

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: DOCHEFF 12N-13HZ
 Facility: SEC.14-T3N-R68W Wellbore: DOCHEFF 12N-13HZ PWB

Plot reference wellpath is DOCHEFF 12N-13HZ (PERMIT REV-2) 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#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'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#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)	1482.60	198.42	3146955.995	1325213.276	40°13'29.680"N	104°58'25.342"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14))				4951ft		
Mean Sea Level to Mud line (At Slot: SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14))				0ft		
PERMIT (17KB) (RKB) to Mean Sea Level				4951ft		

Survey Program

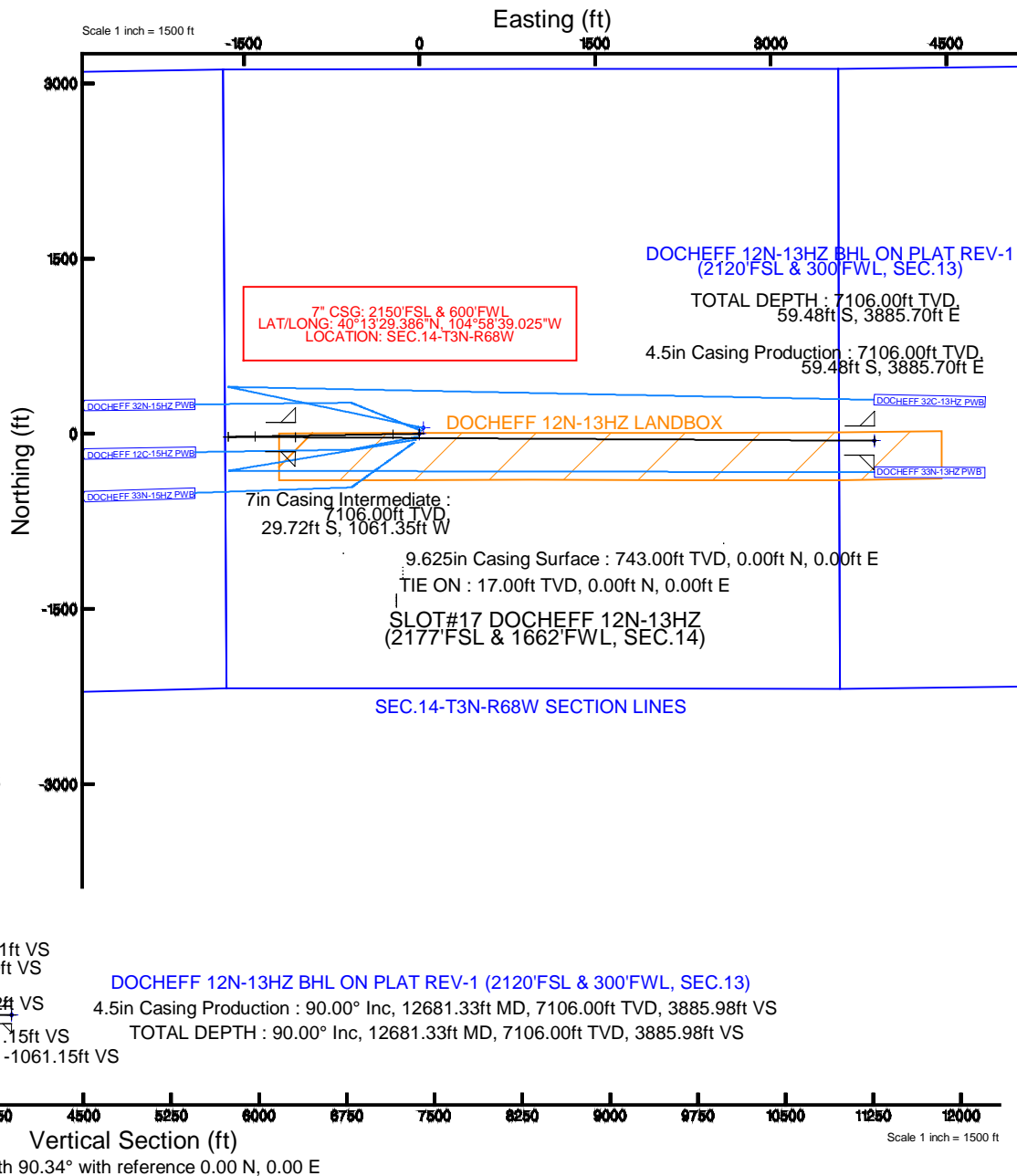
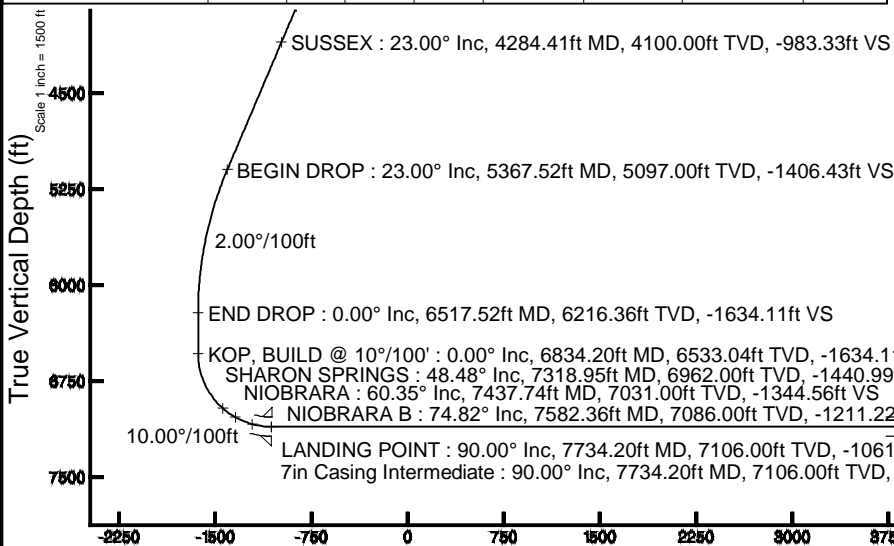
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12681.33	NaviTrak	NaviTrak	(IFR)	DOCHEFF 12N-13HZ PWB

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	2284.75	8303.90	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.14-T3N-R68W SECTION LINES		0.00	2284.75	8303.90	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.15-T3N-R68W SECTION LINES		0.00	50.60	32.11	3146987.81	1325284.06	40°13'30.180"N	104°58'24.928"W
DOCHEFF 12N-13HZ BHL ON PLAT REV-1 (2120'FSL & 300'FWL, SEC.13)	12681.33	7106.00	-59.48	3885.70	3150841.80	1325176.86	40°13'29.089"N	104°57'35.248"W
DOCHEFF 12N-13HZ LANDBOX		7106.00	0.00	0.00	3146956.00	1325213.28	40°13'29.680"N	104°58'25.342"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	269.079	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1200.00	0.000	269.079	1200.00	0.00	0.00	0.00	0.00
END NUDGE	2350.00	23.000	269.079	2319.36	-3.66	-227.71	2.00	-227.68
BEGIN DROP	5367.52	23.000	269.079	5097.00	-22.61	-1406.59	0.00	-1406.43
END DROP	6517.52	0.000	90.345	6216.36	-26.27	-1634.30	2.00	-1634.11
KOP, BUILD @ 10°/100'	6834.20	0.000	90.345	6533.04	-26.27	-1634.30	0.00	-1634.11
LANDING POINT	7734.20	90.000	90.345	7106.00	-29.72	-1061.35	10.00	-1061.15
TOTAL DEPTH	12681.33	90.000	90.345	7106.00	-59.48	3885.70	0.00	3885.98



Vertical Section (ft)
 Azimuth 90.34° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ 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 5:06:54 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_12N-13HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1482.60	198.42	3146956.00	1325213.28	40°13'29.680"N	104°58'25.342"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#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'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	90.34°



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (142 stations) † = interpolated/extrapolated station										
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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	269.079	0.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
17.00	0.000	269.079	17.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	TIE ON
117.00†	0.000	269.079	117.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
217.00†	0.000	269.079	217.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
317.00†	0.000	269.079	317.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
417.00†	0.000	269.079	417.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
517.00†	0.000	269.079	517.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
551.00†	0.000	269.079	551.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	BASE FOX HILLS
617.00†	0.000	269.079	617.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
717.00†	0.000	269.079	717.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
743.00†	0.000	269.079	743.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	269.079	817.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
917.00†	0.000	269.079	917.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
1017.00†	0.000	269.079	1017.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
1117.00†	0.000	269.079	1117.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	
1200.00	0.000	269.079	1200.00	0.00	0.00	0.00	40°13'29.680"N	104°58'25.342"W	0.00	BEGIN NUDGE
1217.00†	0.340	269.079	1217.00	-0.05	0.00	-0.05	40°13'29.680"N	104°58'25.343"W	2.00	
1317.00†	2.340	269.079	1316.97	-2.39	-0.04	-2.39	40°13'29.680"N	104°58'25.373"W	2.00	
1417.00†	4.340	269.079	1416.79	-8.21	-0.13	-8.21	40°13'29.679"N	104°58'25.448"W	2.00	
1517.00†	6.340	269.079	1516.35	-17.52	-0.28	-17.52	40°13'29.677"N	104°58'25.568"W	2.00	
1617.00†	8.340	269.079	1615.53	-30.29	-0.49	-30.29	40°13'29.675"N	104°58'25.733"W	2.00	
1717.00†	10.340	269.079	1714.20	-46.51	-0.75	-46.52	40°13'29.673"N	104°58'25.942"W	2.00	
1817.00†	12.340	269.079	1812.24	-66.17	-1.06	-66.18	40°13'29.669"N	104°58'26.195"W	2.00	
1917.00†	14.340	269.079	1909.54	-89.24	-1.43	-89.25	40°13'29.666"N	104°58'26.493"W	2.00	
2017.00†	16.340	269.079	2005.97	-115.68	-1.86	-115.70	40°13'29.662"N	104°58'26.834"W	2.00	
2117.00†	18.340	269.079	2101.42	-145.48	-2.34	-145.50	40°13'29.657"N	104°58'27.218"W	2.00	
2217.00†	20.340	269.079	2195.77	-178.59	-2.87	-178.61	40°13'29.652"N	104°58'27.645"W	2.00	
2317.00†	22.340	269.079	2288.91	-214.97	-3.46	-214.99	40°13'29.646"N	104°58'28.114"W	2.00	
2350.00	23.000	269.079	2319.36	-227.68	-3.66	-227.71	40°13'29.644"N	104°58'28.278"W	2.00	END NUDGE
2417.00†	23.000	269.079	2381.04	-253.85	-4.08	-253.88	40°13'29.640"N	104°58'28.615"W	0.00	
2517.00†	23.000	269.079	2473.09	-292.92	-4.71	-292.95	40°13'29.633"N	104°58'29.119"W	0.00	
2617.00†	23.000	269.079	2565.14	-331.98	-5.34	-332.02	40°13'29.627"N	104°58'29.622"W	0.00	
2717.00†	23.000	269.079	2657.19	-371.04	-5.97	-371.09	40°13'29.621"N	104°58'30.126"W	0.00	
2817.00†	23.000	269.079	2749.24	-410.11	-6.59	-410.16	40°13'29.615"N	104°58'30.630"W	0.00	
2917.00†	23.000	269.079	2841.29	-449.17	-7.22	-449.22	40°13'29.609"N	104°58'31.133"W	0.00	
3017.00†	23.000	269.079	2933.34	-488.24	-7.85	-488.29	40°13'29.602"N	104°58'31.637"W	0.00	
3117.00†	23.000	269.079	3025.39	-527.30	-8.48	-527.36	40°13'29.596"N	104°58'32.141"W	0.00	
3217.00†	23.000	269.079	3117.44	-566.36	-9.11	-566.43	40°13'29.590"N	104°58'32.644"W	0.00	
3317.00†	23.000	269.079	3209.49	-605.43	-9.73	-605.50	40°13'29.584"N	104°58'33.148"W	0.00	
3417.00†	23.000	269.079	3301.54	-644.49	-10.36	-644.56	40°13'29.578"N	104°58'33.652"W	0.00	
3517.00†	23.000	269.079	3393.59	-683.55	-10.99	-683.63	40°13'29.571"N	104°58'34.155"W	0.00	
3617.00†	23.000	269.079	3485.64	-722.62	-11.62	-722.70	40°13'29.565"N	104°58'34.659"W	0.00	
3717.00†	23.000	269.079	3577.69	-761.68	-12.25	-761.77	40°13'29.559"N	104°58'35.163"W	0.00	
3781.43†	23.000	269.079	3637.00	-786.85	-12.65	-786.94	40°13'29.555"N	104°58'35.487"W	0.00	PARKMAN
3817.00†	23.000	269.079	3669.74	-800.74	-12.87	-800.84	40°13'29.553"N	104°58'35.666"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (142 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	23.000	269.079	3761.79	-839.81	-13.50	-839.90	40°13'29.546"N	104°58'36.170"W	0.00	
4017.00†	23.000	269.079	3853.84	-878.87	-14.13	-878.97	40°13'29.540"N	104°58'36.674"W	0.00	
4117.00†	23.000	269.079	3945.89	-917.93	-14.76	-918.04	40°13'29.534"N	104°58'37.177"W	0.00	
4217.00†	23.000	269.079	4037.94	-957.00	-15.39	-957.11	40°13'29.528"N	104°58'37.681"W	0.00	
4284.41†	23.000	269.079	4100.00	-983.33	-15.81	-983.45	40°13'29.524"N	104°58'38.021"W	0.00	SUSSEX
4317.00†	23.000	269.079	4130.00	-996.06	-16.01	-996.18	40°13'29.522"N	104°58'38.185"W	0.00	
4417.00†	23.000	269.079	4222.05	-1035.13	-16.64	-1035.24	40°13'29.515"N	104°58'38.688"W	0.00	
4517.00†	23.000	269.079	4314.10	-1074.19	-17.27	-1074.31	40°13'29.509"N	104°58'39.192"W	0.00	
4617.00†	23.000	269.079	4406.15	-1113.25	-17.90	-1113.38	40°13'29.503"N	104°58'39.696"W	0.00	
4717.00†	23.000	269.079	4498.20	-1152.32	-18.53	-1152.45	40°13'29.497"N	104°58'40.199"W	0.00	
4817.00†	23.000	269.079	4590.25	-1191.38	-19.15	-1191.52	40°13'29.490"N	104°58'40.703"W	0.00	
4917.00†	23.000	269.079	4682.30	-1230.44	-19.78	-1230.58	40°13'29.484"N	104°58'41.207"W	0.00	
5017.00†	23.000	269.079	4774.35	-1269.51	-20.41	-1269.65	40°13'29.478"N	104°58'41.710"W	0.00	
5117.00†	23.000	269.079	4866.40	-1308.57	-21.04	-1308.72	40°13'29.472"N	104°58'42.214"W	0.00	
5217.00†	23.000	269.079	4958.45	-1347.63	-21.67	-1347.79	40°13'29.466"N	104°58'42.718"W	0.00	
5317.00†	23.000	269.079	5050.50	-1386.70	-22.29	-1386.86	40°13'29.459"N	104°58'43.221"W	0.00	
5367.52	23.000	269.079	5097.00	-1406.43	-22.61	-1406.59	40°13'29.456"N	104°58'43.476"W	0.00	BEGIN DROP
5417.00†	22.010	269.079	5142.72	-1425.37	-22.92	-1425.53	40°13'29.453"N	104°58'43.720"W	2.00	
5517.00†	20.010	269.079	5236.06	-1461.21	-23.49	-1461.38	40°13'29.447"N	104°58'44.182"W	2.00	
5617.00†	18.010	269.079	5330.60	-1493.77	-24.02	-1493.95	40°13'29.442"N	104°58'44.602"W	2.00	
5717.00†	16.010	269.079	5426.22	-1523.02	-24.49	-1523.19	40°13'29.438"N	104°58'44.979"W	2.00	
5817.00†	14.010	269.079	5522.81	-1548.91	-24.90	-1549.09	40°13'29.433"N	104°58'45.313"W	2.00	
5917.00†	12.010	269.079	5620.23	-1571.42	-25.26	-1571.60	40°13'29.430"N	104°58'45.603"W	2.00	
6017.00†	10.010	269.079	5718.39	-1590.51	-25.57	-1590.69	40°13'29.427"N	104°58'45.849"W	2.00	
6117.00†	8.010	269.079	5817.15	-1606.17	-25.82	-1606.35	40°13'29.424"N	104°58'46.051"W	2.00	
6217.00†	6.010	269.079	5916.40	-1618.37	-26.02	-1618.55	40°13'29.422"N	104°58'46.208"W	2.00	
6317.00†	4.010	269.079	6016.01	-1627.10	-26.16	-1627.29	40°13'29.421"N	104°58'46.321"W	2.00	
6417.00†	2.010	269.079	6115.87	-1632.35	-26.24	-1632.54	40°13'29.420"N	104°58'46.389"W	2.00	
6517.00†	0.010	269.079	6215.85	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	2.00	
6517.52	0.000	90.345	6216.36	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	2.00	END DROP
6617.00†	0.000	90.345	6315.85	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	0.00	
6717.00†	0.000	90.345	6415.85	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	0.00	
6817.00†	0.000	90.345	6515.85	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	0.00	
6834.20	0.000	90.345	6533.04	-1634.11	-26.27	-1634.30	40°13'29.420"N	104°58'46.411"W	0.00	KOP, BUILD @ 10°/100'
6917.00†	8.280	90.345	6615.56	-1628.14	-26.31	-1628.33	40°13'29.419"N	104°58'46.334"W	10.00	
7017.00†	18.280	90.345	6712.76	-1605.20	-26.45	-1605.38	40°13'29.418"N	104°58'46.039"W	10.00	
7117.00†	28.280	90.345	6804.50	-1565.72	-26.68	-1565.91	40°13'29.416"N	104°58'45.530"W	10.00	
7217.00†	38.280	90.345	6888.00	-1510.92	-27.01	-1511.11	40°13'29.413"N	104°58'44.823"W	10.00	
7317.00†	48.280	90.345	6960.70	-1442.45	-27.43	-1442.64	40°13'29.409"N	104°58'43.941"W	10.00	
7318.95†	48.476	90.345	6962.00	-1440.99	-27.43	-1441.18	40°13'29.408"N	104°58'43.922"W	10.00	SHARON SPRINGS
7417.00†	58.280	90.345	7020.42	-1362.39	-27.91	-1362.59	40°13'29.404"N	104°58'42.908"W	10.00	
7437.74†	60.354	90.345	7031.00	-1344.56	-28.01	-1344.75	40°13'29.403"N	104°58'42.679"W	10.00	NIOBRARA
7517.00†	68.280	90.345	7065.32	-1273.19	-28.44	-1273.38	40°13'29.399"N	104°58'41.758"W	10.00	
7582.36†	74.817	90.345	7086.00	-1211.22	-28.82	-1211.41	40°13'29.395"N	104°58'40.960"W	10.00	NIOBRARA B
7617.00†	78.280	90.345	7094.06	-1177.53	-29.02	-1177.73	40°13'29.393"N	104°58'40.525"W	10.00	



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (142 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7717.00†	88.280	90.345	7105.74	-1078.35	-29.62	-1078.55	40°13'29.387"N	104°58'39.247"W	10.00	
7734.20	90.000	90.345	7106.00	-1061.15	-29.72	-1061.35	40°13'29.386"N	104°58'39.025"W	10.00	LANDING POINT
7817.00†	90.000	90.345	7106.00	-978.35	-30.22	-978.55	40°13'29.381"N	104°58'37.957"W	0.00	
7917.00†	90.000	90.345	7106.00	-878.35	-30.82	-878.55	40°13'29.375"N	104°58'36.668"W	0.00	
8017.00†	90.000	90.345	7106.00	-778.35	-31.42	-778.55	40°13'29.369"N	104°58'35.379"W	0.00	
8117.00†	90.000	90.345	7106.00	-678.35	-32.02	-678.55	40°13'29.363"N	104°58'34.090"W	0.00	
8217.00†	90.000	90.345	7106.00	-578.35	-32.62	-578.56	40°13'29.358"N	104°58'32.801"W	0.00	
8317.00†	90.000	90.345	7106.00	-478.35	-33.23	-478.56	40°13'29.352"N	104°58'31.512"W	0.00	
8417.00†	90.000	90.345	7106.00	-378.35	-33.83	-378.56	40°13'29.346"N	104°58'30.222"W	0.00	
8517.00†	90.000	90.345	7106.00	-278.35	-34.43	-278.56	40°13'29.340"N	104°58'28.933"W	0.00	
8617.00†	90.000	90.345	7106.00	-178.35	-35.03	-178.56	40°13'29.334"N	104°58'27.644"W	0.00	
8717.00†	90.000	90.345	7106.00	-78.35	-35.63	-78.57	40°13'29.328"N	104°58'26.355"W	0.00	
8817.00†	90.000	90.345	7106.00	21.65	-36.23	21.43	40°13'29.322"N	104°58'25.066"W	0.00	
8917.00†	90.000	90.345	7106.00	121.65	-36.84	121.43	40°13'29.316"N	104°58'23.777"W	0.00	
9017.00†	90.000	90.345	7106.00	221.65	-37.44	221.43	40°13'29.310"N	104°58'22.487"W	0.00	
9117.00†	90.000	90.345	7106.00	321.65	-38.04	321.43	40°13'29.304"N	104°58'21.198"W	0.00	
9217.00†	90.000	90.345	7106.00	421.65	-38.64	421.43	40°13'29.298"N	104°58'19.909"W	0.00	
9317.00†	90.000	90.345	7106.00	521.65	-39.24	521.42	40°13'29.292"N	104°58'18.620"W	0.00	
9417.00†	90.000	90.345	7106.00	621.65	-39.84	621.42	40°13'29.286"N	104°58'17.331"W	0.00	
9517.00†	90.000	90.345	7106.00	721.65	-40.44	721.42	40°13'29.280"N	104°58'16.041"W	0.00	
9617.00†	90.000	90.345	7106.00	821.65	-41.05	821.42	40°13'29.274"N	104°58'14.752"W	0.00	
9717.00†	90.000	90.345	7106.00	921.65	-41.65	921.42	40°13'29.268"N	104°58'13.463"W	0.00	
9817.00†	90.000	90.345	7106.00	1021.65	-42.25	1021.41	40°13'29.262"N	104°58'12.174"W	0.00	
9917.00†	90.000	90.345	7106.00	1121.65	-42.85	1121.41	40°13'29.256"N	104°58'10.885"W	0.00	
10017.00†	90.000	90.345	7106.00	1221.65	-43.45	1221.41	40°13'29.250"N	104°58'09.596"W	0.00	
10117.00†	90.000	90.345	7106.00	1321.65	-44.05	1321.41	40°13'29.244"N	104°58'08.306"W	0.00	
10217.00†	90.000	90.345	7106.00	1421.65	-44.66	1421.41	40°13'29.238"N	104°58'07.017"W	0.00	
10317.00†	90.000	90.345	7106.00	1521.65	-45.26	1521.41	40°13'29.232"N	104°58'05.728"W	0.00	
10417.00†	90.000	90.345	7106.00	1621.65	-45.86	1621.40	40°13'29.226"N	104°58'04.439"W	0.00	
10517.00†	90.000	90.345	7106.00	1721.65	-46.46	1721.40	40°13'29.220"N	104°58'03.150"W	0.00	
10617.00†	90.000	90.345	7106.00	1821.65	-47.06	1821.40	40°13'29.214"N	104°58'01.860"W	0.00	
10717.00†	90.000	90.345	7106.00	1921.65	-47.66	1921.40	40°13'29.208"N	104°58'00.571"W	0.00	
10817.00†	90.000	90.345	7106.00	2021.65	-48.27	2021.40	40°13'29.202"N	104°57'59.282"W	0.00	
10917.00†	90.000	90.345	7106.00	2121.65	-48.87	2121.39	40°13'29.196"N	104°57'57.993"W	0.00	
11017.00†	90.000	90.345	7106.00	2221.65	-49.47	2221.39	40°13'29.190"N	104°57'56.704"W	0.00	
11117.00†	90.000	90.345	7106.00	2321.65	-50.07	2321.39	40°13'29.184"N	104°57'55.415"W	0.00	
11217.00†	90.000	90.345	7106.00	2421.65	-50.67	2421.39	40°13'29.178"N	104°57'54.125"W	0.00	
11317.00†	90.000	90.345	7106.00	2521.65	-51.27	2521.39	40°13'29.172"N	104°57'52.836"W	0.00	
11417.00†	90.000	90.345	7106.00	2621.65	-51.87	2621.39	40°13'29.166"N	104°57'51.547"W	0.00	
11517.00†	90.000	90.345	7106.00	2721.65	-52.48	2721.38	40°13'29.160"N	104°57'50.258"W	0.00	
11617.00†	90.000	90.345	7106.00	2821.65	-53.08	2821.38	40°13'29.154"N	104°57'48.969"W	0.00	
11717.00†	90.000	90.345	7106.00	2921.65	-53.68	2921.38	40°13'29.148"N	104°57'47.680"W	0.00	
11817.00†	90.000	90.345	7106.00	3021.65	-54.28	3021.38	40°13'29.142"N	104°57'46.390"W	0.00	
11917.00†	90.000	90.345	7106.00	3121.65	-54.88	3121.38	40°13'29.136"N	104°57'45.101"W	0.00	
12017.00†	90.000	90.345	7106.00	3221.65	-55.48	3221.37	40°13'29.130"N	104°57'43.812"W	0.00	



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (142 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12117.00†	90.000	90.345	7106.00	3321.65	-56.09	3321.37	40°13'29.124"N	104°57'42.523"W	0.00	
12217.00†	90.000	90.345	7106.00	3421.65	-56.69	3421.37	40°13'29.117"N	104°57'41.234"W	0.00	
12317.00†	90.000	90.345	7106.00	3521.65	-57.29	3521.37	40°13'29.111"N	104°57'39.944"W	0.00	
12417.00†	90.000	90.345	7106.00	3621.65	-57.89	3621.37	40°13'29.105"N	104°57'38.655"W	0.00	
12517.00†	90.000	90.345	7106.00	3721.65	-58.49	3721.37	40°13'29.099"N	104°57'37.366"W	0.00	
12617.00†	90.000	90.345	7106.00	3821.65	-59.09	3821.36	40°13'29.093"N	104°57'36.077"W	0.00	
12681.33	90.000	90.345	7106.00 ¹	3885.98	-59.48	3885.70	40°13'29.089"N	104°57'35.248"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -

Ref Wellbore: DOCHEFF 12N-13HZ PWB Ref Wellpath: DOCHEFF 12N-13HZ (PERMIT REV-2) 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	7734.20	6991.20	743.00	7106.00	0.00	0.00	-29.72	-1061.35
7in Casing Intermediate	17.00	7734.20	7717.20	17.00	7106.00	0.00	0.00	-29.72	-1061.35
6.125in Open Hole	7734.20	12681.33	4947.13	7106.00	7106.00	-29.72	-1061.35	-59.48	3885.70
4.5in Casing Production	17.00	12681.33	12664.33	17.00	7106.00	0.00	0.00	-59.48	3885.70



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ 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	2284.75	8303.90	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		0.00	2284.75	8303.90	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.15-T3N-R68W SECTION LINES		0.00	50.60	32.11	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
1) DOCHEFF 12N-13HZ BHL ON PLAT REV-1 (2120'FSL & 300'FWL, SEC.13)	12681.33	7106.00	-59.48	3885.70	3150841.80	1325176.86	40°13'29.089"N	104°57'35.248"W	point
DOCHEFF 12N-13HZ LANDBOX		7106.00	0.00	0.00	3146956.00	1325213.28	40°13'29.680"N	104°58'25.342"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 12N-13HZ PWB Ref Wellpath: DOCHEFF 12N-13HZ (PERMIT REV-2) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12681.33	NaviTrak (IFR)		DOCHEFF 12N-13HZ PWB



Planned Wellpath Report

DOCHEFF 12N-13HZ (PERMIT REV-2) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#17 DOCHEFF 12N-13HZ (2177'FSL & 1662'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12N-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12N-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
551.00	0.000	269.079	551.00	BASE FOX HILLS
743.00	0.000	269.079	743.00	SURFACE CSG SETTING DEPTH
3781.43	23.000	269.079	3637.00	PARKMAN
4284.41	23.000	269.079	4100.00	SUSSEX
7318.95	48.476	90.345	6962.00	SHARON SPRINGS
7437.74	60.354	90.345	7031.00	NIOBRARA
7582.36	74.817	90.345	7086.00	NIOBRARA B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	269.079	17.00	TIE ON
1200.00	0.000	269.079	1200.00	BEGIN NUDGE
2350.00	23.000	269.079	2319.36	END NUDGE
5367.52	23.000	269.079	5097.00	BEGIN DROP
6517.52	0.000	90.345	6216.36	END DROP
6834.20	0.000	90.345	6533.04	KOP, BUILD @ 10°/100'
7734.20	90.000	90.345	7106.00	LANDING POINT
12681.33	90.000	90.345	7106.00	TOTAL DEPTH