

KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOTH30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
 Field: WELD COUNTY (KERR MCGEE) Well: DOUTHIT STATE 38N-27HZ
 Facility: SEC.26-T3N-R68W Wellbore: DOUTHIT STATE 38N-27HZ PWB

Plot reference wellpath is DOUTHIT STATE 38N-27HZ (REV.8.0) PWB

True vertical depths are referenced to XTREME 20 (16'KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US Feet
Measured depths are referenced to XTREME 20 (16'KB) (RKB)	North Reference: True north
XTREME 20 (16'KB) (RKB) to Mean Sea Level: 4041 feet	Scale: True distance
Mean Sea Level to Mud line (A) Slot: SLOTH30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gpracin on 1/7/2014

Location Information

Facility Name	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude		
SEC.26-T3N-R68W	3146914.208	1313273.208	40°11'33.407"N	104°57'43.632"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SLOTH30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)	642.10	3346.83	3150259.045	1314035.117	40°11'33.410"N	104°57'43.632"W
XTREME 20 (16'KB) (RKB) to Mud line (A) Slot: SLOTH30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)						4041ft
Mean Sea Level to Mud line (A) Slot: SLOTH30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)						0ft
XTREME 20 (16'KB) (RKB) to Mean Sea Level						4041ft

Survey Program

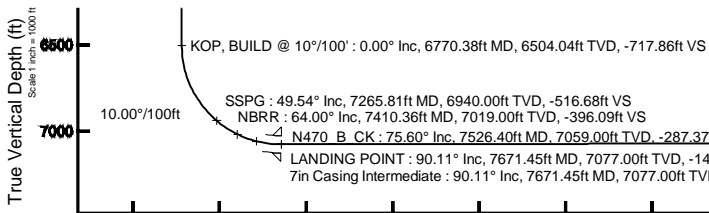
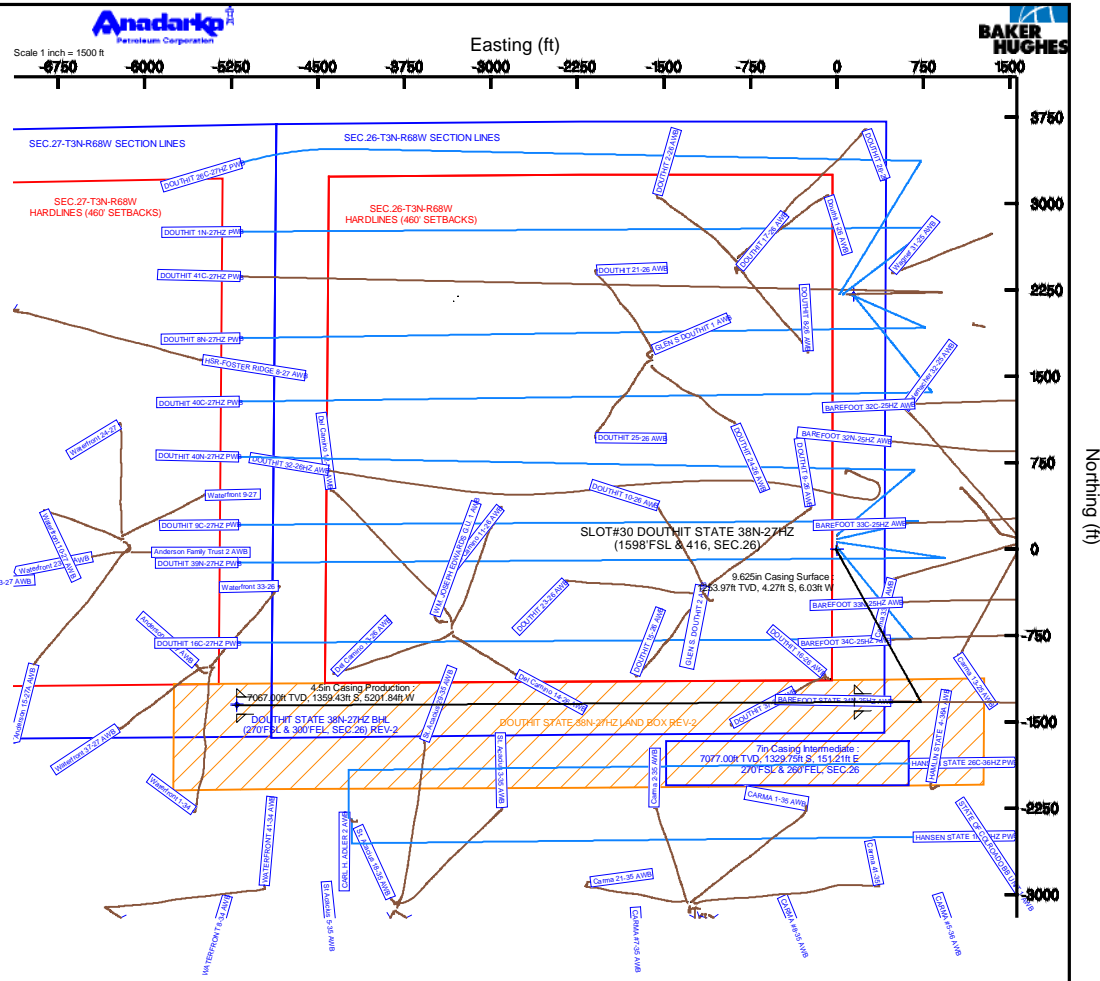
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1198.00	Genetic gyro - continuous	Genetic gyro - continuous (Standard)		DOUTHIT STATE 38N-27HZ AWB
1198.00	7671.45	NewTrak	NewTrak (FR)		DOUTHIT STATE 38N-27HZ PWB
7671.45	13024.59	NewTrak	NewTrak (FR)		DOUTHIT STATE 38N-27HZ PWB

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	1198.00	0.150	273.900	1197.97	-4.28	-5.88	0.07	5.90
BEGIN NUDGE	1375.03	0.150	273.900	1375.00	-4.24	-6.34	0.00	6.37
END NUDGE	2479.12	22.000	151.000	2452.26	-187.29	93.72	2.00	-92.67
BEGIN DROP	5399.51	22.000	151.000	5160.00	-1144.12	624.10	0.00	-617.74
END DROP	6499.51	0.000	269.682	6233.17	-1326.57	725.23	2.00	-717.86
KOP, BUILD @ 10°/100'	6770.38	0.000	269.682	6504.04	-1326.57	725.23	0.00	-717.86
LANDING POINT	7671.45	90.107	269.682	7077.00	-1329.75	151.21	10.00	-143.83
TOTAL DEPTH	13024.59	90.107	269.682	7067.00	-1359.43	-5201.84	0.00	5209.30

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)	-18.00	2212.41	141.92	3150387.54	1316248.25	40°11'33.407"N	104°57'41.803"W	
SEC.26-T3N-R68W SECTION LINES	-18.00	2212.41	141.92	3150387.54	1316248.25	40°11'33.407"N	104°57'41.803"W	
SEC.27-T3N-R68W HARDLINES (460' SETBACKS)	-18.00	2212.41	141.92	3150387.54	1316248.25	40°11'33.407"N	104°57'41.803"W	
SEC.27-T3N-R68W SECTION LINES	-18.00	2212.41	141.92	3150387.54	1316248.25	40°11'33.407"N	104°57'41.803"W	
DOUTHIT STATE 38N-27HZ BHL (270'FSL & 300'FEL, SEC.26) REV-2	13024.59	7067.00	-1359.43	-5201.84	3146914.208	1313273.208	40°11'33.407"N	104°57'43.632"W
DOUTHIT STATE 38N-27HZ BHL ON PLAT (280'FSL & 300'FEL, SEC.26) REV-1	7067.00	-1344.43	-5201.84	3146914.208	1313273.208	40°11'33.407"N	104°57'43.632"W	
DOUTHIT STATE 38N-27HZ LAND BOX	7068.00	0.00	0.00	3150259.045	1314035.117	40°11'33.410"N	104°57'43.632"W	
DOUTHIT STATE 38N-27HZ LAND BOX REV-2	7068.00	0.00	0.00	3150259.045	1314035.117	40°11'33.410"N	104°57'43.632"W	



DOUTHIT STATE 38N-27HZ BHL (270'FSL & 300'FEL, SEC.27) REV-2
 4.5in Casing Production : 90.11° Inc, 13024.59ft MD, 7067.00ft TVD, 5209.30ft VS
 TOTAL DEPTH : 90.11° Inc, 13024.59ft MD, 7067.00ft TVD, 5209.30ft VS

Vertical Section (ft)
 Azimuth 269.68° with reference 0.00 N, 0.00 E

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO	Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT STATE 38N-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	17/Sep/2014 at 14:41
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOUTHIT_STATE_38N-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	642.10	3346.83	3150259.05	1314035.12	40°11'39.019"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#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, 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	269.68°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO	Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT STATE 38N-27HZ PWB
Facility	SEC.26-T3N-R68W		

WELLPATH DATA (145 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	257.710	0.00	0.00	0.00	0.00	40°11'39.019"N	104°57'43.632"W	0.00	
16.00	0.000	257.710	16.00	0.00	0.00	0.00	40°11'39.019"N	104°57'43.632"W	0.00	
116.00	0.260	257.710	116.00	0.22	-0.05	-0.22	40°11'39.019"N	104°57'43.635"W	0.26	
216.00	0.170	234.920	216.00	0.57	-0.18	-0.56	40°11'39.017"N	104°57'43.639"W	0.12	
316.00	0.430	232.200	316.00	0.99	-0.50	-0.98	40°11'39.014"N	104°57'43.645"W	0.26	
416.00	0.420	218.230	415.99	1.51	-1.02	-1.51	40°11'39.009"N	104°57'43.651"W	0.10	
516.00	0.530	231.860	515.99	2.11	-1.59	-2.10	40°11'39.003"N	104°57'43.659"W	0.16	
616.00	0.580	223.560	615.99	2.82	-2.24	-2.81	40°11'38.997"N	104°57'43.668"W	0.09	
716.00	0.480	223.280	715.98	3.46	-2.91	-3.45	40°11'38.990"N	104°57'43.676"W	0.10	
816.00	0.310	233.770	815.98	3.97	-3.38	-3.95	40°11'38.986"N	104°57'43.683"W	0.18	
916.00	0.440	243.580	915.98	4.53	-3.71	-4.51	40°11'38.982"N	104°57'43.690"W	0.14	
1016.00	0.430	243.540	1015.97	5.21	-4.05	-5.19	40°11'38.979"N	104°57'43.699"W	0.01	
1039.03†	0.367	244.608	1039.00	5.36	-4.12	-5.34	40°11'38.978"N	104°57'43.701"W	0.27	Fox Hills Base
1116.00	0.160	254.250	1115.97	5.69	-4.25	-5.66	40°11'38.977"N	104°57'43.705"W	0.27	
1198.00	0.150	273.900	1197.97	5.90	-4.28	-5.88	40°11'38.977"N	104°57'43.708"W	0.07	TIE-INTO GYRO SURVEY
1298.00†	0.150	273.900	1297.97	6.16	-4.26	-6.14	40°11'38.977"N	104°57'43.711"W	0.00	
1375.03	0.150	273.900	1375.00	6.37	-4.24	-6.34	40°11'38.977"N	104°57'43.714"W	0.00	BEGIN NUDGE
1398.00†	0.398	169.088	1397.97	6.38	-4.32	-6.36	40°11'38.976"N	104°57'43.714"W	2.00	
1498.00†	2.381	153.710	1497.94	5.41	-6.52	-5.37	40°11'38.955"N	104°57'43.701"W	2.00	
1598.00†	4.379	152.328	1597.76	2.74	-11.77	-2.68	40°11'38.903"N	104°57'43.667"W	2.00	
1698.00†	6.379	151.812	1697.31	-1.61	-20.04	1.72	40°11'38.821"N	104°57'43.610"W	2.00	
1798.00†	8.378	151.542	1796.48	-7.64	-31.35	7.82	40°11'38.709"N	104°57'43.531"W	2.00	
1898.00†	10.378	151.375	1895.14	-15.35	-45.66	15.60	40°11'38.568"N	104°57'43.431"W	2.00	
1998.00†	12.378	151.261	1993.17	-24.72	-62.97	25.07	40°11'38.397"N	104°57'43.309"W	2.00	
2098.00†	14.378	151.179	2090.45	-35.75	-83.24	36.21	40°11'38.196"N	104°57'43.165"W	2.00	
2198.00†	16.378	151.116	2186.87	-48.42	-106.47	49.01	40°11'37.967"N	104°57'43.000"W	2.00	
2298.00†	18.378	151.067	2282.30	-62.71	-132.61	63.45	40°11'37.709"N	104°57'42.814"W	2.00	
2398.00†	20.378	151.027	2376.63	-78.61	-161.64	79.51	40°11'37.422"N	104°57'42.607"W	2.00	
2479.12	22.000	151.000	2452.26	-92.67	-187.29	93.72	40°11'37.168"N	104°57'42.424"W	2.00	END NUDGE
2498.00†	22.000	151.000	2469.77	-96.07	-193.47	97.15	40°11'37.107"N	104°57'42.380"W	0.00	
2598.00†	22.000	151.000	2562.48	-114.05	-226.24	115.31	40°11'36.783"N	104°57'42.146"W	0.00	
2698.00†	22.000	151.000	2655.20	-132.03	-259.00	133.47	40°11'36.460"N	104°57'41.912"W	0.00	
2798.00†	22.000	151.000	2747.92	-150.01	-291.77	151.63	40°11'36.136"N	104°57'41.678"W	0.00	
2898.00†	22.000	151.000	2840.64	-167.99	-324.53	169.79	40°11'35.812"N	104°57'41.444"W	0.00	
2998.00†	22.000	151.000	2933.36	-185.97	-357.29	187.95	40°11'35.488"N	104°57'41.210"W	0.00	
3098.00†	22.000	151.000	3026.08	-203.94	-390.06	206.11	40°11'35.164"N	104°57'40.976"W	0.00	
3198.00†	22.000	151.000	3118.79	-221.92	-422.82	224.27	40°11'34.841"N	104°57'40.742"W	0.00	
3298.00†	22.000	151.000	3211.51	-239.90	-455.58	242.44	40°11'34.517"N	104°57'40.508"W	0.00	
3398.00†	22.000	151.000	3304.23	-257.88	-488.35	260.60	40°11'34.193"N	104°57'40.274"W	0.00	
3498.00†	22.000	151.000	3396.95	-275.86	-521.11	278.76	40°11'33.869"N	104°57'40.040"W	0.00	
3598.00†	22.000	151.000	3489.67	-293.84	-553.88	296.92	40°11'33.546"N	104°57'39.806"W	0.00	
3698.00†	22.000	151.000	3582.39	-311.82	-586.64	315.08	40°11'33.222"N	104°57'39.572"W	0.00	
3798.00†	22.000	151.000	3675.10	-329.80	-619.40	333.24	40°11'32.898"N	104°57'39.338"W	0.00	
3817.30†	22.000	151.000	3693.00	-333.27	-625.73	336.75	40°11'32.836"N	104°57'39.293"W	0.00	Parkman
3898.00†	22.000	151.000	3767.82	-347.78	-652.17	351.40	40°11'32.574"N	104°57'39.104"W	0.00	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO		Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	DOUTHIT STATE 38N-27HZ PWB
Facility	SEC.26-T3N-R68W			

WELLPATH DATA (145 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3998.00†	22.000	151.000	3860.54	-365.76	-684.93	369.56	40°11'32.250"N	104°57'38.870"W	0.00	
4098.00†	22.000	151.000	3953.26	-383.74	-717.70	387.73	40°11'31.927"N	104°57'38.636"W	0.00	
4198.00†	22.000	151.000	4045.98	-401.72	-750.46	405.89	40°11'31.603"N	104°57'38.402"W	0.00	
4259.50†	22.000	151.000	4103.00	-412.77	-770.61	417.06	40°11'31.404"N	104°57'38.258"W	0.00	Sussex
4298.00†	22.000	151.000	4138.70	-419.69	-783.22	424.05	40°11'31.279"N	104°57'38.168"W	0.00	
4398.00†	22.000	151.000	4231.41	-437.67	-815.99	442.21	40°11'30.955"N	104°57'37.934"W	0.00	
4498.00†	22.000	151.000	4324.13	-455.65	-848.75	460.37	40°11'30.632"N	104°57'37.700"W	0.00	
4598.00†	22.000	151.000	4416.85	-473.63	-881.51	478.53	40°11'30.308"N	104°57'37.466"W	0.00	
4698.00†	22.000	151.000	4509.57	-491.61	-914.28	496.69	40°11'29.984"N	104°57'37.232"W	0.00	
4798.00†	22.000	151.000	4602.29	-509.59	-947.04	514.85	40°11'29.660"N	104°57'36.998"W	0.00	
4898.00†	22.000	151.000	4695.01	-527.57	-979.81	533.02	40°11'29.337"N	104°57'36.764"W	0.00	
4998.00†	22.000	151.000	4787.72	-545.55	-1012.57	551.18	40°11'29.013"N	104°57'36.530"W	0.00	
5098.00†	22.000	151.000	4880.44	-563.53	-1045.33	569.34	40°11'28.689"N	104°57'36.296"W	0.00	
5198.00†	22.000	151.000	4973.16	-581.51	-1078.10	587.50	40°11'28.365"N	104°57'36.062"W	0.00	
5298.00†	22.000	151.000	5065.88	-599.49	-1110.86	605.66	40°11'28.041"N	104°57'35.828"W	0.00	
5398.00†	22.000	151.000	5158.60	-617.47	-1143.63	623.82	40°11'27.718"N	104°57'35.594"W	0.00	
5399.51	22.000	151.000	5160.00	-617.74	-1144.12	624.10	40°11'27.713"N	104°57'35.590"W	0.00	BEGIN DROP
5498.00†	20.030	151.000	5251.93	-634.69	-1175.01	641.22	40°11'27.407"N	104°57'35.370"W	2.00	
5598.00†	18.030	151.000	5346.46	-650.34	-1203.53	657.03	40°11'27.126"N	104°57'35.166"W	2.00	
5698.00†	16.030	151.000	5442.07	-664.39	-1229.14	671.22	40°11'26.873"N	104°57'34.983"W	2.00	
5798.00†	14.030	151.000	5538.65	-676.84	-1251.82	683.80	40°11'26.648"N	104°57'34.821"W	2.00	
5898.00†	12.030	151.000	5636.07	-687.66	-1271.54	694.73	40°11'26.454"N	104°57'34.680"W	2.00	
5998.00†	10.030	151.000	5734.21	-696.84	-1288.27	704.00	40°11'26.288"N	104°57'34.561"W	2.00	
6098.00†	8.030	151.000	5832.97	-704.37	-1302.00	711.61	40°11'26.153"N	104°57'34.463"W	2.00	
6198.00†	6.030	151.000	5932.21	-710.25	-1312.70	717.54	40°11'26.047"N	104°57'34.386"W	2.00	
6298.00†	4.030	151.000	6031.82	-714.46	-1320.37	721.80	40°11'25.971"N	104°57'34.331"W	2.00	
6398.00†	2.030	151.000	6131.68	-716.99	-1325.00	724.36	40°11'25.925"N	104°57'34.298"W	2.00	
6498.00†	0.030	151.000	6231.66	-717.86	-1326.57	725.23	40°11'25.910"N	104°57'34.287"W	2.00	
6499.51	0.000	269.682	6233.17	-717.86	-1326.57	725.23	40°11'25.910"N	104°57'34.287"W	2.00	END DROP
6598.00†	0.000	269.682	6331.66	-717.86	-1326.57	725.23	40°11'25.910"N	104°57'34.287"W	0.00	
6698.00†	0.000	269.682	6431.66	-717.86	-1326.57	725.23	40°11'25.910"N	104°57'34.287"W	0.00	
6770.38	0.000	269.682	6504.04	-717.86	-1326.57	725.23	40°11'25.910"N	104°57'34.287"W	0.00	KOP, BUILD @ 10°/100'
6798.00†	2.762	269.682	6531.65	-717.19	-1326.57	724.56	40°11'25.910"N	104°57'34.296"W	10.00	
6898.00†	12.762	269.682	6630.60	-703.70	-1326.65	711.08	40°11'25.909"N	104°57'34.469"W	10.00	
6998.00†	22.762	269.682	6725.72	-673.23	-1326.82	680.61	40°11'25.907"N	104°57'34.862"W	10.00	
7098.00†	32.762	269.682	6814.09	-626.71	-1327.07	634.09	40°11'25.905"N	104°57'35.461"W	10.00	
7198.00†	42.762	269.682	6893.05	-565.55	-1327.41	572.93	40°11'25.901"N	104°57'36.250"W	10.00	
7265.81†	49.543	269.682	6940.00	-516.68	-1327.68	524.05	40°11'25.899"N	104°57'36.879"W	10.00	SSPG
7298.00†	52.762	269.682	6960.19	-491.61	-1327.82	498.99	40°11'25.897"N	104°57'37.202"W	10.00	
7398.00†	62.762	269.682	7013.46	-407.14	-1328.29	414.51	40°11'25.893"N	104°57'38.291"W	10.00	
7410.36†	63.998	269.682	7019.00	-396.09	-1328.35	403.47	40°11'25.892"N	104°57'38.433"W	10.00	NBRR
7498.00†	72.762	269.682	7051.26	-314.69	-1328.80	322.07	40°11'25.888"N	104°57'39.482"W	10.00	
7526.40†	75.602	269.682	7059.00	-287.37	-1328.96	294.75	40°11'25.886"N	104°57'39.834"W	10.00	N470_B_CK
7598.00†	82.762	269.682	7072.43	-217.09	-1329.35	224.47	40°11'25.882"N	104°57'40.740"W	10.00	
7671.45	90.107	269.682	7077.00	-143.83	-1329.75	151.21	40°11'25.878"N	104°57'41.684"W	10.00	LANDING POINT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO	Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT STATE 38N-27HZ PWB
Facility	SEC.26-T3N-R68W		

WELLPATH DATA (145 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7698.00†	90.107	269.682	7076.95	-117.28	-1329.90	124.66	40°11'25.877"N	104°57'42.026"W	0.00	
7798.00†	90.107	269.682	7076.76	-17.28	-1330.45	24.66	40°11'25.871"N	104°57'43.314"W	0.00	
7898.00†	90.107	269.682	7076.57	82.72	-1331.01	-75.33	40°11'25.866"N	104°57'44.603"W	0.00	
7998.00†	90.107	269.682	7076.39	182.72	-1331.56	-175.33	40°11'25.861"N	104°57'45.891"W	0.00	
8098.00†	90.107	269.682	7076.20	282.72	-1332.12	-275.33	40°11'25.855"N	104°57'47.180"W	0.00	
8198.00†	90.107	269.682	7076.01	382.72	-1332.67	-375.33	40°11'25.850"N	104°57'48.468"W	0.00	
8298.00†	90.107	269.682	7075.83	482.72	-1333.23	-475.33	40°11'25.844"N	104°57'49.757"W	0.00	
8398.00†	90.107	269.682	7075.64	582.72	-1333.78	-575.33	40°11'25.839"N	104°57'51.045"W	0.00	
8498.00†	90.107	269.682	7075.45	682.72	-1334.33	-675.32	40°11'25.833"N	104°57'52.334"W	0.00	
8598.00†	90.107	269.682	7075.27	782.72	-1334.89	-775.32	40°11'25.828"N	104°57'53.622"W	0.00	
8698.00†	90.107	269.682	7075.08	882.72	-1335.44	-875.32	40°11'25.822"N	104°57'54.911"W	0.00	
8798.00†	90.107	269.682	7074.89	982.72	-1336.00	-975.32	40°11'25.816"N	104°57'56.199"W	0.00	
8898.00†	90.107	269.682	7074.71	1082.72	-1336.55	-1075.32	40°11'25.811"N	104°57'57.488"W	0.00	
8998.00†	90.107	269.682	7074.52	1182.72	-1337.11	-1175.31	40°11'25.805"N	104°57'58.777"W	0.00	
9098.00†	90.107	269.682	7074.33	1282.72	-1337.66	-1275.31	40°11'25.800"N	104°58'00.065"W	0.00	
9198.00†	90.107	269.682	7074.15	1382.72	-1338.21	-1375.31	40°11'25.794"N	104°58'01.354"W	0.00	
9298.00†	90.107	269.682	7073.96	1482.72	-1338.77	-1475.31	40°11'25.789"N	104°58'02.642"W	0.00	
9398.00†	90.107	269.682	7073.77	1582.72	-1339.32	-1575.31	40°11'25.783"N	104°58'03.931"W	0.00	
9498.00†	90.107	269.682	7073.59	1682.72	-1339.88	-1675.31	40°11'25.778"N	104°58'05.219"W	0.00	
9598.00†	90.107	269.682	7073.40	1782.72	-1340.43	-1775.30	40°11'25.772"N	104°58'06.508"W	0.00	
9698.00†	90.107	269.682	7073.21	1882.72	-1340.99	-1875.30	40°11'25.767"N	104°58'07.796"W	0.00	
9798.00†	90.107	269.682	7073.02	1982.72	-1341.54	-1975.30	40°11'25.761"N	104°58'09.085"W	0.00	
9898.00†	90.107	269.682	7072.84	2082.72	-1342.10	-2075.30	40°11'25.756"N	104°58'10.373"W	0.00	
9998.00†	90.107	269.682	7072.65	2182.72	-1342.65	-2175.30	40°11'25.750"N	104°58'11.662"W	0.00	
10098.00†	90.107	269.682	7072.46	2282.72	-1343.20	-2275.30	40°11'25.744"N	104°58'12.950"W	0.00	
10198.00†	90.107	269.682	7072.28	2382.72	-1343.76	-2375.29	40°11'25.739"N	104°58'14.239"W	0.00	
10298.00†	90.107	269.682	7072.09	2482.72	-1344.31	-2475.29	40°11'25.733"N	104°58'15.527"W	0.00	
10398.00†	90.107	269.682	7071.90	2582.72	-1344.87	-2575.29	40°11'25.728"N	104°58'16.816"W	0.00	
10498.00†	90.107	269.682	7071.72	2682.72	-1345.42	-2675.29	40°11'25.722"N	104°58'18.104"W	0.00	
10598.00†	90.107	269.682	7071.53	2782.72	-1345.98	-2775.29	40°11'25.717"N	104°58'19.393"W	0.00	
10698.00†	90.107	269.682	7071.34	2882.71	-1346.53	-2875.29	40°11'25.711"N	104°58'20.682"W	0.00	
10798.00†	90.107	269.682	7071.16	2982.71	-1347.09	-2975.28	40°11'25.705"N	104°58'21.970"W	0.00	
10898.00†	90.107	269.682	7070.97	3082.71	-1347.64	-3075.28	40°11'25.700"N	104°58'23.259"W	0.00	
10998.00†	90.107	269.682	7070.78	3182.71	-1348.19	-3175.28	40°11'25.694"N	104°58'24.547"W	0.00	
11098.00†	90.107	269.682	7070.60	3282.71	-1348.75	-3275.28	40°11'25.689"N	104°58'25.836"W	0.00	
11198.00†	90.107	269.682	7070.41	3382.71	-1349.30	-3375.28	40°11'25.683"N	104°58'27.124"W	0.00	
11298.00†	90.107	269.682	7070.22	3482.71	-1349.86	-3475.28	40°11'25.677"N	104°58'28.413"W	0.00	
11398.00†	90.107	269.682	7070.04	3582.71	-1350.41	-3575.27	40°11'25.672"N	104°58'29.701"W	0.00	
11498.00†	90.107	269.682	7069.85	3682.71	-1350.97	-3675.27	40°11'25.666"N	104°58'30.990"W	0.00	
11598.00†	90.107	269.682	7069.66	3782.71	-1351.52	-3775.27	40°11'25.660"N	104°58'32.278"W	0.00	
11698.00†	90.107	269.682	7069.48	3882.71	-1352.08	-3875.27	40°11'25.655"N	104°58'33.567"W	0.00	
11798.00†	90.107	269.682	7069.29	3982.71	-1352.63	-3975.27	40°11'25.649"N	104°58'34.855"W	0.00	
11898.00†	90.107	269.682	7069.10	4082.71	-1353.18	-4075.27	40°11'25.644"N	104°58'36.144"W	0.00	
11998.00†	90.107	269.682	7068.92	4182.71	-1353.74	-4175.26	40°11'25.638"N	104°58'37.432"W	0.00	
12098.00†	90.107	269.682	7068.73	4282.71	-1354.29	-4275.26	40°11'25.632"N	104°58'38.721"W	0.00	

REFERENCE WELLPATH IDENTIFICATION				
Operator	KERR-MCGEE OIL & GAS ONSHORE LP		Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO		Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)		Wellbore	DOUTHIT STATE 38N-27HZ PWB
Facility	SEC.26-T3N-R68W			

WELLPATH DATA (145 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12198.00†	90.107	269.682	7068.54	4382.71	-1354.85	-4375.26	40°11'25.627"N	104°58'40.009"W	0.00	
12298.00†	90.107	269.682	7068.36	4482.71	-1355.40	-4475.26	40°11'25.621"N	104°58'41.298"W	0.00	
12398.00†	90.107	269.682	7068.17	4582.71	-1355.96	-4575.26	40°11'25.615"N	104°58'42.586"W	0.00	
12498.00†	90.107	269.682	7067.98	4682.71	-1356.51	-4675.26	40°11'25.610"N	104°58'43.875"W	0.00	
12598.00†	90.107	269.682	7067.80	4782.71	-1357.06	-4775.25	40°11'25.604"N	104°58'45.164"W	0.00	
12698.00†	90.107	269.682	7067.61	4882.71	-1357.62	-4875.25	40°11'25.598"N	104°58'46.452"W	0.00	
12798.00†	90.107	269.682	7067.42	4982.71	-1358.17	-4975.25	40°11'25.593"N	104°58'47.741"W	0.00	
12898.00†	90.107	269.682	7067.24	5082.71	-1358.73	-5075.25	40°11'25.587"N	104°58'49.029"W	0.00	
12998.00†	90.107	269.682	7067.05	5182.71	-1359.28	-5175.25	40°11'25.581"N	104°58'50.318"W	0.00	
13024.59	90.107	269.682	7067.00 [†]	5209.30	-1359.43	-5201.84	40°11'25.580"N	104°58'50.660"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DOUTHIT STATE 38N-27HZ PWB Ref Wellpath: DOUTHIT STATE 38N-27HZ (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	1198.00	1182.00	16.00	1197.97	0.00	0.00	-4.28	-5.88	
13.5in Open Hole	1198.00	1264.00	66.00	1197.97	1263.97	-4.28	-5.88	-4.26	-6.05	
9.625in Casing Surface	16.00	1254.00	1238.00	16.00	1253.97	0.00	0.00	-4.27	-6.03	
8.75in Open Hole	1264.00	7671.45	6407.45	1263.97	7077.00	-4.26	-6.05	-1329.75	151.21	
7in Casing Intermediate	16.00	7671.45	7655.45	16.00	7077.00	0.00	0.00	-1329.75	151.21	
6.125in Open Hole	7671.45	13024.59	5353.14	7077.00	7067.00	-1329.75	151.21	-1359.43	-5201.84	
4.5in Casing Production	16.00	13024.59	13008.59	16.00	7067.00	0.00	0.00	-1359.43	-5201.84	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO	Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT STATE 38N-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	2212.41	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	2212.41	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	2212.41	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	2212.41	141.92	3150387.54	1316248.25	40°12'00.882"N	104°57'41.803"W	polygon
1) DOUTHIT STATE 38N-27HZ BHL (270'FSL & 300'FEL, SEC.26) REV-2	13024.59	7067.00	-1359.43	-5201.84	3145065.78	1312644.22	40°11'25.580"N	104°58'50.660"W	point
DOUTHIT STATE 38N-27HZ BHL ON PLAT (285'FSL & 300'FEL, SEC.26) REV-1		7067.00	-1344.43	-5201.84	3145065.69	1312659.22	40°11'25.728"N	104°58'50.660"W	point
DOUTHIT STATE 38N-27HZ LAND BOX		7068.00	0.00	0.00	3150259.05	1314035.12	40°11'39.019"N	104°57'43.632"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOUTHIT STATE 38N-27HZ PWB				Ref Wellpath: DOUTHIT STATE 38N-27HZ (REV-B.0) PWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
16.00	1198.00	Generic gyro - continuous (Standard)		DOUTHIT STATE 38N-27HZ AWB	
1198.00	7671.45	NaviTrak (IFR)		DOUTHIT STATE 38N-27HZ PWB	
7671.45	13024.59	NaviTrak (IFR)		DOUTHIT STATE 38N-27HZ PWB	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#30 DOUTHIT STATE 38N-27HZ (1598'FSL & 416, SEC.26)
Area	COLORADO	Well	DOUTHIT STATE 38N-27HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOUTHIT STATE 38N-27HZ PWB
Facility	SEC.26-T3N-R68W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]		Comment
1039.03	0.367	244.608	1039.00		Fox Hills Base
3817.30	22.000	151.000	3693.00		Parkman
4259.50	22.000	151.000	4103.00		Sussex
7265.81	49.543	269.682	6940.00		SSPG
7410.36	63.998	269.682	7019.00		NBRR
7526.40	75.602	269.682	7059.00		N470_B_CK

DESIGN COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]		Comment
1198.00	0.150	273.900	1197.97		TIE-INTO GYRO SURVEY
1375.03	0.150	273.900	1375.00		BEGIN NUDGE
2479.12	22.000	151.000	2452.26		END NUDGE
5399.51	22.000	151.000	5160.00		BEGIN DROP
6499.51	0.000	269.682	6233.17		END DROP
6770.38	0.000	269.682	6504.04		KOP, BUILD @ 10°/100'
7671.45	90.107	269.682	7077.00		LANDING POINT
13024.59	90.107	269.682	7067.00		TOTAL DEPTH