

# KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOTH31 DOUTHIT 16C-27HZ (162°FSL & 416°FEL, SEC.26)  
Field: WELD COUNTY (KERR MCGEE) Well: DOUTHIT 16C-27HZ  
Facility: SEC.26-T3N-R68W Wellbore: DOUTHIT 16C-27HZ PWB

Plot reference wellpath is DOUTHIT 16C-27HZ (REV-A.0) PWP

True vertical depths are referenced to XTREME 20 (16KB) (R9B)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (S01), US feet
Measured depths are referenced to XTREME 20 (16KB) (R9B)	North Reference: True north
XTREME 20 (16KB) (R9B) to Mean Sea Level: 4941 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOTH31 DOUTHIT 16C-27HZ (162°FSL & 416°FEL, SEC.26)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gresen on 15/Sep/2014

## Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.26-T3N-R68W	3148916.228	1312372.228	40°11'32.67"N	104°58'26.78"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOTH31 DOUTHIT 16C-27HZ (162°FSL & 416°FEL, SEC.26)	671.95	3346.83	3150258.864	1314064.967
XTREME 20 (16KB) (R9B) to Mud line (At Slot: SLOTH31 DOUTHIT 16C-27HZ (162°FSL & 416°FEL, SEC.26))			4941 ft	
Mean Sea Level to Mud line (At Slot: SLOTH31 DOUTHIT 16C-27HZ (162°FSL & 416°FEL, SEC.26))			0 ft	
XTREME 20 (16KB) (R9B) to Mean Sea Level			4941 ft	

## Survey Program

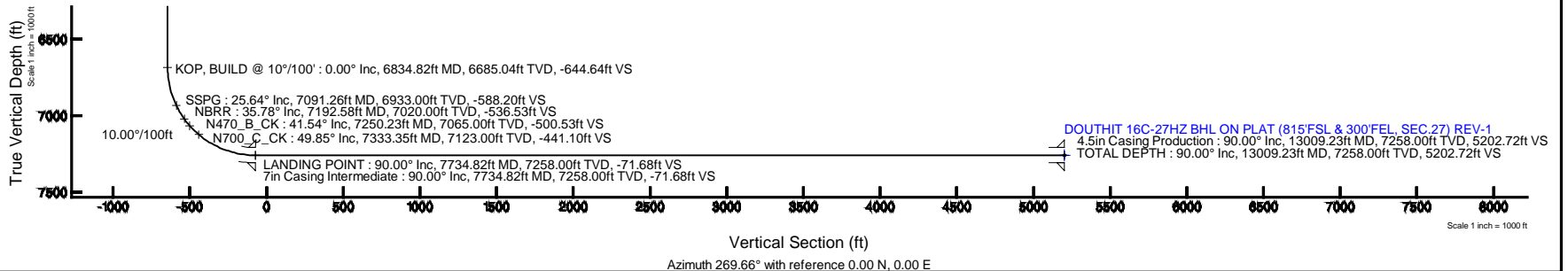
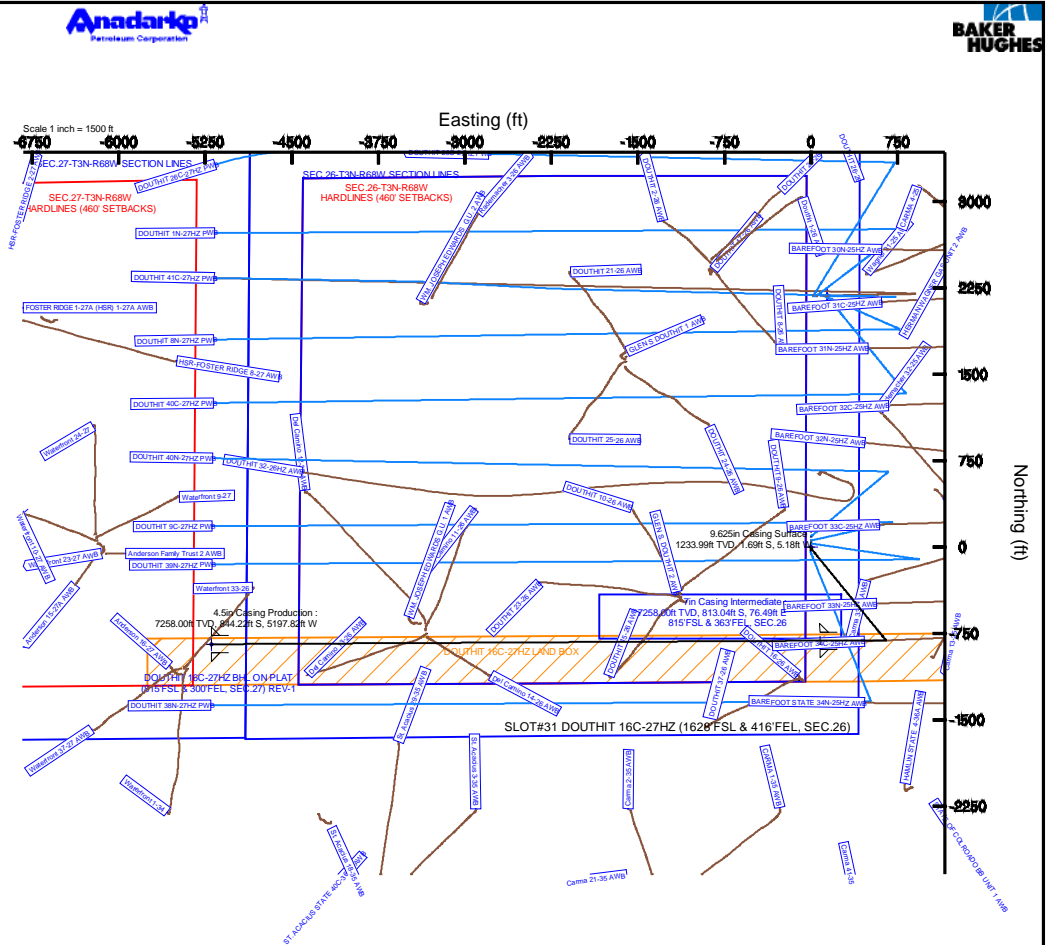
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1174.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		DOUTHIT 16C-27HZ AWB
1174.00	7734.82	NavTrak	NavTrak (FR)		DOUTHIT 16C-27HZ PWB
7734.82	13009.23	NavTrak	NavTrak (FR)		DOUTHIT 16C-27HZ PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO GYRO SURVEY	1174.00	0.240	240.680	1173.99	-1.57	-4.96	0.13	4.97
BEGIN NUDGE	1375.02	0.240	240.680	1375.00	-1.98	-5.69	0.00	5.70
END NUDGE	2277.14	18.000	140.850	2262.39	-111.91	81.38	2.00	-80.72
BEGIN DROP	4735.05	18.000	140.850	4600.00	-700.92	560.92	0.00	-556.76
END DROP	5635.05	0.000	269.661	5485.27	-809.66	649.44	2.00	-644.64
KOP, BUILD @ 10°/100'	6834.82	0.000	269.661	6685.04	-809.66	649.44	0.00	-644.64
LANDING POINT	7734.82	90.000	269.661	7258.00	-813.04	76.49	10.00	-71.68
TOTAL DEPTH	13009.23	90.000	269.661	7258.00	-844.22	-5197.82	0.00	5202.72

## Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.26-T3N-R68W HARDLINES (460 SETBACKS)	-16.00	2162.55	141.92	310387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	
SEC.26-T3N-R68W SECTION LINES	-16.00	2162.55	141.92	310387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	
SEC.27-T3N-R68W HARDLINES (460 SETBACKS)	-16.00	2162.55	141.92	310387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	
SEC.27-T3N-R68W SECTION LINES	-16.00	2162.55	141.92	310387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	
DOUTHIT 16C-27HZ BHL ON PLAT (815°FSL & 300°FEL, SEC.27) REV.1	13009.23	7258.00	-844.22	-5197.82	3149060.49	1313189.27	40°11'30.882"N	104°58'10.610"W
DOUTHIT 16C-27HZ LAND BOX	7258.00	0.00	0.00	0.00	3149060.49	1313189.27	40°11'30.882"N	104°58'10.610"W



# Planned Wellpath Report

DOUTHIT 16C-27HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 DOUTHIT 16C-27HZ (1628'FSL & 416'FEL, SEC.26)
Area	COLORADO	Well	DOUTHIT 16C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT 16C-27HZ PWB
Facility	SEC.26-T3N-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	Precain
Scale	0.999957	Report Generated	15/Sep/2014 at 12:47
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOUTHIT_16C-27HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	671.95	3346.83	3150258.86	1314064.97	40°11'39.314"N	104°57'43.632"W
Facility Reference Pt			3146916.23	1313373.21	40°11'32.676"N	104°58'26.760"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 20 (16'KB) (RKB) to Facility Vertical Datum	4941.00ft
Horizontal Reference Pt	Slot	XTREME 20 (16'KB) (RKB) to Mean Sea Level	4941.00ft
Vertical Reference Pt	XTREME 20 (16'KB) (RKB)	XTREME 20 (16'KB) (RKB) to Mud Line at Slot (SLOT#31 DOUTHIT 16C-27HZ (1628'FSL & 416'FEL, SEC.26))	4941.00ft
MD Reference Pt	XTREME 20 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.66°







# Planned Wellpath Report

DOUTHIT 16C-27HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 DOUTHIT 16C-27HZ (1628'FSL & 416'FEL, SEC.26)
Area	COLORADO	Well	DOUTHIT 16C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT 16C-27HZ PWB
Facility	SEC.26-T3N-R68W		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12074.00†	90.000	269.661	7258.00	4267.50	-838.69	-4262.61	40°11'31.022"N	104°58'38.559"W	0.00	
12174.00†	90.000	269.661	7258.00	4367.50	-839.28	-4362.61	40°11'31.016"N	104°58'39.848"W	0.00	
12274.00†	90.000	269.661	7258.00	4467.50	-839.87	-4462.61	40°11'31.010"N	104°58'41.136"W	0.00	
12374.00†	90.000	269.661	7258.00	4567.50	-840.47	-4562.61	40°11'31.004"N	104°58'42.425"W	0.00	
12474.00†	90.000	269.661	7258.00	4667.50	-841.06	-4662.60	40°11'30.998"N	104°58'43.713"W	0.00	
12574.00†	90.000	269.661	7258.00	4767.50	-841.65	-4762.60	40°11'30.992"N	104°58'45.002"W	0.00	
12674.00†	90.000	269.661	7258.00	4867.50	-842.24	-4862.60	40°11'30.986"N	104°58'46.290"W	0.00	
12774.00†	90.000	269.661	7258.00	4967.50	-842.83	-4962.60	40°11'30.980"N	104°58'47.579"W	0.00	
12874.00†	90.000	269.661	7258.00	5067.50	-843.42	-5062.60	40°11'30.974"N	104°58'48.868"W	0.00	
12974.00†	90.000	269.661	7258.00	5167.50	-844.02	-5162.60	40°11'30.968"N	104°58'50.156"W	0.00	
13009.23	90.000	269.661	7258.00 <sup>1</sup>	5202.72	-844.22	-5197.82	40°11'30.966"N	104°58'50.610"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DOUTHIT 16C-27HZ PWB Ref Wellpath: DOUTHIT 16C-27HZ (REV-A.0) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	16.00	1174.00	1158.00	16.00	1173.99	0.00	0.00	-1.57	-4.96
13.5in Open Hole	1174.00	1244.00	70.00	1173.99	1243.98	-1.57	-4.96	-1.71	-5.21
9.625in Casing Surface	16.00	1234.00	1218.00	16.00	1233.99	0.00	0.00	-1.69	-5.18
8.75in Open Hole	1244.00	7734.82	6490.82	1243.98	7258.00	-1.71	-5.21	-813.04	76.49
7in Casing Intermediate	16.00	7734.82	7718.82	16.00	7258.00	0.00	0.00	-813.04	76.49
6.125in Open Hole	7734.82	13010.23	5275.41	7258.00	NA	-813.04	76.49	NA	NA
4.5in Casing Production	16.00	13009.23	12993.23	16.00	7258.00	0.00	0.00	-844.22	-5197.82

# Planned Wellpath Report

DOUTHIT 16C-27HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#31 DOUTHIT 16C-27HZ (1628'FSL & 416'FEL, SEC.26)
Area	COLORADO	Well	DOUTHIT 16C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT 16C-27HZ PWB
Facility	SEC.26-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.26-T3N-R68W HARDLINES (460' SETBACKS)		-18.00	2182.56	141.92	3150387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	polygon
SEC.26-T3N-R68W SECTION LINES		-18.00	2182.56	141.92	3150387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	polygon
SEC.27-T3N-R68W HARDLINES (460' SETBACKS)		-18.00	2182.56	141.92	3150387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	polygon
SEC.27-T3N-R68W SECTION LINES		-18.00	2182.56	141.92	3150387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	polygon
1) DOUTHIT 16C-27HZ BHL ON PLAT (815'FSL & 300'FEL, SEC.27) REV-1	13009.23	7258.00	-844.22	-5197.82	3145066.49	1313189.27	40°11'30.966"N	104°58'50.610"W	point
DOUTHIT 16C-27HZ LAND BOX		7259.00	0.00	0.00	3150258.86	1314064.97	40°11'39.314"N	104°57'43.632"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOUTHIT 16C-27HZ PWB Ref Wellpath: DOUTHIT 16C-27HZ (REV-A.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1174.00	Generic gyro - continuous (Standard)		DOUTHIT 16C-27HZ AWB
1174.00	7734.82	NaviTrak (IFR)		DOUTHIT 16C-27HZ PWB
7734.82	13009.23	NaviTrak (IFR)		DOUTHIT 16C-27HZ PWB



# Planned Wellpath Report

DOUTHIT 16C-27HZ (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
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Area	COLORADO	Well	DOUTHIT 16C-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT 16C-27HZ PWB
Facility	SEC.26-T3N-R68W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
1039.01	0.347	255.229	1039.00	Fox Hills Base	
3764.55	18.000	140.850	3677.00	Parkman	
4195.65	18.000	140.850	4087.00	Sussex	
7091.26	25.644	269.662	6933.00	SSPG	
7192.58	35.776	269.662	7020.00	NBRR	
7250.23	41.541	269.661	7065.00	N470_B_CK	
7333.35	49.852	269.661	7123.00	N700_C_CK	

DESIGN COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
1174.00	0.240	240.680	1173.99	TIE-INTO GYRO SURVEY	
1375.02	0.240	240.680	1375.00	BEGIN NUDGE	
2277.14	18.000	140.850	2262.39	END NUDGE	
4735.05	18.000	140.850	4600.00	BEGIN DROP	
5635.05	0.000	269.661	5485.27	END DROP	
6834.82	0.000	269.661	6685.04	KOP, BUILD @ 10°/100'	
7734.82	90.000	269.661	7258.00	LANDING POINT	
13009.23	90.000	269.661	7258.00	TOTAL DEPTH	