
8017.00†	90.000	179.668	7251.00	-201.64	203.13	255.52	40°06'00.503"N	104°47'08.043"W	0.00	
8117.00†	90.000	179.668	7251.00	-101.64	103.13	256.10	40°05'59.515"N	104°47'08.035"W	0.00	
8217.00†	90.000	179.668	7251.00	-1.64	3.13	256.68	40°05'58.526"N	104°47'08.028"W	0.00	
8317.00†	90.000	179.668	7251.00	98.36	-96.87	257.26	40°05'57.537"N	104°47'08.020"W	0.00	
8417.00†	90.000	179.668	7251.00	198.36	-196.87	257.84	40°05'56.549"N	104°47'08.013"W	0.00	
8517.00†	90.000	179.668	7251.00	298.36	-296.87	258.42	40°05'55.560"N	104°47'08.005"W	0.00	
8617.00†	90.000	179.668	7251.00	398.36	-396.86	259.00	40°05'54.572"N	104°47'07.998"W	0.00	
8717.00†	90.000	179.668	7251.00	498.36	-496.86	259.58	40°05'53.583"N	104°47'07.990"W	0.00	
8817.00†	90.000	179.668	7251.00	598.36	-596.86	260.16	40°05'52.594"N	104°47'07.983"W	0.00	
8917.00†	90.000	179.668	7251.00	698.36	-696.86	260.74	40°05'51.606"N	104°47'07.975"W	0.00	
9017.00†	90.000	179.668	7251.00	798.36	-796.86	261.32	40°05'50.617"N	104°47'07.968"W	0.00	
9117.00†	90.000	179.668	7251.00	898.36	-896.86	261.90	40°05'49.629"N	104°47'07.961"W	0.00	
9217.00†	90.000	179.668	7251.00	998.36	-996.85	262.48	40°05'48.640"N	104°47'07.953"W	0.00	
9317.00†	90.000	179.668	7251.00	1098.36	-1096.85	263.06	40°05'47.651"N	104°47'07.946"W	0.00	
9417.00†	90.000	179.667	7251.00	1198.36	-1196.85	263.64	40°05'46.663"N	104°47'07.938"W	0.00	
9517.00†	90.000	179.667	7251.00	1298.36	-1296.85	264.22	40°05'45.674"N	104°47'07.931"W	0.00	
9617.00†	90.000	179.667	7251.00	1398.36	-1396.85	264.80	40°05'44.686"N	104°47'07.923"W	0.00	
9717.00†	90.000	179.667	7251.00	1498.36	-1496.85	265.38	40°05'43.697"N	104°47'07.916"W	0.00	
9817.00†	90.000	179.667	7251.00	1598.36	-1596.84	265.96	40°05'42.708"N	104°47'07.908"W	0.00	
9917.00†	90.000	179.667	7251.00	1698.36	-1696.84	266.54	40°05'41.720"N	104°47'07.901"W	0.00	
10017.00†	90.000	179.667	7251.00	1798.36	-1796.84	267.12	40°05'40.731"N	104°47'07.893"W	0.00	
10117.00†	90.000	179.667	7251.00	1898.36	-1896.84	267.70	40°05'39.743"N	104°47'07.886"W	0.00	
10217.00†	90.000	179.667	7251.00	1998.36	-1996.84	268.29	40°05'38.754"N	104°47'07.879"W	0.00	
10317.00†	90.000	179.667	7251.00	2098.36	-2096.84	268.87	40°05'37.766"N	104°47'07.871"W	0.00	
10417.00†	90.000	179.667	7251.00	2198.36	-2196.83	269.45	40°05'36.777"N	104°47'07.864"W	0.00	
10517.00†	90.000	179.667	7251.00	2298.36	-2296.83	270.03	40°05'35.788"N	104°47'07.856"W	0.00	
10617.00†	90.000	179.667	7251.00	2398.36	-2396.83	270.61	40°05'34.800"N	104°47'07.849"W	0.00	
10717.00†	90.000	179.667	7251.00	2498.36	-2496.83	271.19	40°05'33.811"N	104°47'07.841"W	0.00	
10817.00†	90.000	179.667	7251.00	2598.36	-2596.83	271.77	40°05'32.823"N	104°47'07.834"W	0.00	
10917.00†	90.000	179.667	7251.00	2698.36	-2696.83	272.35	40°05'31.834"N	104°47'07.826"W	0.00	
11017.00†	90.000	179.667	7251.00	2798.36	-2796.82	272.93	40°05'30.845"N	104°47'07.819"W	0.00	
11117.00†	90.000	179.667	7251.00	2898.36	-2896.82	273.51	40°05'29.857"N	104°47'07.811"W	0.00	
11217.00†	90.000	179.667	7251.00	2998.36	-2996.82	274.10	40°05'28.868"N	104°47'07.804"W	0.00	
11317.00†	90.000	179.667	7251.00	3098.36	-3096.82	274.68	40°05'27.880"N	104°47'07.796"W	0.00	
11417.00†	90.000	179.667	7251.00	3198.36	-3196.82	275.26	40°05'26.891"N	104°47'07.789"W	0.00	
11517.00†	90.000	179.667	7251.00	3298.36	-3296.82	275.84	40°05'25.902"N	104°47'07.781"W	0.00	
11617.00†	90.000	179.667	7251.00	3398.36	-3396.81	276.42	40°05'24.914"N	104°47'07.774"W	0.00	
11717.00†	90.000	179.667	7251.00	3498.36	-3496.81	277.00	40°05'23.925"N	104°47'07.767"W	0.00	
11817.00†	90.000	179.667	7251.00	3598.36	-3596.81	277.58	40°05'22.937"N	104°47'07.759"W	0.00	
11917.00†	90.000	179.667	7251.00	3698.36	-3696.81	278.17	40°05'21.948"N	104°47'07.752"W	0.00	
12017.00†	90.000	179.667	7251.00	3798.36	-3796.81	278.75	40°05'20.959"N	104°47'07.744"W	0.00	
12117.00†	90.000	179.667	7251.00	3898.36	-3896.81	279.33	40°05'19.971"N	104°47'07.737"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12217.00†	90.000	179.667	7251.00	3998.36	-3996.80	279.91	40°05'18.982"N	104°47'07.729"W	0.00	
12317.00†	90.000	179.667	7251.00	4098.36	-4096.80	280.49	40°05'17.994"N	104°47'07.722"W	0.00	
12417.00†	90.000	179.667	7251.00	4198.36	-4196.80	281.07	40°05'17.005"N	104°47'07.714"W	0.00	
12517.00†	90.000	179.667	7251.00	4298.36	-4296.80	281.66	40°05'16.017"N	104°47'07.707"W	0.00	
12617.00†	90.000	179.667	7251.00	4398.36	-4396.80	282.24	40°05'15.028"N	104°47'07.699"W	0.00	
12617.64	90.000	179.667	7251.00 <sup>1</sup>	4399.00	-4397.44	282.24	40°05'15.022"N	104°47'07.699"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: CARTER 35N-33HZ PWB Ref Wellpath: CARTER 35N-33HZ (PERMIT REV-1) 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	17.00	1089.00	1072.00	17.00	1089.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1089.00	1072.00	17.00	1089.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1089.00	7715.11	6626.11	1089.00	7251.00	0.00	0.00	505.01	253.77
7in Casing Intermediate	17.00	7715.11	7698.11	17.00	7251.00	0.00	0.00	505.01	253.77
6.125in Open Hole	7715.11	12617.64	4902.53	7251.00	7251.00	505.01	253.77	-4397.44	282.24
4.5in Casing Production	17.00	12617.64	12600.64	17.00	7251.00	0.00	0.00	-4397.44	282.24

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.33-T2N-R66W SECTION LINES		0.00	0.40	-119.63	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W	polygon
1) CARTER 35N-33HZ BHL REV-1 (50'FSL & 1711'FWL, SEC.33)	12617.64	7251.00	-4397.44	282.24	1700418.70	14558670.52	40°05'15.022"N	104°47'07.699"W	point

SURVEY PROGRAM - Ref Wellbore: CARTER 35N-33HZ PWB Ref Wellpath: CARTER 35N-33HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12617.64	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		CARTER 35N-33HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#05 CARTER 35N-33HZ (825'FNL & 1440'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35N-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35N-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1039.00	0.000	13.080	1039.00	FOX HILLS BASE
4069.12	15.000	13.080	3988.00	PARKMAN
4589.86	15.000	13.080	4491.00	SUSSEX
6715.11	0.000	179.668	6578.04	4 1/2" LINER TOP
7334.24	51.913	179.668	7129.00	SHARON SPRINGS
7433.13	61.802	179.668	7183.00	NIOBRARA A

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	13.080	17.00	TIE ON
1189.00	0.000	13.080	1189.00	BEGIN NUDGE
1939.00	15.000	13.080	1930.46	END NUDGE
5460.53	15.000	13.080	5332.00	BEGIN DROP
6210.53	0.000	179.668	6073.46	END DROP
6815.11	0.000	179.668	6678.04	KOP, BUILD @ 10°/100'
7715.11	90.000	179.668	7251.00	LANDING POINT
12617.64	90.000	179.667	7251.00	TOTAL DEPTH