

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)  
 Field: WELD COUNTY (KERR MCGEE) Well: DOLPH 2N-1HZ  
 Facility: SEC.01-T2N-R66W Wellbore: DOLPH 2N-1HZ PWB

Plot reference wellpath is DOLPH 2N-1HZ (REV-B.0) PWP  
 True vertical depths are referenced to ENSIGN 145 (13KB) (RKB)  
 Measured depths are referenced to ENSIGN 145 (13KB) (RKB)  
 ENSIGN 145 (13KB) (RKB) to Mean Sea Level: 5001 feet  
 Mean Sea Level to Mud line (At Slot: SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)): 0 feet  
 Depths are in feet  
 Coordinates are in feet referenced to Slot  
 Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet  
 North Reference: True north  
 Scale: True distance  
 Created by: precain on 05/Aug/2014

## Location Information

Facility Name	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SEC.01-T2N-R66W	3215110.895	1303150.300	40°09'49.728"N	104°43'49.152"W
Slot	Local N (ft)	Local E (ft)	Grid North (US Ft)	Latitude
SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)	-362.26	3290.57	3218404.045	1302816.632
ENSIGN 145 (13KB) (RKB) to Mud line (At Slot: SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1))				5001ft
Mean Sea Level to Mud line (At Slot: SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1))				0ft
ENSIGN 145 (13KB) (RKB) to Mean Sea Level				5001ft

## Survey Program

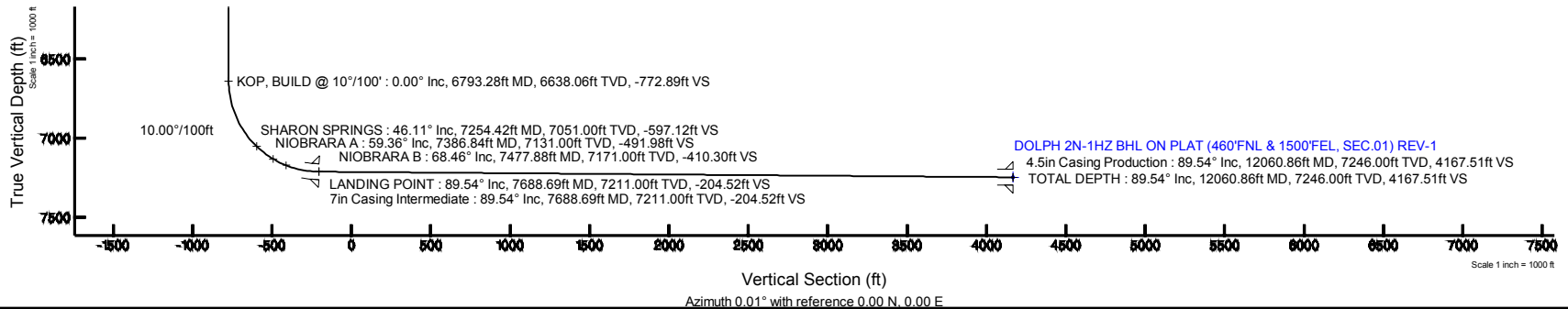
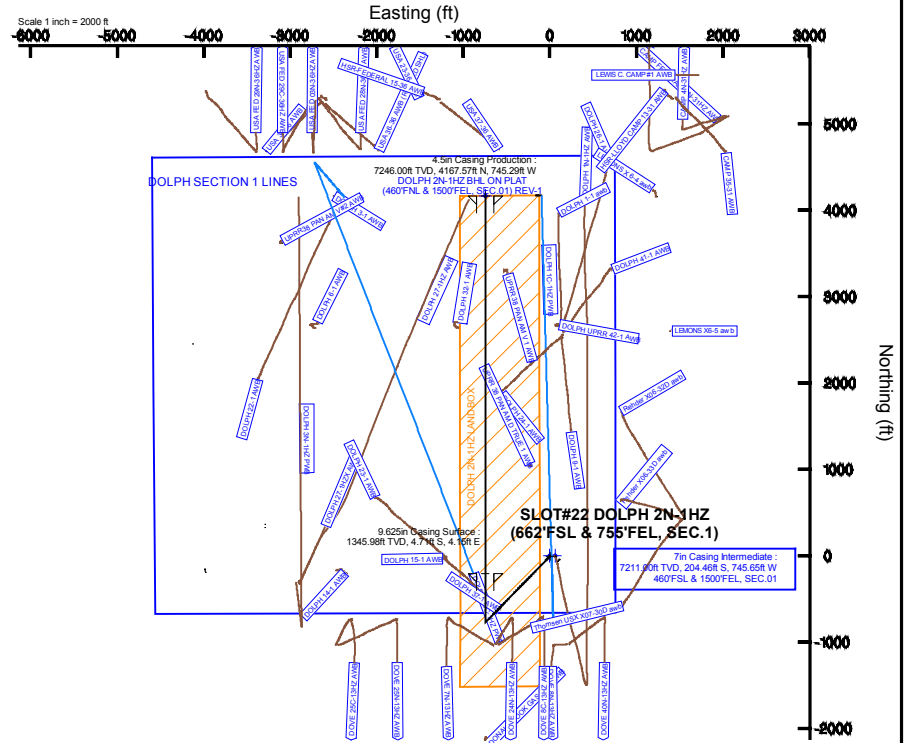
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	1311.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		DOLPH 2N-1HZ AWB
1311.00	7688.69	NavTrak	NavTrak (MAGCORR,FR)		DOLPH 2N-1HZ PWB
7688.69	12060.86	NavTrak	NavTrak (MAGCORR,FR)		DOLPH 2N-1HZ PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO SURVEYS	1311.00	0.250	21.170	1310.98	-4.86	4.10	0.15	-4.86
BEGIN NUDDGE	1550.03	0.250	21.170	1550.00	-3.88	4.47	0.00	-3.88
END NUDDGE	2461.54	18.000	224.250	2446.78	-103.75	-93.92	2.00	-103.76
BEGIN DROP	5030.49	18.000	224.250	4890.00	-672.39	-647.86	0.00	-672.45
END DROP	5930.49	0.000	0.005	5775.27	-772.83	-745.70	2.00	-772.89
KOP, BUILD @ 10°/100'	6793.28	0.000	0.005	6638.06	-772.83	-745.70	0.00	-772.89
LANDING POINT	7688.69	89.541	0.005	7211.00	-204.45	-745.65	10.00	-204.52
TOTAL DEPTH	12060.86	89.541	0.005	7246.00	4167.57	-745.29	0.00	4167.51

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
DOLPH SECTION 1 LINES	6996.00	0.40	60.09	3218464.13	1302817.57	40°09'43.159"N	104°43'05.995"W	
DOLPH 2N-1HZ BHL ON PLAT (460'FNL & 1500'FEL, SEC.01) REV-1	12060.86	7246.00	4167.57	-745.29	3218422.10	1306877.29	40°10'24.330"N	104°43'16.370"W
DOLPH 2N-1HZ LANDBOX	7246.00	0.00	0.00	3218404.05	1302816.63	40°09'43.148"N	104°43'06.789"W	



Azimuth 0.01° with reference 0.00 N, 0.00 E

# Planned Wellpath Report

DOLPH 2N-1HZ (REV-B.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	<b>KERR-MCGEE OIL &amp; GAS ONSHORE LP</b>	Slot	<b>SLOT#22 DOLPH 2N-1HZ (662'FSL &amp; 755'FEL, SEC.1)</b>
Area	<b>COLORADO</b>	Well	<b>DOLPH 2N-1HZ</b>
Field	<b>WELD COUNTY (KERR MCGEE)</b>	Wellbore	<b>DOLPH 2N-1HZ PWB</b>
Facility	<b>SEC.01-T2N-R66W</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>Precain</b>
Scale	<b>0.999958</b>	Report Generated	<b>05/Aug/2014 at 14:07</b>
Convergence at slot	<b>n/a</b>	Database/Source file	<b>WellArchitectDB/DOLPH_2N-1HZ_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	-362.26	3290.57	3218404.05	1302816.63	<b>40°09'43.146"N</b>	<b>104°43'06.769"W</b>
Facility Reference Pt			3215110.60	1303150.30	<b>40°09'46.728"N</b>	<b>104°43'49.152"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>	ENSIGN 145 (13'KB) (RKB) to Facility Vertical Datum	<b>5001.00ft</b>
Horizontal Reference Pt	<b>Slot</b>	ENSIGN 145 (13'KB) (RKB) to Mean Sea Level	<b>5001.00ft</b>
Vertical Reference Pt	<b>ENSIGN 145 (13'KB) (RKB)</b>	ENSIGN 145 (13'KB) (RKB) to Mud Line at Slot (SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1))	<b>5001.00ft</b>
MD Reference Pt	<b>ENSIGN 145 (13'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>0.01°</b>

# Planned Wellpath Report

DOLPH 2N-1HZ (REV-B.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)
Area	COLORADO	Well	DOLPH 2N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOLPH 2N-1HZ PWB
Facility	SEC.01-T2N-R66W		

## WELLPATH DATA (135 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	158.080	0.00	0.00	0.00	0.00	40°09'43.146"N	104°43'06.769"W	0.00	
13.00	0.000	158.080	13.00	0.00	0.00	0.00	40°09'43.146"N	104°43'06.769"W	0.00	
113.00	0.450	158.080	113.00	-0.36	-0.36	0.15	40°09'43.142"N	104°43'06.767"W	0.45	
213.00	0.330	152.420	213.00	-0.98	-0.98	0.43	40°09'43.136"N	104°43'06.764"W	0.13	
313.00	0.400	128.300	312.99	-1.46	-1.46	0.83	40°09'43.132"N	104°43'06.758"W	0.17	
413.00	0.510	138.410	412.99	-2.00	-2.00	1.40	40°09'43.126"N	104°43'06.751"W	0.14	
513.00	0.350	151.010	512.99	-2.60	-2.60	1.85	40°09'43.120"N	104°43'06.745"W	0.18	
613.00	0.490	150.990	612.99	-3.25	-3.25	2.20	40°09'43.114"N	104°43'06.741"W	0.14	
713.00	0.360	168.970	712.98	-3.93	-3.93	2.47	40°09'43.107"N	104°43'06.737"W	0.18	
813.00	0.390	161.250	812.98	-4.56	-4.56	2.64	40°09'43.101"N	104°43'06.735"W	0.06	
913.00	0.250	154.320	912.98	-5.08	-5.08	2.84	40°09'43.096"N	104°43'06.732"W	0.14	
1013.00	0.180	99.380	1012.98	-5.30	-5.30	3.09	40°09'43.094"N	104°43'06.729"W	0.21	
1113.00	0.240	87.280	1112.98	-5.32	-5.32	3.46	40°09'43.093"N	104°43'06.724"W	0.07	
1213.00	0.250	54.630	1212.98	-5.18	-5.18	3.84	40°09'43.095"N	104°43'06.719"W	0.14	
1296.02†	0.245	26.111	1296.00	-4.91	-4.92	4.07	40°09'43.097"N	104°43'06.717"W	0.15	FOX HILLS MARKER
1311.00	0.250	21.170	1310.98	-4.86	-4.86	4.10	40°09'43.098"N	104°43'06.716"W	0.15	TIE-INTO GYRO SURVEYS
1411.00†	0.250	21.170	1410.98	-4.45	-4.45	4.25	40°09'43.102"N	104°43'06.714"W	0.00	
1511.00†	0.250	21.170	1510.97	-4.04	-4.04	4.41	40°09'43.106"N	104°43'06.712"W	0.00	
1550.03	0.250	21.170	1550.00	-3.88	-3.88	4.47	40°09'43.108"N	104°43'06.711"W	0.00	BEGIN NUDGE
1611.00†	0.994	229.542	1610.97	-4.10	-4.10	4.12	40°09'43.105"N	104°43'06.716"W	2.00	
1711.00†	2.991	225.805	1710.91	-6.48	-6.48	1.59	40°09'43.082"N	104°43'06.749"W	2.00	
1811.00†	4.990	225.061	1810.66	-11.38	-11.37	-3.36	40°09'43.034"N	104°43'06.812"W	2.00	
1911.00†	6.990	224.742	1910.11	-18.77	-18.77	-10.72	40°09'42.961"N	104°43'06.907"W	2.00	
2011.00†	8.990	224.564	2009.13	-28.66	-28.66	-20.49	40°09'42.863"N	104°43'07.033"W	2.00	
2111.00†	10.989	224.451	2107.61	-41.03	-41.03	-32.65	40°09'42.741"N	104°43'07.190"W	2.00	
2211.00†	12.989	224.372	2205.42	-55.87	-55.87	-47.18	40°09'42.594"N	104°43'07.377"W	2.00	
2311.00†	14.989	224.314	2302.45	-73.16	-73.16	-64.08	40°09'42.423"N	104°43'07.594"W	2.00	
2411.00†	16.989	224.269	2398.58	-92.88	-92.87	-83.31	40°09'42.228"N	104°43'07.842"W	2.00	
2461.54	18.000	224.250	2446.78	-103.76	-103.75	-93.92	40°09'42.121"N	104°43'07.979"W	2.00	END NUDGE
2511.00†	18.000	224.250	2493.82	-114.71	-114.70	-104.58	40°09'42.012"N	104°43'08.116"W	0.00	
2611.00†	18.000	224.250	2588.93	-136.85	-136.84	-126.14	40°09'41.794"N	104°43'08.394"W	0.00	
2711.00†	18.000	224.250	2684.03	-158.99	-158.97	-147.71	40°09'41.575"N	104°43'08.671"W	0.00	
2811.00†	18.000	224.250	2779.14	-181.12	-181.11	-169.27	40°09'41.356"N	104°43'08.949"W	0.00	
2911.00†	18.000	224.250	2874.24	-203.26	-203.24	-190.83	40°09'41.138"N	104°43'09.227"W	0.00	
3011.00†	18.000	224.250	2969.35	-225.40	-225.38	-212.40	40°09'40.919"N	104°43'09.505"W	0.00	
3111.00†	18.000	224.250	3064.46	-247.53	-247.51	-233.96	40°09'40.700"N	104°43'09.782"W	0.00	
3211.00†	18.000	224.250	3159.56	-269.67	-269.65	-255.52	40°09'40.481"N	104°43'10.060"W	0.00	
3311.00†	18.000	224.250	3254.67	-291.81	-291.78	-277.08	40°09'40.263"N	104°43'10.338"W	0.00	
3411.00†	18.000	224.250	3349.77	-313.94	-313.92	-298.65	40°09'40.044"N	104°43'10.616"W	0.00	
3511.00†	18.000	224.250	3444.88	-336.08	-336.05	-320.21	40°09'39.825"N	104°43'10.893"W	0.00	
3611.00†	18.000	224.250	3539.98	-358.22	-358.19	-341.77	40°09'39.606"N	104°43'11.171"W	0.00	
3711.00†	18.000	224.250	3635.09	-380.35	-380.32	-363.34	40°09'39.388"N	104°43'11.449"W	0.00	
3811.00†	18.000	224.250	3730.19	-402.49	-402.46	-384.90	40°09'39.169"N	104°43'11.726"W	0.00	
3911.00†	18.000	224.250	3825.30	-424.63	-424.59	-406.46	40°09'38.950"N	104°43'12.004"W	0.00	
4011.00†	18.000	224.250	3920.41	-446.76	-446.73	-428.02	40°09'38.731"N	104°43'12.282"W	0.00	

# Planned Wellpath Report

DOLPH 2N-1HZ (REV-B.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	DOLPH 2N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOLPH 2N-1HZ PWB
Facility	SEC.01-T2N-R66W		

## WELLPATH DATA (135 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4111.00†	18.000	224.250	4015.51	-468.90	-468.86	-449.59	40°09'38.513"N	104°43'12.560"W	0.00	
4127.29†	18.000	224.250	4031.00	-472.51	-472.47	-453.10	40°09'38.477"N	104°43'12.605"W	0.00	PARKMAN
4211.00†	18.000	224.250	4110.62	-491.04	-491.00	-471.15	40°09'38.294"N	104°43'12.837"W	0.00	
4311.00†	18.000	224.250	4205.72	-513.17	-513.13	-492.71	40°09'38.075"N	104°43'13.115"W	0.00	
4411.00†	18.000	224.250	4300.83	-535.31	-535.27	-514.28	40°09'37.856"N	104°43'13.393"W	0.00	
4511.00†	18.000	224.250	4395.93	-557.45	-557.40	-535.84	40°09'37.638"N	104°43'13.671"W	0.00	
4542.61†	18.000	224.250	4426.00	-564.45	-564.40	-542.66	40°09'37.569"N	104°43'13.758"W	0.00	SUSSEX
4611.00†	18.000	224.250	4491.04	-579.59	-579.54	-557.40	40°09'37.419"N	104°43'13.948"W	0.00	
4711.00†	18.000	224.250	4586.15	-601.72	-601.67	-578.97	40°09'37.200"N	104°43'14.228"W	0.00	
4811.00†	18.000	224.250	4681.25	-623.86	-623.81	-600.53	40°09'36.981"N	104°43'14.504"W	0.00	
4911.00†	18.000	224.250	4776.36	-646.00	-645.94	-622.09	40°09'36.763"N	104°43'14.781"W	0.00	
5011.00†	18.000	224.250	4871.46	-668.13	-668.08	-643.65	40°09'36.544"N	104°43'15.059"W	0.00	
5030.49	18.000	224.250	4890.00	-672.45	-672.39	-647.86	40°09'36.501"N	104°43'15.113"W	0.00	BEGIN DROP
5111.00†	16.390	224.250	4966.91	-689.50	-689.44	-664.46	40°09'36.333"N	104°43'15.327"W	2.00	
5211.00†	14.390	224.250	5063.32	-708.51	-708.45	-682.98	40°09'36.145"N	104°43'15.568"W	2.00	
5311.00†	12.390	224.250	5160.59	-725.10	-725.03	-699.14	40°09'35.981"N	104°43'15.774"W	2.00	
5411.00†	10.390	224.250	5258.62	-739.24	-739.18	-712.92	40°09'35.841"N	104°43'15.951"W	2.00	
5511.00†	8.390	224.250	5357.27	-750.93	-750.87	-724.30	40°09'35.726"N	104°43'16.098"W	2.00	
5611.00†	6.390	224.250	5456.44	-760.14	-760.08	-733.28	40°09'35.635"N	104°43'16.213"W	2.00	
5711.00†	4.390	224.250	5555.99	-766.87	-766.81	-739.83	40°09'35.568"N	104°43'16.298"W	2.00	
5811.00†	2.390	224.250	5655.81	-771.11	-771.04	-743.96	40°09'35.526"N	104°43'16.351"W	2.00	
5911.00†	0.390	224.250	5755.78	-772.84	-772.78	-745.65	40°09'35.509"N	104°43'16.373"W	2.00	
5930.49	0.000	0.005	5775.27	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	2.00	END DROP
6011.00†	0.000	0.005	5855.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6111.00†	0.000	0.005	5955.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6211.00†	0.000	0.005	6055.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6311.00†	0.000	0.005	6155.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6411.00†	0.000	0.005	6255.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6511.00†	0.000	0.005	6355.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6611.00†	0.000	0.005	6455.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6711.00†	0.000	0.005	6555.78	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	
6793.28	0.000	0.005	6638.06	-772.89	-772.83	-745.70	40°09'35.509"N	104°43'16.373"W	0.00	KOP, BUILD @ 10°/100'
6811.00†	1.772	0.005	6655.77	-772.62	-772.55	-745.70	40°09'35.511"N	104°43'16.373"W	10.00	
6911.00†	11.772	0.005	6754.95	-760.84	-760.78	-745.69	40°09'35.628"N	104°43'16.373"W	10.00	
7011.00†	21.772	0.005	6850.58	-732.02	-731.96	-745.69	40°09'35.913"N	104°43'16.373"W	10.00	
7111.00†	31.772	0.005	6939.74	-687.03	-686.97	-745.69	40°09'36.357"N	104°43'16.373"W	10.00	
7211.00†	41.772	0.005	7019.74	-627.25	-627.18	-745.68	40°09'36.948"N	104°43'16.373"W	10.00	
7254.42†	46.114	0.005	7051.00	-597.12	-597.06	-745.68	40°09'37.246"N	104°43'16.373"W	10.00	SHARON SPRINGS
7311.00†	51.772	0.005	7088.15	-554.48	-554.41	-745.68	40°09'37.667"N	104°43'16.373"W	10.00	
7386.84†	59.355	0.005	7131.00	-491.98	-491.91	-745.67	40°09'38.285"N	104°43'16.373"W	10.00	NIOBRARA A
7411.00†	61.772	0.005	7142.88	-470.93	-470.87	-745.67	40°09'38.493"N	104°43'16.373"W	10.00	
7477.88†	68.460	0.005	7171.00	-410.30	-410.23	-745.67	40°09'39.092"N	104°43'16.373"W	10.00	NIOBRARA B
7511.00†	71.772	0.005	7182.26	-379.16	-379.09	-745.66	40°09'39.400"N	104°43'16.373"W	10.00	
7611.00†	81.772	0.005	7205.12	-281.93	-281.87	-745.66	40°09'40.360"N	104°43'16.373"W	10.00	
7688.69	89.541	0.005	7211.00	-204.52	-204.45	-745.65	40°09'41.125"N	104°43'16.373"W	10.00	LANDING POINT

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)
Area	COLORADO		Well	DOLPH 2N-1HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	DOLPH 2N-1HZ PWB
Facility	SEC.01-T2N-R66W			

### WELLPATH DATA (135 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7711.00†	89.541	0.005	7211.18	-182.22	-182.15	-745.65	40°09'41.346"N	104°43'16.373"W	0.00	
7811.00†	89.541	0.005	7211.98	-82.22	-82.15	-745.64	40°09'42.334"N	104°43'16.373"W	0.00	
7911.00†	89.541	0.005	7212.78	17.78	17.84	-745.63	40°09'43.322"N	104°43'16.373"W	0.00	
8011.00†	89.541	0.005	7213.58	117.78	117.84	-745.62	40°09'44.310"N	104°43'16.373"W	0.00	
8111.00†	89.541	0.005	7214.38	217.77	217.84	-745.61	40°09'45.299"N	104°43'16.373"W	0.00	
8211.00†	89.541	0.005	7215.18	317.77	317.83	-745.61	40°09'46.287"N	104°43'16.373"W	0.00	
8311.00†	89.541	0.005	7215.98	417.77	417.83	-745.60	40°09'47.275"N	104°43'16.373"W	0.00	
8411.00†	89.541	0.005	7216.78	517.76	517.83	-745.59	40°09'48.263"N	104°43'16.372"W	0.00	
8511.00†	89.541	0.005	7217.58	617.76	617.82	-745.58	40°09'49.251"N	104°43'16.372"W	0.00	
8611.00†	89.541	0.005	7218.38	717.76	717.82	-745.57	40°09'50.239"N	104°43'16.372"W	0.00	
8711.00†	89.541	0.005	7219.18	817.75	817.82	-745.56	40°09'51.228"N	104°43'16.372"W	0.00	
8811.00†	89.541	0.005	7219.98	917.75	917.81	-745.56	40°09'52.216"N	104°43'16.372"W	0.00	
8911.00†	89.541	0.005	7220.78	1017.75	1017.81	-745.55	40°09'53.204"N	104°43'16.372"W	0.00	
9011.00†	89.541	0.005	7221.58	1117.74	1117.81	-745.54	40°09'54.192"N	104°43'16.372"W	0.00	
9111.00†	89.541	0.005	7222.38	1217.74	1217.80	-745.53	40°09'55.180"N	104°43'16.372"W	0.00	
9211.00†	89.541	0.005	7223.18	1317.74	1317.80	-745.52	40°09'56.168"N	104°43'16.372"W	0.00	
9311.00†	89.541	0.005	7223.99	1417.73	1417.80	-745.51	40°09'57.157"N	104°43'16.372"W	0.00	
9411.00†	89.541	0.005	7224.79	1517.73	1517.80	-745.51	40°09'58.145"N	104°43'16.372"W	0.00	
9511.00†	89.541	0.005	7225.59	1617.73	1617.79	-745.50	40°09'59.133"N	104°43'16.372"W	0.00	
9611.00†	89.541	0.005	7226.39	1717.72	1717.79	-745.49	40°10'00.121"N	104°43'16.372"W	0.00	
9711.00†	89.541	0.005	7227.19	1817.72	1817.79	-745.48	40°10'01.109"N	104°43'16.372"W	0.00	
9811.00†	89.541	0.005	7227.99	1917.72	1917.78	-745.47	40°10'02.097"N	104°43'16.372"W	0.00	
9911.00†	89.541	0.005	7228.79	2017.71	2017.78	-745.46	40°10'03.086"N	104°43'16.371"W	0.00	
10011.00†	89.541	0.005	7229.59	2117.71	2117.78	-745.46	40°10'04.074"N	104°43'16.371"W	0.00	
10111.00†	89.541	0.005	7230.39	2217.71	2217.77	-745.45	40°10'05.062"N	104°43'16.371"W	0.00	
10211.00†	89.541	0.005	7231.19	2317.70	2317.77	-745.44	40°10'06.050"N	104°43'16.371"W	0.00	
10311.00†	89.541	0.005	7231.99	2417.70	2417.77	-745.43	40°10'07.038"N	104°43'16.371"W	0.00	
10411.00†	89.541	0.005	7232.79	2517.70	2517.76	-745.42	40°10'08.027"N	104°43'16.371"W	0.00	
10511.00†	89.541	0.005	7233.59	2617.70	2617.76	-745.42	40°10'09.015"N	104°43'16.371"W	0.00	
10611.00†	89.541	0.005	7234.39	2717.69	2717.76	-745.41	40°10'10.003"N	104°43'16.371"W	0.00	
10711.00†	89.541	0.005	7235.19	2817.69	2817.75	-745.40	40°10'10.991"N	104°43'16.371"W	0.00	
10811.00†	89.541	0.005	7235.99	2917.69	2917.75	-745.39	40°10'11.979"N	104°43'16.371"W	0.00	
10911.00†	89.541	0.005	7236.79	3017.68	3017.75	-745.38	40°10'12.967"N	104°43'16.371"W	0.00	
11011.00†	89.541	0.005	7237.60	3117.68	3117.74	-745.37	40°10'13.956"N	104°43'16.371"W	0.00	
11111.00†	89.541	0.005	7238.40	3217.68	3217.74	-745.37	40°10'14.944"N	104°43'16.371"W	0.00	
11211.00†	89.541	0.005	7239.20	3317.67	3317.74	-745.36	40°10'15.932"N	104°43'16.371"W	0.00	
11311.00†	89.541	0.005	7240.00	3417.67	3417.73	-745.35	40°10'16.920"N	104°43'16.371"W	0.00	
11411.00†	89.541	0.005	7240.80	3517.67	3517.73	-745.34	40°10'17.908"N	104°43'16.370"W	0.00	
11511.00†	89.541	0.005	7241.60	3617.66	3617.73	-745.33	40°10'18.896"N	104°43'16.370"W	0.00	
11611.00†	89.541	0.005	7242.40	3717.66	3717.72	-745.32	40°10'19.885"N	104°43'16.370"W	0.00	
11711.00†	89.541	0.005	7243.20	3817.66	3817.72	-745.32	40°10'20.873"N	104°43'16.370"W	0.00	
11811.00†	89.541	0.005	7244.00	3917.65	3917.72	-745.31	40°10'21.861"N	104°43'16.370"W	0.00	
11911.00†	89.541	0.005	7244.80	4017.65	4017.72	-745.30	40°10'22.849"N	104°43'16.370"W	0.00	
12011.00†	89.541	0.005	7245.60	4117.65	4117.71	-745.29	40°10'23.837"N	104°43'16.370"W	0.00	
12060.86	89.541	0.005	7246.00 <sup>1</sup>	4167.51	4167.57	-745.29	40°10'24.330"N	104°43'16.370"W	0.00	TOTAL DEPTH

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)
Area	COLORADO	Well	DOLPH 2N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOLPH 2N-1HZ PWB
Facility	SEC.01-T2N-R66W		

HOLE & CASING SECTIONS - Ref Wellbore: DOLPH 2N-1HZ PWB Ref Wellpath: DOLPH 2N-1HZ (REV-B.0) 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	13.00	13.00	0.00	13.00	13.00	0.00	0.00	0.00	0.00
13.5in Open Hole	13.00	1346.00	1333.00	13.00	1345.98	0.00	0.00	-4.71	4.15
9.625in Casing Surface	13.00	1346.00	1333.00	13.00	1345.98	0.00	0.00	-4.71	4.15
8.75in Open Hole	1346.00	7688.69	6342.69	1345.98	7211.00	-4.71	4.15	-204.46	-745.65
7in Casing Intermediate	13.00	7688.69	7675.69	13.00	7211.00	0.00	0.00	-204.46	-745.65
6.125in Open Hole	7688.69	12060.86	4372.17	7211.00	7246.00	-204.46	-745.65	4167.57	-745.29
4.5in Casing Production	13.00	12060.86	12047.86	13.00	7246.00	0.00	0.00	4167.57	-745.29

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
DOLPH SECTION 1 LINES		6996.00	0.40	60.09	3218464.13	1302817.57	40°09'43.150"N	104°43'05.995"W	polygon
1) DOLPH 2N-1HZ BHL ON PLAT (460'FNL & 1500'FEL, SEC.01) REV-1	12060.86	7246.00	4167.57	-745.29	3217622.10	1306977.29	40°10'24.330"N	104°43'16.370"W	point
DOLPH 2N-1HZ LANDBOX		7246.00	0.00	0.00	3218404.05	1302816.63	40°09'43.146"N	104°43'06.769"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOLPH 2N-1HZ PWB Ref Wellpath: DOLPH 2N-1HZ (REV-B.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	1311.00	Generic gyro - continuous (Standard)		DOLPH 2N-1HZ AWB
1311.00	7688.69	NaviTrak (MAGCORR,IFR)		DOLPH 2N-1HZ PWB
7688.69	12060.86	NaviTrak (MAGCORR,IFR)		DOLPH 2N-1HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#22 DOLPH 2N-1HZ (662'FSL & 755'FEL, SEC.1)
Area	COLORADO	Well	DOLPH 2N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOLPH 2N-1HZ PWB
Facility	SEC.01-T2N-R66W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1296.02	0.245	26.111	1296.00	FOX HILLS MARKER
4127.29	18.000	224.250	4031.00	PARKMAN
4542.61	18.000	224.250	4426.00	SUSSEX
7254.42	46.114	0.005	7051.00	SHARON SPRINGS
7386.84	59.355	0.005	7131.00	NIOBRARA A
7477.88	68.460	0.005	7171.00	NIOBRARA B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1311.00	0.250	21.170	1310.98	TIE-INTO GYRO SURVEYS
1550.03	0.250	21.170	1550.00	BEGIN NUDGE
2461.54	18.000	224.250	2446.78	END NUDGE
5030.49	18.000	224.250	4890.00	BEGIN DROP
5930.49	0.000	0.005	5775.27	END DROP
6793.28	0.000	0.005	6638.06	KOP, BUILD @ 10°/100'
7688.69	89.541	0.005	7211.00	LANDING POINT
12060.86	89.541	0.005	7246.00	TOTAL DEPTH