

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#06 WIRKNER-VANCE 35N-1HZ (247FSL & 866FWL, SEC.36)
 Field: WELD COUNTY (KERR MCGEE) Well: WIRKNER-VANCE 35N-1HZ
 Facility: SEC.36-T3N-R67W Wellbore: WIRKNER-VANCE 35N-1HZ PWB

Plot reference wellpath is WIRKNER-VANCE 35N-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: True north
ENSGN 138 (RKB 13) (RKB) to Mean Sea Level: 4835 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLO#06 WIRKNER-VANCE 35N-1HZ (247FSL & 866FWL, SEC.36)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robie01 on 24/Oct/2013

Location Information

Facility Name		Grid East (US R)	Grid North (US R)	Latitude	Longitude	
SEC.36-T3N-R67W		3182517.510	1310192.871	40°10'58.908"N	104°50'48.300"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
SLOT#06 WIRKNER-VANCE 35N-1HZ (247FSL & 866FWL, SEC.36)	-2974.90	438.73	3182978.125	1307221.420	40°10'29.510"N	104°50'42.648"W
ENSGN 138 (RKB 13) (RKB) to Mud line (At Slot: SLO#06 WIRKNER-VANCE 35N-1HZ (247FSL & 866FWL, SEC.36))		4835ft				
Mean Sea Level to Mud line (At Slot: SLO#06 WIRKNER-VANCE 35N-1HZ (247FSL & 866FWL, SEC.36))		0ft				
ENSGN 138 (RKB 13) (RKB) to Mean Sea Level		4835ft				

Survey Program

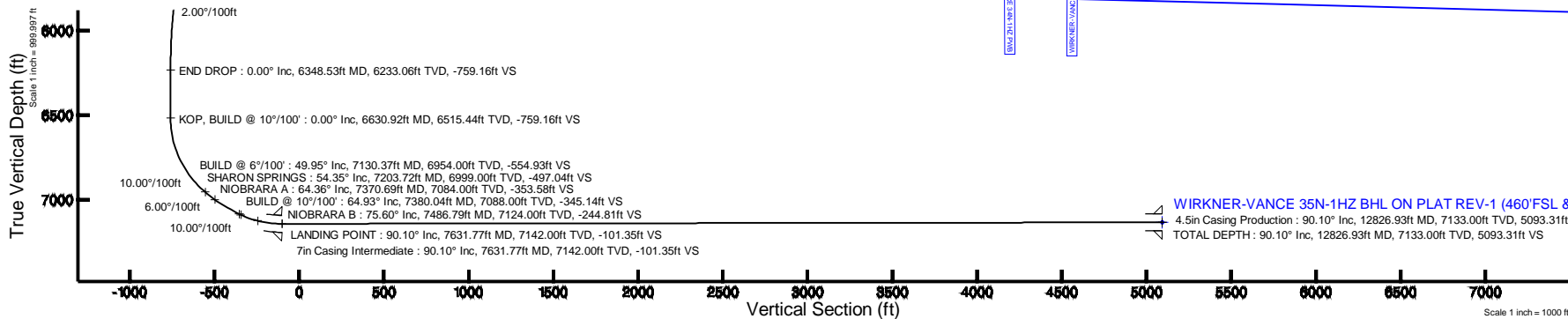
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
13.00	899.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		WIRKNER-VANCE 35N-1HZ AWB
899.00	7631.77	NavTrak	NavTrak (MAGCORR,IFR)		WIRKNER-VANCE 35N-1HZ PWB
7631.77	12826.93	OnTrak	OnTrak (MAGCORR,IFR)		WIRKNER-VANCE 35N-1HZ PWB

Well Profile Data

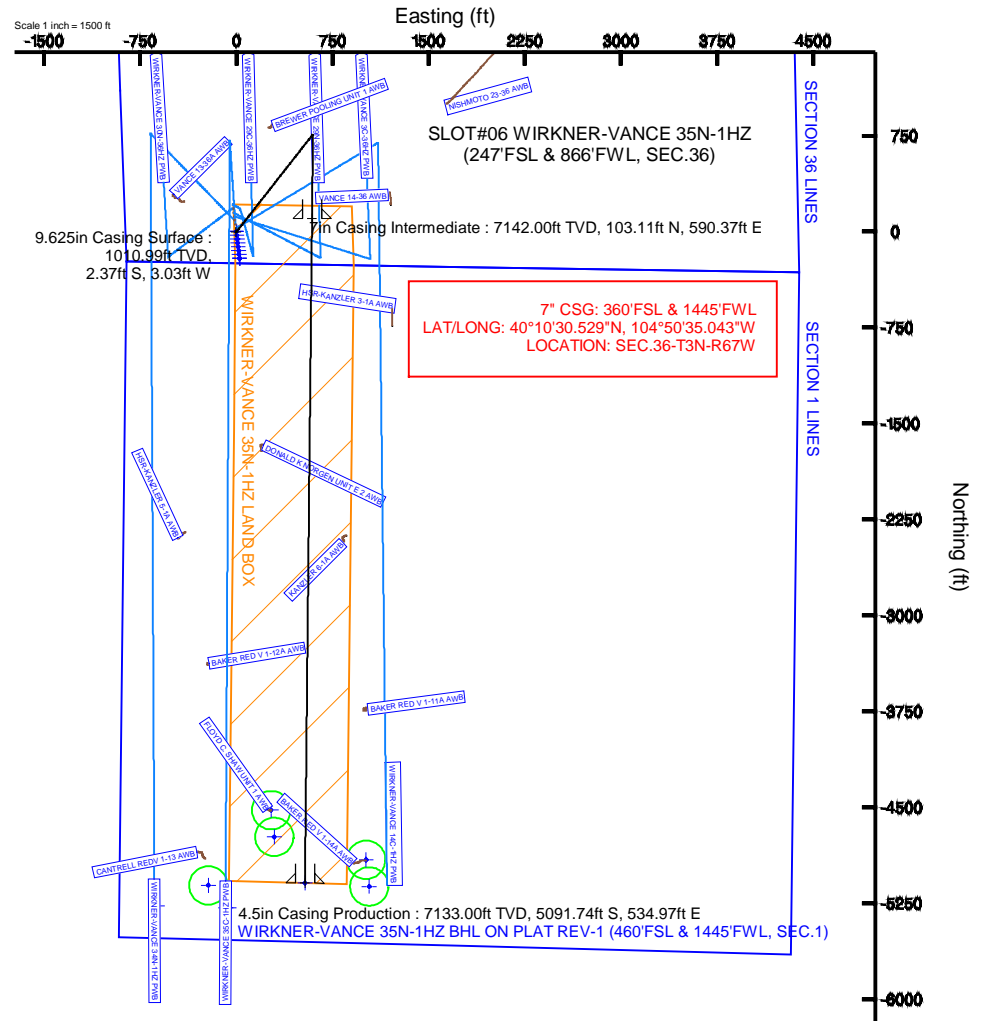
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO	899.00	0.270	182.300	898.99	-1.85	-3.01	0.34	1.84
BEGIN NUDGE	1900.02	0.270	182.300	1900.00	-6.56	-3.20	0.00	6.55
END NUDGE	2042.22	14.000	38.032	2040.81	6.72	7.44	10.00	-6.70
BEGIN DROP	5648.53	14.000	38.032	5540.00	693.92	544.95	0.00	-692.29
END DROP	6348.53	0.000	180.611	6233.06	760.95	597.38	2.00	-759.16
KOP, BUILD @ 10°/100'	6630.92	0.000	180.611	6515.44	760.95	597.38	0.00	-759.16
BUILD @ 6°/100'	7130.37	49.945	180.611	6954.00	556.71	595.21	10.00	-554.93
BUILD @ 10°/100'	7380.04	64.925	180.611	7088.00	346.91	592.97	6.00	-345.14
LANDING POINT	7631.77	90.099	180.611	7142.00	103.11	590.37	10.00	-101.35
TOTAL DEPTH	12826.93	90.099	180.611	7133.00	-5091.74	534.97	0.00	5093.31

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US R)	Grid North (US R)	Latitude	Longitude
FLOYD C. SHAW UNIT 1 50' RADIUS	7130.00	-4522.35	271.11		3183282.61	1302701.40	40°09'44.820"N	104°50'39.156"W
WIRKNER-VANCE 35N-1HZ BHL ON PLAT REV-1 (460'FSL & 1445'FWL, SEC.1)	12826.93	7133.00	-5091.74	534.97	3183550.66	1302133.99	40°09'39.193"N	104°50'35.758"W
BAKER RED V-1-14A	7325.00	-4909.94	1012.36		3184026.67	1302319.31	40°09'40.990"N	104°50'29.609"W
WIRKNER-VANCE 35N-1HZ LAND BOX	7350.00	0.00	0.00		3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W
WIRKNER SECTION 1 LINES	7400.00	0.00	0.00		3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W
WIRKNER SECTION 36 LINES	7400.00	0.00	0.00		3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W



Azimuth 179.83° with reference 0.00 N, 0.00 E



WIRKNER-VANCE 35N-1HZ BHL ON PLAT REV-1 (460'FSL & 1445'FWL, SEC.1)
 4.5in Casing Production : 90.10° Inc, 12826.93ft MD, 7133.00ft TVD, 5093.31ft VS
 TOTAL DEPTH : 90.10° Inc, 12826.93ft MD, 7133.00ft TVD, 5093.31ft VS

Scale 1 inch = 1000 ft



Planned Wellpath Report

WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-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	Robiale01
Scale	0.999958	Report Generated	24/Oct/2013 at 10:39
Convergence at slot	n/a	Database/Source file	WellArchitectDB/WIRKNER-VANCE_35N-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	-2974.90	438.73	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"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#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'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	179.83°



Planned Wellpath Report

WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (144 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	262.270	0.00	0.00	0.00	0.00	40°10'29.510"N	104°50'42.648"W	0.00	
13.00	0.000	262.270	13.00	0.00	0.00	0.00	40°10'29.510"N	104°50'42.648"W	0.00	TIE-ON
113.00	0.130	262.270	113.00	0.01	-0.02	-0.11	40°10'29.510"N	104°50'42.649"W	0.13	BEGIN GYRO SURVEYS
213.00	0.410	259.200	213.00	0.10	-0.10	-0.58	40°10'29.509"N	104°50'42.655"W	0.28	
313.00	0.210	258.940	313.00	0.20	-0.20	-1.11	40°10'29.508"N	104°50'42.662"W	0.20	
413.00	0.140	287.980	413.00	0.19	-0.20	-1.40	40°10'29.508"N	104°50'42.666"W	0.11	
513.00	0.190	207.690	513.00	0.30	-0.31	-1.60	40°10'29.507"N	104°50'42.669"W	0.22	
613.00	0.320	226.200	613.00	0.64	-0.65	-1.88	40°10'29.504"N	104°50'42.672"W	0.15	
713.00	0.450	219.120	712.99	1.14	-1.14	-2.32	40°10'29.499"N	104°50'42.678"W	0.14	
813.00	0.290	245.610	812.99	1.55	-1.55	-2.80	40°10'29.495"N	104°50'42.684"W	0.23	
899.00	0.270	182.300	898.99	1.84	-1.85	-3.01	40°10'29.492"N	104°50'42.687"W	0.34	TIE-INTO GYRO
999.00†	0.270	182.300	998.99	2.31	-2.32	-3.03	40°10'29.487"N	104°50'42.687"W	0.00	
1099.00†	0.270	182.300	1098.99	2.78	-2.79	-3.05	40°10'29.482"N	104°50'42.687"W	0.00	
1199.00†	0.270	182.300	1198.99	3.25	-3.26	-3.07	40°10'29.478"N	104°50'42.688"W	0.00	
1299.00†	0.270	182.300	1298.99	3.72	-3.73	-3.09	40°10'29.473"N	104°50'42.688"W	0.00	
1399.00†	0.270	182.300	1398.98	4.19	-4.20	-3.10	40°10'29.468"N	104°50'42.688"W	0.00	
1499.00†	0.270	182.300	1498.98	4.66	-4.67	-3.12	40°10'29.464"N	104°50'42.688"W	0.00	
1599.00†	0.270	182.300	1598.98	5.13	-5.14	-3.14	40°10'29.459"N	104°50'42.688"W	0.00	
1699.00†	0.270	182.300	1698.98	5.60	-5.61	-3.16	40°10'29.455"N	104°50'42.689"W	0.00	
1799.00†	0.270	182.300	1798.98	6.07	-6.08	-3.18	40°10'29.450"N	104°50'42.689"W	0.00	
1899.00†	0.270	182.300	1898.98	6.54	-6.55	-3.20	40°10'29.445"N	104°50'42.689"W	0.00	
1900.02	0.270	182.300	1900.00	6.55	-6.56	-3.20	40°10'29.445"N	104°50'42.689"W	0.00	BEGIN NUDGE
1999.00†	9.678	38.320	1998.52	0.25	-0.25	1.96	40°10'29.508"N	104°50'42.623"W	10.00	
2042.22	14.000	38.032	2040.81	-6.70	6.72	7.44	40°10'29.576"N	104°50'42.552"W	10.00	END NUDGE
2099.00†	14.000	38.032	2095.90	-17.49	17.54	15.90	40°10'29.683"N	104°50'42.443"W	0.00	
2199.00†	14.000	38.032	2192.93	-36.51	36.60	30.81	40°10'29.872"N	104°50'42.251"W	0.00	
2299.00†	14.000	38.032	2289.96	-55.52	55.65	45.71	40°10'30.060"N	104°50'42.059"W	0.00	
2399.00†	14.000	38.032	2386.99	-74.53	74.71	60.62	40°10'30.248"N	104°50'41.867"W	0.00	
2499.00†	14.000	38.032	2484.02	-93.54	93.76	75.52	40°10'30.437"N	104°50'41.675"W	0.00	
2599.00†	14.000	38.032	2581.05	-112.55	112.82	90.43	40°10'30.625"N	104°50'41.483"W	0.00	
2699.00†	14.000	38.032	2678.08	-131.56	131.87	105.33	40°10'30.813"N	104°50'41.291"W	0.00	
2799.00†	14.000	38.032	2775.11	-150.57	150.93	120.24	40°10'31.001"N	104°50'41.099"W	0.00	
2899.00†	14.000	38.032	2872.14	-169.58	169.99	135.14	40°10'31.190"N	104°50'40.907"W	0.00	
2999.00†	14.000	38.032	2969.17	-188.59	189.04	150.05	40°10'31.378"N	104°50'40.715"W	0.00	
3099.00†	14.000	38.032	3066.20	-207.60	208.10	164.95	40°10'31.566"N	104°50'40.523"W	0.00	
3199.00†	14.000	38.032	3163.23	-226.61	227.15	179.86	40°10'31.755"N	104°50'40.331"W	0.00	
3299.00†	14.000	38.032	3260.26	-245.62	246.21	194.76	40°10'31.943"N	104°50'40.139"W	0.00	
3399.00†	14.000	38.032	3357.29	-264.64	265.26	209.67	40°10'32.131"N	104°50'39.947"W	0.00	
3499.00†	14.000	38.032	3454.32	-283.65	284.32	224.57	40°10'32.320"N	104°50'39.755"W	0.00	
3599.00†	14.000	38.032	3551.35	-302.66	303.37	239.48	40°10'32.508"N	104°50'39.563"W	0.00	
3699.00†	14.000	38.032	3648.38	-321.67	322.43	254.38	40°10'32.696"N	104°50'39.371"W	0.00	
3799.00†	14.000	38.032	3745.41	-340.68	341.48	269.28	40°10'32.885"N	104°50'39.179"W	0.00	
3899.00†	14.000	38.032	3842.44	-359.69	360.54	284.19	40°10'33.073"N	104°50'38.987"W	0.00	
3925.35†	14.000	38.032	3868.00	-364.70	365.56	288.12	40°10'33.122"N	104°50'38.936"W	0.00	PARKMAN
3999.00†	14.000	38.032	3939.47	-378.70	379.59	299.09	40°10'33.261"N	104°50'38.795"W	0.00	



Planned Wellpath Report

WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4099.00†	14.000	38.032	4036.49	-397.71	398.65	314.00	40°10'33.449"N	104°50'38.603"W	0.00	
4199.00†	14.000	38.032	4133.52	-416.72	417.71	328.90	40°10'33.638"N	104°50'38.411"W	0.00	
4299.00†	14.000	38.032	4230.55	-435.73	436.76	343.81	40°10'33.826"N	104°50'38.219"W	0.00	
4321.10†	14.000	38.032	4252.00	-439.93	440.97	347.10	40°10'33.868"N	104°50'38.176"W	0.00	SUSSEX
4399.00†	14.000	38.032	4327.58	-454.74	455.82	358.71	40°10'34.014"N	104°50'38.027"W	0.00	
4499.00†	14.000	38.032	4424.61	-473.75	474.87	373.62	40°10'34.203"N	104°50'37.835"W	0.00	
4599.00†	14.000	38.032	4521.64	-492.76	493.93	388.52	40°10'34.391"N	104°50'37.643"W	0.00	
4699.00†	14.000	38.032	4618.67	-511.78	512.98	403.43	40°10'34.579"N	104°50'37.451"W	0.00	
4799.00†	14.000	38.032	4715.70	-530.79	532.04	418.33	40°10'34.768"N	104°50'37.259"W	0.00	
4899.00†	14.000	38.032	4812.73	-549.80	551.09	433.24	40°10'34.956"N	104°50'37.067"W	0.00	
4999.00†	14.000	38.032	4909.76	-568.81	570.15	448.14	40°10'35.144"N	104°50'36.875"W	0.00	
5099.00†	14.000	38.032	5006.79	-587.82	589.20	463.05	40°10'35.332"N	104°50'36.683"W	0.00	
5199.00†	14.000	38.032	5103.82	-606.83	608.26	477.95	40°10'35.521"N	104°50'36.491"W	0.00	
5299.00†	14.000	38.032	5200.85	-625.84	627.31	492.86	40°10'35.709"N	104°50'36.299"W	0.00	
5399.00†	14.000	38.032	5297.88	-644.85	646.37	507.76	40°10'35.897"N	104°50'36.107"W	0.00	
5499.00†	14.000	38.032	5394.91	-663.86	665.43	522.67	40°10'36.086"N	104°50'35.915"W	0.00	
5599.00†	14.000	38.032	5491.94	-682.87	684.48	537.57	40°10'36.274"N	104°50'35.723"W	0.00	
5648.53	14.000	38.032	5540.00	-692.29	693.92	544.95	40°10'36.367"N	104°50'35.627"W	0.00	BEGIN DROP
5699.00†	12.991	38.032	5589.07	-701.54	703.20	552.21	40°10'36.459"N	104°50'35.534"W	2.00	
5799.00†	10.991	38.032	5686.89	-717.87	719.56	565.01	40°10'36.621"N	104°50'35.369"W	2.00	
5899.00†	8.991	38.032	5785.36	-731.50	733.22	575.70	40°10'36.756"N	104°50'35.231"W	2.00	
5999.00†	6.991	38.032	5884.39	-742.43	744.17	584.26	40°10'36.864"N	104°50'35.121"W	2.00	
6099.00†	4.991	38.032	5983.84	-750.63	752.39	590.69	40°10'36.945"N	104°50'35.038"W	2.00	
6199.00†	2.991	38.032	6083.59	-756.09	757.87	594.98	40°10'36.999"N	104°50'34.983"W	2.00	
6299.00†	0.991	38.032	6183.52	-758.82	760.61	597.12	40°10'37.026"N	104°50'34.955"W	2.00	
6348.53	0.000	180.611	6233.06	-759.16	760.95	597.38	40°10'37.030"N	104°50'34.952"W	2.00	END DROP
6399.00†	0.000	180.611	6283.52	-759.16	760.95	597.38	40°10'37.030"N	104°50'34.952"W	0.00	
6499.00†	0.000	180.611	6383.52	-759.16	760.95	597.38	40°10'37.030"N	104°50'34.952"W	0.00	
6599.00†	0.000	180.611	6483.52	-759.16	760.95	597.38	40°10'37.030"N	104°50'34.952"W	0.00	
6630.92	0.000	180.611	6515.44	-759.16	760.95	597.38	40°10'37.030"N	104°50'34.952"W	0.00	KOP, BUILD @ 10°/100'
6699.00†	6.808	180.611	6583.36	-755.12	756.91	597.34	40°10'36.990"N	104°50'34.952"W	10.00	
6799.00†	16.808	180.611	6681.12	-734.68	736.47	597.12	40°10'36.788"N	104°50'34.955"W	10.00	
6899.00†	26.808	180.611	6773.85	-697.59	699.37	596.73	40°10'36.421"N	104°50'34.960"W	10.00	
6999.00†	36.808	180.611	6858.72	-644.95	646.73	596.17	40°10'35.901"N	104°50'34.968"W	10.00	
7099.00†	46.808	180.611	6933.16	-578.38	580.16	595.46	40°10'35.243"N	104°50'34.977"W	10.00	
7130.37	49.945	180.611	6954.00	-554.93	556.71	595.21	40°10'35.011"N	104°50'34.980"W	10.00	BUILD @ 6°/100'
7199.00†	54.063	180.611	6996.24	-500.86	502.64	594.63	40°10'34.477"N	104°50'34.988"W	6.00	
7203.72†	54.346	180.611	6999.00	-497.04	498.81	594.59	40°10'34.439"N	104°50'34.988"W	6.00	SHARON SPRINGS
7299.00†	60.063	180.611	7050.59	-416.98	418.76	593.73	40°10'33.648"N	104°50'34.999"W	6.00	
7370.69†	64.365	180.611	7084.00	-353.58	355.35	593.06	40°10'33.021"N	104°50'35.008"W	6.00	NIOBRARA A
7380.04	64.925	180.611	7088.00	-345.14	346.91	592.97	40°10'32.938"N	104°50'35.009"W	6.00	BUILD @ 10°/100'
7399.00†	66.822	180.611	7095.75	-327.83	329.60	592.78	40°10'32.767"N	104°50'35.011"W	10.00	
7486.79†	75.601	180.611	7124.00	-244.81	246.57	591.90	40°10'31.947"N	104°50'35.023"W	10.00	NIOBRARA B
7499.00†	76.822	180.611	7126.91	-232.95	234.72	591.77	40°10'31.829"N	104°50'35.024"W	10.00	
7599.00†	86.822	180.611	7141.12	-134.10	135.87	590.72	40°10'30.853"N	104°50'35.038"W	10.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7631.77	90.099	180.611	7142.00	-101.35	103.11	590.37	40°10'30.529"N	104°50'35.043"W	10.00	LANDING POINT
7699.00†	90.099	180.611	7141.88	-34.13	35.89	589.65	40°10'29.865"N	104°50'35.052"W	0.00	
7799.00†	90.099	180.611	7141.71	65.86	-64.11	588.58	40°10'28.876"N	104°50'35.066"W	0.00	
7899.00†	90.099	180.611	7141.54	165.85	-164.10	587.52	40°10'27.888"N	104°50'35.079"W	0.00	
7999.00†	90.099	180.611	7141.36	265.84	-264.09	586.45	40°10'26.900"N	104°50'35.093"W	0.00	
8099.00†	90.099	180.611	7141.19	365.83	-364.09	585.39	40°10'25.912"N	104°50'35.107"W	0.00	
8199.00†	90.099	180.611	7141.02	465.82	-464.08	584.32	40°10'24.924"N	104°50'35.121"W	0.00	
8299.00†	90.099	180.611	7140.84	565.81	-564.08	583.25	40°10'23.936"N	104°50'35.134"W	0.00	
8399.00†	90.099	180.611	7140.67	665.81	-664.07	582.19	40°10'22.948"N	104°50'35.148"W	0.00	
8499.00†	90.099	180.611	7140.50	765.80	-764.06	581.12	40°10'21.959"N	104°50'35.162"W	0.00	
8599.00†	90.099	180.611	7140.33	865.79	-864.06	580.05	40°10'20.971"N	104°50'35.176"W	0.00	
8699.00†	90.099	180.611	7140.15	965.78	-964.05	578.99	40°10'19.983"N	104°50'35.189"W	0.00	
8799.00†	90.099	180.611	7139.98	1065.77	-1064.05	577.92	40°10'18.995"N	104°50'35.203"W	0.00	
8899.00†	90.099	180.611	7139.81	1165.76	-1164.04	576.85	40°10'18.007"N	104°50'35.217"W	0.00	
8999.00†	90.099	180.611	7139.63	1265.75	-1264.04	575.79	40°10'17.019"N	104°50'35.231"W	0.00	
9099.00†	90.099	180.611	7139.46	1365.74	-1364.03	574.72	40°10'16.031"N	104°50'35.245"W	0.00	
9199.00†	90.099	180.611	7139.29	1465.73	-1464.02	573.66	40°10'15.042"N	104°50'35.258"W	0.00	
9299.00†	90.099	180.611	7139.12	1565.72	-1564.02	572.59	40°10'14.054"N	104°50'35.272"W	0.00	
9399.00†	90.099	180.611	7138.94	1665.71	-1664.01	571.52	40°10'13.066"N	104°50'35.286"W	0.00	
9499.00†	90.099	180.611	7138.77	1765.70	-1764.01	570.46	40°10'12.078"N	104°50'35.300"W	0.00	
9599.00†	90.099	180.611	7138.60	1865.69	-1864.00	569.39	40°10'11.090"N	104°50'35.313"W	0.00	
9699.00†	90.099	180.611	7138.42	1965.68	-1963.99	568.32	40°10'10.102"N	104°50'35.327"W	0.00	
9799.00†	90.099	180.611	7138.25	2065.67	-2063.99	567.26	40°10'09.114"N	104°50'35.341"W	0.00	
9899.00†	90.099	180.611	7138.08	2165.66	-2163.98	566.19	40°10'08.125"N	104°50'35.355"W	0.00	
9999.00†	90.099	180.611	7137.90	2265.65	-2263.98	565.13	40°10'07.137"N	104°50'35.368"W	0.00	
10099.00†	90.099	180.611	7137.73	2365.64	-2363.97	564.06	40°10'06.149"N	104°50'35.382"W	0.00	
10199.00†	90.099	180.611	7137.56	2465.63	-2463.97	562.99	40°10'05.161"N	104°50'35.396"W	0.00	
10299.00†	90.099	180.611	7137.38	2565.63	-2563.96	561.93	40°10'04.173"N	104°50'35.410"W	0.00	
10399.00†	90.099	180.611	7137.21	2665.62	-2663.95	560.86	40°10'03.185"N	104°50'35.423"W	0.00	
10499.00†	90.099	180.611	7137.04	2765.61	-2763.95	559.79	40°10'02.197"N	104°50'35.437"W	0.00	
10599.00†	90.099	180.611	7136.86	2865.60	-2863.94	558.73	40°10'01.208"N	104°50'35.451"W	0.00	
10699.00†	90.099	180.611	7136.69	2965.59	-2963.94	557.66	40°10'00.220"N	104°50'35.465"W	0.00	
10799.00†	90.099	180.611	7136.52	3065.58	-3063.93	556.59	40°09'59.232"N	104°50'35.479"W	0.00	
10899.00†	90.099	180.611	7136.34	3165.57	-3163.92	555.53	40°09'58.244"N	104°50'35.492"W	0.00	
10999.00†	90.099	180.611	7136.17	3265.56	-3263.92	554.46	40°09'57.256"N	104°50'35.506"W	0.00	
11099.00†	90.099	180.611	7136.00	3365.55	-3363.91	553.40	40°09'56.268"N	104°50'35.520"W	0.00	
11199.00†	90.099	180.611	7135.82	3465.54	-3463.91	552.33	40°09'55.280"N	104°50'35.534"W	0.00	
11299.00†	90.099	180.611	7135.65	3565.53	-3563.90	551.26	40°09'54.291"N	104°50'35.547"W	0.00	
11399.00†	90.099	180.611	7135.48	3665.52	-3663.90	550.20	40°09'53.303"N	104°50'35.561"W	0.00	
11499.00†	90.099	180.611	7135.30	3765.51	-3763.89	549.13	40°09'52.315"N	104°50'35.575"W	0.00	
11599.00†	90.099	180.611	7135.13	3865.50	-3863.88	548.06	40°09'51.327"N	104°50'35.589"W	0.00	
11699.00†	90.099	180.611	7134.96	3965.49	-3963.88	547.00	40°09'50.339"N	104°50'35.602"W	0.00	
11799.00†	90.099	180.611	7134.78	4065.48	-4063.87	545.93	40°09'49.351"N	104°50'35.616"W	0.00	
11899.00†	90.099	180.611	7134.61	4165.47	-4163.87	544.87	40°09'48.362"N	104°50'35.630"W	0.00	
11999.00†	90.099	180.611	7134.44	4265.46	-4263.86	543.80	40°09'47.374"N	104°50'35.644"W	0.00	



Planned Wellpath Report

WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12099.00†	90.099	180.611	7134.26	4365.46	-4363.85	542.73	40°09'46.386"N	104°50'35.657"W	0.00	
12199.00†	90.099	180.611	7134.09	4465.45	-4463.85	541.67	40°09'45.398"N	104°50'35.671"W	0.00	
12299.00†	90.099	180.611	7133.92	4565.44	-4563.84	540.60	40°09'44.410"N	104°50'35.685"W	0.00	
12399.00†	90.099	180.611	7133.74	4665.43	-4663.84	539.54	40°09'43.422"N	104°50'35.699"W	0.00	
12499.00†	90.099	180.611	7133.57	4765.42	-4763.83	538.47	40°09'42.434"N	104°50'35.712"W	0.00	
12599.00†	90.099	180.611	7133.40	4865.41	-4863.83	537.40	40°09'41.445"N	104°50'35.726"W	0.00	
12699.00†	90.099	180.611	7133.22	4965.40	-4963.82	536.34	40°09'40.457"N	104°50'35.740"W	0.00	
12799.00†	90.099	180.611	7133.05	5065.39	-5063.81	535.27	40°09'39.469"N	104°50'35.754"W	0.00	
12826.93	90.099	180.611	7133.00 [†]	5093.31	-5091.74	534.97	40°09'39.193"N	104°50'35.758"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -

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	899.00	886.00	13.00	898.99	0.00	0.00	-1.85	-3.01
9.625in Casing Surface	13.00	1011.00	998.00	13.00	1010.99	0.00	0.00	-2.37	-3.03
8.75in Open Hole	899.00	7631.77	6732.77	898.99	7142.00	-1.85	-3.01	103.11	590.37
7in Casing Intermediate	13.00	7631.77	7618.77	13.00	7142.00	0.00	0.00	103.11	590.37
6.125in Open Hole	7631.77	12826.93	5195.16	7142.00	7133.00	103.11	590.37	-5091.74	534.97
4.5in Casing Production	13.00	12826.93	12813.93	13.00	7133.00	0.00	0.00	-5091.74	534.97



Planned Wellpath Report

WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP
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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
FLOYD C. SHAW UNIT 1 150' RADIUS		7130.00	-4522.35	271.11	3183282.61	1302701.40	40°09'44.820"N	104°50'39.156"W	circle
1) WIRKNER-VANCE 35N-1HZ BHL ON PLAT REV-1 (460'FSL & 1445'FWL, SEC.1)	12826.93	7133.00	-5091.74	534.97	3183550.66	1302133.99	40°09'39.193"N	104°50'35.758"W	point
BAKER RED V 1-14A		7325.00	-4909.94	1012.36	3184026.67	1302319.31	40°09'40.990"N	104°50'29.609"W	circle
WIRKNER-VANCE 35N-1HZ LAND BOX		7350.00	0.00	0.00	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W	polygon
WIRKNER SECTION 1 LINES		7400.00	0.00	0.00	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W	polygon
WIRKNER SECTION 36 LINES		7400.00	0.00	0.00	3182978.13	1307221.42	40°10'29.510"N	104°50'42.648"W	polygon

SURVEY PROGRAM -

Ref Wellbore: WIRKNER-VANCE 35N-1HZ PWB Ref Wellpath: WIRKNER-VANCE 35N-1HZ (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
13.00	899.00	Generic gyro - continuous (Standard)		WIRKNER-VANCE 35N-1HZ AWB
899.00	7631.77	NaviTrak (MAGCORR,IFR)		WIRKNER-VANCE 35N-1HZ PWB
7631.77	12826.93	OnTrak (MAGCORR,IFR)		WIRKNER-VANCE 35N-1HZ PWB

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#06 WIRKNER-VANCE 35N-1HZ (247'FSL & 866'FWL, S
Area	COLORADO	Well	WIRKNER-VANCE 35N-1HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	WIRKNER-VANCE 35N-1HZ PWB
Facility	SEC.36-T3N-R67W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
13.00	0.000	262.270	13.00	TIE-ON
113.00	0.130	262.270	113.00	BEGIN GYRO SURVEYS
3925.35	14.000	38.032	3868.00	PARKMAN
4321.10	14.000	38.032	4252.00	SUSSEX
7203.72	54.346	180.611	6999.00	SHARON SPRINGS
7370.69	64.365	180.611	7084.00	NIOBRARA A
7486.79	75.601	180.611	7124.00	NIOBRARA B

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
899.00	0.270	182.300	898.99	TIE-INTO GYRO
1900.02	0.270	182.300	1900.00	BEGIN NUDGE
2042.22	14.000	38.032	2040.81	END NUDGE
5648.53	14.000	38.032	5540.00	BEGIN DROP
6348.53	0.000	180.611	6233.06	END DROP
6630.92	0.000	180.611	6515.44	KOP, BUILD @ 10°/100'
7130.37	49.945	180.611	6954.00	BUILD @ 6°/100'
7380.04	64.925	180.611	7088.00	BUILD @ 10°/100'
7631.77	90.099	180.611	7142.00	LANDING POINT
12826.93	90.099	180.611	7133.00	TOTAL DEPTH