

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: DOCHEFF 33N-15HZ
 Facility: SEC.14-T3N-R68W Wellbore: DOCHEFF 33N-15HZ PWB

Plot reference wellpath is DOCHEFF 33N-15HZ (PERMIT REV-1) PWP

True vertical depths are referenced to PERMIT (17KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PERMIT (17KB) (RKB)	North Reference: True north
PERMIT (17KB) (RKB) to Mean Sea Level: 4951 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 9/10/2014

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
SEC.14-T3N-R68W	3146766.378	1323729.589	40°13'15.029"N	104°58'27.900"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)	1406.81	150.17	3146908.201	1325137.200	40°13'28.931"N	104°58'25.964"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14))						4951ft
Mean Sea Level to Mud line (At Slot: SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14))						0ft
PERMIT (17KB) (RKB) to Mean Sea Level						4951ft

Survey Program

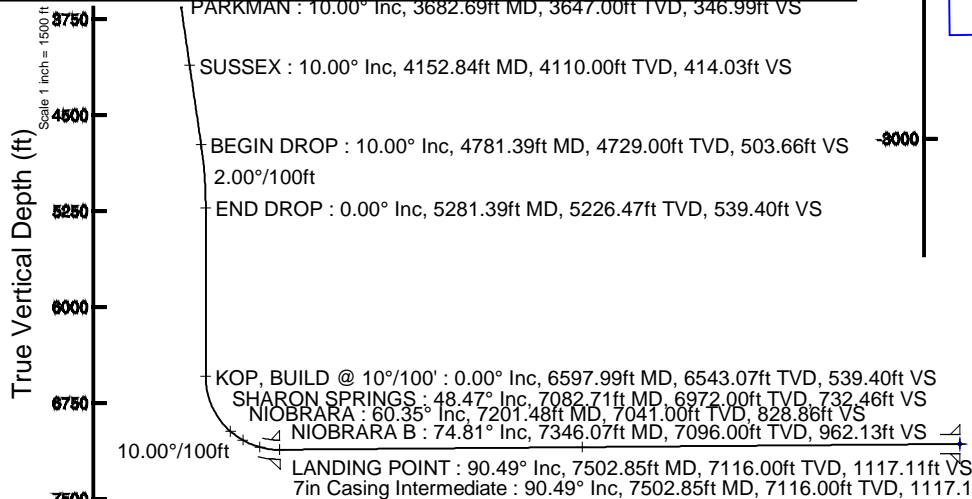
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12809.48	NaviTrak	NaviTrak	(IFR)	DOCHEFF 33N-15HZ PWB

Targets

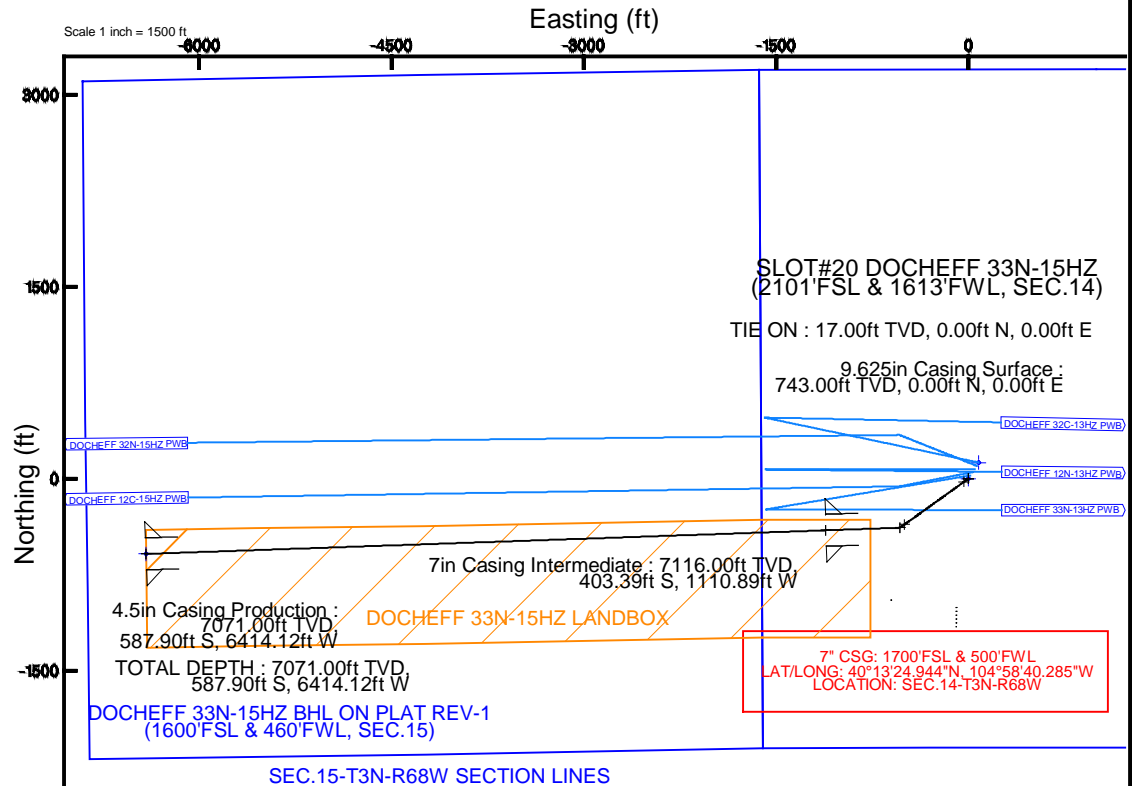
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.13-T3N-R68W SECTION LINES		0.00	2360.56	8352.14	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.14-T3N-R68W SECTION LINES		0.00	2360.56	8352.14	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.15-T3N-R68W SECTION LINES		0.00	126.39	80.36	3146967.81	1325284.06	40°13'30.180"N	104°58'24.928"W
DOCHEFF 33N-15HZ BHL ON PLAT REV-1 (1600'FSL & 460'FWL, SEC.15)	12809.48	7071.00	-587.90	-6414.12	3140497.97	1324511.28	40°13'23.113"N	104°59'48.653"W
DOCHEFF 33N-15HZ LANDBOX		7071.00	0.00	0.00	3146908.20	1325137.20	40°13'28.931"N	104°58'25.964"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	234.300	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1000.00	0.000	234.300	1000.00	0.00	0.00	0.00	0.00
END NUDGE	1500.00	10.000	234.300	1497.47	-25.40	-35.34	2.00	35.74
BEGIN DROP	4781.39	10.000	234.300	4729.00	-357.90	-498.07	0.00	503.66
END DROP	5281.39	0.000	268.007	5226.47	-383.30	-533.42	2.00	539.40
KOP, BUILD @ 10°/100'	6597.99	0.000	268.007	6543.07	-383.30	-533.42	0.00	539.40
LANDING POINT	7502.85	90.486	268.007	7116.00	-403.39	-1110.89	10.00	1117.11
TOTAL DEPTH	12809.48	90.486	268.007	7071.00	-587.90	-6414.12	0.00	6422.59



Azimuth 269.10° with reference 0.00 N, 0.00 E



DOCHEFF 33N-15HZ BHL ON PLAT REV-1 (1600'FSL & 460'FWL, SEC.15)

4.5in Casing Production : 90.49° Inc, 12809.48ft MD, 7071.00ft TVD, 6422.59ft VS
 TOTAL DEPTH : 90.49° Inc, 12809.48ft MD, 7071.00ft TVD, 6422.59ft VS

Scale 1 inch = 1500 ft



Planned Wellpath Report

DOCHEFF 33N-15HZ (PERMIT REV-1) PWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

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	0.999957	Report Generated	9/10/2014 at 3:31:28 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_33N-15HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1406.81	150.17	3146908.20	1325137.20	40°13'28.931"N	104°58'25.964"W
Facility Reference Pt			3146766.38	1323729.59	40°13'15.029"N	104°58'27.900"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to Facility Vertical Datum	4951.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4951.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14))	4951.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.10°



Planned Wellpath Report

DOCHEFF 33N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (144 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	234.300	0.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
17.00	0.000	234.300	17.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	TIE ON
117.00†	0.000	234.300	117.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
217.00†	0.000	234.300	217.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
317.00†	0.000	234.300	317.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
417.00†	0.000	234.300	417.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
517.00†	0.000	234.300	517.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
551.00†	0.000	234.300	551.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	BASE FOX HILLS
617.00†	0.000	234.300	617.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
717.00†	0.000	234.300	717.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
743.00†	0.000	234.300	743.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	234.300	817.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
917.00†	0.000	234.300	917.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	
1000.00	0.000	234.300	1000.00	0.00	0.00	0.00	40°13'28.931"N	104°58'25.964"W	0.00	BEGIN NUDGE
1017.00†	0.340	234.300	1017.00	0.04	-0.03	-0.04	40°13'28.931"N	104°58'25.965"W	2.00	
1117.00†	2.340	234.300	1116.97	1.96	-1.39	-1.94	40°13'28.917"N	104°58'25.989"W	2.00	
1217.00†	4.340	234.300	1216.79	6.75	-4.79	-6.67	40°13'28.884"N	104°58'26.050"W	2.00	
1317.00†	6.340	234.300	1316.35	14.39	-10.22	-14.23	40°13'28.830"N	104°58'26.147"W	2.00	
1417.00†	8.340	234.300	1415.53	24.88	-17.68	-24.60	40°13'28.756"N	104°58'26.281"W	2.00	
1500.00	10.000	234.300	1497.47	35.74	-25.40	-35.34	40°13'28.680"N	104°58'26.420"W	2.00	END NUDGE
1517.00†	10.000	234.300	1514.21	38.16	-27.12	-37.74	40°13'28.663"N	104°58'26.451"W	0.00	
1617.00†	10.000	234.300	1612.69	52.42	-37.25	-51.84	40°13'28.563"N	104°58'26.632"W	0.00	
1717.00†	10.000	234.300	1711.17	66.68	-47.39	-65.94	40°13'28.463"N	104°58'26.814"W	0.00	
1817.00†	10.000	234.300	1809.65	80.94	-57.52	-80.05	40°13'28.363"N	104°58'26.996"W	0.00	
1917.00†	10.000	234.300	1908.13	95.20	-67.65	-94.15	40°13'28.262"N	104°58'27.178"W	0.00	
2017.00†	10.000	234.300	2006.61	109.46	-77.79	-108.25	40°13'28.162"N	104°58'27.360"W	0.00	
2117.00†	10.000	234.300	2105.09	123.72	-87.92	-122.35	40°13'28.062"N	104°58'27.541"W	0.00	
2217.00†	10.000	234.300	2203.57	137.98	-98.05	-136.45	40°13'27.962"N	104°58'27.723"W	0.00	
2317.00†	10.000	234.300	2302.05	152.24	-108.18	-150.55	40°13'27.862"N	104°58'27.905"W	0.00	
2417.00†	10.000	234.300	2400.53	166.50	-118.32	-164.66	40°13'27.762"N	104°58'28.087"W	0.00	
2517.00†	10.000	234.300	2499.01	180.76	-128.45	-178.76	40°13'27.662"N	104°58'28.269"W	0.00	
2617.00†	10.000	234.300	2597.50	195.02	-138.58	-192.86	40°13'27.562"N	104°58'28.450"W	0.00	
2717.00†	10.000	234.300	2695.98	209.28	-148.72	-206.96	40°13'27.461"N	104°58'28.632"W	0.00	
2817.00†	10.000	234.300	2794.46	223.54	-158.85	-221.06	40°13'27.361"N	104°58'28.814"W	0.00	
2917.00†	10.000	234.300	2892.94	237.80	-168.98	-235.16	40°13'27.261"N	104°58'28.996"W	0.00	
3017.00†	10.000	234.300	2991.42	252.06	-179.12	-249.27	40°13'27.161"N	104°58'29.178"W	0.00	
3117.00†	10.000	234.300	3089.90	266.32	-189.25	-263.37	40°13'27.061"N	104°58'29.359"W	0.00	
3217.00†	10.000	234.300	3188.38	280.58	-199.38	-277.47	40°13'26.961"N	104°58'29.541"W	0.00	
3317.00†	10.000	234.300	3286.86	294.84	-209.52	-291.57	40°13'26.861"N	104°58'29.723"W	0.00	
3417.00†	10.000	234.300	3385.34	309.10	-219.65	-305.67	40°13'26.760"N	104°58'29.905"W	0.00	
3517.00†	10.000	234.300	3483.82	323.36	-229.78	-319.77	40°13'26.660"N	104°58'30.086"W	0.00	
3617.00†	10.000	234.300	3582.30	337.62	-239.91	-333.88	40°13'26.560"N	104°58'30.268"W	0.00	
3682.69†	10.000	234.300	3647.00	346.99	-246.57	-343.14	40°13'26.494"N	104°58'30.388"W	0.00	PARKMAN
3717.00†	10.000	234.300	3680.78	351.88	-250.05	-347.98	40°13'26.460"N	104°58'30.450"W	0.00	
3817.00†	10.000	234.300	3779.26	366.14	-260.18	-362.08	40°13'26.360"N	104°58'30.632"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	10.000	234.300	3877.75	380.40	-270.31	-376.18	40°13'26.260"N	104°58'30.814"W	0.00	
4017.00†	10.000	234.300	3976.23	394.66	-280.45	-390.28	40°13'26.160"N	104°58'30.995"W	0.00	
4117.00†	10.000	234.300	4074.71	408.92	-290.58	-404.39	40°13'26.059"N	104°58'31.177"W	0.00	
4152.84†	10.000	234.300	4110.00	414.03	-294.21	-409.44	40°13'26.024"N	104°58'31.242"W	0.00	SUSSEX
4217.00†	10.000	234.300	4173.19	423.18	-300.71	-418.49	40°13'25.959"N	104°58'31.359"W	0.00	
4317.00†	10.000	234.300	4271.67	437.44	-310.85	-432.59	40°13'25.859"N	104°58'31.541"W	0.00	
4417.00†	10.000	234.300	4370.15	451.70	-320.98	-446.69	40°13'25.759"N	104°58'31.723"W	0.00	
4517.00†	10.000	234.300	4468.63	465.96	-331.11	-460.79	40°13'25.659"N	104°58'31.904"W	0.00	
4617.00†	10.000	234.300	4567.11	480.22	-341.25	-474.89	40°13'25.559"N	104°58'32.086"W	0.00	
4717.00†	10.000	234.300	4665.59	494.48	-351.38	-489.00	40°13'25.459"N	104°58'32.268"W	0.00	
4781.39	10.000	234.300	4729.00	503.66	-357.90	-498.07	40°13'25.394"N	104°58'32.385"W	0.00	BEGIN DROP
4817.00†	9.288	234.300	4764.11	508.56	-361.38	-502.92	40°13'25.360"N	104°58'32.448"W	2.00	
4917.00†	7.288	234.300	4863.06	520.39	-369.80	-514.62	40°13'25.277"N	104°58'32.598"W	2.00	
5017.00†	5.288	234.300	4962.45	529.39	-376.19	-523.52	40°13'25.213"N	104°58'32.713"W	2.00	
5117.00†	3.288	234.300	5062.17	535.53	-380.55	-529.59	40°13'25.170"N	104°58'32.791"W	2.00	
5217.00†	1.288	234.300	5162.08	538.81	-382.88	-532.83	40°13'25.147"N	104°58'32.833"W	2.00	
5281.39	0.000	268.007	5226.47	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	2.00	END DROP
5317.00†	0.000	268.007	5262.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5417.00†	0.000	268.007	5362.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5517.00†	0.000	268.007	5462.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5617.00†	0.000	268.007	5562.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5717.00†	0.000	268.007	5662.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5817.00†	0.000	268.007	5762.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
5917.00†	0.000	268.007	5862.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6017.00†	0.000	268.007	5962.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6117.00†	0.000	268.007	6062.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6217.00†	0.000	268.007	6162.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6317.00†	0.000	268.007	6262.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6417.00†	0.000	268.007	6362.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6517.00†	0.000	268.007	6462.08	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	
6597.99	0.000	268.007	6543.07	539.40	-383.30	-533.42	40°13'25.143"N	104°58'32.841"W	0.00	KOP, BUILD @ 10°/100'
6617.00†	1.901	268.007	6562.08	539.71	-383.31	-533.73	40°13'25.143"N	104°58'32.845"W	10.00	
6717.00†	11.901	268.007	6661.23	551.71	-383.73	-545.73	40°13'25.139"N	104°58'32.999"W	10.00	
6817.00†	21.901	268.007	6756.78	580.74	-384.74	-574.75	40°13'25.129"N	104°58'33.374"W	10.00	
6917.00†	31.901	268.007	6845.85	625.92	-386.31	-619.91	40°13'25.113"N	104°58'33.956"W	10.00	
7017.00†	41.901	268.007	6925.72	685.88	-388.39	-679.84	40°13'25.093"N	104°58'34.728"W	10.00	
7082.71†	48.472	268.007	6972.00	732.46	-390.01	-726.40	40°13'25.077"N	104°58'35.329"W	10.00	SHARON SPRINGS
7117.00†	51.901	268.007	6993.95	758.79	-390.93	-752.72	40°13'25.068"N	104°58'35.668"W	10.00	
7201.48†	60.350	268.007	7041.00	828.86	-393.37	-822.76	40°13'25.044"N	104°58'36.571"W	10.00	NIOBRARA
7217.00†	61.901	268.007	7048.49	842.44	-393.84	-836.34	40°13'25.039"N	104°58'36.746"W	10.00	
7317.00†	71.901	268.007	7087.68	934.29	-397.03	-928.15	40°13'25.007"N	104°58'37.929"W	10.00	
7346.07†	74.808	268.007	7096.00	962.13	-398.00	-955.97	40°13'24.998"N	104°58'38.288"W	10.00	NIOBRARA B
7417.00†	81.901	268.007	7110.31	1031.55	-400.42	-1025.36	40°13'24.974"N	104°58'39.183"W	10.00	
7502.85	90.486	268.007	7116.00	1117.11	-403.39	-1110.89	40°13'24.944"N	104°58'40.285"W	10.00	LANDING POINT
7517.00†	90.486	268.007	7115.88	1131.26	-403.88	-1125.03	40°13'24.940"N	104°58'40.468"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7617.00†	90.486	268.007	7115.03	1231.24	-407.36	-1224.97	40°13'24.905"N	104°58'41.756"W	0.00	
7717.00†	90.486	268.007	7114.19	1331.22	-410.84	-1324.90	40°13'24.871"N	104°58'43.044"W	0.00	
7817.00†	90.486	268.007	7113.34	1431.20	-414.31	-1424.84	40°13'24.836"N	104°58'44.333"W	0.00	
7917.00†	90.486	268.007	7112.49	1531.18	-417.79	-1524.78	40°13'24.802"N	104°58'45.621"W	0.00	
8017.00†	90.486	268.007	7111.64	1631.16	-421.27	-1624.71	40°13'24.768"N	104°58'46.909"W	0.00	
8117.00†	90.486	268.007	7110.79	1731.13	-424.75	-1724.65	40°13'24.733"N	104°58'48.198"W	0.00	
8217.00†	90.486	268.007	7109.95	1831.11	-428.22	-1824.58	40°13'24.699"N	104°58'49.486"W	0.00	
8317.00†	90.486	268.007	7109.10	1931.09	-431.70	-1924.52	40°13'24.664"N	104°58'50.774"W	0.00	
8417.00†	90.486	268.007	7108.25	2031.07	-435.18	-2024.46	40°13'24.630"N	104°58'52.063"W	0.00	
8517.00†	90.486	268.007	7107.40	2131.05	-438.65	-2124.39	40°13'24.595"N	104°58'53.351"W	0.00	
8617.00†	90.486	268.007	7106.55	2231.03	-442.13	-2224.33	40°13'24.561"N	104°58'54.639"W	0.00	
8717.00†	90.486	268.007	7105.71	2331.00	-445.61	-2324.26	40°13'24.526"N	104°58'55.928"W	0.00	
8817.00†	90.486	268.007	7104.86	2430.98	-449.08	-2424.20	40°13'24.492"N	104°58'57.216"W	0.00	
8917.00†	90.486	268.007	7104.01	2530.96	-452.56	-2524.13	40°13'24.458"N	104°58'58.505"W	0.00	
9017.00†	90.486	268.007	7103.16	2630.94	-456.04	-2624.07	40°13'24.423"N	104°58'59.793"W	0.00	
9117.00†	90.486	268.007	7102.31	2730.92	-459.51	-2724.01	40°13'24.389"N	104°59'01.081"W	0.00	
9217.00†	90.486	268.007	7101.47	2830.90	-462.99	-2823.94	40°13'24.354"N	104°59'02.370"W	0.00	
9317.00†	90.486	268.007	7100.62	2930.87	-466.47	-2923.88	40°13'24.320"N	104°59'03.658"W	0.00	
9417.00†	90.486	268.007	7099.77	3030.85	-469.95	-3023.81	40°13'24.285"N	104°59'04.946"W	0.00	
9517.00†	90.486	268.007	7098.92	3130.83	-473.42	-3123.75	40°13'24.251"N	104°59'06.235"W	0.00	
9617.00†	90.486	268.007	7098.07	3230.81	-476.90	-3223.69	40°13'24.216"N	104°59'07.523"W	0.00	
9717.00†	90.486	268.007	7097.23	3330.79	-480.38	-3323.62	40°13'24.182"N	104°59'08.811"W	0.00	
9817.00†	90.486	268.007	7096.38	3430.77	-483.85	-3423.56	40°13'24.147"N	104°59'10.100"W	0.00	
9861.52†	90.486	268.007	7096.00	3475.27	-485.40	-3468.05	40°13'24.132"N	104°59'10.673"W	0.00	NIOBRARA B
9917.00†	90.486	268.007	7095.53	3530.74	-487.33	-3523.49	40°13'24.113"N	104°59'11.388"W	0.00	
10017.00†	90.486	268.007	7094.68	3630.72	-490.81	-3623.43	40°13'24.078"N	104°59'12.676"W	0.00	
10117.00†	90.486	268.007	7093.83	3730.70	-494.28	-3723.37	40°13'24.044"N	104°59'13.965"W	0.00	
10217.00†	90.486	268.007	7092.99	3830.68	-497.76	-3823.30	40°13'24.009"N	104°59'15.253"W	0.00	
10317.00†	90.486	268.007	7092.14	3930.66	-501.24	-3923.24	40°13'23.975"N	104°59'16.541"W	0.00	
10417.00†	90.486	268.007	7091.29	4030.64	-504.71	-4023.17	40°13'23.940"N	104°59'17.830"W	0.00	
10517.00†	90.486	268.007	7090.44	4130.61	-508.19	-4123.11	40°13'23.906"N	104°59'19.118"W	0.00	
10617.00†	90.486	268.007	7089.59	4230.59	-511.67	-4223.05	40°13'23.871"N	104°59'20.406"W	0.00	
10717.00†	90.486	268.007	7088.75	4330.57	-515.15	-4322.98	40°13'23.837"N	104°59'21.695"W	0.00	
10817.00†	90.486	268.007	7087.90	4430.55	-518.62	-4422.92	40°13'23.802"N	104°59'22.983"W	0.00	
10917.00†	90.486	268.007	7087.05	4530.53	-522.10	-4522.85	40°13'23.768"N	104°59'24.271"W	0.00	
11017.00†	90.486	268.007	7086.20	4630.51	-525.58	-4622.79	40°13'23.733"N	104°59'25.560"W	0.00	
11117.00†	90.486	268.007	7085.35	4730.48	-529.05	-4722.73	40°13'23.698"N	104°59'26.848"W	0.00	
11217.00†	90.486	268.007	7084.50	4830.46	-532.53	-4822.66	40°13'23.664"N	104°59'28.136"W	0.00	
11317.00†	90.486	268.007	7083.66	4930.44	-536.01	-4922.60	40°13'23.629"N	104°59'29.425"W	0.00	
11417.00†	90.486	268.007	7082.81	5030.42	-539.48	-5022.53	40°13'23.595"N	104°59'30.713"W	0.00	
11517.00†	90.486	268.007	7081.96	5130.40	-542.96	-5122.47	40°13'23.560"N	104°59'32.001"W	0.00	
11617.00†	90.486	268.007	7081.11	5230.38	-546.44	-5222.41	40°13'23.526"N	104°59'33.290"W	0.00	
11717.00†	90.486	268.007	7080.26	5330.35	-549.92	-5322.34	40°13'23.491"N	104°59'34.578"W	0.00	
11817.00†	90.486	268.007	7079.42	5430.33	-553.39	-5422.28	40°13'23.457"N	104°59'35.866"W	0.00	
11917.00†	90.486	268.007	7078.57	5530.31	-556.87	-5522.21	40°13'23.422"N	104°59'37.155"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12017.00†	90.486	268.007	7077.72	5630.29	-560.35	-5622.15	40°13'23.387"N	104°59'38.443"W	0.00	
12117.00†	90.486	268.007	7076.87	5730.27	-563.82	-5722.08	40°13'23.353"N	104°59'39.731"W	0.00	
12217.00†	90.486	268.007	7076.02	5830.25	-567.30	-5822.02	40°13'23.318"N	104°59'41.020"W	0.00	
12317.00†	90.486	268.007	7075.18	5930.22	-570.78	-5921.96	40°13'23.284"N	104°59'42.308"W	0.00	
12417.00†	90.486	268.007	7074.33	6030.20	-574.25	-6021.89	40°13'23.249"N	104°59'43.596"W	0.00	
12517.00†	90.486	268.007	7073.48	6130.18	-577.73	-6121.83	40°13'23.214"N	104°59'44.885"W	0.00	
12617.00†	90.486	268.007	7072.63	6230.16	-581.21	-6221.76	40°13'23.180"N	104°59'46.173"W	0.00	
12717.00†	90.486	268.007	7071.78	6330.14	-584.68	-6321.70	40°13'23.145"N	104°59'47.461"W	0.00	
12809.48	90.486	268.007	7071.00 [†]	6422.59	-587.90	-6414.12	40°13'23.113"N	104°59'48.653"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -										
Ref Wellbore: DOCHEFF 33N-15HZ PWB Ref Wellpath: DOCHEFF 33N-15HZ (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	743.00	726.00	17.00	743.00	0.00	0.00	0.00	0.00	
9.625in Casing Surface	17.00	743.00	726.00	17.00	743.00	0.00	0.00	0.00	0.00	
8.75in Open Hole	743.00	7502.85	6759.85	743.00	7116.00	0.00	0.00	-403.39	-1110.89	
7in Casing Intermediate	17.00	7502.85	7485.85	17.00	7116.00	0.00	0.00	-403.39	-1110.89	
6.125in Open Hole	7502.85	12809.48	5306.63	7116.00	7071.00	-403.39	-1110.89	-587.90	-6414.12	
4.5in Casing Production	17.00	12809.48	12792.48	17.00	7071.00	0.00	0.00	-587.90	-6414.12	



Planned Wellpath Report

DOCHEFF 33N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.13-T3N-R68W SECTION LINES		0.00	2360.56	8352.14	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		0.00	2360.56	8352.14	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.15-T3N-R68W SECTION LINES		0.00	126.39	80.36	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
1) DOCHEFF 33N-15HZ BHL ON PLAT REV-1 (1600'FSL & 460'FWL, SEC.15)	12809.48	7071.00	-587.90	-6414.12	3140497.97	1324511.28	40°13'23.113"N	104°59'48.653"W	point
DOCHEFF 33N-15HZ LANDBOX		7071.00	0.00	0.00	3146908.20	1325137.20	40°13'28.931"N	104°58'25.964"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 33N-15HZ PWB Ref Wellpath: DOCHEFF 33N-15HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12809.48	NaviTrak (IFR)		DOCHEFF 33N-15HZ PWB



Planned Wellpath Report

DOCHEFF 33N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 DOCHEFF 33N-15HZ (2101'FSL & 1613'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
551.00	0.000	234.300	551.00	BASE FOX HILLS
743.00	0.000	234.300	743.00	SURFACE CSG SETTING DEPTH
3682.69	10.000	234.300	3647.00	PARKMAN
4152.84	10.000	234.300	4110.00	SUSSEX
7082.71	48.472	268.007	6972.00	SHARON SPRINGS
7201.48	60.350	268.007	7041.00	NIOBRARA
7346.07	74.808	268.007	7096.00	NIOBRARA B
9861.52	90.486	268.007	7096.00	NIOBRARA B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	234.300	17.00	TIE ON
1000.00	0.000	234.300	1000.00	BEGIN NUDGE
1500.00	10.000	234.300	1497.47	END NUDGE
4781.39	10.000	234.300	4729.00	BEGIN DROP
5281.39	0.000	268.007	5226.47	END DROP
6597.99	0.000	268.007	6543.07	KOP, BUILD @ 10°/100'
7502.85	90.486	268.007	7116.00	LANDING POINT
12809.48	90.486	268.007	7071.00	TOTAL DEPTH