

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
 Field: WELD COUNTY (KERR MCGEE) Well: RANCHVIEW 3C-11HZ
 Facility: SEC.14-T1N-R68W Wellbore: RANCHVIEW 3C-11HZ PWB

Plot reference wellpath is RANCHVIEW 3C-11HZ (PERMIT REV-1) PWP

True vertical depths are referenced to PERMIT (17KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PERMIT (17KB) (RKB)	North Reference: True north
PERMIT (17KB) (RKB) to Mean Sea Level: 5161 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLO#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robbie01 on 27/Mar/2014

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.14-T1N-R68W	3150004.168	1261260.607	40°02'57.498"N	104°57'51.026"W
Slot	Local N (ft)	Local E (ft)	Grid North (US ft)	Grid East (US ft)
SLO#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)	-1557.65	-2201.26	3147812.444	1259689.749

PERMIT (17KB) (RKB) to Mud line (At Slot: SLO#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)): 5161 ft
 Mean Sea Level to Mud line (At Slot: SLO#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)): 0 ft
 PERMIT (17KB) (RKB) to Mean Sea Level: 5161 ft

Survey Program

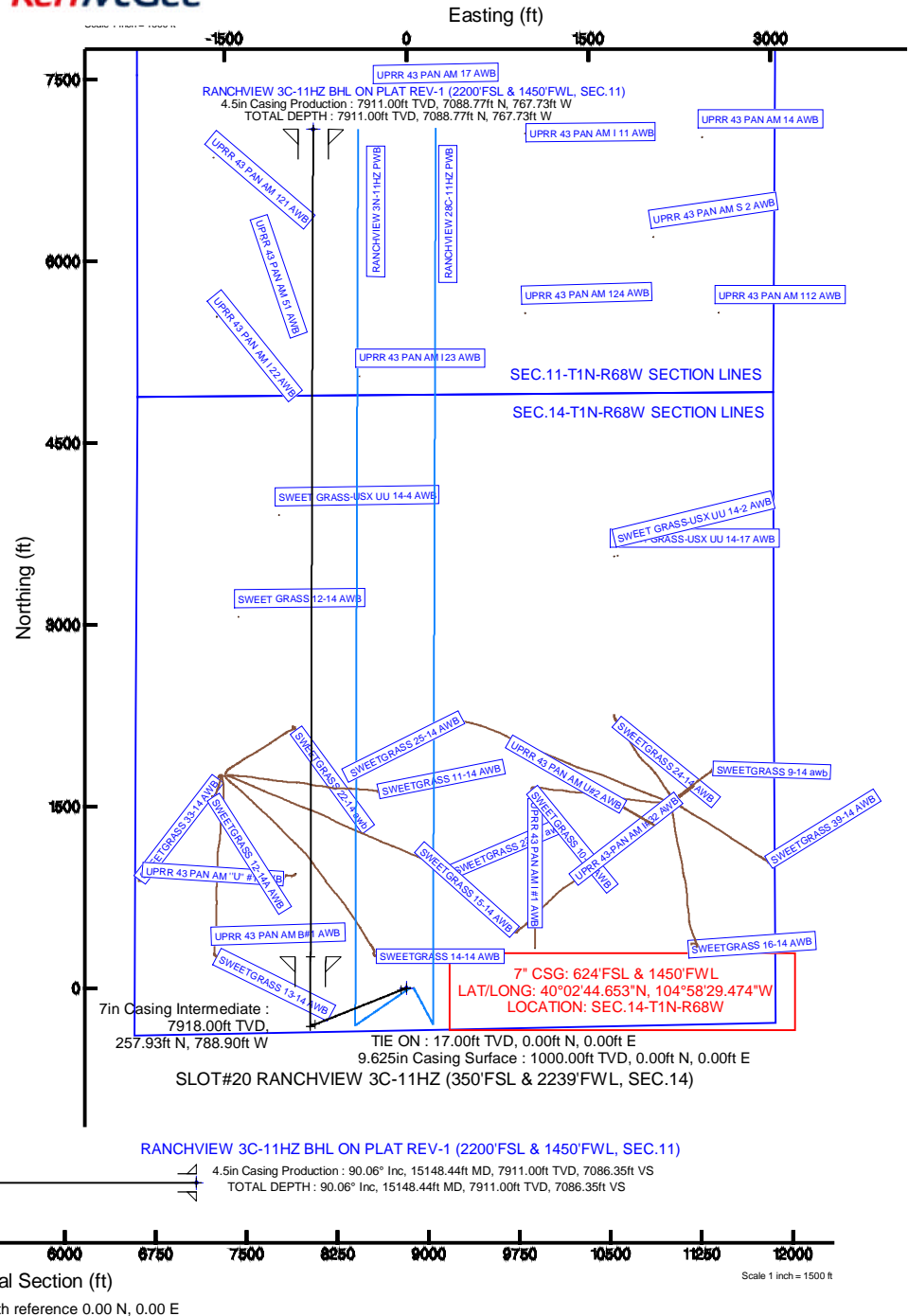
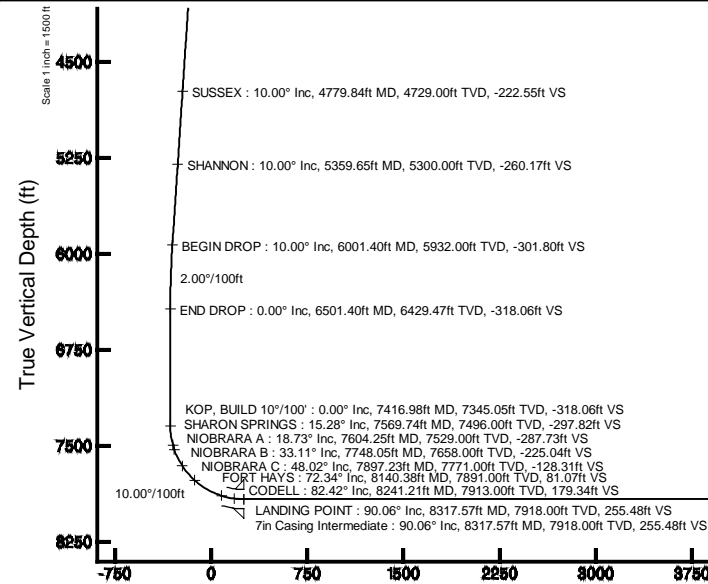
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	15148.44	Navitrak	Navitrak (MAGCORR,IFR)		RANCHVIEW 3C-11HZ PWB

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.11-T1N-R68W SECTION LINES	0.00	0.00	0.00	0.00	3147812.44	1259689.75	40°02'42.104"N	104°58'19.330"W
SEC.14-T1N-R68W SECTION LINES	0.00	0.00	0.00	0.00	3147812.44	1259689.75	40°02'42.104"N	104°58'19.330"W
RANCHVIEW 3C-11HZ BHL ON PLAT REV-1 (2200'FSL & 1450'FWL, SEC.11)	15148.44	7911.00	7088.77	-767.73	3147002.55	1266773.55	40°03'52.157"N	104°58'29.204"W

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ON	17.00	0.000	248.240	17.00	0.00	0.00	0.00	0.00
BEGIN NUJDGE	1100.00	0.000	248.240	1100.00	0.00	0.00	0.00	0.00
END NUJDGE	1600.00	10.000	248.240	1597.47	-16.13	-40.42	2.00	-16.26
BEGIN DROP	6001.40	10.000	248.240	5932.00	-299.47	-750.26	0.00	-301.80
END DROP	6501.40	0.000	0.178	6429.47	-315.61	-790.68	2.00	-318.06
KOP, BUILD 10°/100'	7416.98	0.000	0.178	7345.05	-315.61	-790.68	0.00	-318.06
LANDING POINT	8317.57	90.059	0.178	7918.00	257.93	-788.90	10.00	255.48
TOTAL DEPTH	15148.44	90.059	0.178	7911.00	7088.77	-767.73	0.00	7086.35



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

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	0.999963	Report Generated	27/Mar/2014 at 12:49
Convergence at slot	n/a	Database/Source file	WellArchitectDB/RANCHVIEW_3C-11HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-1557.65	-2201.26	3147812.44	1259689.75	40°02'42.104"N	104°58'19.330"W
Facility Reference Pt			3150004.17	1261260.61	40°02'57.498"N	104°57'51.026"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to Facility Vertical Datum	5161.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	5161.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14))	5161.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.18°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (169 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	248.240	0.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
17.00	0.000	248.240	17.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	TIE ON
117.00†	0.000	248.240	117.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
217.00†	0.000	248.240	217.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
317.00†	0.000	248.240	317.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
417.00†	0.000	248.240	417.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
517.00†	0.000	248.240	517.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
617.00†	0.000	248.240	617.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
717.00†	0.000	248.240	717.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
817.00†	0.000	248.240	817.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
917.00†	0.000	248.240	917.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
1017.00†	0.000	248.240	1017.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	
1100.00	0.000	248.240	1100.00	0.00	0.00	0.00	40°02'42.104"N	104°58'19.330"W	0.00	BEGIN NUDGE
1117.00†	0.340	248.240	1117.00	-0.02	-0.02	-0.05	40°02'42.104"N	104°58'19.331"W	2.00	
1217.00†	2.340	248.240	1216.97	-0.89	-0.89	-2.22	40°02'42.095"N	104°58'19.359"W	2.00	
1217.03†	2.341	248.240	1217.00	-0.89	-0.89	-2.22	40°02'42.095"N	104°58'19.359"W	2.00	FOX HILLS MARKER
1317.00†	4.340	248.240	1316.79	-3.07	-3.05	-7.63	40°02'42.074"N	104°58'19.428"W	2.00	
1417.00†	6.340	248.240	1416.35	-6.55	-6.50	-16.27	40°02'42.040"N	104°58'19.539"W	2.00	
1517.00†	8.340	248.240	1515.53	-11.32	-11.23	-28.14	40°02'41.993"N	104°58'19.692"W	2.00	
1600.00	10.000	248.240	1597.47	-16.26	-16.13	-40.42	40°02'41.945"N	104°58'19.850"W	2.00	END NUDGE
1617.00†	10.000	248.240	1614.21	-17.36	-17.23	-43.16	40°02'41.934"N	104°58'19.885"W	0.00	
1717.00†	10.000	248.240	1712.69	-23.85	-23.67	-59.29	40°02'41.870"N	104°58'20.092"W	0.00	
1817.00†	10.000	248.240	1811.17	-30.34	-30.10	-75.42	40°02'41.807"N	104°58'20.300"W	0.00	
1917.00†	10.000	248.240	1909.65	-36.83	-36.54	-91.55	40°02'41.743"N	104°58'20.507"W	0.00	
2017.00†	10.000	248.240	2008.13	-43.31	-42.98	-107.67	40°02'41.679"N	104°58'20.714"W	0.00	
2117.00†	10.000	248.240	2106.61	-49.80	-49.42	-123.80	40°02'41.616"N	104°58'20.922"W	0.00	
2217.00†	10.000	248.240	2205.09	-56.29	-55.85	-139.93	40°02'41.552"N	104°58'21.129"W	0.00	
2317.00†	10.000	248.240	2303.57	-62.78	-62.29	-156.06	40°02'41.488"N	104°58'21.337"W	0.00	
2417.00†	10.000	248.240	2402.05	-69.26	-68.73	-172.18	40°02'41.425"N	104°58'21.544"W	0.00	
2517.00†	10.000	248.240	2500.53	-75.75	-75.17	-188.31	40°02'41.361"N	104°58'21.751"W	0.00	
2617.00†	10.000	248.240	2599.01	-82.24	-81.60	-204.44	40°02'41.298"N	104°58'21.959"W	0.00	
2717.00†	10.000	248.240	2697.50	-88.73	-88.04	-220.57	40°02'41.234"N	104°58'22.166"W	0.00	
2817.00†	10.000	248.240	2795.98	-95.21	-94.48	-236.69	40°02'41.170"N	104°58'22.373"W	0.00	
2917.00†	10.000	248.240	2894.46	-101.70	-100.92	-252.82	40°02'41.107"N	104°58'22.581"W	0.00	
3017.00†	10.000	248.240	2992.94	-108.19	-107.35	-268.95	40°02'41.043"N	104°58'22.788"W	0.00	
3117.00†	10.000	248.240	3091.42	-114.68	-113.79	-285.08	40°02'40.979"N	104°58'22.996"W	0.00	
3217.00†	10.000	248.240	3189.90	-121.16	-120.23	-301.20	40°02'40.916"N	104°58'23.203"W	0.00	
3317.00†	10.000	248.240	3288.38	-127.65	-126.67	-317.33	40°02'40.852"N	104°58'23.410"W	0.00	
3417.00†	10.000	248.240	3386.86	-134.14	-133.10	-333.46	40°02'40.789"N	104°58'23.618"W	0.00	
3517.00†	10.000	248.240	3485.34	-140.63	-139.54	-349.59	40°02'40.725"N	104°58'23.825"W	0.00	
3617.00†	10.000	248.240	3583.82	-147.11	-145.98	-365.71	40°02'40.661"N	104°58'24.032"W	0.00	
3717.00†	10.000	248.240	3682.30	-153.60	-152.42	-381.84	40°02'40.598"N	104°58'24.240"W	0.00	
3817.00†	10.000	248.240	3780.78	-160.09	-158.85	-397.97	40°02'40.534"N	104°58'24.447"W	0.00	
3917.00†	10.000	248.240	3879.26	-166.58	-165.29	-414.10	40°02'40.471"N	104°58'24.654"W	0.00	
4017.00†	10.000	248.240	3977.75	-173.06	-171.73	-430.22	40°02'40.407"N	104°58'24.862"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	10.000	248.240	4076.23	-179.55	-178.17	-446.35	40°02'40.343"N	104°58'25.069"W	0.00	
4217.00†	10.000	248.240	4174.71	-186.04	-184.60	-462.48	40°02'40.280"N	104°58'25.277"W	0.00	
4317.00†	10.000	248.240	4273.19	-192.53	-191.04	-478.61	40°02'40.216"N	104°58'25.484"W	0.00	
4417.00†	10.000	248.240	4371.67	-199.01	-197.48	-494.73	40°02'40.152"N	104°58'25.691"W	0.00	
4517.00†	10.000	248.240	4470.15	-205.50	-203.92	-510.86	40°02'40.089"N	104°58'25.899"W	0.00	
4617.00†	10.000	248.240	4568.63	-211.99	-210.35	-526.99	40°02'40.025"N	104°58'26.106"W	0.00	
4717.00†	10.000	248.240	4667.11	-218.48	-216.79	-543.12	40°02'39.962"N	104°58'26.313"W	0.00	
4779.84†	10.000	248.240	4729.00	-222.55	-220.84	-553.25	40°02'39.922"N	104°58'26.444"W	0.00	SUSSEX
4817.00†	10.000	248.240	4765.59	-224.96	-223.23	-559.24	40°02'39.898"N	104°58'26.521"W	0.00	
4917.00†	10.000	248.240	4864.07	-231.45	-229.67	-575.37	40°02'39.834"N	104°58'26.728"W	0.00	
5017.00†	10.000	248.240	4962.55	-237.94	-236.10	-591.50	40°02'39.771"N	104°58'26.935"W	0.00	
5117.00†	10.000	248.240	5061.03	-244.43	-242.54	-607.63	40°02'39.707"N	104°58'27.143"W	0.00	
5217.00†	10.000	248.240	5159.52	-250.91	-248.98	-623.75	40°02'39.643"N	104°58'27.350"W	0.00	
5317.00†	10.000	248.240	5258.00	-257.40	-255.42	-639.88	40°02'39.580"N	104°58'27.558"W	0.00	
5359.65†	10.000	248.240	5300.00	-260.17	-258.16	-646.76	40°02'39.553"N	104°58'27.646"W	0.00	SHANNON
5417.00†	10.000	248.240	5356.48	-263.89	-261.85	-656.01	40°02'39.516"N	104°58'27.765"W	0.00	
5517.00†	10.000	248.240	5454.96	-270.38	-268.29	-672.13	40°02'39.453"N	104°58'27.972"W	0.00	
5617.00†	10.000	248.240	5553.44	-276.87	-274.73	-688.26	40°02'39.389"N	104°58'28.180"W	0.00	
5717.00†	10.000	248.240	5651.92	-283.35	-281.17	-704.39	40°02'39.325"N	104°58'28.387"W	0.00	
5817.00†	10.000	248.240	5750.40	-289.84	-287.60	-720.52	40°02'39.262"N	104°58'28.594"W	0.00	
5917.00†	10.000	248.240	5848.88	-296.33	-294.04	-736.64	40°02'39.198"N	104°58'28.802"W	0.00	
6001.40	10.000	248.240	5932.00	-301.80	-299.47	-750.26	40°02'39.144"N	104°58'28.977"W	0.00	BEGIN DROP
6017.00†	9.688	248.240	5947.37	-302.80	-300.46	-752.73	40°02'39.135"N	104°58'29.009"W	2.00	
6117.00†	7.688	248.240	6046.22	-308.44	-306.06	-766.76	40°02'39.079"N	104°58'29.189"W	2.00	
6217.00†	5.688	248.240	6145.53	-312.79	-310.38	-777.58	40°02'39.037"N	104°58'29.328"W	2.00	
6317.00†	3.688	248.240	6245.19	-315.85	-313.41	-785.17	40°02'39.007"N	104°58'29.426"W	2.00	
6417.00†	1.688	248.240	6345.08	-317.60	-315.15	-789.52	40°02'38.990"N	104°58'29.482"W	2.00	
6501.40	0.000	0.178	6429.47	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	2.00	END DROP
6517.00†	0.000	0.178	6445.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
6617.00†	0.000	0.178	6545.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
6717.00†	0.000	0.178	6645.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
6817.00†	0.000	0.178	6745.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
6917.00†	0.000	0.178	6845.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
7017.00†	0.000	0.178	6945.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
7117.00†	0.000	0.178	7045.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
7217.00†	0.000	0.178	7145.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
7317.00†	0.000	0.178	7245.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	
7416.98	0.000	0.178	7345.05	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	0.00	KOP, BUILD 10°/100'
7417.00†	0.002	0.178	7345.06	-318.06	-315.61	-790.68	40°02'38.985"N	104°58'29.496"W	10.00	
7517.00†	10.002	0.178	7444.56	-309.36	-306.90	-790.65	40°02'39.071"N	104°58'29.496"W	10.00	
7569.74†	15.276	0.178	7496.00	-297.82	-295.37	-790.62	40°02'39.185"N	104°58'29.496"W	10.00	SHARON SPRINGS
7604.25†	18.727	0.178	7529.00	-287.73	-285.28	-790.58	40°02'39.285"N	104°58'29.495"W	10.00	NIOBRARA A
7617.00†	20.002	0.178	7541.03	-283.50	-281.05	-790.57	40°02'39.326"N	104°58'29.495"W	10.00	
7717.00†	30.002	0.178	7631.54	-241.29	-238.84	-790.44	40°02'39.744"N	104°58'29.493"W	10.00	
7748.05†	33.107	0.178	7658.00	-225.04	-222.59	-790.39	40°02'39.904"N	104°58'29.493"W	10.00	NIOBRARA B

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7817.00†	40.002	0.178	7713.35	-184.01	-181.55	-790.26	40°02'40.310"N	104°58'29.491"W	10.00	
7897.23†	48.025	0.178	7771.00	-128.31	-125.85	-790.09	40°02'40.860"N	104°58'29.489"W	10.00	NIOBRARA C
7917.00†	50.002	0.178	7783.97	-113.38	-110.93	-790.04	40°02'41.008"N	104°58'29.488"W	10.00	
8017.00†	60.002	0.178	7841.25	-31.57	-29.12	-789.79	40°02'41.816"N	104°58'29.485"W	10.00	
8117.00†	70.002	0.178	7883.46	58.95	61.40	-789.51	40°02'42.711"N	104°58'29.482"W	10.00	
8140.38†	72.339	0.178	7891.00	81.07	83.52	-789.44	40°02'42.929"N	104°58'29.481"W	10.00	FORT HAYS
8217.00†	80.002	0.178	7909.30	155.42	157.87	-789.21	40°02'43.664"N	104°58'29.478"W	10.00	
8241.21†	82.423	0.178	7913.00	179.34	181.80	-789.14	40°02'43.900"N	104°58'29.477"W	10.00	CODELL
8317.00†	90.002	0.178	7918.00	254.91	257.36	-788.90	40°02'44.647"N	104°58'29.474"W	10.00	
8317.57	90.059	0.178	7918.00	255.48	257.93	-788.90	40°02'44.653"N	104°58'29.474"W	10.00	LANDING POINT
8417.00†	90.059	0.178	7917.90	354.91	357.36	-788.59	40°02'45.635"N	104°58'29.470"W	0.00	
8517.00†	90.059	0.178	7917.80	454.91	457.36	-788.28	40°02'46.624"N	104°58'29.466"W	0.00	
8617.00†	90.059	0.178	7917.70	554.91	557.36	-787.97	40°02'47.612"N	104°58'29.462"W	0.00	
8717.00†	90.059	0.178	7917.59	654.91	657.36	-787.66	40°02'48.600"N	104°58'29.458"W	0.00	
8817.00†	90.059	0.178	7917.49	754.91	757.36	-787.35	40°02'49.588"N	104°58'29.454"W	0.00	
8917.00†	90.059	0.178	7917.39	854.91	857.36	-787.04	40°02'50.577"N	104°58'29.450"W	0.00	
9017.00†	90.059	0.178	7917.29	954.91	957.36	-786.73	40°02'51.565"N	104°58'29.446"W	0.00	
9117.00†	90.059	0.178	7917.18	1054.91	1057.36	-786.42	40°02'52.553"N	104°58'29.442"W	0.00	
9217.00†	90.059	0.178	7917.08	1154.91	1157.36	-786.11	40°02'53.541"N	104°58'29.438"W	0.00	
9317.00†	90.059	0.178	7916.98	1254.91	1257.36	-785.80	40°02'54.529"N	104°58'29.434"W	0.00	
9417.00†	90.059	0.178	7916.88	1354.91	1357.36	-785.49	40°02'55.518"N	104°58'29.431"W	0.00	
9517.00†	90.059	0.178	7916.77	1454.91	1457.36	-785.18	40°02'56.506"N	104°58'29.427"W	0.00	
9617.00†	90.059	0.178	7916.67	1554.91	1557.36	-784.87	40°02'57.494"N	104°58'29.423"W	0.00	
9717.00†	90.059	0.178	7916.57	1654.91	1657.36	-784.56	40°02'58.482"N	104°58'29.419"W	0.00	
9817.00†	90.059	0.178	7916.47	1754.91	1757.36	-784.25	40°02'59.471"N	104°58'29.415"W	0.00	
9917.00†	90.059	0.178	7916.36	1854.91	1857.36	-783.94	40°03'00.459"N	104°58'29.411"W	0.00	
10017.00†	90.059	0.178	7916.26	1954.91	1957.36	-783.63	40°03'01.447"N	104°58'29.407"W	0.00	
10117.00†	90.059	0.178	7916.16	2054.91	2057.36	-783.32	40°03'02.435"N	104°58'29.403"W	0.00	
10217.00†	90.059	0.178	7916.06	2154.91	2157.35	-783.01	40°03'03.423"N	104°58'29.399"W	0.00	
10317.00†	90.059	0.178	7915.95	2254.91	2257.35	-782.71	40°03'04.412"N	104°58'29.395"W	0.00	
10417.00†	90.059	0.178	7915.85	2354.91	2357.35	-782.40	40°03'05.400"N	104°58'29.391"W	0.00	
10517.00†	90.059	0.178	7915.75	2454.91	2457.35	-782.09	40°03'06.388"N	104°58'29.387"W	0.00	
10617.00†	90.059	0.178	7915.65	2554.91	2557.35	-781.78	40°03'07.376"N	104°58'29.383"W	0.00	
10717.00†	90.059	0.178	7915.54	2654.91	2657.35	-781.47	40°03'08.364"N	104°58'29.379"W	0.00	
10817.00†	90.059	0.178	7915.44	2754.91	2757.35	-781.16	40°03'09.353"N	104°58'29.375"W	0.00	
10917.00†	90.059	0.178	7915.34	2854.91	2857.35	-780.85	40°03'10.341"N	104°58'29.371"W	0.00	
11017.00†	90.059	0.178	7915.24	2954.91	2957.35	-780.54	40°03'11.329"N	104°58'29.367"W	0.00	
11117.00†	90.059	0.178	7915.13	3054.91	3057.35	-780.23	40°03'12.317"N	104°58'29.363"W	0.00	
11217.00†	90.059	0.178	7915.03	3154.91	3157.35	-779.92	40°03'13.306"N	104°58'29.360"W	0.00	
11317.00†	90.059	0.178	7914.93	3254.91	3257.35	-779.61	40°03'14.294"N	104°58'29.356"W	0.00	
11417.00†	90.059	0.178	7914.83	3354.91	3357.35	-779.30	40°03'15.282"N	104°58'29.352"W	0.00	
11517.00†	90.059	0.178	7914.72	3454.91	3457.35	-778.99	40°03'16.270"N	104°58'29.348"W	0.00	
11617.00†	90.059	0.178	7914.62	3554.91	3557.35	-778.68	40°03'17.258"N	104°58'29.344"W	0.00	
11717.00†	90.059	0.178	7914.52	3654.91	3657.35	-778.37	40°03'18.247"N	104°58'29.340"W	0.00	
11817.00†	90.059	0.178	7914.42	3754.91	3757.35	-778.06	40°03'19.235"N	104°58'29.336"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11917.00†	90.059	0.178	7914.31	3854.91	3857.35	-777.75	40°03'20.223"N	104°58'29.332"W	0.00	
12017.00†	90.059	0.178	7914.21	3954.91	3957.34	-777.44	40°03'21.211"N	104°58'29.328"W	0.00	
12117.00†	90.059	0.178	7914.11	4054.91	4057.34	-777.13	40°03'22.200"N	104°58'29.324"W	0.00	
12217.00†	90.059	0.178	7914.01	4154.91	4157.34	-776.82	40°03'23.188"N	104°58'29.320"W	0.00	
12317.00†	90.059	0.178	7913.90	4254.91	4257.34	-776.51	40°03'24.176"N	104°58'29.316"W	0.00	
12417.00†	90.059	0.178	7913.80	4354.91	4357.34	-776.20	40°03'25.164"N	104°58'29.312"W	0.00	
12517.00†	90.059	0.178	7913.70	4454.91	4457.34	-775.89	40°03'26.152"N	104°58'29.308"W	0.00	
12617.00†	90.059	0.178	7913.60	4554.91	4557.34	-775.58	40°03'27.141"N	104°58'29.304"W	0.00	
12717.00†	90.059	0.178	7913.49	4654.91	4657.34	-775.27	40°03'28.129"N	104°58'29.300"W	0.00	
12817.00†	90.059	0.178	7913.39	4754.91	4757.34	-774.96	40°03'29.117"N	104°58'29.296"W	0.00	
12917.00†	90.059	0.178	7913.29	4854.91	4857.34	-774.65	40°03'30.105"N	104°58'29.292"W	0.00	
13017.00†	90.059	0.178	7913.19	4954.91	4957.34	-774.34	40°03'31.093"N	104°58'29.288"W	0.00	
13117.00†	90.059	0.178	7913.08	5054.91	5057.34	-774.03	40°03'32.082"N	104°58'29.285"W	0.00	
13217.00†	90.059	0.178	7912.98	5154.91	5157.34	-773.72	40°03'33.070"N	104°58'29.281"W	0.00	
13317.00†	90.059	0.178	7912.88	5254.91	5257.34	-773.41	40°03'34.058"N	104°58'29.277"W	0.00	
13417.00†	90.059	0.178	7912.78	5354.91	5357.34	-773.10	40°03'35.046"N	104°58'29.273"W	0.00	
13517.00†	90.059	0.178	7912.67	5454.91	5457.34	-772.79	40°03'36.035"N	104°58'29.269"W	0.00	
13617.00†	90.059	0.178	7912.57	5554.91	5557.34	-772.48	40°03'37.023"N	104°58'29.265"W	0.00	
13717.00†	90.059	0.178	7912.47	5654.91	5657.34	-772.17	40°03'38.011"N	104°58'29.261"W	0.00	
13817.00†	90.059	0.178	7912.36	5754.91	5757.34	-771.86	40°03'38.999"N	104°58'29.257"W	0.00	
13917.00†	90.059	0.178	7912.26	5854.91	5857.33	-771.55	40°03'39.987"N	104°58'29.253"W	0.00	
14017.00†	90.059	0.178	7912.16	5954.91	5957.33	-771.24	40°03'40.976"N	104°58'29.249"W	0.00	
14117.00†	90.059	0.178	7912.06	6054.91	6057.33	-770.93	40°03'41.964"N	104°58'29.245"W	0.00	
14217.00†	90.059	0.178	7911.95	6154.91	6157.33	-770.62	40°03'42.952"N	104°58'29.241"W	0.00	
14317.00†	90.059	0.178	7911.85	6254.91	6257.33	-770.31	40°03'43.940"N	104°58'29.237"W	0.00	
14417.00†	90.059	0.178	7911.75	6354.91	6357.33	-770.00	40°03'44.929"N	104°58'29.233"W	0.00	
14517.00†	90.059	0.178	7911.65	6454.91	6457.33	-769.69	40°03'45.917"N	104°58'29.229"W	0.00	
14617.00†	90.059	0.178	7911.54	6554.91	6557.33	-769.38	40°03'46.905"N	104°58'29.225"W	0.00	
14717.00†	90.059	0.178	7911.44	6654.91	6657.33	-769.07	40°03'47.893"N	104°58'29.221"W	0.00	
14817.00†	90.059	0.178	7911.34	6754.91	6757.33	-768.76	40°03'48.881"N	104°58'29.217"W	0.00	
14917.00†	90.059	0.178	7911.24	6854.91	6857.33	-768.45	40°03'49.870"N	104°58'29.214"W	0.00	
15017.00†	90.059	0.178	7911.13	6954.91	6957.33	-768.14	40°03'50.858"N	104°58'29.210"W	0.00	
15117.00†	90.059	0.178	7911.03	7054.91	7057.33	-767.83	40°03'51.846"N	104°58'29.206"W	0.00	
15148.44	90.059	0.178	7911.00 ¹	7086.35	7088.77	-767.73	40°03'52.157"N	104°58'29.204"W	0.00	TOTAL DEPTH

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

HOLE & CASING SECTIONS - Ref Wellbore: RANCHVIEW 3C-11HZ PWB Ref Wellpath: RANCHVIEW 3C-11HZ (PERMIT REV-1) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	17.00	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1000.00	983.00	17.00	1000.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1000.00	8317.57	7317.57	1000.00	7918.00	0.00	0.00	257.93	-788.90
7in Casing Intermediate	17.00	8317.57	8300.57	17.00	7918.00	0.00	0.00	257.93	-788.90
6.125in Open Hole	8317.57	15148.44	6830.87	7918.00	7911.00	257.93	-788.90	7088.77	-767.73
4.5in Casing Production	17.00	15148.44	15131.44	17.00	7911.00	0.00	0.00	7088.77	-767.73

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.11-T1N-R68W SECTION LINES		0.00	0.00	0.00	3147812.44	1259689.75	40°02'42.104"N	104°58'19.330"W	polygon
SEC.14-T1N-R68W SECTION LINES		0.00	0.00	0.00	3147812.44	1259689.75	40°02'42.104"N	104°58'19.330"W	polygon
1) RANCHVIEW 3C-11HZ BHL ON PLAT REV-1 (2200'FSL & 1450'FWL, SEC.11)	15148.44	7911.00	7088.77	-767.73	3147002.55	1266773.55	40°03'52.157"N	104°58'29.204"W	point

SURVEY PROGRAM - Ref Wellbore: RANCHVIEW 3C-11HZ PWB Ref Wellpath: RANCHVIEW 3C-11HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	15148.44	NaviTrak (MAGCORR,IFR)		RANCHVIEW 3C-11HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#20 RANCHVIEW 3C-11HZ (350'FSL & 2239'FWL, SEC.14)
Area	COLORADO	Well	RANCHVIEW 3C-11HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	RANCHVIEW 3C-11HZ PWB
Facility	SEC.14-T1N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1217.03	2.341	248.240	1217.00	FOX HILLS MARKER
4779.84	10.000	248.240	4729.00	SUSSEX
5359.65	10.000	248.240	5300.00	SHANNON
7569.74	15.276	0.178	7496.00	SHARON SPRINGS
7604.25	18.727	0.178	7529.00	NIOBRARA A
7748.05	33.107	0.178	7658.00	NIOBRARA B
7897.23	48.025	0.178	7771.00	NIOBRARA C
8140.38	72.339	0.178	7891.00	FORT HAYS
8241.21	82.423	0.178	7913.00	CODELL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	248.240	17.00	TIE ON
1100.00	0.000	248.240	1100.00	BEGIN NUDGE
1600.00	10.000	248.240	1597.47	END NUDGE
6001.40	10.000	248.240	5932.00	BEGIN DROP
6501.40	0.000	0.178	6429.47	END DROP
7416.98	0.000	0.178	7345.05	KOP, BUILD 10°/100'
8317.57	90.059	0.178	7918.00	LANDING POINT
15148.44	90.059	0.178	7911.00	TOTAL DEPTH