

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: DOCHEFF 12C-15HZ
 Facility: SEC.14-T3N-R68W Wellbore: DOCHEFF 12C-15HZ PWB

Plot reference wellpath is DOCHEFF 12C-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#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'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#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)	1457.41	182.28	3146940.012	1325187.985	40°13'29.431"N	104°58'25.550"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14))				4951ft		
Mean Sea Level to Mud line (At Slot: SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14))				0ft		
PERMIT (17KB) (RKB) to Mean Sea Level				4951ft		

Survey Program

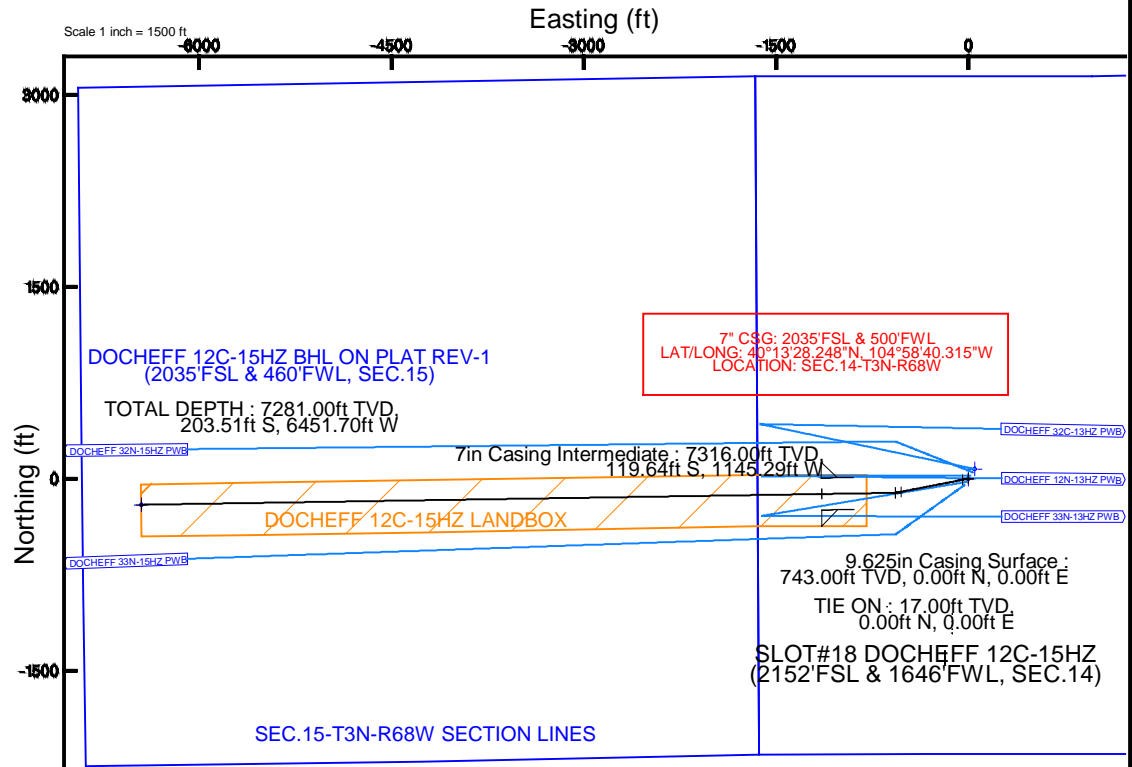
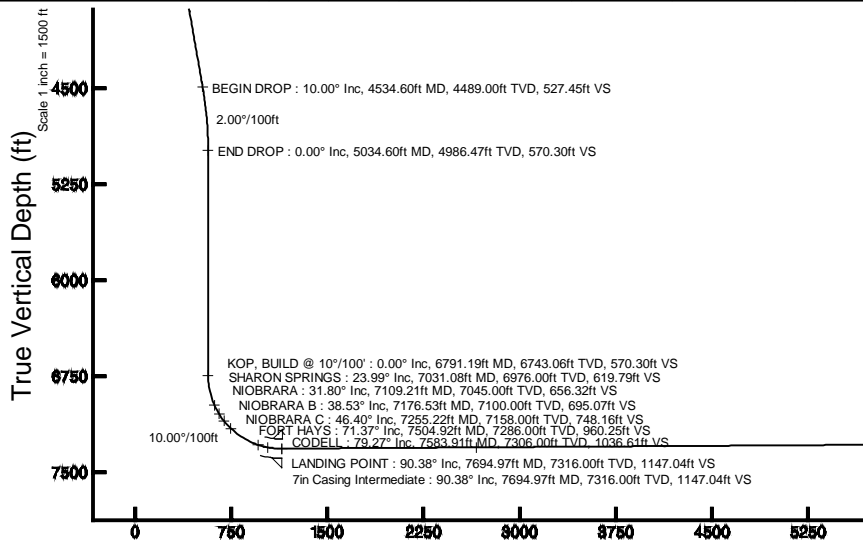
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	13002.16	NaviTrak	NaviTrak (IFR)		DOCHEFF 12C-15HZ PWB

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	2309.95	8320.03	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.14-T3N-R68W SECTION LINES		0.00	2309.95	8320.03	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W
SEC.15-T3N-R68W SECTION LINES		0.00	75.79	48.25	3146987.81	1325284.06	40°13'30.180"N	104°58'24.928"W
DOCHEFF 12C-15HZ BHL ON PLAT REV-1 (2035'FSL & 460'FWL, SEC.15)	13002.16	7281.00	-203.51	-6451.70	3140489.92	1324946.20	40°13'27.412"N	104°58'48.725"W
DOCHEFF 12C-15HZ LANDBOX		7281.00	0.00	0.00	3146940.01	1325187.98	40°13'29.431"N	104°58'25.550"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	259.000	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1200.00	0.000	259.000	1200.00	0.00	0.00	0.00	0.00
END NUDGE	1700.00	10.000	259.000	1697.47	-8.30	-42.72	2.00	42.85
BEGIN DROP	4534.60	10.000	259.000	4489.00	-102.23	-525.90	0.00	527.45
END DROP	5034.60	0.000	269.095	4986.47	-110.53	-568.63	2.00	570.30
KOP, BUILD @ 10°/100'	6791.19	0.000	269.095	6743.06	-110.53	-568.63	0.00	570.30
LANDING POINT	7694.97	90.378	269.095	7316.00	-119.64	-1145.29	10.00	1147.04
TOTAL DEPTH	13002.16	90.378	269.095	7281.00	-203.51	-6451.70	0.00	6454.11



DOCHEFF 12C-15HZ BHL ON PLAT REV-1 (2035'FSL & 460'FWL, SEC.15)
 TOTAL DEPTH : 90.38° Inc, 13002.16ft MD, 7281.00ft TVD, 6454.11ft VS

Vertical Section (ft)
 Azimuth 269.10° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500 ft



Planned Wellpath Report

DOCHEFF 12C-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-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 3:04:43 PM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_12C-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	1457.41	182.28	3146940.01	1325187.99	40°13'29.431"N	104°58'25.550"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#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'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 12C-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (149 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	259.000	0.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
17.00	0.000	259.000	17.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	TIE ON
117.00†	0.000	259.000	117.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
217.00†	0.000	259.000	217.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
317.00†	0.000	259.000	317.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
417.00†	0.000	259.000	417.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
517.00†	0.000	259.000	517.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
551.00†	0.000	259.000	551.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	BASE FOX HILLS
617.00†	0.000	259.000	617.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
717.00†	0.000	259.000	717.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
743.00†	0.000	259.000	743.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	259.000	817.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
917.00†	0.000	259.000	917.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
1017.00†	0.000	259.000	1017.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
1117.00†	0.000	259.000	1117.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	
1200.00	0.000	259.000	1200.00	0.00	0.00	0.00	40°13'29.431"N	104°58'25.550"W	0.00	BEGIN NUDGE
1217.00†	0.340	259.000	1217.00	0.05	-0.01	-0.05	40°13'29.431"N	104°58'25.551"W	2.00	
1317.00†	2.340	259.000	1316.97	2.35	-0.46	-2.34	40°13'29.426"N	104°58'25.580"W	2.00	
1417.00†	4.340	259.000	1416.79	8.09	-1.57	-8.06	40°13'29.416"N	104°58'25.654"W	2.00	
1517.00†	6.340	259.000	1516.35	17.25	-3.34	-17.20	40°13'29.398"N	104°58'25.772"W	2.00	
1617.00†	8.340	259.000	1615.53	29.83	-5.78	-29.74	40°13'29.374"N	104°58'25.933"W	2.00	
1700.00	10.000	259.000	1697.47	42.85	-8.30	-42.72	40°13'29.349"N	104°58'26.101"W	2.00	END NUDGE
1717.00†	10.000	259.000	1714.21	45.76	-8.87	-45.62	40°13'29.343"N	104°58'26.138"W	0.00	
1817.00†	10.000	259.000	1812.69	62.85	-12.18	-62.67	40°13'29.311"N	104°58'26.358"W	0.00	
1917.00†	10.000	259.000	1911.17	79.95	-15.49	-79.71	40°13'29.278"N	104°58'26.578"W	0.00	
2017.00†	10.000	259.000	2009.65	97.04	-18.81	-96.76	40°13'29.245"N	104°58'26.797"W	0.00	
2117.00†	10.000	259.000	2108.13	114.14	-22.12	-113.80	40°13'29.212"N	104°58'27.017"W	0.00	
2217.00†	10.000	259.000	2206.61	131.24	-25.43	-130.85	40°13'29.180"N	104°58'27.237"W	0.00	
2317.00†	10.000	259.000	2305.09	148.33	-28.75	-147.90	40°13'29.147"N	104°58'27.457"W	0.00	
2417.00†	10.000	259.000	2403.57	165.43	-32.06	-164.94	40°13'29.114"N	104°58'27.676"W	0.00	
2517.00†	10.000	259.000	2502.05	182.52	-35.37	-181.99	40°13'29.081"N	104°58'27.896"W	0.00	
2617.00†	10.000	259.000	2600.53	199.62	-38.69	-199.03	40°13'29.049"N	104°58'28.116"W	0.00	
2717.00†	10.000	259.000	2699.01	216.71	-42.00	-216.08	40°13'29.016"N	104°58'28.336"W	0.00	
2817.00†	10.000	259.000	2797.50	233.81	-45.31	-233.12	40°13'28.983"N	104°58'28.555"W	0.00	
2917.00†	10.000	259.000	2895.98	250.91	-48.63	-250.17	40°13'28.950"N	104°58'28.775"W	0.00	
3017.00†	10.000	259.000	2994.46	268.00	-51.94	-267.22	40°13'28.918"N	104°58'28.995"W	0.00	
3117.00†	10.000	259.000	3092.94	285.10	-55.25	-284.26	40°13'28.885"N	104°58'29.215"W	0.00	
3217.00†	10.000	259.000	3191.42	302.19	-58.57	-301.31	40°13'28.852"N	104°58'29.434"W	0.00	
3317.00†	10.000	259.000	3289.90	319.29	-61.88	-318.35	40°13'28.819"N	104°58'29.654"W	0.00	
3417.00†	10.000	259.000	3388.38	336.39	-65.19	-335.40	40°13'28.787"N	104°58'29.874"W	0.00	
3517.00†	10.000	259.000	3486.86	353.48	-68.51	-352.44	40°13'28.754"N	104°58'30.094"W	0.00	
3617.00†	10.000	259.000	3585.34	370.58	-71.82	-369.49	40°13'28.721"N	104°58'30.313"W	0.00	
3683.67†	10.000	259.000	3651.00	381.98	-74.03	-380.86	40°13'28.699"N	104°58'30.460"W	0.00	PARKMAN
3717.00†	10.000	259.000	3683.82	387.67	-75.14	-386.54	40°13'28.688"N	104°58'30.533"W	0.00	
3817.00†	10.000	259.000	3782.30	404.77	-78.45	-403.58	40°13'28.656"N	104°58'30.753"W	0.00	

Planned Wellpath Report

DOCHEFF 12C-15HZ (PERMIT REV-1) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (149 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	259.000	3880.78	421.87	-81.76	-420.63	40°13'28.623"N	104°58'30.973"W	0.00	
4017.00†	10.000	259.000	3979.26	438.96	-85.08	-437.67	40°13'28.590"N	104°58'31.192"W	0.00	
4117.00†	10.000	259.000	4077.75	456.06	-88.39	-454.72	40°13'28.558"N	104°58'31.412"W	0.00	
4217.00†	10.000	259.000	4176.23	473.15	-91.70	-471.77	40°13'28.525"N	104°58'31.632"W	0.00	
4317.00†	10.000	259.000	4274.71	490.25	-95.02	-488.81	40°13'28.492"N	104°58'31.852"W	0.00	
4417.00†	10.000	259.000	4373.19	507.35	-98.33	-505.86	40°13'28.459"N	104°58'32.071"W	0.00	
4517.00†	10.000	259.000	4471.67	524.44	-101.64	-522.90	40°13'28.427"N	104°58'32.291"W	0.00	
4534.60	10.000	259.000	4489.00	527.45	-102.23	-525.90	40°13'28.421"N	104°58'32.330"W	0.00	BEGIN DROP
4617.00†	8.352	259.000	4570.34	540.39	-104.73	-538.80	40°13'28.396"N	104°58'32.496"W	2.00	
4717.00†	6.352	259.000	4669.52	552.99	-107.17	-551.36	40°13'28.372"N	104°58'32.658"W	2.00	
4817.00†	4.352	259.000	4769.08	562.17	-108.95	-560.52	40°13'28.354"N	104°58'32.776"W	2.00	
4917.00†	2.352	259.000	4868.90	567.92	-110.07	-566.26	40°13'28.343"N	104°58'32.850"W	2.00	
5017.00†	0.352	259.000	4968.87	570.25	-110.52	-568.57	40°13'28.339"N	104°58'32.880"W	2.00	
5034.60	0.000	269.095	4986.47	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	2.00	END DROP
5117.00†	0.000	269.095	5068.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5217.00†	0.000	269.095	5168.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5317.00†	0.000	269.095	5268.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5417.00†	0.000	269.095	5368.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5517.00†	0.000	269.095	5468.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5617.00†	0.000	269.095	5568.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5717.00†	0.000	269.095	5668.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5817.00†	0.000	269.095	5768.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
5917.00†	0.000	269.095	5868.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6017.00†	0.000	269.095	5968.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6117.00†	0.000	269.095	6068.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6217.00†	0.000	269.095	6168.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6317.00†	0.000	269.095	6268.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6417.00†	0.000	269.095	6368.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6517.00†	0.000	269.095	6468.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6617.00†	0.000	269.095	6568.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6717.00†	0.000	269.095	6668.87	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	
6791.19	0.000	269.095	6743.06	570.30	-110.53	-568.63	40°13'28.339"N	104°58'32.881"W	0.00	KOP, BUILD @ 10°/100'
6817.00†	2.581	269.095	6768.86	570.88	-110.54	-569.21	40°13'28.339"N	104°58'32.888"W	10.00	
6917.00†	12.581	269.095	6867.86	584.06	-110.75	-582.38	40°13'28.337"N	104°58'33.058"W	10.00	
7017.00†	22.581	269.095	6963.07	614.22	-111.22	-612.54	40°13'28.332"N	104°58'33.447"W	10.00	
7031.08†	23.989	269.095	6976.00	619.79	-111.31	-618.11	40°13'28.331"N	104°58'33.519"W	10.00	SHARON SPRINGS
7109.21†	31.802	269.095	7045.00	656.32	-111.89	-654.63	40°13'28.325"N	104°58'33.990"W	10.00	NIOBRARA
7117.00†	32.581	269.095	7051.59	660.47	-111.95	-658.78	40°13'28.325"N	104°58'34.043"W	10.00	
7176.53†	38.535	269.095	7100.00	695.07	-112.50	-693.38	40°13'28.319"N	104°58'34.489"W	10.00	NIOBRARA B
7217.00†	42.581	269.095	7130.74	721.38	-112.92	-719.68	40°13'28.315"N	104°58'34.828"W	10.00	
7255.22†	46.404	269.095	7158.00	748.16	-113.34	-746.46	40°13'28.311"N	104°58'35.173"W	10.00	NIOBRARA C
7317.00†	52.581	269.095	7198.11	795.11	-114.08	-793.40	40°13'28.304"N	104°58'35.779"W	10.00	
7417.00†	62.581	269.095	7251.65	879.42	-115.41	-877.70	40°13'28.290"N	104°58'36.865"W	10.00	
7504.92†	71.373	269.095	7286.00	960.25	-116.69	-958.53	40°13'28.278"N	104°58'37.907"W	10.00	FORT HAYS
7517.00†	72.581	269.095	7289.74	971.74	-116.87	-970.02	40°13'28.276"N	104°58'38.055"W	10.00	



Planned Wellpath Report

DOCHEFF 12C-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (149 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7583.91†	79.273	269.095	7306.00	1036.61	-117.90	-1034.88	40°13'28.266"N	104°58'38.892"W	10.00	CODELL
7617.00†	82.581	269.095	7311.22	1069.28	-118.41	-1067.54	40°13'28.261"N	104°58'39.313"W	10.00	
7694.97	90.378	269.095	7316.00	1147.04	-119.64	-1145.29	40°13'28.248"N	104°58'40.315"W	10.00	LANDING POINT
7717.00†	90.378	269.095	7315.86	1169.07	-119.99	-1167.32	40°13'28.245"N	104°58'40.599"W	0.00	
7817.00†	90.378	269.095	7315.20	1269.07	-121.57	-1267.30	40°13'28.229"N	104°58'41.888"W	0.00	
7917.00†	90.378	269.095	7314.54	1369.06	-123.15	-1367.29	40°13'28.214"N	104°58'43.177"W	0.00	
8017.00†	90.378	269.095	7313.88	1469.06	-124.73	-1467.28	40°13'28.198"N	104°58'44.466"W	0.00	
8117.00†	90.378	269.095	7313.22	1569.06	-126.31	-1567.26	40°13'28.182"N	104°58'45.755"W	0.00	
8217.00†	90.378	269.095	7312.56	1669.06	-127.89	-1667.25	40°13'28.167"N	104°58'47.044"W	0.00	
8317.00†	90.378	269.095	7311.90	1769.06	-129.47	-1767.23	40°13'28.151"N	104°58'48.333"W	0.00	
8417.00†	90.378	269.095	7311.24	1869.05	-131.05	-1867.22	40°13'28.135"N	104°58'49.622"W	0.00	
8517.00†	90.378	269.095	7310.58	1969.05	-132.63	-1967.20	40°13'28.120"N	104°58'50.911"W	0.00	
8617.00†	90.378	269.095	7309.92	2069.05	-134.21	-2067.19	40°13'28.104"N	104°58'52.200"W	0.00	
8717.00†	90.378	269.095	7309.26	2169.05	-135.79	-2167.17	40°13'28.088"N	104°58'53.489"W	0.00	
8817.00†	90.378	269.095	7308.60	2269.04	-137.38	-2267.16	40°13'28.072"N	104°58'54.778"W	0.00	
8917.00†	90.378	269.095	7307.94	2369.04	-138.96	-2367.14	40°13'28.057"N	104°58'56.067"W	0.00	
9017.00†	90.378	269.095	7307.28	2469.04	-140.54	-2467.13	40°13'28.041"N	104°58'57.356"W	0.00	
9117.00†	90.378	269.095	7306.62	2569.04	-142.12	-2567.11	40°13'28.025"N	104°58'58.645"W	0.00	
9211.39†	90.378	269.095	7306.00	2663.42	-143.61	-2661.49	40°13'28.010"N	104°58'59.862"W	0.00	CODELL
9217.00†	90.378	269.095	7305.96	2669.04	-143.70	-2667.10	40°13'28.010"N	104°58'59.934"W	0.00	
9317.00†	90.378	269.095	7305.30	2769.03	-145.28	-2767.08	40°13'27.994"N	104°59'01.223"W	0.00	
9417.00†	90.378	269.095	7304.64	2869.03	-146.86	-2867.07	40°13'27.978"N	104°59'02.512"W	0.00	
9517.00†	90.378	269.095	7303.98	2969.03	-148.44	-2967.06	40°13'27.962"N	104°59'03.801"W	0.00	
9617.00†	90.378	269.095	7303.32	3069.03	-150.02	-3067.04	40°13'27.947"N	104°59'05.090"W	0.00	
9717.00†	90.378	269.095	7302.67	3169.03	-151.60	-3167.03	40°13'27.931"N	104°59'06.379"W	0.00	
9817.00†	90.378	269.095	7302.01	3269.02	-153.18	-3267.01	40°13'27.915"N	104°59'07.668"W	0.00	
9917.00†	90.378	269.095	7301.35	3369.02	-154.76	-3367.00	40°13'27.899"N	104°59'08.957"W	0.00	
10017.00†	90.378	269.095	7300.69	3469.02	-156.34	-3466.98	40°13'27.884"N	104°59'10.246"W	0.00	
10117.00†	90.378	269.095	7300.03	3569.02	-157.92	-3566.97	40°13'27.868"N	104°59'11.535"W	0.00	
10217.00†	90.378	269.095	7299.37	3669.01	-159.50	-3666.95	40°13'27.852"N	104°59'12.824"W	0.00	
10317.00†	90.378	269.095	7298.71	3769.01	-161.08	-3766.94	40°13'27.836"N	104°59'14.113"W	0.00	
10417.00†	90.378	269.095	7298.05	3869.01	-162.66	-3866.92	40°13'27.821"N	104°59'15.402"W	0.00	
10517.00†	90.378	269.095	7297.39	3969.01	-164.24	-3966.91	40°13'27.805"N	104°59'16.691"W	0.00	
10617.00†	90.378	269.095	7296.73	4069.01	-165.82	-4066.89	40°13'27.789"N	104°59'17.980"W	0.00	
10717.00†	90.378	269.095	7296.07	4169.00	-167.40	-4166.88	40°13'27.773"N	104°59'19.269"W	0.00	
10817.00†	90.378	269.095	7295.41	4269.00	-168.98	-4266.86	40°13'27.758"N	104°59'20.558"W	0.00	
10917.00†	90.378	269.095	7294.75	4369.00	-170.56	-4366.85	40°13'27.742"N	104°59'21.847"W	0.00	
11017.00†	90.378	269.095	7294.09	4469.00	-172.14	-4466.84	40°13'27.726"N	104°59'23.136"W	0.00	
11117.00†	90.378	269.095	7293.43	4568.99	-173.72	-4566.82	40°13'27.710"N	104°59'24.425"W	0.00	
11217.00†	90.378	269.095	7292.77	4668.99	-175.30	-4666.81	40°13'27.694"N	104°59'25.714"W	0.00	
11317.00†	90.378	269.095	7292.11	4768.99	-176.88	-4766.79	40°13'27.679"N	104°59'27.003"W	0.00	
11417.00†	90.378	269.095	7291.45	4868.99	-178.46	-4866.78	40°13'27.663"N	104°59'28.292"W	0.00	
11517.00†	90.378	269.095	7290.79	4968.99	-180.04	-4966.76	40°13'27.647"N	104°59'29.581"W	0.00	
11617.00†	90.378	269.095	7290.14	5068.98	-181.62	-5066.75	40°13'27.631"N	104°59'30.870"W	0.00	
11717.00†	90.378	269.095	7289.48	5168.98	-183.20	-5166.73	40°13'27.615"N	104°59'32.159"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (149 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11817.00†	90.378	269.095	7288.82	5268.98	-184.78	-5266.72	40°13'27.599"N	104°59'33.448"W	0.00	
11917.00†	90.378	269.095	7288.16	5368.98	-186.36	-5366.70	40°13'27.584"N	104°59'34.737"W	0.00	
12017.00†	90.378	269.095	7287.50	5468.98	-187.94	-5466.69	40°13'27.568"N	104°59'36.026"W	0.00	
12117.00†	90.378	269.095	7286.84	5568.97	-189.52	-5566.67	40°13'27.552"N	104°59'37.315"W	0.00	
12217.00†	90.378	269.095	7286.18	5668.97	-191.10	-5666.66	40°13'27.536"N	104°59'38.604"W	0.00	
12244.00†	90.378	269.095	7286.00	5695.97	-191.53	-5693.66	40°13'27.532"N	104°59'38.952"W	0.00	FORT HAYS
12317.00†	90.378	269.095	7285.52	5768.97	-192.68	-5766.64	40°13'27.520"N	104°59'39.893"W	0.00	
12417.00†	90.378	269.095	7284.86	5868.97	-194.27	-5866.63	40°13'27.504"N	104°59'41.182"W	0.00	
12517.00†	90.378	269.095	7284.20	5968.96	-195.85	-5966.62	40°13'27.489"N	104°59'42.471"W	0.00	
12617.00†	90.378	269.095	7283.54	6068.96	-197.43	-6066.60	40°13'27.473"N	104°59'43.760"W	0.00	
12717.00†	90.378	269.095	7282.88	6168.96	-199.01	-6166.59	40°13'27.457"N	104°59'45.049"W	0.00	
12817.00†	90.378	269.095	7282.22	6268.96	-200.59	-6266.57	40°13'27.441"N	104°59'46.338"W	0.00	
12917.00†	90.378	269.095	7281.56	6368.96	-202.17	-6366.56	40°13'27.425"N	104°59'47.627"W	0.00	
13002.16	90.378	269.095	7281.00 [†]	6454.11	-203.51	-6451.70	40°13'27.412"N	104°59'48.725"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -									
Ref Wellbore: DOCHEFF 12C-15HZ PWB Ref Wellpath: DOCHEFF 12C-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	7694.97	6951.97	743.00	7316.00	0.00	0.00	-119.64	-1145.29
7in Casing Intermediate	17.00	7694.97	7677.97	17.00	7316.00	0.00	0.00	-119.64	-1145.29
6.125in Open Hole	7694.97	13002.16	5307.19	7316.00	7281.00	-119.64	-1145.29	-203.51	-6451.70
4.5in Casing Production	17.00	13002.16	12985.16	17.00	7281.00	0.00	0.00	-203.51	-6451.70



Planned Wellpath Report

DOCHEFF 12C-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-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	2309.95	8320.03	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		0.00	2309.95	8320.03	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.15-T3N-R68W SECTION LINES		0.00	75.79	48.25	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
1) DOCHEFF 12C-15HZ BHL ON PLAT REV-1 (2035'FSL & 460'FWL, SEC.15)	13002.16	7281.00	-203.51	-6451.70	3140489.92	1324946.20	40°13'27.412"N	104°59'48.725"W	point
DOCHEFF 12C-15HZ LANDBOX		7281.00	0.00	0.00	3146940.01	1325187.98	40°13'29.431"N	104°58'25.550"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 12C-15HZ PWB Ref Wellpath: DOCHEFF 12C-15HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13002.16	NaviTrak (IFR)		DOCHEFF 12C-15HZ PWB



Planned Wellpath Report

DOCHEFF 12C-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 DOCHEFF 12C-15HZ (2152'FSL & 1646'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 12C-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 12C-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
551.00	0.000	259.000	551.00	BASE FOX HILLS
743.00	0.000	259.000	743.00	SURFACE CSG SETTING DEPTH
3683.67	10.000	259.000	3651.00	PARKMAN
7031.08	23.989	269.095	6976.00	SHARON SPRINGS
7109.21	31.802	269.095	7045.00	NIOBRARA
7176.53	38.535	269.095	7100.00	NIOBRARA B
7255.22	46.404	269.095	7158.00	NIOBRARA C
7504.92	71.373	269.095	7286.00	FORT HAYS
7583.91	79.273	269.095	7306.00	CODELL
9211.39	90.378	269.095	7306.00	CODELL
12244.00	90.378	269.095	7286.00	FORT HAYS

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	259.000	17.00	TIE ON
1200.00	0.000	259.000	1200.00	BEGIN NUDGE
1700.00	10.000	259.000	1697.47	END NUDGE
4534.60	10.000	259.000	4489.00	BEGIN DROP
5034.60	0.000	269.095	4986.47	END DROP
6791.19	0.000	269.095	6743.06	KOP, BUILD @ 10°/100'
7694.97	90.378	269.095	7316.00	LANDING POINT
13002.16	90.378	269.095	7281.00	TOTAL DEPTH