

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)  
 Field: WELD COUNTY (KERR MCGEE) Well: DOCHEFF 32N-15HZ  
 Facility: SEC.14-T3N-R68W Wellbore: DOCHEFF 32N-15HZ PWB

Plot reference wellpath is DOCHEFF 32N-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#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robain01 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#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)	1508.11	214.40	3146971.822	1325238.871	40°13'29.932"N	104°58'25.136"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14))	4951ft					
Mean Sea Level to Mud line (At Slot: SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14))	0ft					
PERMIT (17KB) (RKB) to Mean Sea Level	4951ft					

## Survey Program

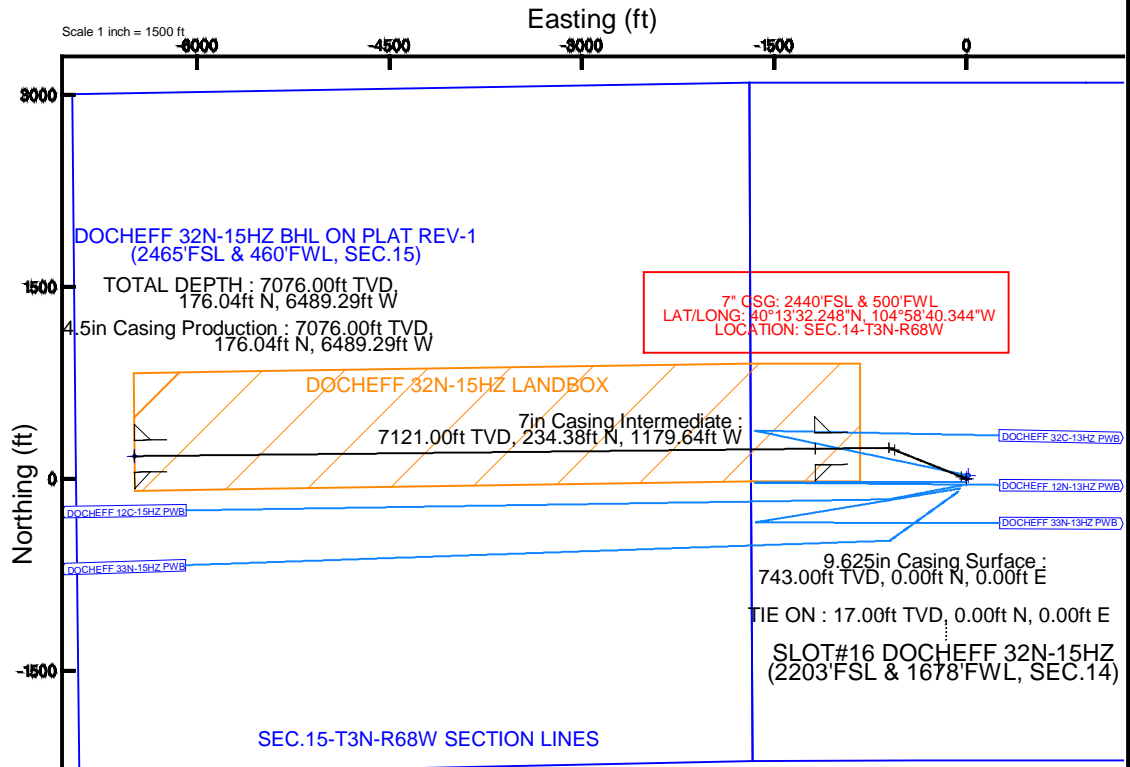
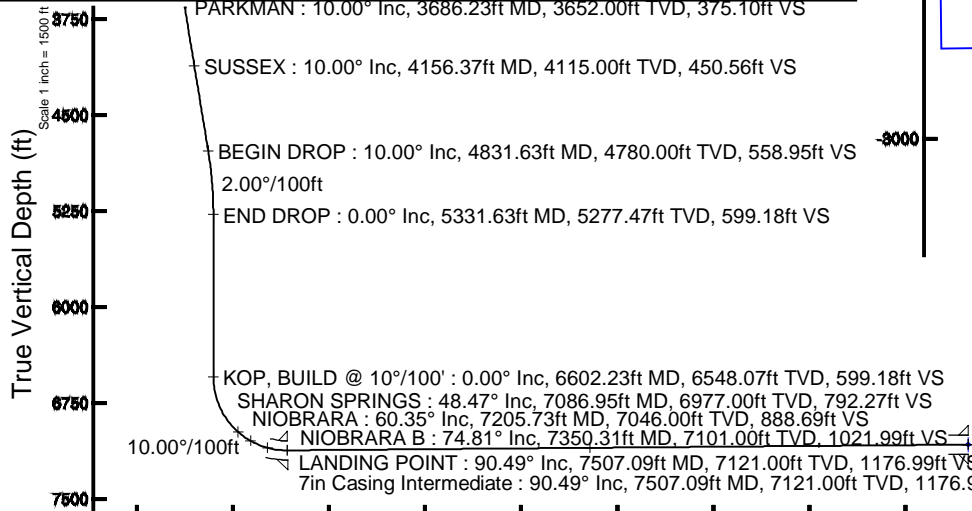
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12817.25	NaviTrak	NaviTrak	(IFR)	DOCHEFF 32N-15HZ PWB

## 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	2259.25	8287.92	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	
SEC.14-T3N-R68W SECTION LINES	0.00	2259.25	8287.92	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	
SEC.15-T3N-R68W SECTION LINES	0.00	25.10	16.13	3146967.81	1325264.06	40°13'30.180"N	104°58'24.928"W	
DOCHEFF 32N-15HZ BHL ON PLAT REV-1 (2465'FSL & 460'FWL, SEC.15)	12817.25	7076.00	176.04	-6489.29	3140481.89	1325376.38	40°13'31.663"N	104°58'48.797"W
DOCHEFF 32N-15HZ LANDBOX	7076.00	0.00	0.00	3146971.82	1325238.87	40°13'29.932"N	104°58'25.136"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	291.800	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1100.00	0.000	291.800	1100.00	0.00	0.00	0.00	0.00
END NUDGE	1600.00	10.000	291.800	1597.47	16.16	-40.41	2.00	40.23
BEGIN DROP	4831.63	10.000	291.800	4780.00	224.56	-561.45	0.00	558.95
END DROP	5331.63	0.000	269.371	5277.47	240.73	-601.86	2.00	599.18
KOP, BUILD @ 10°/100'	6602.23	0.000	269.371	6548.07	240.73	-601.86	0.00	599.18
LANDING POINT	7507.09	90.486	269.371	7121.00	234.38	-1179.63	10.00	1176.99
TOTAL DEPTH	12817.25	90.486	269.371	7076.00	176.04	-6489.29	0.00	6486.96



DOCHEFF 32N-15HZ BHL ON PLAT REV-1 (2465'FSL & 460'FWL, SEC.15)  
 4.5in Casing Production : 90.49° Inc, 12817.25ft MD, 7076.00ft TVD, 6486.96ft VS  
 TOTAL DEPTH : 90.49° Inc, 12817.25ft MD, 7076.00ft TVD, 6486.96ft VS

Scale 1 inch = 1500 ft



# Planned Wellpath Report

## DOCHEFF 32N-15HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	<b>KERR-MCGEE OIL &amp; GAS ONSHORE LP</b>	Slot	<b>SLOT#16 DOCHEFF 32N-15HZ (2203'FSL &amp; 1678'FWL, SEC.14)</b>
Area	<b>COLORADO</b>	Well	<b>DOCHEFF 32N-15HZ</b>
Field	<b>WELD COUNTY (KERR MCGEE)</b>	Wellbore	<b>DOCHEFF 32N-15HZ PWB</b>
Facility	<b>SEC.14-T3N-R68W</b>		

REPORT SETUP INFORMATION			
Projection System	<b>NAD83 / Lambert Colorado SP, Northern Zone (501), US feet</b>	Software System	<b>WellArchitect® 4.0.0</b>
North Reference	<b>True</b>	User	<b>Robiale01</b>
Scale	<b>0.999957</b>	Report Generated	<b>9/10/2014 at 2:38:46 PM</b>
Convergence at slot	<b>n/a</b>	Database/Source file	<b>WellArchitectDB/DOCHEFF_32N-15HZ_PWB.xml</b>

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	1508.11	214.40	3146971.82	1325238.87	<b>40°13'29.932"N</b>	<b>104°58'25.136"W</b>
Facility Reference Pt			3146766.38	1323729.59	<b>40°13'15.029"N</b>	<b>104°58'27.900"W</b>
Field Reference Pt			<b>3197771.84</b>	<b>1268891.29</b>	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	<b>Minimum curvature</b>	PERMIT (17'KB) (RKB) to Facility Vertical Datum	<b>4951.00ft</b>
Horizontal Reference Pt	<b>Slot</b>	PERMIT (17'KB) (RKB) to Mean Sea Level	<b>4951.00ft</b>
Vertical Reference Pt	<b>PERMIT (17'KB) (RKB)</b>	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14))	<b>4951.00ft</b>
MD Reference Pt	<b>PERMIT (17'KB) (RKB)</b>	Section Origin	<b>N 0.00, E 0.00 ft</b>
Field Vertical Reference	<b>Mean Sea Level</b>	Section Azimuth	<b>269.37°</b>



# Planned Wellpath Report

## DOCHEFF 32N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (145 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	291.800	0.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
17.00	0.000	291.800	17.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	TIE ON
117.00†	0.000	291.800	117.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
217.00†	0.000	291.800	217.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
317.00†	0.000	291.800	317.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
417.00†	0.000	291.800	417.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
517.00†	0.000	291.800	517.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
551.00†	0.000	291.800	551.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	BASE FOX HILLS
617.00†	0.000	291.800	617.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
717.00†	0.000	291.800	717.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
743.00†	0.000	291.800	743.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	291.800	817.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
917.00†	0.000	291.800	917.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
1017.00†	0.000	291.800	1017.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	
1100.00	0.000	291.800	1100.00	0.00	0.00	0.00	40°13'29.932"N	104°58'25.136"W	0.00	BEGIN NUDGE
1117.00†	0.340	291.800	1117.00	0.05	0.02	-0.05	40°13'29.932"N	104°58'25.137"W	2.00	
1217.00†	2.340	291.800	1216.97	2.21	0.89	-2.22	40°13'29.941"N	104°58'25.165"W	2.00	
1317.00†	4.340	291.800	1316.79	7.59	3.05	-7.63	40°13'29.962"N	104°58'25.234"W	2.00	
1417.00†	6.340	291.800	1416.35	16.20	6.51	-16.27	40°13'29.996"N	104°58'25.346"W	2.00	
1517.00†	8.340	291.800	1515.53	28.00	11.25	-28.13	40°13'30.043"N	104°58'25.499"W	2.00	
1600.00	10.000	291.800	1597.47	40.23	16.16	-40.41	40°13'30.092"N	104°58'25.657"W	2.00	END NUDGE
1617.00†	10.000	291.800	1614.21	42.96	17.26	-43.15	40°13'30.103"N	104°58'25.692"W	0.00	
1717.00†	10.000	291.800	1712.69	59.01	23.71	-59.27	40°13'30.166"N	104°58'25.900"W	0.00	
1817.00†	10.000	291.800	1811.17	75.06	30.16	-75.40	40°13'30.230"N	104°58'26.108"W	0.00	
1917.00†	10.000	291.800	1909.65	91.11	36.61	-91.52	40°13'30.294"N	104°58'26.316"W	0.00	
2017.00†	10.000	291.800	2008.13	107.16	43.05	-107.64	40°13'30.357"N	104°58'26.524"W	0.00	
2117.00†	10.000	291.800	2106.61	123.22	49.50	-123.77	40°13'30.421"N	104°58'26.732"W	0.00	
2217.00†	10.000	291.800	2205.09	139.27	55.95	-139.89	40°13'30.485"N	104°58'26.939"W	0.00	
2317.00†	10.000	291.800	2303.57	155.32	62.40	-156.01	40°13'30.549"N	104°58'27.147"W	0.00	
2417.00†	10.000	291.800	2402.05	171.37	68.85	-172.13	40°13'30.612"N	104°58'27.355"W	0.00	
2517.00†	10.000	291.800	2500.53	187.42	75.30	-188.26	40°13'30.676"N	104°58'27.563"W	0.00	
2617.00†	10.000	291.800	2599.01	203.47	81.75	-204.38	40°13'30.740"N	104°58'27.771"W	0.00	
2717.00†	10.000	291.800	2697.50	219.52	88.20	-220.50	40°13'30.804"N	104°58'27.979"W	0.00	
2817.00†	10.000	291.800	2795.98	235.57	94.64	-236.63	40°13'30.867"N	104°58'28.187"W	0.00	
2917.00†	10.000	291.800	2894.46	251.62	101.09	-252.75	40°13'30.931"N	104°58'28.394"W	0.00	
3017.00†	10.000	291.800	2992.94	267.68	107.54	-268.87	40°13'30.995"N	104°58'28.602"W	0.00	
3117.00†	10.000	291.800	3091.42	283.73	113.99	-285.00	40°13'31.058"N	104°58'28.810"W	0.00	
3217.00†	10.000	291.800	3189.90	299.78	120.44	-301.12	40°13'31.122"N	104°58'29.018"W	0.00	
3317.00†	10.000	291.800	3288.38	315.83	126.89	-317.24	40°13'31.186"N	104°58'29.226"W	0.00	
3417.00†	10.000	291.800	3386.86	331.88	133.34	-333.36	40°13'31.250"N	104°58'29.434"W	0.00	
3517.00†	10.000	291.800	3485.34	347.93	139.79	-349.49	40°13'31.313"N	104°58'29.642"W	0.00	
3617.00†	10.000	291.800	3583.82	363.98	146.23	-365.61	40°13'31.377"N	104°58'29.849"W	0.00	
3686.23†	10.000	291.800	3652.00	375.10	150.70	-376.77	40°13'31.421"N	104°58'29.993"W	0.00	PARKMAN
3717.00†	10.000	291.800	3682.30	380.03	152.68	-381.73	40°13'31.441"N	104°58'30.057"W	0.00	
3817.00†	10.000	291.800	3780.78	396.09	159.13	-397.86	40°13'31.504"N	104°58'30.265"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-15HZ PWB
Facility	SEC.14-T3N-R68W		

**WELLPATH DATA (145 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	291.800	3879.26	412.14	165.58	-413.98	40°13'31.568"N	104°58'30.473"W	0.00	
4017.00†	10.000	291.800	3977.75	428.19	172.03	-430.10	40°13'31.632"N	104°58'30.681"W	0.00	
4117.00†	10.000	291.800	4076.23	444.24	178.48	-446.23	40°13'31.696"N	104°58'30.889"W	0.00	
4156.37†	10.000	291.800	4115.00	450.56	181.02	-452.57	40°13'31.721"N	104°58'30.971"W	0.00	SUSSEX
4217.00†	10.000	291.800	4174.71	460.29	184.93	-462.35	40°13'31.759"N	104°58'31.097"W	0.00	
4317.00†	10.000	291.800	4273.19	476.34	191.38	-478.47	40°13'31.823"N	104°58'31.305"W	0.00	
4417.00†	10.000	291.800	4371.67	492.39	197.82	-494.59	40°13'31.887"N	104°58'31.512"W	0.00	
4517.00†	10.000	291.800	4470.15	508.44	204.27	-510.72	40°13'31.951"N	104°58'31.720"W	0.00	
4617.00†	10.000	291.800	4568.63	524.50	210.72	-526.84	40°13'32.014"N	104°58'31.928"W	0.00	
4717.00†	10.000	291.800	4667.11	540.55	217.17	-542.96	40°13'32.078"N	104°58'32.136"W	0.00	
4817.00†	10.000	291.800	4765.59	556.60	223.62	-559.09	40°13'32.142"N	104°58'32.344"W	0.00	
4831.63	10.000	291.800	4780.00	558.95	224.56	-561.45	40°13'32.151"N	104°58'32.374"W	0.00	BEGIN DROP
4917.00†	8.293	291.800	4864.28	571.49	229.60	-574.04	40°13'32.201"N	104°58'32.537"W	2.00	
5017.00†	6.293	291.800	4963.47	583.22	234.32	-585.83	40°13'32.247"N	104°58'32.689"W	2.00	
5117.00†	4.293	291.800	5063.04	591.75	237.74	-594.39	40°13'32.281"N	104°58'32.799"W	2.00	
5217.00†	2.293	291.800	5162.87	597.06	239.87	-599.73	40°13'32.302"N	104°58'32.868"W	2.00	
5317.00†	0.293	291.800	5262.84	599.14	240.71	-601.82	40°13'32.311"N	104°58'32.895"W	2.00	
5331.63	0.000	269.371	5277.47	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	2.00	END DROP
5417.00†	0.000	269.371	5362.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
5517.00†	0.000	269.371	5462.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
5617.00†	0.000	269.371	5562.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
5717.00†	0.000	269.371	5662.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
5817.00†	0.000	269.371	5762.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
5917.00†	0.000	269.371	5862.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6017.00†	0.000	269.371	5962.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6117.00†	0.000	269.371	6062.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6217.00†	0.000	269.371	6162.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6317.00†	0.000	269.371	6262.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6417.00†	0.000	269.371	6362.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6517.00†	0.000	269.371	6462.84	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	
6602.23	0.000	269.371	6548.07	599.18	240.73	-601.86	40°13'32.311"N	104°58'32.895"W	0.00	KOP, BUILD @ 10°/100'
6617.00†	1.477	269.371	6562.83	599.37	240.72	-602.05	40°13'32.311"N	104°58'32.898"W	10.00	
6717.00†	11.477	269.371	6662.07	610.63	240.60	-613.31	40°13'32.310"N	104°58'33.043"W	10.00	
6817.00†	21.477	269.371	6757.84	638.96	240.29	-641.64	40°13'32.306"N	104°58'33.408"W	10.00	
6917.00†	31.477	269.371	6847.24	683.49	239.80	-686.16	40°13'32.302"N	104°58'33.982"W	10.00	
7017.00†	41.477	269.371	6927.55	742.86	239.15	-745.53	40°13'32.295"N	104°58'34.748"W	10.00	
7086.95†	48.472	269.371	6977.00	792.27	238.60	-794.94	40°13'32.290"N	104°58'35.384"W	10.00	SHARON SPRINGS
7117.00†	51.477	269.371	6996.32	815.28	238.35	-817.95	40°13'32.287"N	104°58'35.681"W	10.00	
7205.73†	60.350	269.371	7046.00	888.69	237.54	-891.35	40°13'32.279"N	104°58'36.627"W	10.00	NIORARA
7217.00†	61.477	269.371	7051.48	898.54	237.44	-901.20	40°13'32.278"N	104°58'36.754"W	10.00	
7317.00†	71.477	269.371	7091.34	990.11	236.43	-992.77	40°13'32.268"N	104°58'37.935"W	10.00	
7350.31†	74.808	269.371	7101.00	1021.99	236.08	-1024.64	40°13'32.265"N	104°58'38.346"W	10.00	NIORARA B
7417.00†	81.477	269.371	7114.70	1087.22	235.36	-1089.87	40°13'32.258"N	104°58'39.187"W	10.00	
7507.09	90.486	269.371	7121.00	1176.99	234.38	-1179.63	40°13'32.248"N	104°58'40.344"W	10.00	LANDING POINT
7517.00†	90.486	269.371	7120.92	1186.90	234.27	-1189.55	40°13'32.247"N	104°58'40.472"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (145 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	269.371	7120.07	1286.90	233.17	-1289.54	40°13'32.236"N	104°58'41.761"W	0.00	
7717.00†	90.486	269.371	7119.22	1386.90	232.07	-1389.53	40°13'32.225"N	104°58'43.050"W	0.00	
7817.00†	90.486	269.371	7118.38	1486.89	230.97	-1489.52	40°13'32.214"N	104°58'44.339"W	0.00	
7917.00†	90.486	269.371	7117.53	1586.89	229.87	-1589.51	40°13'32.203"N	104°58'45.628"W	0.00	
8017.00†	90.486	269.371	7116.68	1686.89	228.77	-1689.50	40°13'32.192"N	104°58'46.917"W	0.00	
8117.00†	90.486	269.371	7115.83	1786.88	227.68	-1789.49	40°13'32.181"N	104°58'48.206"W	0.00	
8217.00†	90.486	269.371	7114.99	1886.88	226.58	-1889.48	40°13'32.170"N	104°58'49.495"W	0.00	
8317.00†	90.486	269.371	7114.14	1986.87	225.48	-1989.47	40°13'32.159"N	104°58'50.785"W	0.00	
8417.00†	90.486	269.371	7113.29	2086.87	224.38	-2089.46	40°13'32.148"N	104°58'52.074"W	0.00	
8517.00†	90.486	269.371	7112.44	2186.87	223.28	-2189.45	40°13'32.138"N	104°58'53.363"W	0.00	
8617.00†	90.486	269.371	7111.60	2286.86	222.18	-2289.44	40°13'32.127"N	104°58'54.652"W	0.00	
8717.00†	90.486	269.371	7110.75	2386.86	221.08	-2389.43	40°13'32.116"N	104°58'55.941"W	0.00	
8817.00†	90.486	269.371	7109.90	2486.86	219.99	-2489.42	40°13'32.105"N	104°58'57.230"W	0.00	
8917.00†	90.486	269.371	7109.05	2586.85	218.89	-2589.41	40°13'32.094"N	104°58'58.519"W	0.00	
9017.00†	90.486	269.371	7108.21	2686.85	217.79	-2689.40	40°13'32.083"N	104°58'59.808"W	0.00	
9117.00†	90.486	269.371	7107.36	2786.85	216.69	-2789.39	40°13'32.072"N	104°59'01.097"W	0.00	
9217.00†	90.486	269.371	7106.51	2886.84	215.59	-2889.38	40°13'32.061"N	104°59'02.386"W	0.00	
9317.00†	90.486	269.371	7105.66	2986.84	214.49	-2989.37	40°13'32.050"N	104°59'03.675"W	0.00	
9417.00†	90.486	269.371	7104.82	3086.84	213.39	-3089.36	40°13'32.039"N	104°59'04.965"W	0.00	
9517.00†	90.486	269.371	7103.97	3186.83	212.30	-3189.35	40°13'32.028"N	104°59'06.254"W	0.00	
9617.00†	90.486	269.371	7103.12	3286.83	211.20	-3289.34	40°13'32.017"N	104°59'07.543"W	0.00	
9717.00†	90.486	269.371	7102.27	3386.82	210.10	-3389.34	40°13'32.006"N	104°59'08.832"W	0.00	
9817.00†	90.486	269.371	7101.43	3486.82	209.00	-3489.33	40°13'31.995"N	104°59'10.121"W	0.00	
9867.33†	90.486	269.371	7101.00	3537.15	208.45	-3539.65	40°13'31.989"N	104°59'10.770"W	0.00	NIORARA B
9917.00†	90.486	269.371	7100.58	3586.82	207.90	-3589.32	40°13'31.984"N	104°59'11.410"W	0.00	
10017.00†	90.486	269.371	7099.73	3686.81	206.80	-3689.31	40°13'31.973"N	104°59'12.699"W	0.00	
10117.00†	90.486	269.371	7098.88	3786.81	205.70	-3789.30	40°13'31.962"N	104°59'13.988"W	0.00	
10217.00†	90.486	269.371	7098.04	3886.81	204.61	-3889.29	40°13'31.951"N	104°59'15.277"W	0.00	
10317.00†	90.486	269.371	7097.19	3986.80	203.51	-3989.28	40°13'31.940"N	104°59'16.566"W	0.00	
10417.00†	90.486	269.371	7096.34	4086.80	202.41	-4089.27	40°13'31.929"N	104°59'17.855"W	0.00	
10517.00†	90.486	269.371	7095.49	4186.80	201.31	-4189.26	40°13'31.918"N	104°59'19.145"W	0.00	
10617.00†	90.486	269.371	7094.65	4286.79	200.21	-4289.25	40°13'31.907"N	104°59'20.434"W	0.00	
10717.00†	90.486	269.371	7093.80	4386.79	199.11	-4389.24	40°13'31.896"N	104°59'21.723"W	0.00	
10817.00†	90.486	269.371	7092.95	4486.79	198.01	-4489.23	40°13'31.885"N	104°59'23.012"W	0.00	
10917.00†	90.486	269.371	7092.10	4586.78	196.92	-4589.22	40°13'31.874"N	104°59'24.301"W	0.00	
11017.00†	90.486	269.371	7091.26	4686.78	195.82	-4689.21	40°13'31.863"N	104°59'25.590"W	0.00	
11117.00†	90.486	269.371	7090.41	4786.77	194.72	-4789.20	40°13'31.852"N	104°59'26.879"W	0.00	
11217.00†	90.486	269.371	7089.56	4886.77	193.62	-4889.19	40°13'31.841"N	104°59'28.168"W	0.00	
11317.00†	90.486	269.371	7088.71	4986.77	192.52	-4989.18	40°13'31.830"N	104°59'29.457"W	0.00	
11417.00†	90.486	269.371	7087.87	5086.76	191.42	-5089.17	40°13'31.818"N	104°59'30.746"W	0.00	
11517.00†	90.486	269.371	7087.02	5186.76	190.32	-5189.16	40°13'31.807"N	104°59'32.035"W	0.00	
11617.00†	90.486	269.371	7086.17	5286.76	189.22	-5289.15	40°13'31.796"N	104°59'33.325"W	0.00	
11717.00†	90.486	269.371	7085.32	5386.75	188.13	-5389.14	40°13'31.785"N	104°59'34.614"W	0.00	
11817.00†	90.486	269.371	7084.48	5486.75	187.03	-5489.13	40°13'31.774"N	104°59'35.903"W	0.00	
11917.00†	90.486	269.371	7083.63	5586.75	185.93	-5589.12	40°13'31.763"N	104°59'37.192"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12017.00†	90.486	269.371	7082.78	5686.74	184.83	-5689.11	40°13'31.752"N	104°59'38.481"W	0.00	
12117.00†	90.486	269.371	7081.93	5786.74	183.73	-5789.10	40°13'31.741"N	104°59'39.770"W	0.00	
12217.00†	90.486	269.371	7081.09	5886.73	182.63	-5889.09	40°13'31.730"N	104°59'41.059"W	0.00	
12317.00†	90.486	269.371	7080.24	5986.73	181.53	-5989.09	40°13'31.719"N	104°59'42.348"W	0.00	
12417.00†	90.486	269.371	7079.39	6086.73	180.44	-6089.08	40°13'31.708"N	104°59'43.637"W	0.00	
12517.00†	90.486	269.371	7078.54	6186.72	179.34	-6189.07	40°13'31.697"N	104°59'44.926"W	0.00	
12617.00†	90.486	269.371	7077.70	6286.72	178.24	-6289.06	40°13'31.685"N	104°59'46.215"W	0.00	
12717.00†	90.486	269.371	7076.85	6386.72	177.14	-6389.05	40°13'31.674"N	104°59'47.504"W	0.00	
12817.00†	90.486	269.371	7076.00	6486.71	176.04	-6489.04	40°13'31.663"N	104°59'48.794"W	0.00	
12817.25	90.486	269.371	7076.00 <sup>1</sup>	6486.96	176.04	-6489.29	40°13'31.663"N	104°59'48.797"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -										
Ref Wellbore: DOCHEFF 32N-15HZ PWB    Ref Wellpath: DOCHEFF 32N-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	7507.09	6764.09	743.00	7121.00	0.00	0.00	234.38	-1179.64	
7in Casing Intermediate	17.00	7507.09	7490.09	17.00	7121.00	0.00	0.00	234.38	-1179.64	
6.125in Open Hole	7507.09	12817.25	5310.16	7121.00	7076.00	234.38	-1179.64	176.04	-6489.29	
4.5in Casing Production	17.00	12817.25	12800.25	17.00	7076.00	0.00	0.00	176.04	-6489.29	



# Planned Wellpath Report

## DOCHEFF 32N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-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	2259.25	8287.92	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		0.00	2259.25	8287.92	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.15-T3N-R68W SECTION LINES		0.00	25.10	16.13	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
1) DOCHEFF 32N-15HZ BHL ON PLAT REV-1 (2465'FSL & 460'FWL, SEC.15)	12817.25	7076.00	176.04	-6489.29	3140481.89	1325376.38	40°13'31.663"N	104°59'48.797"W	point
DOCHEFF 32N-15HZ LANDBOX		7076.00	0.00	0.00	3146971.82	1325238.87	40°13'29.932"N	104°58'25.136"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 32N-15HZ PWB    Ref Wellpath: DOCHEFF 32N-15HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12817.25	NaviTrak (IFR)		DOCHEFF 32N-15HZ PWB



# Planned Wellpath Report

## DOCHEFF 32N-15HZ (PERMIT REV-1) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#16 DOCHEFF 32N-15HZ (2203'FSL & 1678'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 32N-15HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 32N-15HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
551.00	0.000	291.800	551.00	BASE FOX HILLS
743.00	0.000	291.800	743.00	SURFACE CSG SETTING DEPTH
3686.23	10.000	291.800	3652.00	PARKMAN
4156.37	10.000	291.800	4115.00	SUSSEX
7086.95	48.472	269.371	6977.00	SHARON SPRINGS
7205.73	60.350	269.371	7046.00	NIOBRARA
7350.31	74.808	269.371	7101.00	NIOBRARA B
9867.33	90.486	269.371	7101.00	NIOBRARA B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	291.800	17.00	TIE ON
1100.00	0.000	291.800	1100.00	BEGIN NUDGE
1600.00	10.000	291.800	1597.47	END NUDGE
4831.63	10.000	291.800	4780.00	BEGIN DROP
5331.63	0.000	269.371	5277.47	END DROP
6602.23	0.000	269.371	6548.07	KOP, BUILD @ 10°/100'
7507.09	90.486	269.371	7121.00	LANDING POINT
12817.25	90.486	269.371	7076.00	TOTAL DEPTH