

Location:	COLORADO	Slot:	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Field:	WELD COUNTY (KERR MCGEE)	Well:	DOCHEFF 13N-15HZ
Facility:	SEC.14-T3N-R68W	Wellbore:	DOCHEFF 13N-15HZ PWB

Plot reference wellpath is DOCHEFF 13N-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
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Measured depths are referenced to PERMIT (17KB) (RKB)

PERMIT (17KB) (RKB) to Mean Sea Level: 4952 feet

Mean Sea Level to Mud line (At Slot: SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)): 0 feet

Coordinates are in feet referenced to Slot

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Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 14-T3N-R66W				Grid East: 6766.378	Grid North: 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#22 DOCHFF# 13N-15#Z (1065FSL & 1514FWL, SEC 14)	369.66	56.63		1346820.810	1324099.565	40°13'15.682"N	104°58'27.170"W
PERMIT 17(KB) (R#B) to Mud line (At Slot: SLOT#22 DOCHFF# 13N-15#Z (1065FSL & 1514FWL, SEC 14))				4952R			
Mean Sea Level to Mud line (At Slot: SLOT#22 DOCHFF# 13N-15#Z (1065FSL & 1514FWL, SEC 14))				DR			
PERMIT 17(KB) (R#B) to Mean Sea Level				4952R			

Survey Program

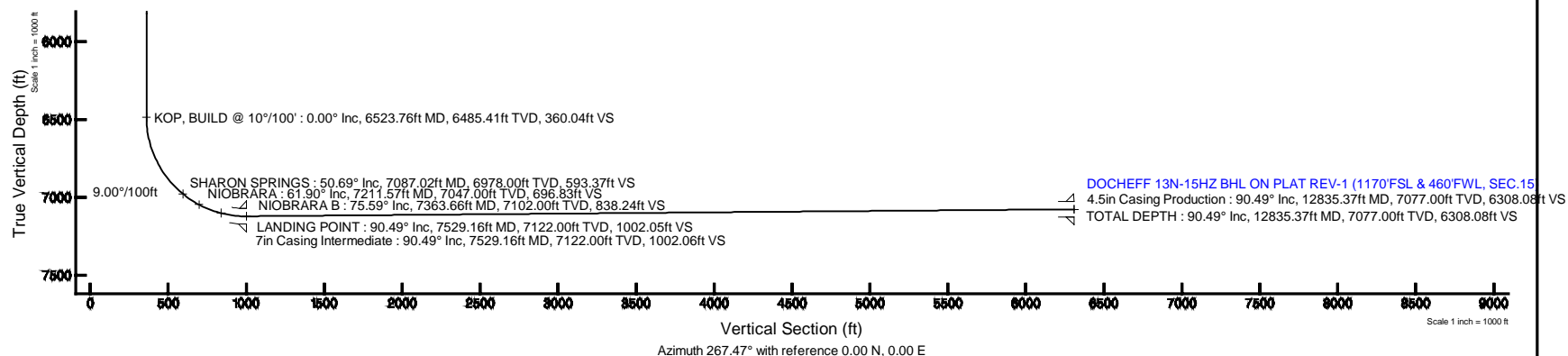
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12835.37	NaviTrak	NaviTrak (IFR) 1		DOCHEFF 13N-15HZ PWB

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	307.100	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	307.100	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1600.00	10.000	307.100	1597.47	26.25	-34.71	2.00	33.52
BEGIN DROP	3790.82	10.000	307.100	3755.00	255.73	-338.14	0.00	326.52
END DROP	4290.82	0.000	267.469	4252.47	281.99	-372.85	2.00	360.04
KOP, BUILD @ 10°/100'	6523.76	0.000	267.469	6485.41	281.99	-372.85	0.00	360.04
LANDING POINT	7529.16	90.486	267.469	7122.00	253.64	-1014.24	9.00	1002.05
TOTAL DEPTH	12835.37	90.486	267.469	7077.00	19.34	-6315.09		6308.08

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (ft)	Grid North (ft)	Latitude	Longitude
SEC 15-T3N-R8W SECTION LINES		1.00	1163.54	173.91	3146987.81	1325264.06	40°13'30.180"N	104°56'24.928"W
SEC 13-T3N-R8W SECTION LINES		4952.00	3397.74	8446.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.279"W
SEC 14-T3N-R8W SECTION LINES		4952.00	3397.74	8446.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.279"W
DOOHEFF 13N-15W B/L ON PLAT REV 1 (1170PSL & 460FWL SEC.15)	12836.37	7077.00	19.34	-6315.09	3145056.00	1324081.47	40°13'18.865"N	104°56'48.581"W
DOOHEFF 13N-15W LAMPSON		7077.00	0.00		3146850.81	1326909.57	40°13'14.682"N	104°56'77.170"W



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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	Precain
Scale	0.999957	Report Generated	11/Sep/2014 at 10:56
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_13N-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	369.66	56.63	3146820.81	1324099.57	40°13'18.682"N	104°58'27.170"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	4952.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4952.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14))	4952.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	267.47°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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	307.100	0.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
17.00	0.000	307.100	17.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	TIE ON
117.00†	0.000	307.100	117.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
217.00†	0.000	307.100	217.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
317.00†	0.000	307.100	317.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
417.00†	0.000	307.100	417.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
517.00†	0.000	307.100	517.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
552.00†	0.000	307.100	552.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	FOX BASE HILLS
617.00†	0.000	307.100	617.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
717.00†	0.000	307.100	717.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
744.00†	0.000	307.100	744.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	307.100	817.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
917.00†	0.000	307.100	917.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
1017.00†	0.000	307.100	1017.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	
1100.00	0.000	307.100	1100.00	0.00	0.00	0.00	40°13'18.682"N	104°58'27.170"W	0.00	BEGIN NUDGE
1117.00†	0.340	307.100	1117.00	0.04	0.03	-0.04	40°13'18.682"N	104°58'27.171"W	2.00	
1217.00†	2.340	307.100	1216.97	1.84	1.44	-1.91	40°13'18.696"N	104°58'27.195"W	2.00	
1317.00†	4.340	307.100	1316.79	6.33	4.96	-6.55	40°13'18.731"N	104°58'27.254"W	2.00	
1417.00†	6.340	307.100	1416.35	13.49	10.57	-13.97	40°13'18.786"N	104°58'27.350"W	2.00	
1517.00†	8.340	307.100	1515.53	23.33	18.27	-24.16	40°13'18.863"N	104°58'27.482"W	2.00	
1600.00	10.000	307.100	1597.47	33.52	26.25	-34.71	40°13'18.941"N	104°58'27.618"W	2.00	END NUDGE
1617.00†	10.000	307.100	1614.21	35.79	28.03	-37.07	40°13'18.959"N	104°58'27.648"W	0.00	
1717.00†	10.000	307.100	1712.69	49.17	38.51	-50.92	40°13'19.063"N	104°58'27.826"W	0.00	
1817.00†	10.000	307.100	1811.17	62.54	48.98	-64.77	40°13'19.166"N	104°58'28.005"W	0.00	
1917.00†	10.000	307.100	1909.65	75.91	59.46	-78.62	40°13'19.270"N	104°58'28.183"W	0.00	
2017.00†	10.000	307.100	2008.13	89.29	69.93	-92.47	40°13'19.373"N	104°58'28.362"W	0.00	
2117.00†	10.000	307.100	2106.61	102.66	80.41	-106.32	40°13'19.477"N	104°58'28.541"W	0.00	
2217.00†	10.000	307.100	2205.09	116.04	90.88	-120.17	40°13'19.580"N	104°58'28.719"W	0.00	
2317.00†	10.000	307.100	2303.57	129.41	101.36	-134.02	40°13'19.684"N	104°58'28.898"W	0.00	
2417.00†	10.000	307.100	2402.05	142.78	111.83	-147.87	40°13'19.787"N	104°58'29.076"W	0.00	
2517.00†	10.000	307.100	2500.53	156.16	122.31	-161.72	40°13'19.891"N	104°58'29.255"W	0.00	
2617.00†	10.000	307.100	2599.01	169.53	132.78	-175.57	40°13'19.994"N	104°58'29.433"W	0.00	
2717.00†	10.000	307.100	2697.50	182.91	143.25	-189.42	40°13'20.098"N	104°58'29.612"W	0.00	
2817.00†	10.000	307.100	2795.98	196.28	153.73	-203.27	40°13'20.201"N	104°58'29.790"W	0.00	
2917.00†	10.000	307.100	2894.46	209.65	164.20	-217.12	40°13'20.305"N	104°58'29.969"W	0.00	
3017.00†	10.000	307.100	2992.94	223.03	174.68	-230.97	40°13'20.408"N	104°58'30.148"W	0.00	
3117.00†	10.000	307.100	3091.42	236.40	185.15	-244.82	40°13'20.512"N	104°58'30.326"W	0.00	
3217.00†	10.000	307.100	3189.90	249.77	195.63	-258.67	40°13'20.615"N	104°58'30.505"W	0.00	
3317.00†	10.000	307.100	3288.38	263.15	206.10	-272.52	40°13'20.719"N	104°58'30.683"W	0.00	
3417.00†	10.000	307.100	3386.86	276.52	216.58	-286.37	40°13'20.822"N	104°58'30.862"W	0.00	
3517.00†	10.000	307.100	3485.34	289.90	227.05	-300.22	40°13'20.926"N	104°58'31.040"W	0.00	
3617.00†	10.000	307.100	3583.82	303.27	237.53	-314.07	40°13'21.029"N	104°58'31.219"W	0.00	
3687.24†	10.000	307.100	3653.00	312.66	244.88	-323.79	40°13'21.102"N	104°58'31.344"W	0.00	PARKMAN
3717.00†	10.000	307.100	3682.30	316.64	248.00	-327.92	40°13'21.133"N	104°58'31.397"W	0.00	
3790.82	10.000	307.100	3755.00	326.52	255.73	-338.14	40°13'21.209"N	104°58'31.529"W	0.00	BEGIN DROP

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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
3817.00†	9.476	307.100	3780.80	329.93	258.40	-341.67	40°13'21.236"N	104°58'31.575"W	2.00	
3917.00†	7.476	307.100	3879.71	341.28	267.29	-353.43	40°13'21.323"N	104°58'31.726"W	2.00	
4017.00†	5.476	307.100	3979.06	349.97	274.10	-362.42	40°13'21.391"N	104°58'31.842"W	2.00	
4117.00†	3.476	307.100	4078.75	355.98	278.81	-368.65	40°13'21.437"N	104°58'31.922"W	2.00	
4154.30†	2.730	307.100	4116.00	357.53	280.02	-370.26	40°13'21.449"N	104°58'31.943"W	2.00	SUSSEX
4217.00†	1.476	307.100	4178.66	359.30	281.41	-372.09	40°13'21.463"N	104°58'31.967"W	2.00	
4290.82	0.000	267.469	4252.47	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	2.00	END DROP
4317.00†	0.000	267.469	4278.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4417.00†	0.000	267.469	4378.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4517.00†	0.000	267.469	4478.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4617.00†	0.000	267.469	4578.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4717.00†	0.000	267.469	4678.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4817.00†	0.000	267.469	4778.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
4917.00†	0.000	267.469	4878.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5017.00†	0.000	267.469	4978.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5117.00†	0.000	267.469	5078.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5217.00†	0.000	267.469	5178.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5317.00†	0.000	267.469	5278.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5417.00†	0.000	267.469	5378.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5517.00†	0.000	267.469	5478.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5617.00†	0.000	267.469	5578.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5717.00†	0.000	267.469	5678.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5817.00†	0.000	267.469	5778.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
5917.00†	0.000	267.469	5878.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6017.00†	0.000	267.469	5978.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6117.00†	0.000	267.469	6078.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6217.00†	0.000	267.469	6178.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6317.00†	0.000	267.469	6278.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6417.00†	0.000	267.469	6378.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6517.00†	0.000	267.469	6478.65	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	
6523.76	0.000	267.469	6485.41	360.04	281.99	-372.85	40°13'21.469"N	104°58'31.977"W	0.00	KOP, BUILD @ 10°/100'
6617.00†	8.392	267.469	6578.31	366.85	281.68	-379.66	40°13'21.466"N	104°58'32.064"W	9.00	
6717.00†	17.392	267.469	6675.69	389.14	280.70	-401.93	40°13'21.456"N	104°58'32.351"W	9.00	
6817.00†	26.392	267.469	6768.39	426.39	279.06	-439.14	40°13'21.440"N	104°58'32.831"W	9.00	
6917.00†	35.392	267.469	6854.11	477.68	276.79	-490.38	40°13'21.417"N	104°58'33.492"W	9.00	
7017.00†	44.392	267.469	6930.76	541.74	273.96	-554.38	40°13'21.389"N	104°58'34.317"W	9.00	
7087.02†	50.693	267.469	6978.00	593.37	271.68	-605.96	40°13'21.367"N	104°58'34.982"W	9.00	SHARON SPRINGS
7117.00†	53.392	267.469	6996.44	617.01	270.64	-629.58	40°13'21.356"N	104°58'35.286"W	9.00	
7211.57†	61.903	267.469	7047.00	696.83	267.11	-709.32	40°13'21.322"N	104°58'36.314"W	9.00	NIOBRARA
7217.00†	62.392	267.469	7049.54	701.63	266.90	-714.11	40°13'21.319"N	104°58'36.376"W	9.00	
7317.00†	71.392	267.469	7088.74	793.51	262.85	-805.91	40°13'21.279"N	104°58'37.559"W	9.00	
7363.66†	75.591	267.469	7102.00	838.24	260.87	-850.59	40°13'21.260"N	104°58'38.135"W	9.00	NIOBRARA B
7417.00†	80.392	267.469	7113.09	890.40	258.57	-902.70	40°13'21.237"N	104°58'38.807"W	9.00	
7517.00†	89.392	267.469	7121.99	989.90	254.17	-1002.10	40°13'21.194"N	104°58'40.089"W	9.00	
7529.16	90.486	267.469	7122.00	1002.05	253.64	-1014.24	40°13'21.188"N	104°58'40.245"W	9.00	LANDING POINT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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	267.469	7121.26	1089.89	249.76	-1102.00	40°13'21.150"N	104°58'41.377"W	0.00	
7717.00†	90.486	267.469	7120.41	1189.89	245.34	-1201.90	40°13'21.106"N	104°58'42.664"W	0.00	
7817.00†	90.486	267.469	7119.56	1289.89	240.93	-1301.80	40°13'21.062"N	104°58'43.952"W	0.00	
7917.00†	90.486	267.469	7118.71	1389.88	236.51	-1401.70	40°13'21.019"N	104°58'45.240"W	0.00	
8017.00†	90.486	267.469	7117.86	1489.88	232.10	-1501.59	40°13'20.975"N	104°58'46.528"W	0.00	
8117.00†	90.486	267.469	7117.02	1589.88	227.68	-1601.49	40°13'20.931"N	104°58'47.816"W	0.00	
8217.00†	90.486	267.469	7116.17	1689.87	223.27	-1701.39	40°13'20.888"N	104°58'49.104"W	0.00	
8317.00†	90.486	267.469	7115.32	1789.87	218.85	-1801.29	40°13'20.844"N	104°58'50.391"W	0.00	
8417.00†	90.486	267.469	7114.47	1889.87	214.43	-1901.19	40°13'20.800"N	104°58'51.679"W	0.00	
8517.00†	90.486	267.469	7113.62	1989.86	210.02	-2001.09	40°13'20.757"N	104°58'52.967"W	0.00	
8617.00†	90.486	267.469	7112.78	2089.86	205.60	-2100.99	40°13'20.713"N	104°58'54.255"W	0.00	
8717.00†	90.486	267.469	7111.93	2189.85	201.19	-2200.89	40°13'20.669"N	104°58'55.543"W	0.00	
8817.00†	90.486	267.469	7111.08	2289.85	196.77	-2300.79	40°13'20.625"N	104°58'56.831"W	0.00	
8917.00†	90.486	267.469	7110.23	2389.85	192.36	-2400.68	40°13'20.582"N	104°58'58.119"W	0.00	
9017.00†	90.486	267.469	7109.38	2489.84	187.94	-2500.58	40°13'20.538"N	104°58'59.406"W	0.00	
9117.00†	90.486	267.469	7108.54	2589.84	183.53	-2600.48	40°13'20.494"N	104°59'00.694"W	0.00	
9217.00†	90.486	267.469	7107.69	2689.84	179.11	-2700.38	40°13'20.451"N	104°59'01.982"W	0.00	
9317.00†	90.486	267.469	7106.84	2789.83	174.70	-2800.28	40°13'20.407"N	104°59'03.270"W	0.00	
9417.00†	90.486	267.469	7105.99	2889.83	170.28	-2900.18	40°13'20.363"N	104°59'04.558"W	0.00	
9517.00†	90.486	267.469	7105.14	2989.83	165.86	-3000.08	40°13'20.319"N	104°59'05.846"W	0.00	
9617.00†	90.486	267.469	7104.30	3089.82	161.45	-3099.98	40°13'20.276"N	104°59'07.133"W	0.00	
9717.00†	90.486	267.469	7103.45	3189.82	157.03	-3199.87	40°13'20.232"N	104°59'08.421"W	0.00	
9817.00†	90.486	267.469	7102.60	3289.82	152.62	-3299.77	40°13'20.188"N	104°59'09.709"W	0.00	
9917.00†	90.486	267.469	7101.75	3389.81	148.20	-3399.67	40°13'20.144"N	104°59'10.997"W	0.00	
10017.00†	90.486	267.469	7100.90	3489.81	143.79	-3499.57	40°13'20.100"N	104°59'12.285"W	0.00	
10117.00†	90.486	267.469	7100.05	3589.80	139.37	-3599.47	40°13'20.057"N	104°59'13.573"W	0.00	
10217.00†	90.486	267.469	7099.21	3689.80	134.96	-3699.37	40°13'20.013"N	104°59'14.861"W	0.00	
10317.00†	90.486	267.469	7098.36	3789.80	130.54	-3799.27	40°13'19.969"N	104°59'16.148"W	0.00	
10417.00†	90.486	267.469	7097.51	3889.79	126.13	-3899.17	40°13'19.925"N	104°59'17.436"W	0.00	
10517.00†	90.486	267.469	7096.66	3989.79	121.71	-3999.07	40°13'19.882"N	104°59'18.724"W	0.00	
10617.00†	90.486	267.469	7095.81	4089.79	117.29	-4098.96	40°13'19.838"N	104°59'20.012"W	0.00	
10717.00†	90.486	267.469	7094.97	4189.78	112.88	-4198.86	40°13'19.794"N	104°59'21.300"W	0.00	
10817.00†	90.486	267.469	7094.12	4289.78	108.46	-4298.76	40°13'19.750"N	104°59'22.588"W	0.00	
10917.00†	90.486	267.469	7093.27	4389.78	104.05	-4398.66	40°13'19.706"N	104°59'23.875"W	0.00	
11017.00†	90.486	267.469	7092.42	4489.77	99.63	-4498.56	40°13'19.663"N	104°59'25.163"W	0.00	
11117.00†	90.486	267.469	7091.57	4589.77	95.22	-4598.46	40°13'19.619"N	104°59'26.451"W	0.00	
11217.00†	90.486	267.469	7090.73	4689.76	90.80	-4698.36	40°13'19.575"N	104°59'27.739"W	0.00	
11317.00†	90.486	267.469	7089.88	4789.76	86.39	-4798.26	40°13'19.531"N	104°59'29.027"W	0.00	
11417.00†	90.486	267.469	7089.03	4889.76	81.97	-4898.16	40°13'19.487"N	104°59'30.315"W	0.00	
11517.00†	90.486	267.469	7088.18	4989.75	77.56	-4998.05	40°13'19.443"N	104°59'31.602"W	0.00	
11617.00†	90.486	267.469	7087.33	5089.75	73.14	-5097.95	40°13'19.400"N	104°59'32.890"W	0.00	
11717.00†	90.486	267.469	7086.48	5189.75	68.73	-5197.85	40°13'19.356"N	104°59'34.178"W	0.00	
11817.00†	90.486	267.469	7085.64	5289.74	64.31	-5297.75	40°13'19.312"N	104°59'35.466"W	0.00	
11917.00†	90.486	267.469	7084.79	5389.74	59.89	-5397.65	40°13'19.268"N	104°59'36.754"W	0.00	
12017.00†	90.486	267.469	7083.94	5489.74	55.48	-5497.55	40°13'19.224"N	104°59'38.042"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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
12117.00†	90.486	267.469	7083.09	5589.73	51.06	-5597.45	40°13'19.180"N	104°59'39.329"W	0.00	
12217.00†	90.486	267.469	7082.24	5689.73	46.65	-5697.35	40°13'19.136"N	104°59'40.617"W	0.00	
12317.00†	90.486	267.469	7081.40	5789.73	42.23	-5797.25	40°13'19.093"N	104°59'41.905"W	0.00	
12417.00†	90.486	267.469	7080.55	5889.72	37.82	-5897.14	40°13'19.049"N	104°59'43.193"W	0.00	
12517.00†	90.486	267.469	7079.70	5989.72	33.40	-5997.04	40°13'19.005"N	104°59'44.481"W	0.00	
12617.00†	90.486	267.469	7078.85	6089.71	28.99	-6096.94	40°13'18.961"N	104°59'45.769"W	0.00	
12717.00†	90.486	267.469	7078.00	6189.71	24.57	-6196.84	40°13'18.917"N	104°59'47.056"W	0.00	
12817.00†	90.486	267.469	7077.16	6289.71	20.16	-6296.74	40°13'18.873"N	104°59'48.344"W	0.00	
12835.37	90.486	267.469	7077.00 ¹	6308.08	19.34	-6315.09	40°13'18.865"N	104°59'48.581"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DOCHEFF 13N-15HZ PWB Ref Wellpath: DOCHEFF 13N-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	744.00	727.00	17.00	744.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	744.00	727.00	17.00	744.00	0.00	0.00	0.00	0.00
8.75in Open Hole	744.00	7529.16	6785.16	744.00	7122.00	0.00	0.00	253.64	-1014.25
7in Casing Intermediate	17.00	7529.16	7512.16	17.00	7122.00	0.00	0.00	253.64	-1014.25
6.125in Open Hole	7529.16	12835.37	5306.21	7122.00	7077.00	253.64	-1014.25	19.34	-6315.09
4.5in Casing Production	17.00	12835.37	12818.37	17.00	7077.00	0.00	0.00	19.34	-6315.09

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 13N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-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.15-T3N-R68W SECTION LINES		1.00	1163.54	173.91	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
SEC.13-T3N-R68W SECTION LINES		4952.00	3397.74	8445.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		4952.00	3397.74	8445.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
1) DOCHEFF 13N-15HZ BHL ON PLAT REV-1 (1170'FSL & 460'FWL, SEC.15)	12835.37	7077.00	19.34	-6315.09	3140506.00	1324081.47	40°13'18.865"N	104°59'48.581"W	point
DOCHEFF 13N-15HZ LANDBOX		7077.00	0.00	0.00	3146820.81	1324099.57	40°13'18.682"N	104°58'27.170"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 13N-15HZ PWB Ref Wellpath: DOCHEFF 13N-15HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12835.37	NaviTrak (IFR)_1		DOCHEFF 13N-15HZ PWB

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOCHEFF 13N-15HZ (1065'FSL & 1514'FWL, SEC.14)	
Area	COLORADO	Well	DOCHEFF 13N-15HZ	
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 13N-15HZ PWB	
Facility	SEC.14-T3N-R68W			

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
552.00	0.000	307.100	552.00	FOX BASE HILLS
744.00	0.000	307.100	744.00	SURFACE CSG SETTING DEPTH
3687.24	10.000	307.100	3653.00	PARKMAN
4154.30	2.730	307.100	4116.00	SUSSEX
7087.02	50.693	267.469	6978.00	SHARON SPRINGS
7211.57	61.903	267.469	7047.00	NIOBRARA
7363.66	75.591	267.469	7102.00	NIOBRARA B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	307.100	17.00	TIE ON
1100.00	0.000	307.100	1100.00	BEGIN NUDGE
1600.00	10.000	307.100	1597.47	END NUDGE
3790.82	10.000	307.100	3755.00	BEGIN DROP
4290.82	0.000	267.469	4252.47	END DROP
6523.76	0.000	267.469	6485.41	KOP, BUILD @ 10°/100'
7529.16	90.486	267.469	7122.00	LANDING POINT
12835.37	90.486	267.469	7077.00	TOTAL DEPTH