

KERR-MCGEE OIL & GAS ONSHORE LP

Location: Compass Import Slot: SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Field: WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH) Well: CARTER 35C-33HZ
Facility: SEC.33-T2N-R66W Wellbore: CARTER 35C-33HZ PWB

Plot reference wellpath is CARTER 35C-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: 4976 feet Scale: Grid distance
Mean Sea Level to Mud line (At Slot: SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'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)	Longitude
SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)	502.97	-2653.60	1700095.998	14563067.188	40°05'58.495"N 104°47'11.717"W
PERMIT (17'KB) (RKB) to Mud line (At Slot: SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33))					4976ft
Mean Sea Level to Mud line (At Slot: SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33))					0ft
PERMIT (17'KB) (RKB) to Mean Sea Level					4976ft

Survey Program

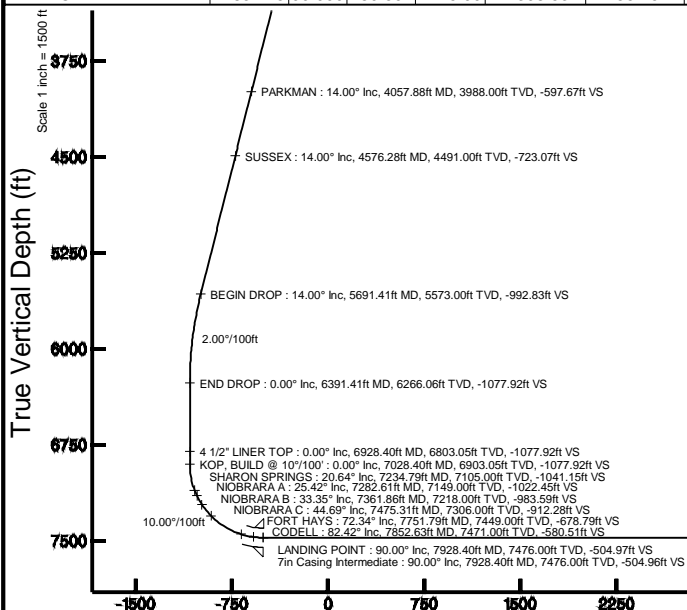
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12832.25	ISOWSA MWD, Rev. 2, axial magnetic correction	ISOWSA MWD, Rev. 2, axial magnetic correction (Standard) (Mag/Var IFR Wattenberg)		CARTER 35C-33HZ PWB

Targets

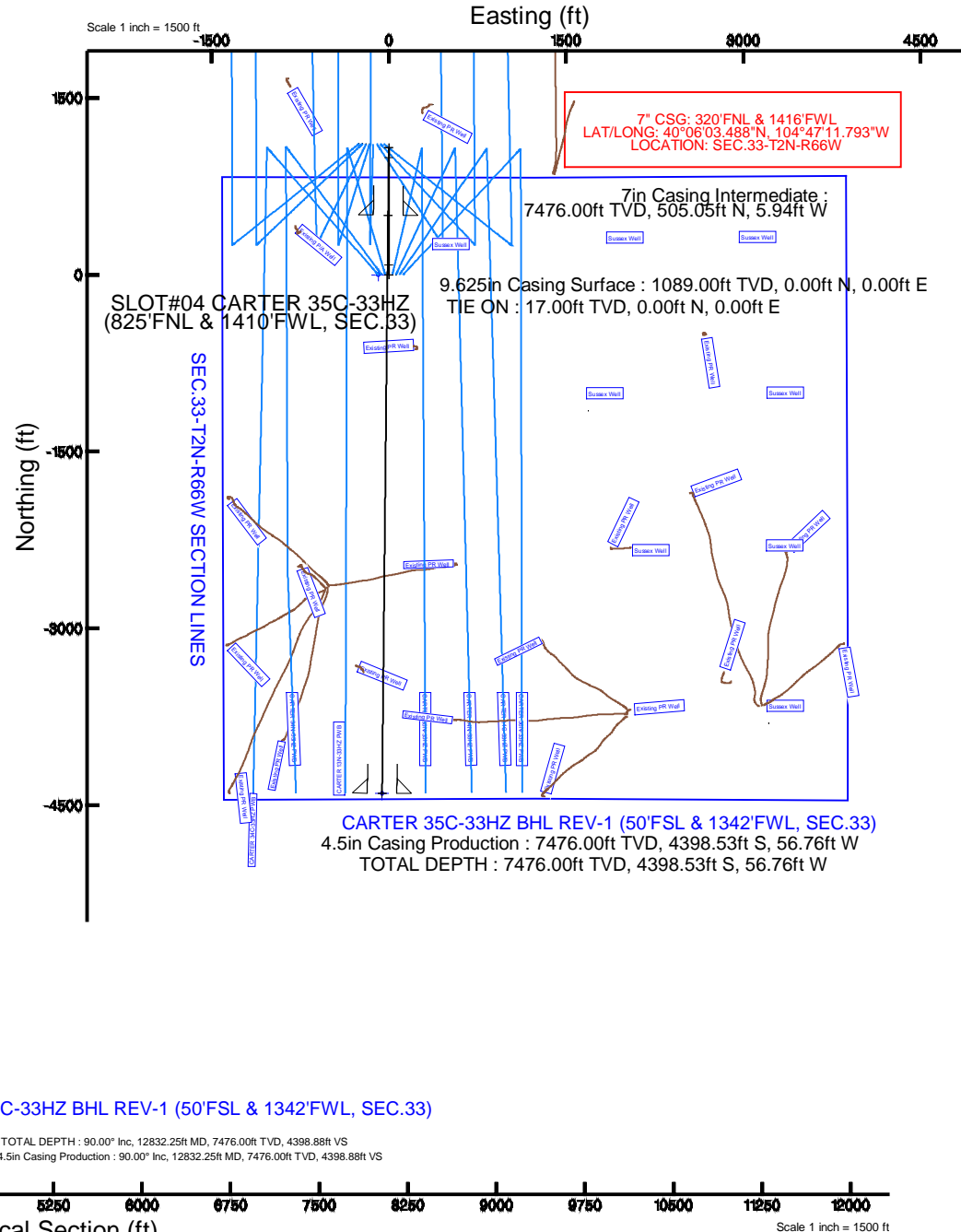
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.33-T2N-R66W SECTION LINES		0.00	0.40	-89.72	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W
CARTER 35C-33HZ BHL REV-1 (50'FSL & 1342'FWL, SEC.33)	12832.25	7476.00	-4398.53	-56.76	1700049.79	14558668.54	40°05'15.011"N	104°47'12.448"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	0.000	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1239.00	0.000	0.000	1239.00	0.00	0.00	0.00	0.00
END NUDGE	1939.00	14.000	0.000	1932.06	85.10	0.00	2.00	-85.09
BEGIN DROP	5691.41	14.000	0.000	5573.00	992.89	0.00	0.00	-992.83
END DROP	6391.41	0.000	180.594	6266.06	1077.98	0.00	2.00	-1077.92
KOP, BUILD @ 10°/100'	7028.40	0.000	180.594	6903.05	1077.98	0.00	0.00	-1077.92
LANDING POINT	7928.40	90.000	180.594	7476.00	505.06	-5.94	10.00	-504.97
TOTAL DEPTH	12832.25	90.000	180.594	7476.00	-4398.53	-56.76	0.00	4398.88



Azimuth 180.59° with reference 0.00 N, 0.00 E



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-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 2:16:45 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/CARTER_35C-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	-2653.60	1700096.00	14563067.19	40°05'58.495"N	104°47'11.717"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#04 CARTER 35C-33HZ (825'FNL & 1410'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	180.59°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (147 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	0.000	0.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
17.00	0.000	0.000	17.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	TIE ON
117.00†	0.000	0.000	117.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
217.00†	0.000	0.000	217.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
317.00†	0.000	0.000	317.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
417.00†	0.000	0.000	417.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
517.00†	0.000	0.000	517.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
617.00†	0.000	0.000	617.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
717.00†	0.000	0.000	717.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
817.00†	0.000	0.000	817.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
917.00†	0.000	0.000	917.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
1017.00†	0.000	0.000	1017.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
1039.00†	0.000	0.000	1039.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	FOX HILLS BASE
1117.00†	0.000	0.000	1117.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
1217.00†	0.000	0.000	1217.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	
1239.00	0.000	0.000	1239.00	0.00	0.00	0.00	40°05'58.495"N	104°47'11.717"W	0.00	BEGIN NUDGE
1317.00†	1.560	0.000	1316.99	-1.06	1.06	0.00	40°05'58.505"N	104°47'11.717"W	2.00	
1417.00†	3.560	0.000	1416.89	-5.53	5.53	0.00	40°05'58.550"N	104°47'11.717"W	2.00	
1517.00†	5.560	0.000	1516.56	-13.48	13.48	0.00	40°05'58.628"N	104°47'11.717"W	2.00	
1617.00†	7.560	0.000	1615.90	-24.90	24.90	0.00	40°05'58.741"N	104°47'11.717"W	2.00	
1717.00†	9.560	0.000	1714.79	-39.78	39.79	0.00	40°05'58.888"N	104°47'11.717"W	2.00	
1817.00†	11.560	0.000	1813.09	-58.11	58.11	0.00	40°05'59.069"N	104°47'11.717"W	2.00	
1917.00†	13.560	0.000	1910.69	-79.85	79.86	0.00	40°05'59.284"N	104°47'11.717"W	2.00	
1939.00	14.000	0.000	1932.06	-85.09	85.10	0.00	40°05'59.336"N	104°47'11.717"W	2.00	END NUDGE
2017.00†	14.000	0.000	2007.74	-103.96	103.97	0.00	40°05'59.523"N	104°47'11.717"W	0.00	
2117.00†	14.000	0.000	2104.77	-128.15	128.16	0.00	40°05'59.762"N	104°47'11.717"W	0.00	
2217.00†	14.000	0.000	2201.80	-152.34	152.35	0.00	40°06'00.001"N	104°47'11.717"W	0.00	
2317.00†	14.000	0.000	2298.83	-176.53	176.54	0.00	40°06'00.240"N	104°47'11.717"W	0.00	
2417.00†	14.000	0.000	2395.86	-200.72	200.74	0.00	40°06'00.479"N	104°47'11.717"W	0.00	
2517.00†	14.000	0.000	2492.89	-224.92	224.93	0.00	40°06'00.719"N	104°47'11.717"W	0.00	
2617.00†	14.000	0.000	2589.92	-249.11	249.12	0.00	40°06'00.958"N	104°47'11.717"W	0.00	
2717.00†	14.000	0.000	2686.95	-273.30	273.31	0.00	40°06'01.197"N	104°47'11.717"W	0.00	
2817.00†	14.000	0.000	2783.97	-297.49	297.50	0.00	40°06'01.436"N	104°47'11.717"W	0.00	
2917.00†	14.000	0.000	2881.00	-321.68	321.70	0.00	40°06'01.675"N	104°47'11.717"W	0.00	
3017.00†	14.000	0.000	2978.03	-345.87	345.89	0.00	40°06'01.914"N	104°47'11.717"W	0.00	
3117.00†	14.000	0.000	3075.06	-370.06	370.08	0.00	40°06'02.154"N	104°47'11.717"W	0.00	
3217.00†	14.000	0.000	3172.09	-394.25	394.27	0.00	40°06'02.393"N	104°47'11.717"W	0.00	
3317.00†	14.000	0.000	3269.12	-418.44	418.46	0.00	40°06'02.632"N	104°47'11.717"W	0.00	
3417.00†	14.000	0.000	3366.15	-442.63	442.66	0.00	40°06'02.871"N	104°47'11.717"W	0.00	
3517.00†	14.000	0.000	3463.18	-466.82	466.85	0.00	40°06'03.110"N	104°47'11.717"W	0.00	
3617.00†	14.000	0.000	3560.21	-491.02	491.04	0.00	40°06'03.349"N	104°47'11.717"W	0.00	
3717.00†	14.000	0.000	3657.24	-515.21	515.23	0.00	40°06'03.589"N	104°47'11.717"W	0.00	
3817.00†	14.000	0.000	3754.27	-539.40	539.43	0.00	40°06'03.828"N	104°47'11.717"W	0.00	
3917.00†	14.000	0.000	3851.30	-563.59	563.62	0.00	40°06'04.067"N	104°47'11.717"W	0.00	
4017.00†	14.000	0.000	3948.33	-587.78	587.81	0.00	40°06'04.306"N	104°47'11.717"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4057.88†	14.000	0.000	3988.00	-597.67	597.70	0.00	40°06'04.404"N	104°47'11.717"W	0.00	PARKMAN
4117.00†	14.000	0.000	4045.36	-611.97	612.00	0.00	40°06'04.545"N	104°47'11.717"W	0.00	
4217.00†	14.000	0.000	4142.39	-636.16	636.19	0.00	40°06'04.784"N	104°47'11.717"W	0.00	
4317.00†	14.000	0.000	4239.42	-660.35	660.39	0.00	40°06'05.024"N	104°47'11.717"W	0.00	
4417.00†	14.000	0.000	4336.45	-684.54	684.58	0.00	40°06'05.263"N	104°47'11.717"W	0.00	
4517.00†	14.000	0.000	4433.48	-708.73	708.77	0.00	40°06'05.502"N	104°47'11.717"W	0.00	
4576.28†	14.000	0.000	4491.00	-723.07	723.11	0.00	40°06'05.644"N	104°47'11.717"W	0.00	SUSSEX
4617.00†	14.000	0.000	4530.51	-732.92	732.96	0.00	40°06'05.741"N	104°47'11.717"W	0.00	
4717.00†	14.000	0.000	4627.54	-757.11	757.16	0.00	40°06'05.980"N	104°47'11.717"W	0.00	
4817.00†	14.000	0.000	4724.57	-781.31	781.35	0.00	40°06'06.219"N	104°47'11.717"W	0.00	
4917.00†	14.000	0.000	4821.60	-805.50	805.54	0.00	40°06'06.459"N	104°47'11.717"W	0.00	
5017.00†	14.000	0.000	4918.63	-829.69	829.73	0.00	40°06'06.698"N	104°47'11.717"W	0.00	
5117.00†	14.000	0.000	5015.65	-853.88	853.92	0.00	40°06'06.937"N	104°47'11.717"W	0.00	
5217.00†	14.000	0.000	5112.68	-878.07	878.12	0.00	40°06'07.176"N	104°47'11.717"W	0.00	
5317.00†	14.000	0.000	5209.71	-902.26	902.31	0.00	40°06'07.415"N	104°47'11.717"W	0.00	
5417.00†	14.000	0.000	5306.74	-926.45	926.50	0.00	40°06'07.654"N	104°47'11.717"W	0.00	
5517.00†	14.000	0.000	5403.77	-950.64	950.69	0.00	40°06'07.894"N	104°47'11.717"W	0.00	
5617.00†	14.000	0.000	5500.80	-974.83	974.89	0.00	40°06'08.133"N	104°47'11.717"W	0.00	
5691.41	14.000	0.000	5573.00	-992.83	992.89	0.00	40°06'08.311"N	104°47'11.717"W	0.00	BEGIN DROP
5717.00†	13.488	0.000	5597.86	-998.91	998.97	0.00	40°06'08.371"N	104°47'11.717"W	2.00	
5817.00†	11.488	0.000	5695.49	-1020.53	1020.59	0.00	40°06'08.585"N	104°47'11.717"W	2.00	
5917.00†	9.488	0.000	5793.81	-1038.74	1038.79	0.00	40°06'08.765"N	104°47'11.717"W	2.00	
6017.00†	7.488	0.000	5892.71	-1053.49	1053.55	0.00	40°06'08.910"N	104°47'11.717"W	2.00	
6117.00†	5.488	0.000	5992.07	-1064.79	1064.85	0.00	40°06'09.022"N	104°47'11.717"W	2.00	
6217.00†	3.488	0.000	6091.76	-1072.62	1072.68	0.00	40°06'09.100"N	104°47'11.717"W	2.00	
6317.00†	1.488	0.000	6191.66	-1076.96	1077.02	0.00	40°06'09.142"N	104°47'11.717"W	2.00	
6391.41	0.000	180.594	6266.06	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	2.00	END DROP
6417.00†	0.000	180.594	6291.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6517.00†	0.000	180.594	6391.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6617.00†	0.000	180.594	6491.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6717.00†	0.000	180.594	6591.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6817.00†	0.000	180.594	6691.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6917.00†	0.000	180.594	6791.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
6928.40†	0.000	180.594	6803.05	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	4 1/2" LINER TOP
7017.00†	0.000	180.594	6891.65	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	
7028.40	0.000	180.594	6903.05	-1077.92	1077.98	0.00	40°06'09.152"N	104°47'11.717"W	0.00	KOP, BUILD @ 10°/100'
7117.00†	8.860	180.594	6991.30	-1071.09	1071.15	-0.07	40°06'09.084"N	104°47'11.718"W	10.00	
7217.00†	18.860	180.594	7088.26	-1047.16	1047.22	-0.32	40°06'08.848"N	104°47'11.721"W	10.00	
7234.79†	20.639	180.594	7105.00	-1041.15	1041.21	-0.38	40°06'08.788"N	104°47'11.722"W	10.00	SHARON SPRINGS
7282.61†	25.421	180.594	7149.00	-1022.45	1022.51	-0.58	40°06'08.604"N	104°47'11.724"W	10.00	NIOBRARA A
7317.00†	28.860	180.594	7179.60	-1006.76	1006.82	-0.74	40°06'08.449"N	104°47'11.726"W	10.00	
7361.86†	33.346	180.594	7218.00	-983.59	983.66	-0.98	40°06'08.219"N	104°47'11.730"W	10.00	NIOBRARA B
7417.00†	38.860	180.594	7262.53	-951.12	951.18	-1.31	40°06'07.898"N	104°47'11.734"W	10.00	
7475.31†	44.691	180.594	7306.00	-912.28	912.35	-1.72	40°06'07.515"N	104°47'11.739"W	10.00	NIOBRARA C
7517.00†	48.860	180.594	7334.54	-881.91	881.98	-2.03	40°06'07.214"N	104°47'11.743"W	10.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7617.00†	58.860	180.594	7393.44	-801.26	801.33	-2.87	40°06'06.417"N	104°47'11.754"W	10.00	
7717.00†	68.860	180.594	7437.45	-711.60	711.68	-3.80	40°06'05.531"N	104°47'11.766"W	10.00	
7751.79†	72.340	180.594	7449.00	-678.79	678.87	-4.14	40°06'05.206"N	104°47'11.770"W	10.00	FORT HAYS
7817.00†	78.860	180.594	7465.21	-615.66	615.75	-4.79	40°06'04.582"N	104°47'11.779"W	10.00	
7852.63†	82.423	180.594	7471.00	-580.51	580.60	-5.16	40°06'04.235"N	104°47'11.783"W	10.00	CODELL
7917.00†	88.860	180.594	7475.89	-516.36	516.45	-5.82	40°06'03.601"N	104°47'11.792"W	10.00	
7928.40	90.000	180.594	7476.00	-504.97	505.06	-5.94	40°06'03.488"N	104°47'11.793"W	10.00	LANDING POINT
8017.00†	90.000	180.594	7476.00	-416.36	416.46	-6.86	40°06'02.612"N	104°47'11.805"W	0.00	
8117.00†	90.000	180.594	7476.00	-316.36	316.46	-7.90	40°06'01.624"N	104°47'11.819"W	0.00	
8217.00†	90.000	180.594	7476.00	-216.36	216.47	-8.93	40°06'00.635"N	104°47'11.832"W	0.00	
8317.00†	90.000	180.594	7476.00	-116.36	116.47	-9.97	40°05'59.646"N	104°47'11.845"W	0.00	
8417.00†	90.000	180.594	7476.00	-16.36	16.48	-11.01	40°05'58.658"N	104°47'11.859"W	0.00	
8517.00†	90.000	180.594	7476.00	83.64	-83.52	-12.04	40°05'57.669"N	104°47'11.872"W	0.00	
8617.00†	90.000	180.594	7476.00	183.64	-183.51	-13.08	40°05'56.681"N	104°47'11.885"W	0.00	
8717.00†	90.000	180.594	7476.00	283.64	-283.50	-14.12	40°05'55.692"N	104°47'11.899"W	0.00	
8817.00†	90.000	180.594	7476.00	383.64	-383.50	-15.15	40°05'54.704"N	104°47'11.912"W	0.00	
8917.00†	90.000	180.594	7476.00	483.64	-483.49	-16.19	40°05'53.715"N	104°47'11.925"W	0.00	
9017.00†	90.000	180.594	7476.00	583.64	-583.49	-17.22	40°05'52.727"N	104°47'11.939"W	0.00	
9117.00†	90.000	180.594	7476.00	683.64	-683.48	-18.26	40°05'51.738"N	104°47'11.952"W	0.00	
9217.00†	90.000	180.594	7476.00	783.64	-783.48	-19.30	40°05'50.749"N	104°47'11.965"W	0.00	
9317.00†	90.000	180.594	7476.00	883.64	-883.47	-20.33	40°05'49.761"N	104°47'11.979"W	0.00	
9417.00†	90.000	180.594	7476.00	983.64	-983.47	-21.37	40°05'48.772"N	104°47'11.992"W	0.00	
9517.00†	90.000	180.594	7476.00	1083.64	-1083.46	-22.41	40°05'47.784"N	104°47'12.005"W	0.00	
9617.00†	90.000	180.594	7476.00	1183.64	-1183.46	-23.44	40°05'46.795"N	104°47'12.019"W	0.00	
9717.00†	90.000	180.594	7476.00	1283.64	-1283.45	-24.48	40°05'45.807"N	104°47'12.032"W	0.00	
9817.00†	90.000	180.594	7476.00	1383.64	-1383.45	-25.52	40°05'44.818"N	104°47'12.045"W	0.00	
9917.00†	90.000	180.594	7476.00	1483.64	-1483.44	-26.55	40°05'43.830"N	104°47'12.059"W	0.00	
10017.00†	90.000	180.594	7476.00	1583.64	-1583.43	-27.59	40°05'42.841"N	104°47'12.072"W	0.00	
10117.00†	90.000	180.594	7476.00	1683.64	-1683.43	-28.63	40°05'41.852"N	104°47'12.085"W	0.00	
10217.00†	90.000	180.594	7476.00	1783.64	-1783.42	-29.66	40°05'40.864"N	104°47'12.099"W	0.00	
10317.00†	90.000	180.594	7476.00	1883.64	-1883.42	-30.70	40°05'39.875"N	104°47'12.112"W	0.00	
10417.00†	90.000	180.594	7476.00	1983.64	-1983.41	-31.74	40°05'38.887"N	104°47'12.126"W	0.00	
10517.00†	90.000	180.594	7476.00	2083.64	-2083.41	-32.77	40°05'37.898"N	104°47'12.139"W	0.00	
10617.00†	90.000	180.594	7476.00	2183.64	-2183.40	-33.81	40°05'36.910"N	104°47'12.152"W	0.00	
10717.00†	90.000	180.594	7476.00	2283.64	-2283.40	-34.84	40°05'35.921"N	104°47'12.166"W	0.00	
10817.00†	90.000	180.594	7476.00	2383.64	-2383.39	-35.88	40°05'34.933"N	104°47'12.179"W	0.00	
10917.00†	90.000	180.594	7476.00	2483.64	-2483.39	-36.92	40°05'33.944"N	104°47'12.192"W	0.00	
11017.00†	90.000	180.594	7476.00	2583.64	-2583.38	-37.95	40°05'32.956"N	104°47'12.206"W	0.00	
11117.00†	90.000	180.594	7476.00	2683.64	-2683.38	-38.99	40°05'31.967"N	104°47'12.219"W	0.00	
11217.00†	90.000	180.594	7476.00	2783.64	-2783.37	-40.03	40°05'30.978"N	104°47'12.232"W	0.00	
11317.00†	90.000	180.594	7476.00	2883.64	-2883.37	-41.06	40°05'29.990"N	104°47'12.246"W	0.00	
11417.00†	90.000	180.594	7476.00	2983.64	-2983.36	-42.10	40°05'29.001"N	104°47'12.259"W	0.00	
11517.00†	90.000	180.594	7476.00	3083.64	-3083.35	-43.14	40°05'28.013"N	104°47'12.272"W	0.00	
11617.00†	90.000	180.594	7476.00	3183.64	-3183.35	-44.17	40°05'27.024"N	104°47'12.286"W	0.00	
11717.00†	90.000	180.594	7476.00	3283.64	-3283.34	-45.21	40°05'26.036"N	104°47'12.299"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11817.00†	90.000	180.594	7476.00	3383.64	-3383.34	-46.24	40°05'25.047"N	104°47'12.312"W	0.00	
11917.00†	90.000	180.594	7476.00	3483.64	-3483.33	-47.28	40°05'24.059"N	104°47'12.326"W	0.00	
12017.00†	90.000	180.594	7476.00	3583.64	-3583.33	-48.32	40°05'23.070"N	104°47'12.339"W	0.00	
12117.00†	90.000	180.594	7476.00	3683.64	-3683.32	-49.35	40°05'22.081"N	104°47'12.352"W	0.00	
12217.00†	90.000	180.594	7476.00	3783.64	-3783.32	-50.39	40°05'21.093"N	104°47'12.366"W	0.00	
12317.00†	90.000	180.594	7476.00	3883.64	-3883.31	-51.43	40°05'20.104"N	104°47'12.379"W	0.00	
12417.00†	90.000	180.594	7476.00	3983.64	-3983.31	-52.46	40°05'19.116"N	104°47'12.392"W	0.00	
12517.00†	90.000	180.594	7476.00	4083.64	-4083.30	-53.50	40°05'18.127"N	104°47'12.406"W	0.00	
12617.00†	90.000	180.594	7476.00	4183.64	-4183.30	-54.53	40°05'17.139"N	104°47'12.419"W	0.00	
12717.00†	90.000	180.594	7476.00	4283.64	-4283.29	-55.57	40°05'16.150"N	104°47'12.432"W	0.00	
12817.00†	90.000	180.594	7476.00	4383.64	-4383.28	-56.61	40°05'15.162"N	104°47'12.446"W	0.00	
12832.25	90.000	180.594	7476.00 ¹	4398.88	-4398.53	-56.76	40°05'15.011"N	104°47'12.448"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: CARTER 35C-33HZ PWB Ref Wellpath: CARTER 35C-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	7928.40	6839.40	1089.00	7476.00	0.00	0.00	505.05	-5.94
7in Casing Intermediate	17.00	7928.40	7911.40	17.00	7476.00	0.00	0.00	505.05	-5.94
6.125in Open Hole	7928.40	12832.25	4903.85	7476.00	7476.00	505.05	-5.94	-4398.53	-56.76
4.5in Casing Production	17.00	12832.25	12815.25	17.00	7476.00	0.00	0.00	-4398.53	-56.76

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	-89.72	1700006.28	14563067.38	40°05'58.499"N	104°47'12.872"W	polygon
1) CARTER 35C-33HZ BHL REV-1 (50'FSL & 1342'FWL, SEC.33)	12832.25	7476.00	-4398.53	-56.76	1700049.79	14558668.54	40°05'15.011"N	104°47'12.448"W	point

SURVEY PROGRAM - Ref Wellbore: CARTER 35C-33HZ PWB Ref Wellpath: CARTER 35C-33HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12832.25	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		CARTER 35C-33HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#04 CARTER 35C-33HZ (825'FNL & 1410'FWL, SEC.33)
Area	Compass Import	Well	CARTER 35C-33HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TRUE NORTH)	Wellbore	CARTER 35C-33HZ PWB
Facility	SEC.33-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1039.00	0.000	0.000	1039.00	FOX HILLS BASE
4057.88	14.000	0.000	3988.00	PARKMAN
4576.28	14.000	0.000	4491.00	SUSSEX
6928.40	0.000	180.594	6803.05	4 1/2" LINER TOP
7234.79	20.639	180.594	7105.00	SHARON SPRINGS
7282.61	25.421	180.594	7149.00	NIOBRARA A
7361.86	33.346	180.594	7218.00	NIOBRARA B
7475.31	44.691	180.594	7306.00	NIOBRARA C
7751.79	72.340	180.594	7449.00	FORT HAYS
7852.63	82.423	180.594	7471.00	CODELL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	0.000	17.00	TIE ON
1239.00	0.000	0.000	1239.00	BEGIN NUDGE
1939.00	14.000	0.000	1932.06	END NUDGE
5691.41	14.000	0.000	5573.00	BEGIN DROP
6391.41	0.000	180.594	6266.06	END DROP
7028.40	0.000	180.594	6903.05	KOP, BUILD @ 10°/100'
7928.40	90.000	180.594	7476.00	LANDING POINT
12832.25	90.000	180.594	7476.00	TOTAL DEPTH