

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: DOCHEFF 32C-13HZ
 Facility: SEC.14-T3N-R68W Wellbore: DOCHEFF 32C-13HZ PWB

Plot reference wellpath is DOCHEFF 32C-13HZ (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#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'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#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)	1533.20	230.53	3146987.806	1325264.061	40°13'30.180"N	104°58'24.928"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14))						4951ft
Mean Sea Level to Mud line (At Slot: SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14))						0ft
PERMIT (17KB) (RKB) to Mean Sea Level						4951ft

Survey Program

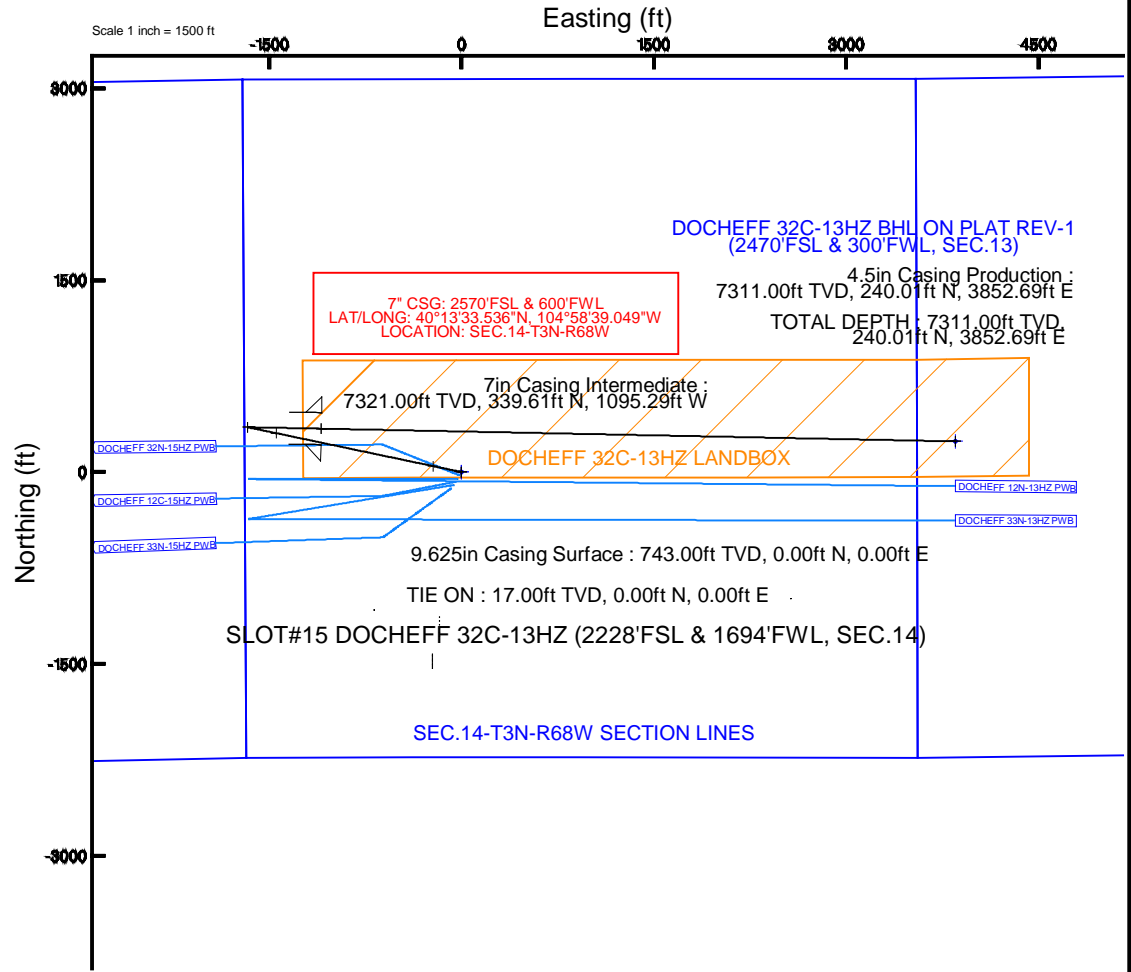
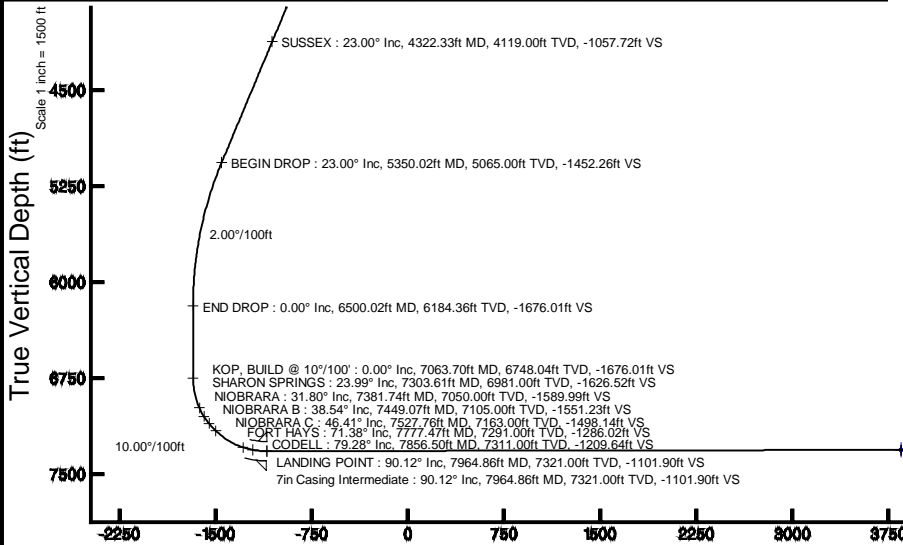
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12913.85	NaviTrak	NaviTrak		DOCHEFF 32C-13HZ PWB

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	2234.14	8271.79	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.14-T3N-R68W SECTION LINES		0.00	2234.14	8271.79	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.15-T3N-R68W SECTION LINES		0.00	0.00	0.00	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W
DOCHEFF 32C-13HZ BHL ON PLAT REV-1 (2470'FSL & 300'FWL, SEC.13)	12913.85	7311.00	240.01	3852.69	3150838.83	1325265.93	40°13'32.549"N	104°57'35.258"W
DOCHEFF 32C-13HZ LANDBOX		7311.00	0.00	0.00	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"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	281.880	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1000.00	0.000	281.880	1000.00	0.00	0.00	0.00	0.00
END NUDGE	2150.00	23.000	281.880	2119.36	46.88	-222.86	2.00	-223.76
BEGIN DROP	5350.02	23.000	281.880	5065.00	304.28	-1446.43	0.00	-1452.26
END DROP	6500.02	0.000	91.153	6184.36	351.17	-1669.29	2.00	-1676.01
KOP_BUILD @ 10°/100'	7063.70	0.000	91.153	6748.04	351.17	-1669.29	0.00	-1676.01
LANDING POINT	7964.86	90.116	91.153	7321.00	339.61	-1095.29	10.00	-1101.90
TOTAL DEPTH	12913.85	90.116	91.153	7311.00	240.01	3852.69	0.00	3847.08



DOCHEFF 32C-13HZ BHL ON PLAT REV-1 (2470'FSL & 300'FWL, SEC.13)

TOTAL DEPTH : 90.12° Inc, 12913.85ft MD, 7311.00ft TVD, 3847.08ft VS
 4.5in Casing Production : 90.12° Inc, 12913.85ft MD, 7311.00ft TVD, 3847.08ft VS

Vertical Section (ft)
 Azimuth 91.15° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft



Planned Wellpath Report

DOCHEFF 32C-13HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-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 2:17:49 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_32C-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	1533.20	230.53	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"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#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'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	91.15°



Planned Wellpath Report

DOCHEFF 32C-13HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-13HZ PWB
Facility	SEC.14-T3N-R68W		

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	281.880	0.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
17.00	0.000	281.880	17.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	TIE ON
117.00†	0.000	281.880	117.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
217.00†	0.000	281.880	217.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
317.00†	0.000	281.880	317.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
417.00†	0.000	281.880	417.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
517.00†	0.000	281.880	517.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
551.00†	0.000	281.880	551.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	BASE FOX HILLS
617.00†	0.000	281.880	617.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
717.00†	0.000	281.880	717.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
743.00†	0.000	281.880	743.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	281.880	817.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
917.00†	0.000	281.880	917.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	
1000.00	0.000	281.880	1000.00	0.00	0.00	0.00	40°13'30.180"N	104°58'24.928"W	0.00	BEGIN NUDGE
1017.00†	0.340	281.880	1017.00	-0.05	0.01	-0.05	40°13'30.180"N	104°58'24.929"W	2.00	
1117.00†	2.340	281.880	1116.97	-2.35	0.49	-2.34	40°13'30.185"N	104°58'24.958"W	2.00	
1217.00†	4.340	281.880	1216.79	-8.07	1.69	-8.04	40°13'30.197"N	104°58'25.032"W	2.00	
1317.00†	6.340	281.880	1316.35	-17.21	3.61	-17.15	40°13'30.216"N	104°58'25.149"W	2.00	
1417.00†	8.340	281.880	1415.53	-29.77	6.24	-29.65	40°13'30.242"N	104°58'25.310"W	2.00	
1517.00†	10.340	281.880	1514.20	-45.71	9.58	-45.53	40°13'30.275"N	104°58'25.515"W	2.00	
1617.00†	12.340	281.880	1612.24	-65.03	13.63	-64.77	40°13'30.315"N	104°58'25.763"W	2.00	
1717.00†	14.340	281.880	1709.54	-87.70	18.37	-87.35	40°13'30.362"N	104°58'26.054"W	2.00	
1817.00†	16.340	281.880	1805.97	-113.69	23.82	-113.23	40°13'30.415"N	104°58'26.388"W	2.00	
1917.00†	18.340	281.880	1901.42	-142.97	29.96	-142.40	40°13'30.476"N	104°58'26.764"W	2.00	
2017.00†	20.340	281.880	1995.77	-175.51	36.77	-174.80	40°13'30.543"N	104°58'27.182"W	2.00	
2117.00†	22.340	281.880	2088.91	-211.26	44.26	-210.41	40°13'30.617"N	104°58'27.641"W	2.00	
2150.00	23.000	281.880	2119.36	-223.76	46.88	-222.86	40°13'30.643"N	104°58'27.801"W	2.00	END NUDGE
2217.00†	23.000	281.880	2181.04	-249.48	52.27	-248.48	40°13'30.697"N	104°58'28.131"W	0.00	
2317.00†	23.000	281.880	2273.09	-287.87	60.32	-286.71	40°13'30.776"N	104°58'28.624"W	0.00	
2417.00†	23.000	281.880	2365.14	-326.26	68.36	-324.95	40°13'30.855"N	104°58'29.117"W	0.00	
2517.00†	23.000	281.880	2457.19	-364.65	76.40	-363.19	40°13'30.935"N	104°58'29.610"W	0.00	
2617.00†	23.000	281.880	2549.24	-403.04	84.45	-401.42	40°13'31.014"N	104°58'30.103"W	0.00	
2717.00†	23.000	281.880	2641.29	-441.43	92.49	-439.66	40°13'31.094"N	104°58'30.596"W	0.00	
2817.00†	23.000	281.880	2733.34	-479.82	100.53	-477.89	40°13'31.173"N	104°58'31.089"W	0.00	
2917.00†	23.000	281.880	2825.39	-518.21	108.58	-516.13	40°13'31.253"N	104°58'31.582"W	0.00	
3017.00†	23.000	281.880	2917.44	-556.60	116.62	-554.37	40°13'31.332"N	104°58'32.075"W	0.00	
3117.00†	23.000	281.880	3009.49	-594.99	124.67	-592.60	40°13'31.412"N	104°58'32.568"W	0.00	
3217.00†	23.000	281.880	3101.54	-633.38	132.71	-630.84	40°13'31.491"N	104°58'33.061"W	0.00	
3317.00†	23.000	281.880	3193.59	-671.77	140.75	-669.08	40°13'31.571"N	104°58'33.554"W	0.00	
3417.00†	23.000	281.880	3285.64	-710.16	148.80	-707.31	40°13'31.650"N	104°58'34.047"W	0.00	
3517.00†	23.000	281.880	3377.69	-748.55	156.84	-745.55	40°13'31.730"N	104°58'34.540"W	0.00	
3617.00†	23.000	281.880	3469.74	-786.94	164.88	-783.78	40°13'31.809"N	104°58'35.033"W	0.00	
3717.00†	23.000	281.880	3561.79	-825.33	172.93	-822.02	40°13'31.889"N	104°58'35.526"W	0.00	
3817.00†	23.000	281.880	3653.84	-863.72	180.97	-860.26	40°13'31.968"N	104°58'36.019"W	0.00	
3819.34†	23.000	281.880	3656.00	-864.62	181.16	-861.15	40°13'31.970"N	104°58'36.030"W	0.00	PARKMAN

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-13HZ PWB
Facility	SEC.14-T3N-R68W		

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
3917.00†	23.000	281.880	3745.89	-902.11	189.01	-898.49	40°13'32.048"N	104°58'36.512"W	0.00	
4017.00†	23.000	281.880	3837.94	-940.50	197.06	-936.73	40°13'32.127"N	104°58'37.004"W	0.00	
4117.00†	23.000	281.880	3930.00	-978.89	205.10	-974.96	40°13'32.207"N	104°58'37.497"W	0.00	
4217.00†	23.000	281.880	4022.05	-1017.29	213.15	-1013.20	40°13'32.286"N	104°58'37.990"W	0.00	
4317.00†	23.000	281.880	4114.10	-1055.68	221.19	-1051.44	40°13'32.366"N	104°58'38.483"W	0.00	
4322.33†	23.000	281.880	4119.00	-1057.72	221.62	-1053.47	40°13'32.370"N	104°58'38.510"W	0.00	SUSSEX
4417.00†	23.000	281.880	4206.15	-1094.07	229.23	-1089.67	40°13'32.445"N	104°58'38.976"W	0.00	
4517.00†	23.000	281.880	4298.20	-1132.46	237.28	-1127.91	40°13'32.524"N	104°58'39.469"W	0.00	
4617.00†	23.000	281.880	4390.25	-1170.85	245.32	-1166.15	40°13'32.604"N	104°58'39.962"W	0.00	
4717.00†	23.000	281.880	4482.30	-1209.24	253.36	-1204.38	40°13'32.683"N	104°58'40.455"W	0.00	
4817.00†	23.000	281.880	4574.35	-1247.63	261.41	-1242.62	40°13'32.763"N	104°58'40.948"W	0.00	
4917.00†	23.000	281.880	4666.40	-1286.02	269.45	-1280.85	40°13'32.842"N	104°58'41.441"W	0.00	
5017.00†	23.000	281.880	4758.45	-1324.41	277.50	-1319.09	40°13'32.922"N	104°58'41.934"W	0.00	
5117.00†	23.000	281.880	4850.50	-1362.80	285.54	-1357.33	40°13'33.001"N	104°58'42.427"W	0.00	
5217.00†	23.000	281.880	4942.55	-1401.19	293.58	-1395.56	40°13'33.081"N	104°58'42.920"W	0.00	
5317.00†	23.000	281.880	5034.60	-1439.58	301.63	-1433.80	40°13'33.160"N	104°58'43.413"W	0.00	
5350.02	23.000	281.880	5065.00	-1452.26	304.28	-1446.43	40°13'33.186"N	104°58'43.576"W	0.00	BEGIN DROP
5417.00†	21.660	281.880	5126.95	-1477.26	309.52	-1471.33	40°13'33.238"N	104°58'43.897"W	2.00	
5517.00†	19.660	281.880	5220.52	-1511.92	316.78	-1505.85	40°13'33.310"N	104°58'44.342"W	2.00	
5617.00†	17.660	281.880	5315.25	-1543.36	323.37	-1537.16	40°13'33.375"N	104°58'44.745"W	2.00	
5717.00†	15.660	281.880	5411.05	-1571.53	329.27	-1565.22	40°13'33.433"N	104°58'45.107"W	2.00	
5817.00†	13.660	281.880	5507.79	-1596.39	334.48	-1589.98	40°13'33.485"N	104°58'45.426"W	2.00	
5917.00†	11.660	281.880	5605.35	-1617.92	338.99	-1611.43	40°13'33.529"N	104°58'45.703"W	2.00	
6017.00†	9.660	281.880	5703.62	-1636.10	342.80	-1629.53	40°13'33.567"N	104°58'45.936"W	2.00	
6117.00†	7.660	281.880	5802.48	-1650.89	345.90	-1644.27	40°13'33.598"N	104°58'46.126"W	2.00	
6217.00†	5.660	281.880	5901.80	-1662.29	348.29	-1655.62	40°13'33.621"N	104°58'46.273"W	2.00	
6317.00†	3.660	281.880	6001.46	-1670.27	349.96	-1663.57	40°13'33.638"N	104°58'46.375"W	2.00	
6417.00†	1.660	281.880	6101.35	-1674.83	350.92	-1668.11	40°13'33.647"N	104°58'46.434"W	2.00	
6500.02	0.000	91.153	6184.36	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	2.00	END DROP
6517.00†	0.000	91.153	6201.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
6617.00†	0.000	91.153	6301.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
6717.00†	0.000	91.153	6401.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
6817.00†	0.000	91.153	6501.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
6917.00†	0.000	91.153	6601.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
7017.00†	0.000	91.153	6701.34	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	
7063.70	0.000	91.153	6748.04	-1676.01	351.17	-1669.29	40°13'33.650"N	104°58'46.449"W	0.00	KOP, BUILD @ 10°/100'
7117.00†	5.330	91.153	6801.26	-1673.54	351.12	-1666.81	40°13'33.649"N	104°58'46.417"W	10.00	
7217.00†	15.330	91.153	6899.52	-1655.63	350.75	-1648.90	40°13'33.646"N	104°58'46.186"W	10.00	
7303.61†	23.991	91.153	6981.00	-1626.52	350.17	-1619.80	40°13'33.640"N	104°58'45.811"W	10.00	SHARON SPRINGS
7317.00†	25.330	91.153	6993.17	-1620.93	350.06	-1614.21	40°13'33.639"N	104°58'45.739"W	10.00	
7381.74†	31.804	91.153	7050.00	-1589.99	349.43	-1583.28	40°13'33.633"N	104°58'45.340"W	10.00	NIOBRARA
7417.00†	35.330	91.153	7079.37	-1570.50	349.04	-1563.79	40°13'33.629"N	104°58'45.089"W	10.00	
7449.07†	38.536	91.153	7105.00	-1551.23	348.65	-1544.53	40°13'33.625"N	104°58'44.840"W	10.00	NIOBRARA B
7517.00†	45.330	91.153	7155.51	-1505.86	347.74	-1499.17	40°13'33.616"N	104°58'44.256"W	10.00	
7527.76†	46.405	91.153	7163.00	-1498.14	347.59	-1491.45	40°13'33.614"N	104°58'44.156"W	10.00	NIOBRARA C



Planned Wellpath Report

DOCHEFF 32C-13HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-13HZ PWB
Facility	SEC.14-T3N-R68W		

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†	55.330	91.153	7219.26	-1428.99	346.19	-1422.31	40°13'33.601"N	104°58'43.265"W	10.00	
7717.00†	65.330	91.153	7268.70	-1342.21	344.45	-1335.55	40°13'33.583"N	104°58'42.146"W	10.00	
7777.47†	71.377	91.153	7291.00	-1286.02	343.32	-1279.38	40°13'33.572"N	104°58'41.422"W	10.00	FORT HAYS
7817.00†	75.330	91.153	7302.32	-1248.16	342.55	-1241.52	40°13'33.565"N	104°58'40.934"W	10.00	
7856.50†	79.280	91.153	7311.00	-1209.64	341.78	-1203.00	40°13'33.557"N	104°58'40.437"W	10.00	CODELL
7917.00†	85.330	91.153	7319.10	-1149.71	340.57	-1143.09	40°13'33.545"N	104°58'39.665"W	10.00	
7964.86	90.116	91.153	7321.00	-1101.90	339.61	-1095.29	40°13'33.536"N	104°58'39.049"W	10.00	LANDING POINT
8017.00†	90.116	91.153	7320.89	-1049.76	338.56	-1043.16	40°13'33.525"N	104°58'38.377"W	0.00	
8117.00†	90.116	91.153	7320.69	-949.76	336.55	-943.18	40°13'33.506"N	104°58'37.088"W	0.00	
8217.00†	90.116	91.153	7320.49	-849.76	334.54	-843.20	40°13'33.486"N	104°58'35.799"W	0.00	
8317.00†	90.116	91.153	7320.29	-749.76	332.52	-743.22	40°13'33.466"N	104°58'34.510"W	0.00	
8417.00†	90.116	91.153	7320.09	-649.76	330.51	-643.24	40°13'33.446"N	104°58'33.221"W	0.00	
8517.00†	90.116	91.153	7319.88	-549.76	328.50	-543.26	40°13'33.426"N	104°58'31.932"W	0.00	
8617.00†	90.116	91.153	7319.68	-449.76	326.49	-443.28	40°13'33.406"N	104°58'30.643"W	0.00	
8717.00†	90.116	91.153	7319.48	-349.76	324.47	-343.30	40°13'33.386"N	104°58'29.354"W	0.00	
8817.00†	90.116	91.153	7319.28	-249.76	322.46	-243.32	40°13'33.367"N	104°58'28.065"W	0.00	
8917.00†	90.116	91.153	7319.08	-149.76	320.45	-143.34	40°13'33.347"N	104°58'26.776"W	0.00	
9017.00†	90.116	91.153	7318.87	-49.76	318.44	-43.36	40°13'33.327"N	104°58'25.487"W	0.00	
9117.00†	90.116	91.153	7318.67	50.24	316.42	56.62	40°13'33.307"N	104°58'24.198"W	0.00	
9217.00†	90.116	91.153	7318.47	150.24	314.41	156.60	40°13'33.287"N	104°58'22.909"W	0.00	
9317.00†	90.116	91.153	7318.27	250.24	312.40	256.58	40°13'33.267"N	104°58'21.620"W	0.00	
9417.00†	90.116	91.153	7318.06	350.24	310.39	356.55	40°13'33.247"N	104°58'20.331"W	0.00	
9517.00†	90.116	91.153	7317.86	450.24	308.37	456.53	40°13'33.227"N	104°58'19.042"W	0.00	
9617.00†	90.116	91.153	7317.66	550.24	306.36	556.51	40°13'33.207"N	104°58'17.753"W	0.00	
9717.00†	90.116	91.153	7317.46	650.24	304.35	656.49	40°13'33.187"N	104°58'16.464"W	0.00	
9817.00†	90.116	91.153	7317.26	750.24	302.34	756.47	40°13'33.168"N	104°58'15.175"W	0.00	
9917.00†	90.116	91.153	7317.05	850.24	300.32	856.45	40°13'33.148"N	104°58'13.886"W	0.00	
10017.00†	90.116	91.153	7316.85	950.24	298.31	956.43	40°13'33.128"N	104°58'12.597"W	0.00	
10117.00†	90.116	91.153	7316.65	1050.24	296.30	1056.41	40°13'33.108"N	104°58'11.309"W	0.00	
10217.00†	90.116	91.153	7316.45	1150.24	294.29	1156.39	40°13'33.088"N	104°58'10.020"W	0.00	
10317.00†	90.116	91.153	7316.25	1250.24	292.27	1256.37	40°13'33.068"N	104°58'08.731"W	0.00	
10417.00†	90.116	91.153	7316.04	1350.23	290.26	1356.35	40°13'33.048"N	104°58'07.442"W	0.00	
10517.00†	90.116	91.153	7315.84	1450.23	288.25	1456.33	40°13'33.028"N	104°58'06.153"W	0.00	
10617.00†	90.116	91.153	7315.64	1550.23	286.24	1556.31	40°13'33.008"N	104°58'04.864"W	0.00	
10717.00†	90.116	91.153	7315.44	1650.23	284.22	1656.29	40°13'32.988"N	104°58'03.575"W	0.00	
10817.00†	90.116	91.153	7315.24	1750.23	282.21	1756.27	40°13'32.968"N	104°58'02.286"W	0.00	
10917.00†	90.116	91.153	7315.03	1850.23	280.20	1856.25	40°13'32.948"N	104°58'00.997"W	0.00	
11017.00†	90.116	91.153	7314.83	1950.23	278.18	1956.23	40°13'32.928"N	104°57'59.708"W	0.00	
11117.00†	90.116	91.153	7314.63	2050.23	276.17	2056.21	40°13'32.908"N	104°57'58.419"W	0.00	
11217.00†	90.116	91.153	7314.43	2150.23	274.16	2156.19	40°13'32.888"N	104°57'57.130"W	0.00	
11317.00†	90.116	91.153	7314.23	2250.23	272.15	2256.17	40°13'32.868"N	104°57'55.841"W	0.00	
11417.00†	90.116	91.153	7314.02	2350.23	270.13	2356.15	40°13'32.848"N	104°57'54.552"W	0.00	
11517.00†	90.116	91.153	7313.82	2450.23	268.12	2456.13	40°13'32.828"N	104°57'53.263"W	0.00	
11617.00†	90.116	91.153	7313.62	2550.23	266.11	2556.10	40°13'32.808"N	104°57'51.974"W	0.00	
11717.00†	90.116	91.153	7313.42	2650.23	264.10	2656.08	40°13'32.788"N	104°57'50.685"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-13HZ PWB
Facility	SEC.14-T3N-R68W		

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†	90.116	91.153	7313.22	2750.23	262.08	2756.06	40°13'32.768"N	104°57'49.396"W	0.00	
11917.00†	90.116	91.153	7313.01	2850.23	260.07	2856.04	40°13'32.748"N	104°57'48.107"W	0.00	
12017.00†	90.116	91.153	7312.81	2950.23	258.06	2956.02	40°13'32.728"N	104°57'46.818"W	0.00	
12117.00†	90.116	91.153	7312.61	3050.23	256.05	3056.00	40°13'32.708"N	104°57'45.529"W	0.00	
12217.00†	90.116	91.153	7312.41	3150.23	254.03	3155.98	40°13'32.688"N	104°57'44.240"W	0.00	
12317.00†	90.116	91.153	7312.21	3250.23	252.02	3255.96	40°13'32.668"N	104°57'42.952"W	0.00	
12417.00†	90.116	91.153	7312.00	3350.23	250.01	3355.94	40°13'32.648"N	104°57'41.663"W	0.00	
12517.00†	90.116	91.153	7311.80	3450.23	248.00	3455.92	40°13'32.628"N	104°57'40.374"W	0.00	
12617.00†	90.116	91.153	7311.60	3550.23	245.98	3555.90	40°13'32.608"N	104°57'39.085"W	0.00	
12717.00†	90.116	91.153	7311.40	3650.23	243.97	3655.88	40°13'32.588"N	104°57'37.796"W	0.00	
12817.00†	90.116	91.153	7311.20	3750.23	241.96	3755.86	40°13'32.568"N	104°57'36.507"W	0.00	
12913.85	90.116	91.153	7311.00 ¹	3847.08	240.01	3852.69	40°13'32.549"N	104°57'35.258"W	0.00	TOTAL DEPTH; CODELL

HOLE & CASING SECTIONS -									
Ref Wellbore: DOCHEFF 32C-13HZ PWB Ref Wellpath: DOCHEFF 32C-13HZ (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	7964.86	7221.86	743.00	7321.00	0.00	0.00	339.61	-1095.29
7in Casing Intermediate	17.00	7964.86	7947.86	17.00	7321.00	0.00	0.00	339.61	-1095.29
6.125in Open Hole	7964.86	12913.85	4948.99	7321.00	7311.00	339.61	-1095.29	240.01	3852.69
4.5in Casing Production	17.00	12913.85	12896.85	17.00	7311.00	0.00	0.00	240.01	3852.69



Planned Wellpath Report

DOCHEFF 32C-13HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-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	2234.14	8271.79	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		0.00	2234.14	8271.79	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.15-T3N-R68W SECTION LINES		0.00	0.00	0.00	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
1) DOCHEFF 32C-13HZ BHL ON PLAT REV-1 (2470'FSL & 300'FWL, SEC.13)	12913.85	7311.00	240.01	3852.69	3150838.83	1325526.93	40°13'32.549"N	104°57'35.258"W	point
DOCHEFF 32C-13HZ LANDBOX		7311.00	0.00	0.00	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 32C-13HZ PWB Ref Wellpath: DOCHEFF 32C-13HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12913.85	NaviTrak (IFR)		DOCHEFF 32C-13HZ PWB



Planned Wellpath Report

DOCHEFF 32C-13HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#15 DOCHEFF 32C-13HZ (2228'FSL & 1694'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
551.00	0.000	281.880	551.00	BASE FOX HILLS
743.00	0.000	281.880	743.00	SURFACE CSG SETTING DEPTH
3819.34	23.000	281.880	3656.00	PARKMAN
4322.33	23.000	281.880	4119.00	SUSSEX
7303.61	23.991	91.153	6981.00	SHARON SPRINGS
7381.74	31.804	91.153	7050.00	NIOBRARA
7449.07	38.536	91.153	7105.00	NIOBRARA B
7527.76	46.405	91.153	7163.00	NIOBRARA C
7777.47	71.377	91.153	7291.00	FORT HAYS
7856.50	79.280	91.153	7311.00	CODELL
12913.85	90.116	91.153	7311.00	CODELL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	281.880	17.00	TIE ON
1000.00	0.000	281.880	1000.00	BEGIN NUDGE
2150.00	23.000	281.880	2119.36	END NUDGE
5350.02	23.000	281.880	5065.00	BEGIN DROP
6500.02	0.000	91.153	6184.36	END DROP
7063.70	0.000	91.153	6748.04	KOP, BUILD @ 10°/100'
7964.86	90.116	91.153	7321.00	LANDING POINT
12913.85	90.116	91.153	7311.00	TOTAL DEPTH