

Location:	COLORADO	Slot:	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Field:	WELD COUNTY (KERR MCGEE)	Well:	WIRKNER-VANCE 34N-1HZ
Facility:	SEC.36-T3N-R67W	Wellbore:	WIRKNER-VANCE 34N-1HZ PWB

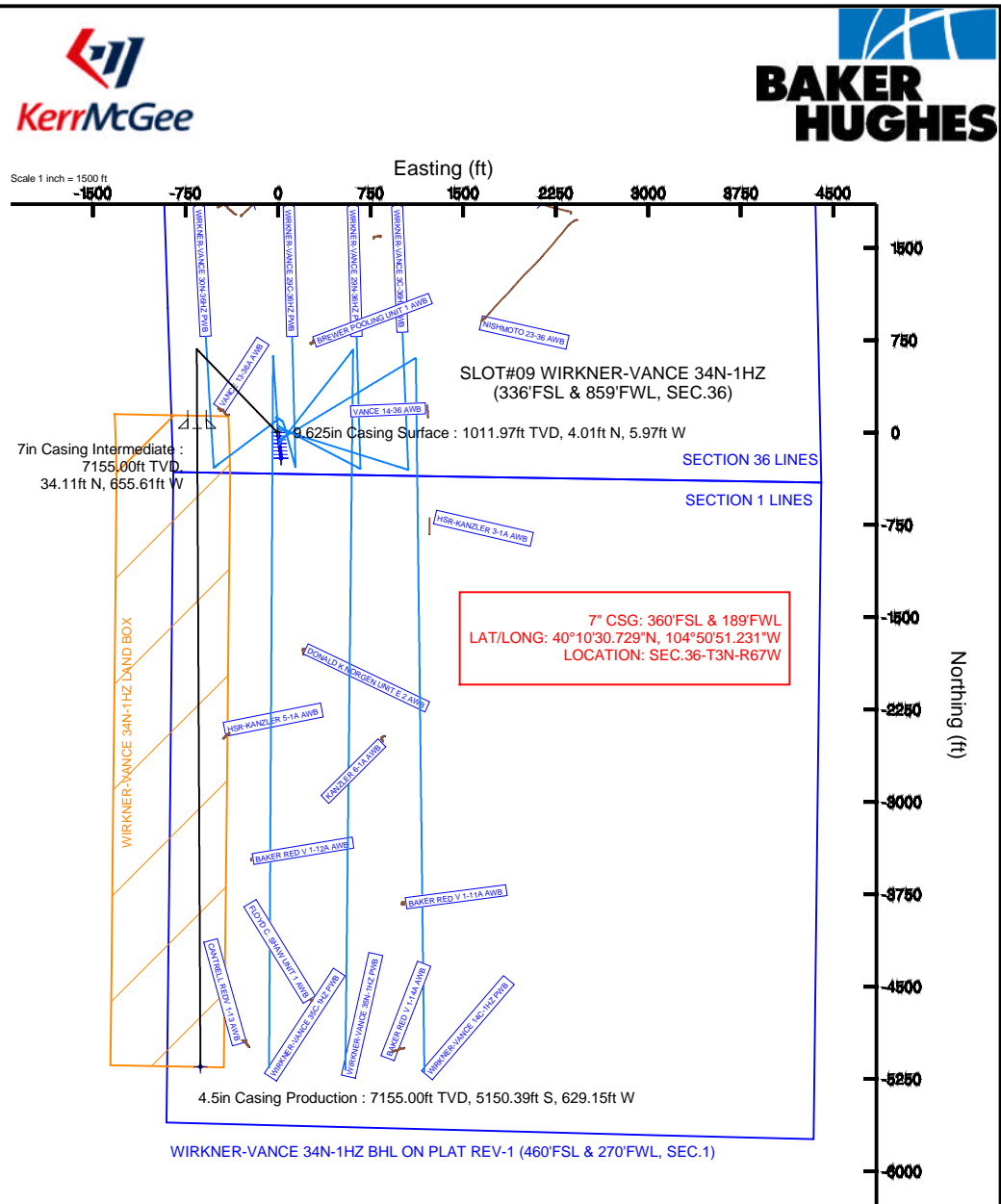
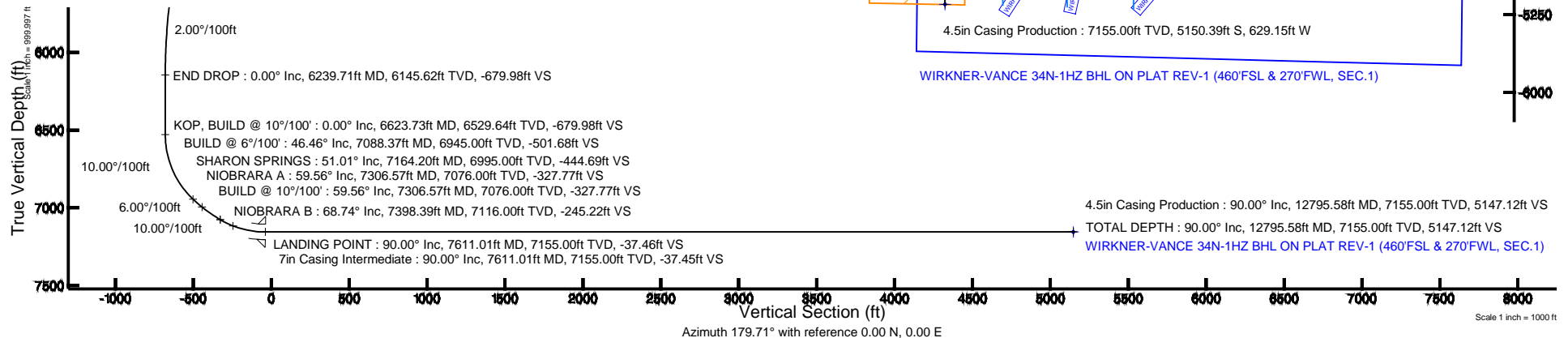
Plot reference wellpath is WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP	
True vertical depths are referenced to ENSIGN 138 (RKB 13') (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to ENSIGN 138 (RKB 13') (RKB)	North Reference: North north
ENSGIN 138 (RKB 13') (RKB) to Mean Sea Level: 4835 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLO709 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: wslja602 on 10/24/2013

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 36-T3N-R6W			3182517.510	1310192.871	40°10'58.908"N	104°50'48.300"W
Site	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#09 WIRKNER-VANCE 34N-14Z (336FSL & 859FWL, SEC.36)	-2895.64	428.10	3182966.833	1307310.588	40°10'30.392"N	104°50'42.785"W
ENGIN 138 (RKB 13) (RKB) to Mud line (N Slot: SLOT#09 WIRKNER-VANCE 34N-14Z (336FSL & 859FWL, SEC.36))					4835ft	
Mean Sea Level to Mud line (N Slot: SLOT#09 WIRKNER-VANCE 34N-14Z (336FSL & 859FWL, SEC.36))					0ft	
ENGIN 138 (RKB 13) (RKB) to Mean Sea Level					4835ft	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	951.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		WIRKNER-VANCE 34N-1HZ AWB
951.00	7611.01	NavitTrak	NavitTrak (MAGCORR,IFR)		WIRKNER-VANCE 34N-1HZ PWB
7611.01	12795.58	OnTrak	OnTrak (MAGCORR,IFR)		WIRKNER-VANCE 34N-1HZ PWB

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO	951.00	0.400	269.590	950.97	4.01	-5.55	0.41	-4.04
BEGIN NUDGE	1150.03	0.400	269.590	1150.00	4.00	-6.93	0.00	-4.04
END NUDGE	1736.42	12.000	315.985	1732.00	47.98	-51.49	2.00	-48.24
BEGIN DROP	5639.71	12.000	315.985	5550.00	631.61	-615.39	0.00	-634.73
END DROP	6239.71	0.000	179.708	6145.62	676.63	-658.89	2.00	-679.98
KOP, BUILD @ 10°/100'	6623.73	0.000	179.708	6529.64	676.63	-658.89	0.00	-679.98
BUILD @ 6°/100'	7088.37	46.464	179.708	6945.00	498.33	-657.98	10.00	-501.68
BUILD @ 10°/100'	7306.57	59.556	179.708	7076.00	324.43	-657.09	6.00	-327.77
LANDING POINT	7611.01	90.000	179.708	7155.00	34.12	-655.61	10.00	-37.46
TOTAL DEPTH	12795.58	90.000	179.707	7155.00	-5150.39	-629.15	0.00	5147.12

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
WIKNER-VANCE 34N-14Z BHL ON PLAT REV 1 (460FSL & 270FWL, SEC. 1)	12795.58	7155.00	-5150.39	-629.15	3182375.76	1302155.92	40°09'39.496"N	104°50'50.888"W
WIKNER-VANCE 34N-14Z LAND BOX		7200.00	0.00	0.00	3182966.83	1307310.59	40°10'30.392"N	104°50'42.785"W
WIKNER SECTION 1 LINES		7400.00	-89.25	10.63	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W
WIKNER SECTION 36 LINES		7400.00	-89.25	10.63	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W



WIRKNER-VANCE 34N-1HZ BHL ON PLAT REV-1 (460'FSL & 270'FWL, SEC.1)

4.5in Casing Production : 90.00° Inc, 12795.58ft MD, 7155.00ft TVD, 5147.12ft VS
+ TOTAL DEPTH : 90.00° Inc, 12795.58ft MD, 7155.00ft TVD, 5147.12ft VS
WIRKNER-VANCE 34N-1HZ BHL ON PLAT REV-1 (460°FSL & 270°FWL, SEC.1)

Scale 1 inch = 1000 ft



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Wilsjef02
Scale	0.999958	Report Generated	10/24/2013 at 11:57:35
Convergence at slot	n/a	Database/Source file	WellArchitectDB/WIRKNER-VANCE_34N-1HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2885.64	428.10	3182966.83	1307310.59	40°10'30.392"N	104°50'42.785"W
Facility Reference Pt			3182517.51	1310192.87	40°10'58.908"N	104°50'48.300"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM

Calculation method	Minimum curvature	ENSIGN 138 (RKB 13') (RKB) to Facility Vertical Datum	4835.00ft
Horizontal Reference Pt	Slot	ENSIGN 138 (RKB 13') (RKB) to Mean Sea Level	4835.00ft
Vertical Reference Pt	ENSIGN 138 (RKB 13') (RKB)	ENSIGN 138 (RKB 13') (RKB) to Mud Line at Slot (SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36))	4835.00ft
MD Reference Pt	ENSIGN 138 (RKB 13') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.71°



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (143 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	321.900	0.00	0.00	0.00	0.00	40°10'30.392"N	104°50'42.785"W	0.00	
13.00	0.000	321.900	13.00	0.00	0.00	0.00	40°10'30.392"N	104°50'42.785"W	0.00	TIE-ON
113.00	0.600	321.900	113.00	-0.41	0.41	-0.32	40°10'30.396"N	104°50'42.789"W	0.60	BEGIN GYRO SURVEYS
213.00	0.600	315.750	212.99	-1.20	1.20	-1.01	40°10'30.404"N	104°50'42.798"W	0.06	
313.00	0.430	309.660	312.99	-1.82	1.81	-1.67	40°10'30.410"N	104°50'42.806"W	0.18	
413.00	0.440	316.200	412.99	-2.34	2.33	-2.22	40°10'30.415"N	104°50'42.814"W	0.05	
513.00	0.550	314.410	512.98	-2.96	2.94	-2.83	40°10'30.421"N	104°50'42.821"W	0.11	
613.00	0.390	299.370	612.98	-3.46	3.45	-3.47	40°10'30.426"N	104°50'42.830"W	0.20	
713.00	0.340	297.160	712.98	-3.77	3.75	-4.03	40°10'30.429"N	104°50'42.837"W	0.05	
813.00	0.470	287.980	812.97	-4.03	4.01	-4.68	40°10'30.432"N	104°50'42.845"W	0.14	
913.00	0.300	250.030	912.97	-4.07	4.05	-5.32	40°10'30.432"N	104°50'42.854"W	0.30	
951.00	0.400	269.590	950.97	-4.04	4.01	-5.55	40°10'30.432"N	104°50'42.856"W	0.41	TIE-INTO GYRO
1051.00†	0.400	269.590	1050.97	-4.04	4.01	-6.24	40°10'30.432"N	104°50'42.865"W	0.00	
1150.03	0.400	269.590	1150.00	-4.04	4.00	-6.93	40°10'30.432"N	104°50'42.874"W	0.00	BEGIN NUDGE
1151.00†	0.413	271.575	1150.97	-4.04	4.00	-6.94	40°10'30.432"N	104°50'42.874"W	2.00	
1251.00†	2.307	310.005	1250.93	-5.35	5.31	-8.84	40°10'30.444"N	104°50'42.899"W	2.00	
1351.00†	4.298	313.434	1350.76	-9.24	9.18	-13.11	40°10'30.483"N	104°50'42.954"W	2.00	
1451.00†	6.295	314.692	1450.33	-15.71	15.61	-19.73	40°10'30.546"N	104°50'43.039"W	2.00	
1551.00†	8.293	315.346	1549.52	-24.74	24.60	-28.69	40°10'30.635"N	104°50'43.155"W	2.00	
1651.00†	10.292	315.747	1648.20	-36.33	36.13	-40.00	40°10'30.749"N	104°50'43.300"W	2.00	
1736.42	12.000	315.985	1732.00	-48.24	47.98	-51.49	40°10'30.866"N	104°50'43.448"W	2.00	END NUDGE
1751.00†	12.000	315.985	1746.27	-50.43	50.16	-53.60	40°10'30.888"N	104°50'43.476"W	0.00	
1851.00†	12.000	315.985	1844.08	-65.46	65.11	-68.05	40°10'31.035"N	104°50'43.662"W	0.00	
1951.00†	12.000	315.985	1941.90	-80.48	80.07	-82.49	40°10'31.183"N	104°50'43.848"W	0.00	
2051.00†	12.000	315.985	2039.71	-95.51	95.02	-96.94	40°10'31.331"N	104°50'44.034"W	0.00	
2151.00†	12.000	315.985	2137.53	-110.54	109.97	-111.39	40°10'31.479"N	104°50'44.220"W	0.00	
2251.00†	12.000	315.985	2235.34	-125.56	124.92	-125.83	40°10'31.626"N	104°50'44.406"W	0.00	
2351.00†	12.000	315.985	2333.16	-140.59	139.87	-140.28	40°10'31.774"N	104°50'44.592"W	0.00	
2451.00†	12.000	315.985	2430.97	-155.61	154.83	-154.73	40°10'31.922"N	104°50'44.778"W	0.00	
2551.00†	12.000	315.985	2528.79	-170.64	169.78	-169.17	40°10'32.070"N	104°50'44.964"W	0.00	
2651.00†	12.000	315.985	2626.60	-185.66	184.73	-183.62	40°10'32.217"N	104°50'45.151"W	0.00	
2751.00†	12.000	315.985	2724.41	-200.69	199.68	-198.07	40°10'32.365"N	104°50'45.337"W	0.00	
2851.00†	12.000	315.985	2822.23	-215.71	214.63	-212.51	40°10'32.513"N	104°50'45.523"W	0.00	
2951.00†	12.000	315.985	2920.04	-230.74	229.59	-226.96	40°10'32.661"N	104°50'45.709"W	0.00	
3051.00†	12.000	315.985	3017.86	-245.77	244.54	-241.41	40°10'32.809"N	104°50'45.895"W	0.00	
3151.00†	12.000	315.985	3115.67	-260.79	259.49	-255.85	40°10'32.956"N	104°50'46.081"W	0.00	
3251.00†	12.000	315.985	3213.49	-275.82	274.44	-270.30	40°10'33.104"N	104°50'46.267"W	0.00	
3351.00†	12.000	315.985	3311.30	-290.84	289.39	-284.75	40°10'33.252"N	104°50'46.453"W	0.00	
3451.00†	12.000	315.985	3409.12	-305.87	304.35	-299.19	40°10'33.400"N	104°50'46.639"W	0.00	
3551.00†	12.000	315.985	3506.93	-320.89	319.30	-313.64	40°10'33.547"N	104°50'46.826"W	0.00	
3651.00†	12.000	315.985	3604.75	-335.92	334.25	-328.09	40°10'33.695"N	104°50'47.012"W	0.00	
3751.00†	12.000	315.985	3702.56	-350.94	349.20	-342.53	40°10'33.843"N	104°50'47.198"W	0.00	
3851.00†	12.000	315.985	3800.38	-365.97	364.16	-356.98	40°10'33.991"N	104°50'47.384"W	0.00	
3918.09†	12.000	315.985	3866.00	-376.05	374.19	-366.67	40°10'34.090"N	104°50'47.509"W	0.00	PARKMAN
3951.00†	12.000	315.985	3898.19	-381.00	379.11	-371.43	40°10'34.138"N	104°50'47.570"W	0.00	



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4051.00†	12.000	315.985	3996.01	-396.02	394.06	-385.87	40°10'34.286"N	104°50'47.756"W	0.00	
4151.00†	12.000	315.985	4093.82	-411.05	409.01	-400.32	40°10'34.434"N	104°50'47.942"W	0.00	
4251.00†	12.000	315.985	4191.64	-426.07	423.96	-414.77	40°10'34.582"N	104°50'48.128"W	0.00	
4310.67†	12.000	315.985	4250.00	-435.04	432.89	-423.39	40°10'34.670"N	104°50'48.239"W	0.00	SUSSEX
4351.00†	12.000	315.985	4289.45	-441.10	438.92	-429.21	40°10'34.729"N	104°50'48.314"W	0.00	
4451.00†	12.000	315.985	4387.27	-456.12	453.87	-443.66	40°10'34.877"N	104°50'48.501"W	0.00	
4551.00†	12.000	315.985	4485.08	-471.15	468.82	-458.11	40°10'35.025"N	104°50'48.687"W	0.00	
4651.00†	12.000	315.985	4582.90	-486.17	483.77	-472.55	40°10'35.173"N	104°50'48.873"W	0.00	
4751.00†	12.000	315.985	4680.71	-501.20	498.72	-487.00	40°10'35.320"N	104°50'49.059"W	0.00	
4851.00†	12.000	315.985	4778.52	-516.23	513.68	-501.45	40°10'35.468"N	104°50'49.245"W	0.00	
4951.00†	12.000	315.985	4876.34	-531.25	528.63	-515.89	40°10'35.616"N	104°50'49.431"W	0.00	
5051.00†	12.000	315.985	4974.15	-546.28	543.58	-530.34	40°10'35.764"N	104°50'49.617"W	0.00	
5151.00†	12.000	315.985	5071.97	-561.30	558.53	-544.79	40°10'35.911"N	104°50'49.803"W	0.00	
5251.00†	12.000	315.985	5169.78	-576.33	573.49	-559.23	40°10'36.059"N	104°50'49.990"W	0.00	
5351.00†	12.000	315.985	5267.60	-591.35	588.44	-573.68	40°10'36.207"N	104°50'50.176"W	0.00	
5451.00†	12.000	315.985	5365.41	-606.38	603.39	-588.13	40°10'36.355"N	104°50'50.362"W	0.00	
5551.00†	12.000	315.985	5463.23	-621.40	618.34	-602.57	40°10'36.502"N	104°50'50.548"W	0.00	
5639.71	12.000	315.985	5550.00	-634.73	631.61	-615.39	40°10'36.633"N	104°50'50.713"W	0.00	BEGIN DROP
5651.00†	11.774	315.985	5561.05	-636.41	633.28	-617.01	40°10'36.650"N	104°50'50.734"W	2.00	
5751.00†	9.774	315.985	5659.28	-649.92	646.72	-629.99	40°10'36.783"N	104°50'50.901"W	2.00	
5851.00†	7.774	315.985	5758.10	-660.95	657.69	-640.59	40°10'36.891"N	104°50'51.038"W	2.00	
5951.00†	5.774	315.985	5857.40	-669.47	666.17	-648.79	40°10'36.975"N	104°50'51.143"W	2.00	
6051.00†	3.774	315.985	5957.05	-675.49	672.16	-654.57	40°10'37.034"N	104°50'51.218"W	2.00	
6151.00†	1.774	315.985	6056.93	-678.98	675.64	-657.93	40°10'37.069"N	104°50'51.261"W	2.00	
6239.71	0.000	179.708	6145.62	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	2.00	END DROP
6251.00†	0.000	179.708	6156.91	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	0.00	
6351.00†	0.000	179.708	6256.91	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	0.00	
6451.00†	0.000	179.708	6356.91	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	0.00	
6551.00†	0.000	179.708	6456.91	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	0.00	
6623.73	0.000	179.708	6529.64	-679.98	676.63	-658.89	40°10'37.078"N	104°50'51.273"W	0.00	KOP, BUILD @ 10°/100'
6651.00†	2.727	179.708	6556.90	-679.33	675.98	-658.89	40°10'37.072"N	104°50'51.273"W	10.00	
6751.00†	12.727	179.708	6655.87	-665.90	662.55	-658.82	40°10'36.939"N	104°50'51.273"W	10.00	
6851.00†	22.727	179.708	6751.00	-635.49	632.14	-658.66	40°10'36.639"N	104°50'51.271"W	10.00	
6951.00†	32.727	179.708	6839.40	-589.02	585.67	-658.43	40°10'36.180"N	104°50'51.267"W	10.00	
7051.00†	42.727	179.708	6918.40	-527.91	524.56	-658.11	40°10'35.576"N	104°50'51.263"W	10.00	
7088.37	46.464	179.708	6945.00	-501.68	498.33	-657.98	40°10'35.316"N	104°50'51.262"W	10.00	BUILD @ 6°/100'
7151.00†	50.222	179.708	6986.62	-454.89	451.54	-657.74	40°10'34.854"N	104°50'51.259"W	6.00	
7164.20†	51.014	179.708	6995.00	-444.69	441.34	-657.69	40°10'34.753"N	104°50'51.258"W	6.00	SHARON SPRINGS
7251.00†	56.222	179.708	7046.47	-374.83	371.49	-657.33	40°10'34.063"N	104°50'51.253"W	6.00	
7306.57	59.556	179.708	7076.00	-327.77	324.43	-657.09	40°10'33.598"N	104°50'51.250"W	6.00	BUILD @ 10°/100'; NIOBRARA A
7351.00†	63.999	179.708	7097.01	-288.63	285.29	-656.89	40°10'33.211"N	104°50'51.248"W	10.00	
7398.39†	68.739	179.708	7116.00	-245.22	241.88	-656.67	40°10'32.782"N	104°50'51.245"W	10.00	NIOBRARA B
7451.00†	73.999	179.708	7132.80	-195.39	192.05	-656.42	40°10'32.290"N	104°50'51.241"W	10.00	
7551.00†	83.999	179.708	7151.86	-97.35	94.01	-655.92	40°10'31.321"N	104°50'51.235"W	10.00	
7611.01	90.000	179.708	7155.00	-37.46	34.12	-655.61	40°10'30.729"N	104°50'51.231"W	10.00	LANDING POINT



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7651.00†	90.000	179.708	7155.00	2.54	-5.88	-655.41	40°10'30.334"N	104°50'51.228"W	0.00	
7751.00†	90.000	179.708	7155.00	102.54	-105.88	-654.90	40°10'29.346"N	104°50'51.222"W	0.00	
7851.00†	90.000	179.708	7155.00	202.54	-205.87	-654.39	40°10'28.357"N	104°50'51.215"W	0.00	
7951.00†	90.000	179.708	7155.00	302.54	-305.87	-653.88	40°10'27.369"N	104°50'51.209"W	0.00	
8051.00†	90.000	179.708	7155.00	402.54	-405.87	-653.37	40°10'26.381"N	104°50'51.202"W	0.00	
8151.00†	90.000	179.708	7155.00	502.54	-505.87	-652.86	40°10'25.393"N	104°50'51.195"W	0.00	
8251.00†	90.000	179.708	7155.00	602.54	-605.87	-652.35	40°10'24.405"N	104°50'51.189"W	0.00	
8351.00†	90.000	179.708	7155.00	702.54	-705.87	-651.84	40°10'23.417"N	104°50'51.182"W	0.00	
8451.00†	90.000	179.708	7155.00	802.54	-805.87	-651.33	40°10'22.428"N	104°50'51.176"W	0.00	
8551.00†	90.000	179.708	7155.00	902.54	-905.87	-650.82	40°10'21.440"N	104°50'51.169"W	0.00	
8651.00†	90.000	179.708	7155.00	1002.54	-1005.86	-650.31	40°10'20.452"N	104°50'51.162"W	0.00	
8751.00†	90.000	179.708	7155.00	1102.54	-1105.86	-649.80	40°10'19.464"N	104°50'51.156"W	0.00	
8851.00†	90.000	179.708	7155.00	1202.54	-1205.86	-649.29	40°10'18.476"N	104°50'51.149"W	0.00	
8951.00†	90.000	179.708	7155.00	1302.54	-1305.86	-648.78	40°10'17.487"N	104°50'51.143"W	0.00	
9051.00†	90.000	179.708	7155.00	1402.54	-1405.86	-648.27	40°10'16.499"N	104°50'51.136"W	0.00	
9151.00†	90.000	179.708	7155.00	1502.54	-1505.86	-647.76	40°10'15.511"N	104°50'51.129"W	0.00	
9251.00†	90.000	179.708	7155.00	1602.54	-1605.86	-647.25	40°10'14.523"N	104°50'51.123"W	0.00	
9351.00†	90.000	179.708	7155.00	1702.54	-1705.85	-646.74	40°10'13.535"N	104°50'51.116"W	0.00	
9451.00†	90.000	179.708	7155.00	1802.54	-1805.85	-646.23	40°10'12.546"N	104°50'51.110"W	0.00	
9551.00†	90.000	179.708	7155.00	1902.54	-1905.85	-645.72	40°10'11.558"N	104°50'51.103"W	0.00	
9651.00†	90.000	179.708	7155.00	2002.54	-2005.85	-645.21	40°10'10.570"N	104°50'51.096"W	0.00	
9751.00†	90.000	179.708	7155.00	2102.54	-2105.85	-644.70	40°10'09.582"N	104°50'51.090"W	0.00	
9851.00†	90.000	179.708	7155.00	2202.54	-2205.85	-644.19	40°10'08.594"N	104°50'51.083"W	0.00	
9951.00†	90.000	179.708	7155.00	2302.54	-2305.85	-643.68	40°10'07.605"N	104°50'51.077"W	0.00	
10051.00†	90.000	179.708	7155.00	2402.54	-2405.85	-643.17	40°10'06.617"N	104°50'51.070"W	0.00	
10151.00†	90.000	179.708	7155.00	2502.54	-2505.84	-642.66	40°10'05.629"N	104°50'51.063"W	0.00	
10251.00†	90.000	179.708	7155.00	2602.54	-2605.84	-642.15	40°10'04.641"N	104°50'51.057"W	0.00	
10351.00†	90.000	179.708	7155.00	2702.54	-2705.84	-641.64	40°10'03.653"N	104°50'51.050"W	0.00	
10451.00†	90.000	179.707	7155.00	2802.54	-2805.84	-641.13	40°10'02.665"N	104°50'51.043"W	0.00	
10551.00†	90.000	179.707	7155.00	2902.54	-2905.84	-640.62	40°10'01.676"N	104°50'51.037"W	0.00	
10651.00†	90.000	179.707	7155.00	3002.54	-3005.84	-640.11	40°10'00.688"N	104°50'51.030"W	0.00	
10751.00†	90.000	179.707	7155.00	3102.54	-3105.84	-639.60	40°09'59.700"N	104°50'51.024"W	0.00	
10851.00†	90.000	179.707	7155.00	3202.54	-3205.84	-639.09	40°09'58.712"N	104°50'51.017"W	0.00	
10951.00†	90.000	179.707	7155.00	3302.54	-3305.83	-638.58	40°09'57.724"N	104°50'51.010"W	0.00	
11051.00†	90.000	179.707	7155.00	3402.54	-3405.83	-638.06	40°09'56.735"N	104°50'51.004"W	0.00	
11151.00†	90.000	179.707	7155.00	3502.54	-3505.83	-637.55	40°09'55.747"N	104°50'50.997"W	0.00	
11251.00†	90.000	179.707	7155.00	3602.54	-3605.83	-637.04	40°09'54.759"N	104°50'50.991"W	0.00	
11351.00†	90.000	179.707	7155.00	3702.54	-3705.83	-636.53	40°09'53.771"N	104°50'50.984"W	0.00	
11451.00†	90.000	179.707	7155.00	3802.54	-3805.83	-636.02	40°09'52.783"N	104°50'50.977"W	0.00	
11551.00†	90.000	179.707	7155.00	3902.54	-3905.83	-635.51	40°09'51.794"N	104°50'50.971"W	0.00	
11651.00†	90.000	179.707	7155.00	4002.54	-4005.82	-635.00	40°09'50.806"N	104°50'50.964"W	0.00	
11751.00†	90.000	179.707	7155.00	4102.54	-4105.82	-634.49	40°09'49.818"N	104°50'50.958"W	0.00	
11851.00†	90.000	179.707	7155.00	4202.54	-4205.82	-633.98	40°09'48.830"N	104°50'50.951"W	0.00	
11951.00†	90.000	179.707	7155.00	4302.54	-4305.82	-633.47	40°09'47.842"N	104°50'50.944"W	0.00	
12051.00†	90.000	179.707	7155.00	4402.54	-4405.82	-632.96	40°09'46.853"N	104°50'50.938"W	0.00	



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (143 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12151.00†	90.000	179.707	7155.00	4502.54	-4505.82	-632.44	40°09'45.865"N	104°50'50.931"W	0.00	
12251.00†	90.000	179.707	7155.00	4602.54	-4605.82	-631.93	40°09'44.877"N	104°50'50.924"W	0.00	
12351.00†	90.000	179.707	7155.00	4702.54	-4705.82	-631.42	40°09'43.889"N	104°50'50.918"W	0.00	
12451.00†	90.000	179.707	7155.00	4802.54	-4805.81	-630.91	40°09'42.901"N	104°50'50.911"W	0.00	
12551.00†	90.000	179.707	7155.00	4902.54	-4905.81	-630.40	40°09'41.913"N	104°50'50.905"W	0.00	
12651.00†	90.000	179.707	7155.00	5002.54	-5005.81	-629.89	40°09'40.924"N	104°50'50.898"W	0.00	
12751.00†	90.000	179.707	7155.00	5102.54	-5105.81	-629.38	40°09'39.936"N	104°50'50.891"W	0.00	
12795.58	90.000	179.707	7155.00 ¹	5147.12	-5150.39	-629.15	40°09'39.496"N	104°50'50.888"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -

Ref Wellbore: WIRKNER-VANCE 34N-1HZ PWB Ref Wellpath: WIRKNER-VANCE 34N-1HZ (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	13.00	951.00	938.00	13.00	950.97	0.00	0.00	4.01	-5.55
9.625in Casing Surface	13.00	1012.00	999.00	13.00	1011.97	0.00	0.00	4.01	-5.97
8.75in Open Hole	951.00	7611.01	6660.01	950.97	7155.00	4.01	-5.55	34.11	-655.61
7in Casing Intermediate	13.00	7611.01	7598.01	13.00	7155.00	0.00	0.00	34.11	-655.61
6.125in Open Hole	7611.01	12795.58	5184.57	7155.00	7155.00	34.11	-655.61	-5150.39	-629.15
4.5in Casing Production	13.00	12795.58	12782.58	13.00	7155.00	0.00	0.00	-5150.39	-629.15

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) WIRKNER-VANCE 34N-1HZ BHL ON PLAT REV-1 (460'FSL & 270'FWL, SEC.1)	12795.58	7155.00	-5150.39	-629.15	3182375.76	1302155.92	40°09'39.496"N	104°50'50.888"W	point
WIRKNER-VANCE 34N-1HZ LAND BOX		7200.00	0.00	0.00	3182966.83	1307310.59	40°10'30.392"N	104°50'42.785"W	polygon
WIRKNER SECTION 1 LINES		7400.00	-89.25	10.63	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W	polygon
WIRKNER SECTION 36 LINES		7400.00	-89.25	10.63	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W	polygon

SURVEY PROGRAM - Ref Wellbore: WIRKNER-VANCE 34N-1HZ PWB Ref Wellpath: WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	951.00	Generic gyro - continuous (Standard)		WIRKNER-VANCE 34N-1HZ AWB
951.00	7611.01	NaviTrak (MAGCORR,IFR)		WIRKNER-VANCE 34N-1HZ PWB
7611.01	12795.58	OnTrak (MAGCORR,IFR)		WIRKNER-VANCE 34N-1HZ PWB



Planned Wellpath Report

WIRKNER-VANCE 34N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#09 WIRKNER-VANCE 34N-1HZ (336'FSL & 859'FWL, SEC.36)
Area	COLORADO	Well	WIRKNER-VANCE 34N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 34N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	321.900	13.00	TIE-ON
113.00	0.600	321.900	113.00	BEGIN GYRO SURVEYS
3918.09	12.000	315.985	3866.00	PARKMAN
4310.67	12.000	315.985	4250.00	SUSSEX
7164.20	51.014	179.708	6995.00	SHARON SPRINGS
7306.57	59.556	179.708	7076.00	NIOBRARA A
7398.39	68.739	179.708	7116.00	NIOBRARA B