

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: Compass Import Slot: SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)  
 Field: WELD COUNTY (UTM (ZONE 13)/NAD83/TN) Well: SKIM 34N-28HZ  
 Facility: 3N-65W-21 Skim 35-21HZ Pad Wellbore: SKIM 34N-28HZ PWB

**Plot reference wellpath is SKIM 34N-28HZ (REV-B.0) PWP**

True vertical depths are referenced to XTREME 24 (16'KB) (RKB)	Grid System: NAD83 / UTM Zone 13 North, US feet
Measured depths are referenced to XTREME 24 (16'KB) (RKB)	North Reference: True north
XTREME 24 (16'KB) (RKB) to Mean Sea Level: 4862 feet	Scale: Grid distance
Mean Sea Level to Mud line (At Slot: SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: robiale01 on 3/9/2015

## Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
3N-65W-21 Skim 35-21HZ Pad		1731548.356	14601715.722	40°12'19.627"N	104°40'24.992"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)	-0.36	29.88	1731578.233	14601715.468	40°12'19.623"N	104°40'24.607"W
Comment		Imported from Compass				
XTREME 24 (16'KB) (RKB) to Mud line (At Slot: SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21))		4862ft				
Mean Sea Level to Mud line (At Slot: SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21))		0ft				
XTREME 24 (16'KB) (RKB) to Mean Sea Level		4862ft				

## Survey Program

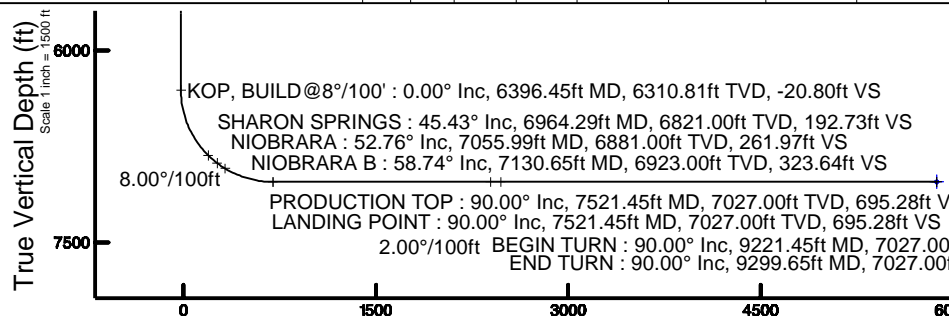
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1204.00	ISCWSA MWD, Rev. 2	ISCWSA MWD, Rev. 2 (Standard)		SKIM 34N-28HZ AWB <95-1204>
1204.00	7521.45	ISCWSA MWD, Rev. 2, axial magnetic correction	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (Mag/AR FR Wattenberg)		SKIM 34N-28HZ PWB
7521.45	12700.89	ISCWSA MWD, Rev. 2, axial magnetic correction	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (Mag/AR FR Wattenberg)		SKIM 34N-28HZ PWB

## Well Profile Data

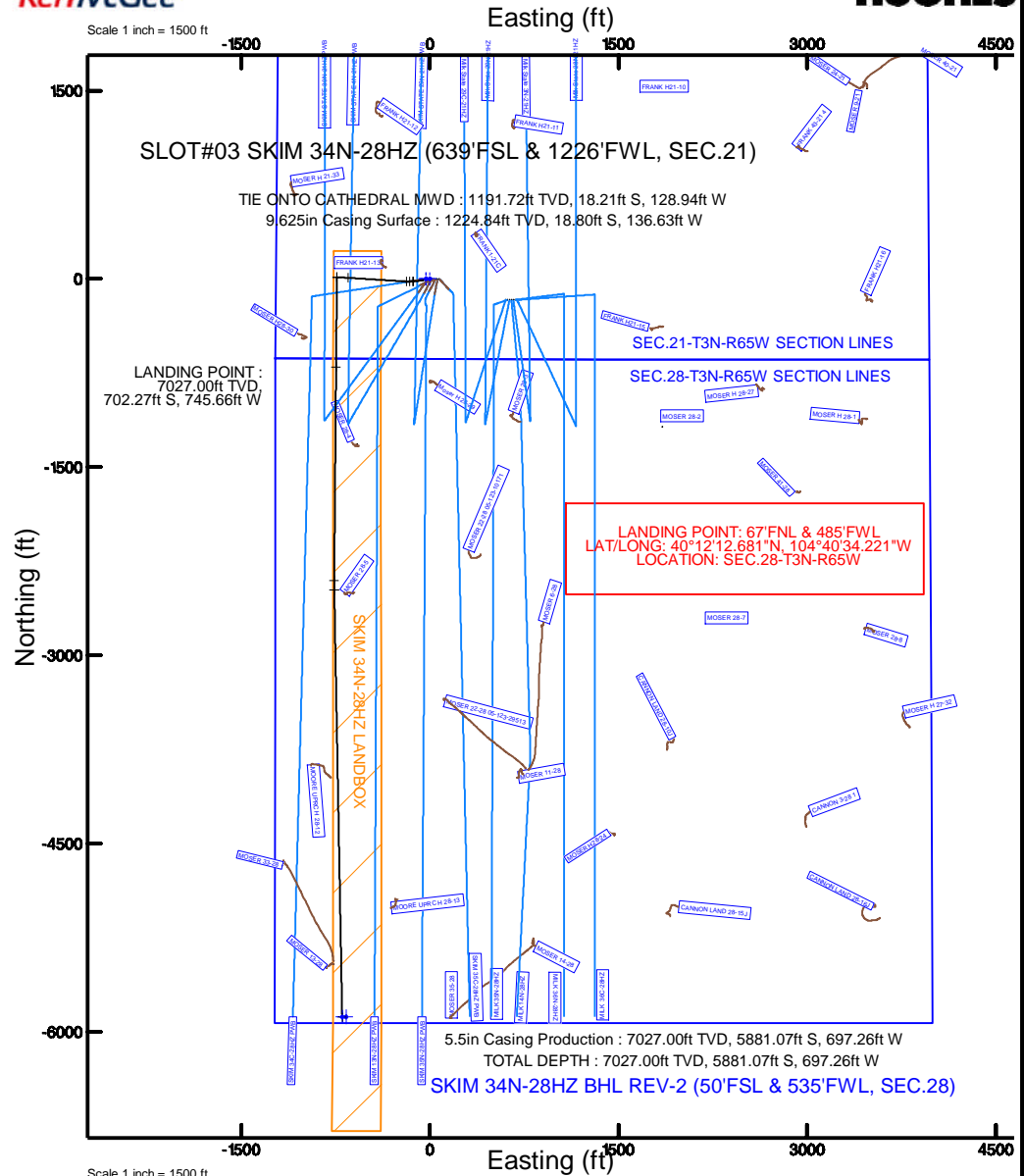
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ONTO CATHEDRAL MWD	1204.00	13.100	265.600	1191.72	-18.21	-128.94	1.03	17.00
BEGIN NUDGE	1338.00	13.100	265.600	1322.24	-20.54	-159.22	0.00	19.05
END NUDGE	1455.99	14.500	273.580	1436.83	-20.64	-187.30	2.00	18.89
BEGIN DROP	3300.93	14.500	273.580	3223.00	8.20	-648.34	0.00	-14.26
END DROP	4025.93	0.000	180.500	3940.29	13.90	-739.41	2.00	-20.80
KOP, BUILD@8°/100'	6396.45	0.000	180.500	6310.81	13.90	-739.41	0.00	-20.80
LANDING POINT	7521.45	90.000	180.500	7027.00	-702.27	-745.66	8.00	695.28
BEGIN TURN	9221.45	90.000	180.500	7027.00	-2402.20	-760.49	0.00	2395.00
END TURN	9299.65	90.000	178.936	7027.00	-2480.40	-760.11	2.00	2473.20
TOTAL DEPTH	12700.89	90.000	178.946	7027.00	-5881.07	-697.26	0.00	5874.30

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.21-T3N-R65W SECTION LINES		0.00	0.36	-29.88	1731548.36	14601715.72	40°12'19.627"N	104°40'24.992"W	
SEC.28-T3N-R65W SECTION LINES		0.00	0.36	-29.88	1731548.36	14601715.72	40°12'19.627"N	104°40'24.992"W	
SKIM 34N-28HZ BHL ON PLAT REV-1 (50'FSL & 565'FWL, SEC.28)		7027.00	-5881.11	-667.23	1730932.64	14595831.96	40°11'21.484"N	104°40'33.208"W	
Comment		Imported from Compass							
SKIM 34N-28HZ BHL REV-2 (50'FSL & 535'FWL, SEC.28)		12700.89	7027.00	-5881.07	-697.26	1730902.61	14595831.89	40°11'21.484"N	104°40'33.595"W
Comment		Imported from Compass							
SKIM 34N-28HZ LANDBOX		7027.00	0.00	0.00	1731578.23	14601715.47	40°12'19.623"N	104°40'24.607"W	



Scale 1 inch = 1500 ft



SKIM 34N-28HZ BHL REV-2 (50'FSL & 535'FWL, SEC.28)

TOTAL DEPTH : 90.00° Inc, 12700.89ft MD, 7027.00ft TVD, 5874.30ft VS

5.5in Casing Production : 90.00° Inc, 12700.89ft MD, 7027.00ft TVD, 5874.30ft VS

Vertical Section (ft)

Scale 1 inch = 1500 ft

Azimuth 179.47° with reference 0.00 N, 0.00 E



# Planned Wellpath Report

SKIM 34N-28HZ (REV-B.0) PWP

Page 1 of 7

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 13 North, US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Robiale01
Scale	0.99961	Report Generated	3/9/2015 at 12:36:06 PM
Convergence at slot	0.21° East	Database/Source file	WellArchitectDB/SKIM_34N-28HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.36	29.88	1731578.23	14601715.47	40°12'19.623"N	104°40'24.607"W
Facility Reference Pt			1731548.36	14601715.72	40°12'19.627"N	104°40'24.992"W
Field Reference Pt			1700626.56	14568707.73	40°06'54.245"N	104°47'04.711"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 24 (16'KB) (RKB) to 3N-65W-21 Skim 35-21HZ Pad vertical datum	4862.00ft
Horizontal Reference Pt	Slot	XTREME 24 (16'KB) (RKB) to Mean Sea Level	4862.00ft
Vertical Reference Pt	XTREME 24 (16'KB) (RKB)	XTREME 24 (16'KB) (RKB) to Mud Line at Slot (SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21))	4862.00ft
MD Reference Pt	XTREME 24 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.47°

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## WELLPATH DATA (151 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	0.700	0.00	0.00	0.00	0.00	40°12'19.623"N	104°40'24.607"W	0.00	
16.00	0.000	0.700	16.00	0.00	0.00	0.00	40°12'19.623"N	104°40'24.607"W	0.00	
95.00	0.400	0.700	95.00	-0.28	0.28	0.00	40°12'19.626"N	104°40'24.607"W	0.51	
158.00	0.400	217.000	158.00	-0.32	0.32	-0.13	40°12'19.627"N	104°40'24.608"W	1.21	
215.00	0.400	262.600	215.00	-0.14	0.14	-0.44	40°12'19.625"N	104°40'24.613"W	0.54	
276.00	0.500	218.900	276.00	0.09	-0.10	-0.82	40°12'19.622"N	104°40'24.617"W	0.57	
334.00	1.100	231.400	333.99	0.63	-0.64	-1.42	40°12'19.617"N	104°40'24.625"W	1.07	
398.00	1.900	245.400	397.97	1.44	-1.47	-2.86	40°12'19.609"N	104°40'24.644"W	1.37	
462.00	2.600	257.200	461.92	2.18	-2.23	-5.24	40°12'19.601"N	104°40'24.674"W	1.31	
526.00	3.900	262.800	525.81	2.74	-2.83	-8.82	40°12'19.595"N	104°40'24.720"W	2.09	
590.00	4.900	264.400	589.62	3.24	-3.37	-13.70	40°12'19.590"N	104°40'24.783"W	1.57	
621.51†	5.785	262.918	621.00	3.54	-3.69	-16.61	40°12'19.587"N	104°40'24.821"W	2.84	BASE FOX HILLS
654.00	6.700	261.800	653.29	3.98	-4.16	-20.11	40°12'19.582"N	104°40'24.866"W	2.84	
718.00	8.000	260.300	716.77	5.18	-5.45	-28.20	40°12'19.570"N	104°40'24.970"W	2.05	
782.00	9.100	261.000	780.06	6.64	-6.99	-37.59	40°12'19.554"N	104°40'25.091"W	1.73	
845.00	10.300	260.000	842.15	8.30	-8.75	-48.05	40°12'19.537"N	104°40'25.226"W	1.92	
909.00	12.500	261.200	904.89	10.24	-10.80	-60.53	40°12'19.517"N	104°40'25.387"W	3.46	
972.00	13.800	261.000	966.23	12.32	-13.02	-74.69	40°12'19.495"N	104°40'25.570"W	2.06	
1035.00	14.300	261.600	1027.35	14.49	-15.33	-89.81	40°12'19.472"N	104°40'25.765"W	0.83	
1099.00	13.300	266.800	1089.50	15.92	-16.90	-104.98	40°12'19.456"N	104°40'25.960"W	2.49	
1163.00	13.200	267.400	1151.80	16.52	-17.64	-119.63	40°12'19.449"N	104°40'26.149"W	0.27	
1204.00	13.100	265.600	1191.72	17.00	-18.21	-128.94	40°12'19.443"N	104°40'26.269"W	1.03	TIE ONTO CATHEDRAL MWD
1304.00†	13.100	265.600	1289.12	18.53	-19.95	-151.54	40°12'19.426"N	104°40'26.561"W	0.00	
1338.00	13.100	265.600	1322.24	19.05	-20.54	-159.22	40°12'19.420"N	104°40'26.660"W	0.00	BEGIN NUDGE
1404.00†	13.852	270.259	1386.42	19.45	-21.08	-174.58	40°12'19.415"N	104°40'26.858"W	2.00	
1455.99	14.500	273.580	1436.83	18.89	-20.64	-187.30	40°12'19.419"N	104°40'27.022"W	2.00	END NUDGE
1504.00†	14.500	273.580	1483.31	18.03	-19.89	-199.30	40°12'19.427"N	104°40'27.176"W	0.00	
1604.00†	14.500	273.580	1580.12	16.23	-18.33	-224.29	40°12'19.442"N	104°40'27.499"W	0.00	
1704.00†	14.500	273.580	1676.94	14.44	-16.76	-249.28	40°12'19.458"N	104°40'27.821"W	0.00	
1804.00†	14.500	273.580	1773.75	12.64	-15.20	-274.27	40°12'19.473"N	104°40'28.143"W	0.00	
1904.00†	14.500	273.580	1870.57	10.84	-13.64	-299.26	40°12'19.489"N	104°40'28.465"W	0.00	
2004.00†	14.500	273.580	1967.38	9.05	-12.07	-324.24	40°12'19.504"N	104°40'28.787"W	0.00	
2104.00†	14.500	273.580	2064.20	7.25	-10.51	-349.23	40°12'19.519"N	104°40'29.110"W	0.00	
2204.00†	14.500	273.580	2161.01	5.45	-8.95	-374.22	40°12'19.535"N	104°40'29.432"W	0.00	
2304.00†	14.500	273.580	2257.83	3.66	-7.38	-399.21	40°12'19.550"N	104°40'29.754"W	0.00	
2404.00†	14.500	273.580	2354.64	1.86	-5.82	-424.20	40°12'19.566"N	104°40'30.076"W	0.00	
2504.00†	14.500	273.580	2451.46	0.06	-4.26	-449.19	40°12'19.581"N	104°40'30.398"W	0.00	
2604.00†	14.500	273.580	2548.27	-1.73	-2.69	-474.18	40°12'19.597"N	104°40'30.721"W	0.00	
2704.00†	14.500	273.580	2645.09	-3.53	-1.13	-499.17	40°12'19.612"N	104°40'31.043"W	0.00	
2804.00†	14.500	273.580	2741.90	-5.33	0.43	-524.16	40°12'19.628"N	104°40'31.365"W	0.00	
2904.00†	14.500	273.580	2838.72	-7.12	2.00	-549.15	40°12'19.643"N	104°40'31.687"W	0.00	
3004.00†	14.500	273.580	2935.53	-8.92	3.56	-574.14	40°12'19.659"N	104°40'32.009"W	0.00	
3104.00†	14.500	273.580	3032.35	-10.72	5.12	-599.13	40°12'19.674"N	104°40'32.332"W	0.00	
3204.00†	14.500	273.580	3129.16	-12.51	6.69	-624.11	40°12'19.689"N	104°40'32.654"W	0.00	
3300.93	14.500	273.580	3223.00	-14.26	8.20	-648.34	40°12'19.704"N	104°40'32.966"W	0.00	BEGIN DROP

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3304.00†	14.439	273.580	3225.98	-14.31	8.25	-649.10	40°12'19.705"N	104°40'32.976"W	2.00	
3404.00†	12.439	273.580	3323.23	-15.98	9.70	-672.30	40°12'19.719"N	104°40'33.275"W	2.00	
3504.00†	10.439	273.580	3421.24	-17.40	10.94	-692.09	40°12'19.731"N	104°40'33.530"W	2.00	
3604.00†	8.439	273.580	3519.88	-18.58	11.96	-708.45	40°12'19.742"N	104°40'33.741"W	2.00	
3704.00†	6.439	273.580	3619.04	-19.51	12.77	-721.37	40°12'19.750"N	104°40'33.908"W	2.00	
3804.00†	4.439	273.580	3718.58	-20.19	13.36	-730.83	40°12'19.755"N	104°40'34.030"W	2.00	
3904.00†	2.439	273.580	3818.40	-20.62	13.74	-736.82	40°12'19.759"N	104°40'34.107"W	2.00	
3967.64†	1.166	273.580	3882.00	-20.76	13.86	-738.82	40°12'19.760"N	104°40'34.133"W	2.00	PARKMAN
4004.00†	0.439	273.580	3918.36	-20.80	13.90	-739.32	40°12'19.761"N	104°40'34.139"W	2.00	
4025.93	0.000	180.500	3940.29	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	2.00	END DROP
4104.00†	0.000	180.500	4018.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4204.00†	0.000	180.500	4118.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4304.00†	0.000	180.500	4218.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4347.64†	0.000	180.500	4262.00	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	SUSSEX
4404.00†	0.000	180.500	4318.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4504.00†	0.000	180.500	4418.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4604.00†	0.000	180.500	4518.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4704.00†	0.000	180.500	4618.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4804.00†	0.000	180.500	4718.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
4904.00†	0.000	180.500	4818.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5004.00†	0.000	180.500	4918.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5104.00†	0.000	180.500	5018.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5204.00†	0.000	180.500	5118.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5304.00†	0.000	180.500	5218.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5404.00†	0.000	180.500	5318.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5504.00†	0.000	180.500	5418.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5604.00†	0.000	180.500	5518.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5704.00†	0.000	180.500	5618.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5804.00†	0.000	180.500	5718.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
5904.00†	0.000	180.500	5818.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
6004.00†	0.000	180.500	5918.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
6104.00†	0.000	180.500	6018.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
6204.00†	0.000	180.500	6118.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
6304.00†	0.000	180.500	6218.36	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	
6396.45	0.000	180.500	6310.81	-20.80	13.90	-739.41	40°12'19.761"N	104°40'34.140"W	0.00	KOP, BUILD@8°/100'
6404.00†	0.604	180.500	6318.36	-20.76	13.86	-739.41	40°12'19.760"N	104°40'34.140"W	8.00	
6504.00†	8.604	180.500	6417.96	-12.74	5.84	-739.48	40°12'19.681"N	104°40'34.141"W	8.00	
6604.00†	16.604	180.500	6515.47	9.06	-15.96	-739.67	40°12'19.465"N	104°40'34.144"W	8.00	
6704.00†	24.604	180.500	6608.99	44.21	-51.12	-739.98	40°12'19.118"N	104°40'34.148"W	8.00	
6804.00†	32.604	180.500	6696.72	92.04	-98.96	-740.39	40°12'18.645"N	104°40'34.153"W	8.00	
6904.00†	40.604	180.500	6776.93	151.61	-158.54	-740.91	40°12'18.056"N	104°40'34.160"W	8.00	
6964.29†	45.428	180.500	6821.00	192.73	-199.66	-741.27	40°12'17.650"N	104°40'34.164"W	8.00	SHARON SPRINGS
7004.00†	48.604	180.500	6848.07	221.76	-228.70	-741.52	40°12'17.362"N	104°40'34.167"W	8.00	
7055.99†	52.763	180.500	6881.00	261.97	-268.91	-741.88	40°12'16.965"N	104°40'34.172"W	8.00	NIOBRARA
7104.00†	56.604	180.500	6908.75	301.13	-308.08	-742.22	40°12'16.578"N	104°40'34.176"W	8.00	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7130.65†	58.736	180.500	6923.00	323.64	-330.59	-742.41	40°12'16.355"N	104°40'34.179"W	8.00	NIOBARRA B
7204.00†	64.604	180.500	6957.80	388.17	-395.13	-742.98	40°12'15.717"N	104°40'34.186"W	8.00	
7304.00†	72.604	180.500	6994.25	481.19	-488.16	-743.79	40°12'14.797"N	104°40'34.197"W	8.00	
7404.00†	80.604	180.500	7017.39	578.37	-585.35	-744.64	40°12'13.837"N	104°40'34.207"W	8.00	
7504.00†	88.604	180.500	7026.79	677.83	-684.83	-745.51	40°12'12.853"N	104°40'34.219"W	8.00	
7521.45	90.000	180.500	7027.00	695.28	-702.27	-745.66	40°12'12.681"N	104°40'34.221"W	8.00	LANDING POINT
7521.45†	90.000	180.500	7027.00	695.28	-702.27	-745.66	40°12'12.681"N	104°40'34.221"W	0.00	PRODUCTION TOP
7604.00†	90.000	180.500	7027.00	777.82	-784.82	-746.38	40°12'11.865"N	104°40'34.230"W	0.00	
7704.00†	90.000	180.500	7027.00	877.80	-884.82	-747.25	40°12'10.876"N	104°40'34.241"W	0.00	
7804.00†	90.000	180.500	7027.00	977.78	-984.81	-748.12	40°12'09.888"N	104°40'34.252"W	0.00	
7904.00†	90.000	180.500	7027.00	1077.77	-1084.81	-749.00	40°12'08.899"N	104°40'34.263"W	0.00	
8004.00†	90.000	180.500	7027.00	1177.75	-1184.80	-749.87	40°12'07.911"N	104°40'34.275"W	0.00	
8104.00†	90.000	180.500	7027.00	1277.73	-1284.80	-750.74	40°12'06.922"N	104°40'34.286"W	0.00	
8204.00†	90.000	180.500	7027.00	1377.72	-1384.80	-751.61	40°12'05.933"N	104°40'34.297"W	0.00	
8304.00†	90.000	180.500	7027.00	1477.70	-1484.79	-752.49	40°12'04.945"N	104°40'34.308"W	0.00	
8404.00†	90.000	180.500	7027.00	1577.69	-1584.79	-753.36	40°12'03.956"N	104°40'34.320"W	0.00	
8504.00†	90.000	180.500	7027.00	1677.67	-1684.79	-754.23	40°12'02.968"N	104°40'34.331"W	0.00	
8604.00†	90.000	180.500	7027.00	1777.65	-1784.78	-755.10	40°12'01.979"N	104°40'34.342"W	0.00	
8704.00†	90.000	180.500	7027.00	1877.64	-1884.78	-755.98	40°12'00.991"N	104°40'34.353"W	0.00	
8804.00†	90.000	180.500	7027.00	1977.62	-1984.77	-756.85	40°12'00.002"N	104°40'34.364"W	0.00	
8904.00†	90.000	180.500	7027.00	2077.60	-2084.77	-757.72	40°11'59.014"N	104°40'34.376"W	0.00	
9004.00†	90.000	180.500	7027.00	2177.59	-2184.77	-758.60	40°11'58.025"N	104°40'34.387"W	0.00	
9104.00†	90.000	180.500	7027.00	2277.57	-2284.76	-759.47	40°11'57.036"N	104°40'34.398"W	0.00	
9204.00†	90.000	180.500	7027.00	2377.56	-2384.76	-760.34	40°11'56.048"N	104°40'34.409"W	0.00	
9221.45	90.000	180.500	7027.00	2395.00	-2402.20	-760.49	40°11'55.875"N	104°40'34.411"W	0.00	BEGIN TURN
9299.65	90.000	178.936	7027.00	2473.20	-2480.40	-760.11	40°11'55.102"N	104°40'34.406"W	2.00	END TURN
9304.00†	90.000	178.936	7027.00	2477.55	-2484.75	-760.03	40°11'55.059"N	104°40'34.405"W	0.00	
9404.00†	90.000	178.936	7027.00	2577.54	-2584.74	-758.17	40°11'54.071"N	104°40'34.381"W	0.00	
9504.00†	90.000	178.937	7027.00	2677.54	-2684.72	-756.31	40°11'53.083"N	104°40'34.357"W	0.00	
9604.00†	90.000	178.937	7027.00	2777.54	-2784.70	-754.46	40°11'52.094"N	104°40'34.333"W	0.00	
9704.00†	90.000	178.937	7027.00	2877.53	-2884.69	-752.60	40°11'51.106"N	104°40'34.309"W	0.00	
9804.00†	90.000	178.938	7027.00	2977.53	-2984.67	-750.75	40°11'50.117"N	104°40'34.285"W	0.00	
9904.00†	90.000	178.938	7027.00	3077.52	-3084.65	-748.90	40°11'49.129"N	104°40'34.261"W	0.00	
10004.00†	90.000	178.938	7027.00	3177.52	-3184.63	-747.04	40°11'48.141"N	104°40'34.237"W	0.00	
10104.00†	90.000	178.938	7027.00	3277.52	-3284.62	-745.19	40°11'47.152"N	104°40'34.214"W	0.00	
10204.00†	90.000	178.939	7027.00	3377.51	-3384.60	-743.34	40°11'46.164"N	104°40'34.190"W	0.00	
10304.00†	90.000	178.939	7027.00	3477.51	-3484.58	-741.48	40°11'45.175"N	104°40'34.166"W	0.00	
10404.00†	90.000	178.939	7027.00	3577.50	-3584.57	-739.63	40°11'44.187"N	104°40'34.142"W	0.00	
10504.00†	90.000	178.940	7027.00	3677.50	-3684.55	-737.78	40°11'43.198"N	104°40'34.118"W	0.00	
10604.00†	90.000	178.940	7027.00	3777.49	-3784.53	-735.93	40°11'42.210"N	104°40'34.094"W	0.00	
10704.00†	90.000	178.940	7027.00	3877.49	-3884.51	-734.08	40°11'41.222"N	104°40'34.070"W	0.00	
10804.00†	90.000	178.941	7027.00	3977.49	-3984.50	-732.23	40°11'40.233"N	104°40'34.046"W	0.00	
10904.00†	90.000	178.941	7027.00	4077.48	-4084.48	-730.39	40°11'39.245"N	104°40'34.022"W	0.00	
11004.00†	90.000	178.941	7027.00	4177.48	-4184.46	-728.54	40°11'38.256"N	104°40'33.998"W	0.00	
11104.00†	90.000	178.942	7027.00	4277.47	-4284.45	-726.69	40°11'37.268"N	104°40'33.975"W	0.00	

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## WELLPATH DATA (151 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11204.00†	90.000	178.942	7027.00	4377.47	-4384.43	-724.84	40°11'36.280"N	104°40'33.951"W	0.00	
11304.00†	90.000	178.942	7027.00	4477.46	-4484.41	-723.00	40°11'35.291"N	104°40'33.927"W	0.00	
11404.00†	90.000	178.942	7027.00	4577.46	-4584.39	-721.15	40°11'34.303"N	104°40'33.903"W	0.00	
11504.00†	90.000	178.943	7027.00	4677.46	-4684.38	-719.31	40°11'33.314"N	104°40'33.879"W	0.00	
11604.00†	90.000	178.943	7027.00	4777.45	-4784.36	-717.46	40°11'32.326"N	104°40'33.855"W	0.00	
11704.00†	90.000	178.943	7027.00	4877.45	-4884.34	-715.62	40°11'31.337"N	104°40'33.832"W	0.00	
11804.00†	90.000	178.944	7027.00	4977.44	-4984.33	-713.77	40°11'30.349"N	104°40'33.808"W	0.00	
11904.00†	90.000	178.944	7027.00	5077.44	-5084.31	-711.93	40°11'29.361"N	104°40'33.784"W	0.00	
12004.00†	90.000	178.944	7027.00	5177.44	-5184.29	-710.09	40°11'28.372"N	104°40'33.760"W	0.00	
12104.00†	90.000	178.945	7027.00	5277.43	-5284.28	-708.24	40°11'27.384"N	104°40'33.736"W	0.00	
12204.00†	90.000	178.945	7027.00	5377.43	-5384.26	-706.40	40°11'26.395"N	104°40'33.713"W	0.00	
12304.00†	90.000	178.945	7027.00	5477.42	-5484.24	-704.56	40°11'25.407"N	104°40'33.689"W	0.00	
12404.00†	90.000	178.946	7027.00	5577.42	-5584.22	-702.72	40°11'24.419"N	104°40'33.665"W	0.00	
12504.00†	90.000	178.946	7027.00	5677.42	-5684.21	-700.88	40°11'23.430"N	104°40'33.641"W	0.00	
12604.00†	90.000	178.946	7027.00	5777.41	-5784.19	-699.04	40°11'22.442"N	104°40'33.618"W	0.00	
12700.89	90.000	178.946	7027.00 <sup>1</sup>	5874.30	-5881.07	-697.26	40°11'21.484"N	104°40'33.595"W	0.00	TOTAL DEPTH

## HOLE & CASING SECTIONS - Ref Wellbore: SKIM 34N-28HZ PWB Ref Wellpath: SKIM 34N-28HZ (REV-B.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	16.00	1247.00	1231.00	16.00	1233.61	0.00	0.00	-18.96	-138.66
9.625in Casing Surface	16.00	1238.00	1222.00	16.00	1224.84	0.00	0.00	-18.80	-136.63
7.875in Open Hole	1247.00	12700.89	11453.89	1233.61	7027.00	-18.96	-138.66	-5881.07	-697.26
5.5in Casing Production	16.00	12700.89	12684.89	16.00	7027.00	0.00	0.00	-5881.07	-697.26

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.21-T3N-R65W SECTION LINES		0.00	0.36	-29.88	1731548.36	14601715.72	40°12'19.627"N	104°40'24.992"W	polygon
SEC.28-T3N-R65W SECTION LINES		0.00	0.36	-29.88	1731548.36	14601715.72	40°12'19.627"N	104°40'24.992"W	polygon
SKIM 34N-28HZ BHL ON PLAT REV-1 (50'FSL & 565'FWL, SEC.28)		7027.00	-5881.11	-667.23	1730932.64	14595831.96	40°11'21.484"N	104°40'33.208"W	point
Imported from Compass									
1) SKIM 34N-28HZ BHL REV-2 (50'FSL & 535'FWL, SEC.28)	12700.89	7027.00	-5881.07	-697.26	1730902.61	14595831.89	40°11'21.484"N	104°40'33.595"W	point
Imported from Compass									
SKIM 34N-28HZ LANDBOX		7027.00	0.00	0.00	1731578.23	14601715.47	40°12'19.623"N	104°40'24.607"W	polygon



# Planned Wellpath Report

SKIM 34N-28HZ (REV-B.0) PWP

Page 6 of 7



## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## SURVEY PROGRAM - Ref Wellbore: SKIM 34N-28HZ PWB Ref Wellpath: SKIM 34N-28HZ (REV-B.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1204.00	ISCWSA MWD, Rev. 2 (Standard)		SKIM 34N-28HZ AWB <95-1204>
1204.00	7521.45	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		SKIM 34N-28HZ PWB
7521.45	12700.89	ISCWSA MWD, Rev. 2, axial magnetic correction (Standard) (MagVAR IFR Wattenberg)		SKIM 34N-28HZ PWB

# Planned Wellpath Report

SKIM 34N-28HZ (REV-B.0) PWP

Page 7 of 7

## REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#03 SKIM 34N-28HZ (639'FSL & 1226'FWL, SEC.21)
Area	Compass Import	Well	SKIM 34N-28HZ
Field	WELD COUNTY (UTM (ZONE 13)/NAD83/TN)	Wellbore	SKIM 34N-28HZ PWB
Facility	3N-65W-21 Skim 35-21HZ Pad		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
621.51	5.785	262.918	621.00	BASE FOX HILLS
3967.64	1.166	273.580	3882.00	PARKMAN
4347.64	0.000	180.500	4262.00	SUSSEX
6964.29	45.428	180.500	6821.00	SHARON SPRINGS
7055.99	52.763	180.500	6881.00	NIOBRARA
7130.65	58.736	180.500	6923.00	NIOBRARA B
7521.45	90.000	180.500	7027.00	PRODUCTION TOP

## DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1204.00	13.100	265.600	1191.72	TIE ONTO CATHEDRAL MWD
1338.00	13.100	265.600	1322.24	BEGIN NUDGE
1455.99	14.500	273.580	1436.83	END NUDGE
3300.93	14.500	273.580	3223.00	BEGIN DROP
4025.93	0.000	180.500	3940.29	END DROP
6396.45	0.000	180.500	6310.81	KOP, BUILD@8°/100'
7521.45	90.000	180.500	7027.00	LANDING POINT
9221.45	90.000	180.500	7027.00	BEGIN TURN
9299.65	90.000	178.936	7027.00	END TURN
12700.89	90.000	178.946	7027.00	TOTAL DEPTH