

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#03 RALPH 35N-19HZ (340°FNL & 1210°FWL, SEC.19)
 Field: WELD COUNTY (KERR MCGEE) Well: RALPH 35N-19HZ
 Facility: SEC.19-T1N-R67W Wellbore: RALPH 35N-19HZ PWB

Plot reference wellpath is RALPH 35N-19HZ (REV-A.0) PWP

True vertical depths are referenced to XTREME 6 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to XTREME 6 (RKB)	North Reference: True north
XTREME 6 (RKB) to Mean Sea Level: 5133 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 RALPH 35N-19HZ (340°FNL & 1210°FWL, SEC.19)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wiljeff02 on 5/8/2013

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.19-T1N-R67W		3157293.749	1259018.130	40°02'34.891"N	104°56'17.471"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 RALPH 35N-19HZ (340°FNL & 1210°FWL, SEC.19)	-0.10	0.08	3157293.828	1259018.029	40°02'34.890"N	104°56'17.470"W
XTREME 6 (RKB) to Mud line (At Slot: SLOT#03 RALPH 35N-19HZ (340°FNL & 1210°FWL, SEC.19))	5133ft					
Mean Sea Level to Mud line (At Slot: SLOT#03 RALPH 35N-19HZ (340°FNL & 1210°FWL, SEC.19))	0ft					
XTREME 6 (RKB) to Mean Sea Level	5133ft					

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	856.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		RALPH 35N-19HZ AWB
856.00	8166.60	Navitrak	Navitrak (MAGCORR,IFR)		RALPH 35N-19HZ PWB
8166.60	12332.30	OnTrak	OnTrak (MAGCORR,IFR)		RALPH 35N-19HZ PWB

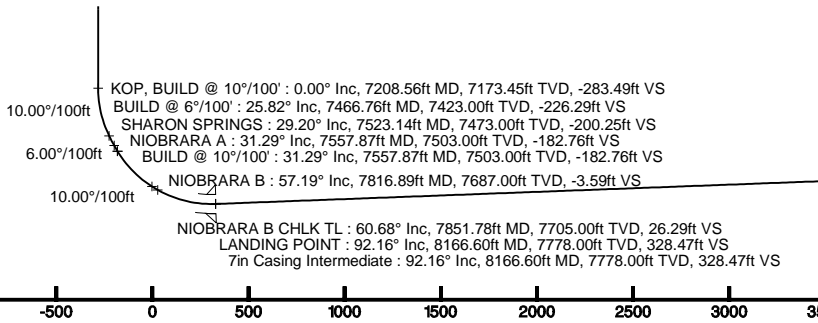
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO	856.00	0.950	72.200	855.80	3.97	15.53	0.00	-3.94
BEGIN NUDGE	1050.23	0.950	72.200	1050.00	4.95	18.59	0.00	-4.92
END NUDGE	1173.35	2.000	180.000	1173.10	3.11	19.56	2.00	-3.08
BEGIN NUDGE	1500.45	2.000	180.000	1500.00	-8.30	19.56	0.00	8.33
END NUDGE	2074.83	10.000	314.400	2071.76	16.65	-16.19	2.00	-16.68
BEGIN DROP	4016.57	10.000	314.400	3984.00	252.56	-257.09	0.00	-252.99
END DROP	4516.57	0.000	179.905	4481.47	283.01	-288.19	2.00	-283.49
KOP, BUILD @ 10°/100'	7208.56	0.000	179.905	7173.45	283.01	-288.19	0.00	-283.49
BUILD @ 6°/100'	7466.76	25.820	179.905	7423.00	225.81	-288.09	10.00	-226.29
BUILD @ 10°/100'	7557.87	31.287	179.905	7503.00	182.28	-288.02	6.00	-182.76
LANDING POINT	8166.60	92.160	179.905	7778.00	-328.95	-287.17	10.00	328.47
TOTAL DEPTH	12332.30	92.160	179.905	7621.00	-4491.69	-280.27	0.00	4491.21

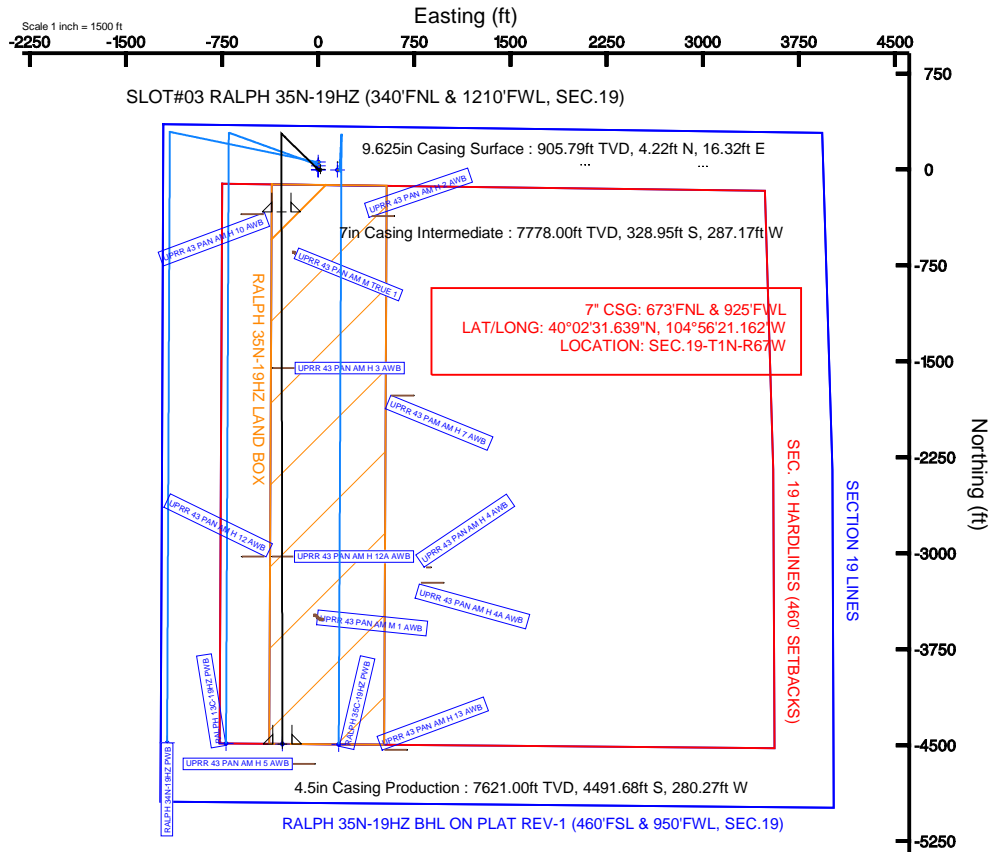
Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SECTION 19 LINES	0.00	0.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W
RALPH 35N-19HZ BHL ON PLAT REV-1 (460°FSL & 950°FWL, SEC.19)	12332.30	7621.00	-4491.69	-280.27	3157042.03	1254524.83	40°01'50.502"N	104°56'21.073"W
RALPH 35N-19HZ LAND BOX	8000.00	0.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W
SEC. 19 HARDLINES (460° SETBACKS)	8000.00	0.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W

True Vertical Depth (ft)
Scale 1 inch = 1000 ft



Vertical Section (ft)
Azimuth 179.91° with reference 0.00 N, 0.00 E





Planned Wellpath Report

RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO	Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-T1N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 3.0.2
North Reference	True	User	Wilsjef02
Scale	0.999963	Report Generated	5/8/2013 at 07:17:16
Convergence at slot	0.36° East	Database/Source file	WellArchitectDB/RALPH_35N-19HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.10	0.08	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W
Facility Reference Pt			3157293.75	1259018.13	40°02'34.891"N	104°56'17.471"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	XTREME 6 (RKB) to Facility Vertical Datum	5133.00ft
Horizontal Reference Pt	Slot	XTREME 6 (RKB) to Mean Sea Level	5133.00ft
Vertical Reference Pt	XTREME 6 (RKB)	XTREME 6 (RKB) to Mud Line at Slot (SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19))	5133.00ft
MD Reference Pt	XTREME 6 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.91°



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RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO	Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-T1N-R67W		

WELLPATH DATA (140 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	76.190	0.00	0.00	0.00	0.00	40°02'34.890"N	104°56'17.470"W	0.00	
16.00	0.000	76.190	16.00	0.00	0.00	0.00	40°02'34.890"N	104°56'17.470"W	0.00	TIE-ON
116.00	0.470	76.190	116.00	-0.10	0.10	0.40	40°02'34.891"N	104°56'17.465"W	0.47	BEGIN GYRO SURVEYS
216.00	0.480	67.970	216.00	-0.35	0.35	1.18	40°02'34.893"N	104°56'17.455"W	0.07	
316.00	0.700	43.430	315.99	-0.95	0.95	1.99	40°02'34.899"N	104°56'17.444"W	0.33	
416.00	1.230	70.790	415.98	-1.74	1.75	3.43	40°02'34.907"N	104°56'17.426"W	0.69	
516.00	1.700	85.430	515.94	-2.21	2.22	5.92	40°02'34.912"N	104°56'17.394"W	0.60	
616.00	1.850	78.940	615.90	-2.63	2.65	8.98	40°02'34.916"N	104°56'17.355"W	0.25	
716.00	1.710	81.890	715.85	-3.15	3.17	12.04	40°02'34.921"N	104°56'17.315"W	0.17	
816.00	1.440	74.020	815.81	-3.70	3.73	14.73	40°02'34.927"N	104°56'17.281"W	0.35	
856.00	0.950	72.200	855.80	-3.94	3.97	15.53	40°02'34.929"N	104°56'17.270"W	0.00	TIE-INTO GYRO
956.00†	0.950	72.200	955.79	-4.44	4.47	17.11	40°02'34.934"N	104°56'17.250"W	0.00	
1050.23	0.950	72.200	1050.00	-4.92	4.95	18.59	40°02'34.939"N	104°56'17.231"W	0.00	BEGIN NUDGE
1056.00†	0.881	78.017	1055.77	-4.94	4.97	18.68	40°02'34.939"N	104°56'17.230"W	2.00	
1156.00†	1.682	175.653	1155.76	-3.64	3.67	19.55	40°02'34.926"N	104°56'17.219"W	2.00	
1173.35	2.000	180.000	1173.10	-3.08	3.11	19.56	40°02'34.921"N	104°56'17.218"W	2.00	END NUDGE
1256.00†	2.000	180.000	1255.70	-0.20	0.23	19.56	40°02'34.892"N	104°56'17.218"W	0.00	
1356.00†	2.000	180.000	1355.64	3.29	-3.26	19.56	40°02'34.858"N	104°56'17.218"W	0.00	
1456.00†	2.000	180.000	1455.57	6.78	-6.75	19.56	40°02'34.823"N	104°56'17.218"W	0.00	
1500.45	2.000	180.000	1500.00	8.33	-8.30	19.56	40°02'34.808"N	104°56'17.218"W	0.00	BEGIN NUDGE
1556.00†	1.326	211.467	1555.53	9.85	-9.82	19.23	40°02'34.793"N	104°56'17.223"W	2.00	
1656.00†	1.986	282.635	1655.49	10.46	-10.43	16.93	40°02'34.787"N	104°56'17.252"W	2.00	
1756.00†	3.758	302.152	1755.36	8.32	-8.30	12.47	40°02'34.808"N	104°56'17.310"W	2.00	
1856.00†	5.684	308.864	1855.02	3.46	-3.45	5.84	40°02'34.856"N	104°56'17.395"W	2.00	
1956.00†	7.648	312.164	1954.34	-4.13	4.12	-2.95	40°02'34.931"N	104°56'17.508"W	2.00	
2056.00†	9.626	314.118	2053.20	-14.43	14.41	-13.89	40°02'35.032"N	104°56'17.649"W	2.00	
2074.83	10.000	314.400	2071.76	-16.68	16.65	-16.19	40°02'35.055"N	104°56'17.678"W	2.00	END NUDGE
2156.00†	10.000	314.400	2151.69	-26.56	26.51	-26.26	40°02'35.152"N	104°56'17.808"W	0.00	
2256.00†	10.000	314.400	2250.17	-38.73	38.66	-38.66	40°02'35.272"N	104°56'17.967"W	0.00	
2356.00†	10.000	314.400	2348.65	-50.90	50.81	-51.07	40°02'35.392"N	104°56'18.127"W	0.00	
2456.00†	10.000	314.400	2447.14	-63.07	62.96	-63.48	40°02'35.512"N	104°56'18.286"W	0.00	
2556.00†	10.000	314.400	2545.62	-75.24	75.11	-75.88	40°02'35.632"N	104°56'18.446"W	0.00	
2656.00†	10.000	314.400	2644.10	-87.41	87.26	-88.29	40°02'35.752"N	104°56'18.605"W	0.00	
2756.00†	10.000	314.400	2742.58	-99.58	99.41	-100.70	40°02'35.872"N	104°56'18.765"W	0.00	
2856.00†	10.000	314.400	2841.06	-111.75	111.56	-113.10	40°02'35.992"N	104°56'18.924"W	0.00	
2956.00†	10.000	314.400	2939.54	-123.92	123.71	-125.51	40°02'36.113"N	104°56'19.084"W	0.00	
3056.00†	10.000	314.400	3038.02	-136.09	135.86	-137.92	40°02'36.233"N	104°56'19.243"W	0.00	
3156.00†	10.000	314.400	3136.50	-148.26	148.01	-150.32	40°02'36.353"N	104°56'19.403"W	0.00	
3256.00†	10.000	314.400	3234.98	-160.43	160.16	-162.73	40°02'36.473"N	104°56'19.562"W	0.00	
3356.00†	10.000	314.400	3333.46	-172.60	172.31	-175.14	40°02'36.593"N	104°56'19.722"W	0.00	
3456.00†	10.000	314.400	3431.94	-184.77	184.46	-187.54	40°02'36.713"N	104°56'19.881"W	0.00	
3556.00†	10.000	314.400	3530.42	-196.94	196.61	-199.95	40°02'36.833"N	104°56'20.041"W	0.00	
3656.00†	10.000	314.400	3628.91	-209.11	208.76	-212.36	40°02'36.953"N	104°56'20.200"W	0.00	
3756.00†	10.000	314.400	3727.39	-221.28	220.90	-224.76	40°02'37.073"N	104°56'20.360"W	0.00	
3856.00†	10.000	314.400	3825.87	-233.45	233.05	-237.17	40°02'37.193"N	104°56'20.519"W	0.00	



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RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO	Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-T1N-R67W		

WELLPATH DATA (140 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3956.00†	10.000	314.400	3924.35	-245.62	245.20	-249.58	40°02'37.313"N	104°56'20.679"W	0.00	
4016.57	10.000	314.400	3984.00	-252.99	252.56	-257.09	40°02'37.386"N	104°56'20.776"W	0.00	BEGIN DROP
4056.00†	9.211	314.400	4022.87	-257.60	257.17	-261.79	40°02'37.431"N	104°56'20.836"W	2.00	
4156.00†	7.211	314.400	4121.84	-267.61	267.16	-272.00	40°02'37.530"N	104°56'20.967"W	2.00	
4256.00†	5.211	314.400	4221.25	-275.19	274.73	-279.73	40°02'37.605"N	104°56'21.067"W	2.00	
4356.00†	3.211	314.400	4320.98	-280.34	279.87	-284.97	40°02'37.656"N	104°56'21.134"W	2.00	
4456.00†	1.211	314.400	4420.90	-283.04	282.57	-287.73	40°02'37.682"N	104°56'21.170"W	2.00	
4516.57	0.000	179.905	4481.47	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	2.00	END DROP
4556.00†	0.000	179.905	4520.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
4656.00†	0.000	179.905	4620.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
4756.00†	0.000	179.905	4720.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
4856.00†	0.000	179.905	4820.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
4918.11†	0.000	179.905	4883.00	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	SUSSEX
4956.00†	0.000	179.905	4920.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5056.00†	0.000	179.905	5020.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5156.00†	0.000	179.905	5120.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5256.00†	0.000	179.905	5220.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5356.00†	0.000	179.905	5320.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5456.00†	0.000	179.905	5420.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5556.00†	0.000	179.905	5520.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5656.00†	0.000	179.905	5620.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5756.00†	0.000	179.905	5720.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5856.00†	0.000	179.905	5820.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
5956.00†	0.000	179.905	5920.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6056.00†	0.000	179.905	6020.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6156.00†	0.000	179.905	6120.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6256.00†	0.000	179.905	6220.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6356.00†	0.000	179.905	6320.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6456.00†	0.000	179.905	6420.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6556.00†	0.000	179.905	6520.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6656.00†	0.000	179.905	6620.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6756.00†	0.000	179.905	6720.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6856.00†	0.000	179.905	6820.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
6956.00†	0.000	179.905	6920.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
7056.00†	0.000	179.905	7020.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
7156.00†	0.000	179.905	7120.89	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	
7208.56	0.000	179.905	7173.45	-283.49	283.01	-288.19	40°02'37.687"N	104°56'21.175"W	0.00	KOP, BUILD @ 10°/100'
7256.00†	4.744	179.905	7220.84	-281.53	281.05	-288.18	40°02'37.667"N	104°56'21.175"W	10.00	
7356.00†	14.744	179.905	7319.27	-264.63	264.15	-288.16	40°02'37.500"N	104°56'21.175"W	10.00	
7456.00†	24.744	179.905	7413.27	-230.89	230.41	-288.10	40°02'37.167"N	104°56'21.174"W	10.00	
7466.76	25.820	179.905	7423.00	-226.29	225.81	-288.09	40°02'37.122"N	104°56'21.174"W	10.00	BUILD @ 6°/100'
7523.14†	29.203	179.905	7473.00	-200.25	199.77	-288.05	40°02'36.864"N	104°56'21.174"W	6.00	SHARON SPRINGS
7556.00†	31.175	179.905	7501.40	-183.73	183.25	-288.02	40°02'36.701"N	104°56'21.173"W	6.00	
7557.87	31.287	179.905	7503.00	-182.76	182.28	-288.02	40°02'36.691"N	104°56'21.173"W	6.00	BUILD @ 10°/100'; NIOBRARA A
7656.00†	41.100	179.905	7582.10	-124.88	124.41	-287.92	40°02'36.119"N	104°56'21.172"W	10.00	



Planned Wellpath Report

RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO		Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-TIN-R67W			

WELLPATH DATA (140 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7756.00†	51.100	179.905	7651.35	-52.92	52.44	-287.80	40°02'35.408"N	104°56'21.171"W	10.00	
7816.89†	57.189	179.905	7687.00	-3.59	3.11	-287.72	40°02'34.921"N	104°56'21.169"W	10.00	NIOBRARA B
7851.78†	60.678	179.905	7705.00	26.29	-26.77	-287.67	40°02'34.625"N	104°56'21.169"W	10.00	NIOBRARA B CHLK TL
7856.00†	61.100	179.905	7707.05	29.98	-30.45	-287.67	40°02'34.589"N	104°56'21.169"W	10.00	
7956.00†	71.100	179.905	7747.52	121.29	-121.76	-287.52	40°02'33.687"N	104°56'21.167"W	10.00	
8056.00†	81.100	179.905	7771.51	218.23	-218.71	-287.36	40°02'32.729"N	104°56'21.165"W	10.00	
8156.00†	91.100	179.905	7778.30	317.88	-318.35	-287.19	40°02'31.744"N	104°56'21.163"W	10.00	
8166.60	92.160	179.905	7778.00	328.47	-328.95	-287.17	40°02'31.639"N	104°56'21.162"W	10.00	LANDING POINT
8256.00†	92.160	179.905	7774.63	417.81	-418.28	-287.02	40°02'30.756"N	104°56'21.160"W	0.00	
8356.00†	92.160	179.905	7770.86	517.74	-518.21	-286.86	40°02'29.769"N	104°56'21.158"W	0.00	
8456.00†	92.160	179.905	7767.09	617.67	-618.14	-286.69	40°02'28.781"N	104°56'21.156"W	0.00	
8556.00†	92.160	179.905	7763.32	717.59	-718.07	-286.53	40°02'27.794"N	104°56'21.154"W	0.00	
8656.00†	92.160	179.905	7759.56	817.52	-818.00	-286.36	40°02'26.806"N	104°56'21.152"W	0.00	
8756.00†	92.160	179.905	7755.79	917.45	-917.93	-286.20	40°02'25.819"N	104°56'21.150"W	0.00	
8856.00†	92.160	179.905	7752.02	1017.38	-1017.86	-286.03	40°02'24.831"N	104°56'21.148"W	0.00	
8956.00†	92.160	179.905	7748.25	1117.31	-1117.79	-285.86	40°02'23.844"N	104°56'21.145"W	0.00	
9056.00†	92.160	179.905	7744.48	1217.24	-1217.72	-285.70	40°02'22.856"N	104°56'21.143"W	0.00	
9156.00†	92.160	179.905	7740.71	1317.17	-1317.64	-285.53	40°02'21.869"N	104°56'21.141"W	0.00	
9256.00†	92.160	179.905	7736.94	1417.10	-1417.57	-285.37	40°02'20.881"N	104°56'21.139"W	0.00	
9356.00†	92.160	179.905	7733.17	1517.03	-1517.50	-285.20	40°02'19.894"N	104°56'21.137"W	0.00	
9456.00†	92.160	179.905	7729.40	1616.96	-1617.43	-285.04	40°02'18.906"N	104°56'21.135"W	0.00	
9556.00†	92.160	179.905	7725.63	1716.88	-1717.36	-284.87	40°02'17.919"N	104°56'21.133"W	0.00	
9656.00†	92.160	179.905	7721.87	1816.81	-1817.29	-284.70	40°02'16.931"N	104°56'21.130"W	0.00	
9756.00†	92.160	179.905	7718.10	1916.74	-1917.22	-284.54	40°02'15.944"N	104°56'21.128"W	0.00	
9856.00†	92.160	179.905	7714.33	2016.67	-2017.15	-284.37	40°02'14.956"N	104°56'21.126"W	0.00	
9956.00†	92.160	179.905	7710.56	2116.60	-2117.07	-284.21	40°02'13.969"N	104°56'21.124"W	0.00	
10056.00†	92.160	179.905	7706.79	2216.53	-2217.00	-284.04	40°02'12.981"N	104°56'21.122"W	0.00	
10156.00†	92.160	179.905	7703.02	2316.46	-2316.93	-283.88	40°02'11.993"N	104°56'21.120"W	0.00	
10256.00†	92.160	179.905	7699.25	2416.39	-2416.86	-283.71	40°02'11.006"N	104°56'21.118"W	0.00	
10356.00†	92.160	179.905	7695.48	2516.32	-2516.79	-283.55	40°02'10.018"N	104°56'21.115"W	0.00	
10456.00†	92.160	179.905	7691.71	2616.24	-2616.72	-283.38	40°02'09.031"N	104°56'21.113"W	0.00	
10556.00†	92.160	179.905	7687.95	2716.17	-2716.65	-283.21	40°02'08.043"N	104°56'21.111"W	0.00	
10656.00†	92.160	179.905	7684.18	2816.10	-2816.58	-283.05	40°02'07.056"N	104°56'21.109"W	0.00	
10756.00†	92.160	179.905	7680.41	2916.03	-2916.50	-282.88	40°02'06.068"N	104°56'21.107"W	0.00	
10856.00†	92.160	179.905	7676.64	3015.96	-3016.43	-282.72	40°02'05.081"N	104°56'21.105"W	0.00	
10956.00†	92.160	179.905	7672.87	3115.89	-3116.36	-282.55	40°02'04.093"N	104°56'21.103"W	0.00	
11056.00†	92.160	179.905	7669.10	3215.82	-3216.29	-282.39	40°02'03.106"N	104°56'21.100"W	0.00	
11156.00†	92.160	179.905	7665.33	3315.75	-3316.22	-282.22	40°02'02.118"N	104°56'21.098"W	0.00	
11256.00†	92.160	179.905	7661.56	3415.68	-3416.15	-282.05	40°02'01.131"N	104°56'21.096"W	0.00	
11356.00†	92.160	179.905	7657.79	3515.61	-3516.08	-281.89	40°02'00.143"N	104°56'21.094"W	0.00	
11456.00†	92.160	179.905	7654.03	3615.53	-3616.01	-281.72	40°01'59.156"N	104°56'21.092"W	0.00	
11556.00†	92.160	179.905	7650.26	3715.46	-3715.94	-281.56	40°01'58.168"N	104°56'21.090"W	0.00	
11656.00†	92.160	179.905	7646.49	3815.39	-3815.86	-281.39	40°01'57.181"N	104°56'21.087"W	0.00	
11756.00†	92.160	179.905	7642.72	3915.32	-3915.79	-281.23	40°01'56.193"N	104°56'21.085"W	0.00	
11856.00†	92.160	179.905	7638.95	4015.25	-4015.72	-281.06	40°01'55.206"N	104°56'21.083"W	0.00	



Planned Wellpath Report

RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO		Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-T1N-R67W			

WELLPATH DATA (140 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11956.00†	92.160	179.905	7635.18	4115.18	-4115.65	-280.89	40°01'54.218"N	104°56'21.081"W	0.00	
12056.00†	92.160	179.905	7631.41	4215.11	-4215.58	-280.73	40°01'53.231"N	104°56'21.079"W	0.00	
12156.00†	92.160	179.905	7627.64	4315.04	-4315.51	-280.56	40°01'52.243"N	104°56'21.077"W	0.00	
12256.00†	92.160	179.905	7623.88	4414.97	-4415.44	-280.40	40°01'51.256"N	104°56'21.075"W	0.00	
12332.30	92.160	179.905	7621.00 ¹	4491.21	-4491.69	-280.27	40°01'50.502"N	104°56'21.073"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: RALPH 35N-19HZ PWB Ref Wellpath: RALPH 35N-19HZ (REV-A.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	16.00	856.00	840.00	16.00	855.80	0.00	0.00	3.97	15.53
9.625in Casing Surface	16.00	906.00	890.00	16.00	905.79	0.00	0.00	4.22	16.32
8.75in Open Hole	856.00	8166.60	7310.60	855.80	7778.00	3.97	15.53	-328.95	-287.17
7in Casing Intermediate	16.00	8166.60	8150.60	16.00	7778.00	0.00	0.00	-328.95	-287.17
6.125in Open Hole	8166.60	12332.30	4165.70	7778.00	7621.00	-328.95	-287.17	-4491.68	-280.27
4.5in Casing Production	16.00	12332.30	12316.30	16.00	7621.00	0.00	0.00	-4491.68	-280.27

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 19 LINES		0.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W	polygon
1) RALPH 35N-19HZ BHL ON PLAT REV-1 (460'FSL & 950'FWL, SEC.19)	12332.30	7621.00	-4491.69	-280.27	3157042.03	1254524.83	40°01'50.502"N	104°56'21.073"W	point
RALPH 35N-19HZ LAND BOX		8000.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W	polygon
SEC. 19 HARDLINES (460' SETBACKS)		8000.00	0.00	0.00	3157293.83	1259018.03	40°02'34.890"N	104°56'17.470"W	polygon

SURVEY PROGRAM - Ref Wellbore: RALPH 35N-19HZ PWB Ref Wellpath: RALPH 35N-19HZ (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	856.00	Generic gyro - continuous (Standard)		RALPH 35N-19HZ AWB
856.00	8166.60	NaviTrak (MAGCORR,IFR)		RALPH 35N-19HZ PWB
8166.60	12332.30	OnTrak (MAGCORR,IFR)		RALPH 35N-19HZ PWB



Planned Wellpath Report

RALPH 35N-19HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 RALPH 35N-19HZ (340'FNL & 1210'FWL, SEC.19)
Area	COLORADO	Well	RALPH 35N-19HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RALPH 35N-19HZ PWB
Facility	SEC.19-T1N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	76.190	16.00	TIE-ON
116.00	0.470	76.190	116.00	BEGIN GYRO SURVEYS
4918.11	0.000	179.905	4883.00	SUSSEX
7523.14	29.203	179.905	7473.00	SHARON SPRINGS
7557.87	31.287	179.905	7503.00	NIOBRARA A
7816.89	57.189	179.905	7687.00	NIOBRARA B
7851.78	60.678	179.905	7705.00	NIOBRARA B CHLK TL