

KERR-MCGEE OIL & GAS ONSHORE LP

COLORADO Slot: SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)

Field: WELD COUNTY (KERR MCGEE) Well: SUMMIT 13N-32HZ

Facility: SEC.29-T2N-R65W Wellbore: SUMMIT 13N-32HZ PWB

Plot reference wellpath is SUMMIT 13N-32HZ PWP (REV.A.0)

True vertical depths are referenced to XTREME 6 (16KB) (RKB) Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
 Measured depths are referenced to XTREME 6 (16KB) (RKB) North Reference: True north
 XTREME 6 (16KB) (RKB) to Mean Sea Level: 4957 feet Scale: True distance
 Mean Sea Level to Mud line (At Slot: SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)): 0 feet Depths are in feet
 Coordinates are in feet referenced to Slot Created by: amarcar on 10/9/2014

Location Information

Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.29-T2N-R65W		3225918.182	1281512.847	40°06'11.954"N	104°41'32.485"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)	-0.20	-369.80	3225548.413	1281509.279	104°41'37.244"W
XTREME 6 (16KB) (RKB) to Mud line (At Slot: SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29))		4957ft			
Mean Sea Level to Mud line (At Slot: SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29))		0ft			
XTREME 6 (16KB) (RKB) to Mean Sea Level		4957ft			

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1078.00	ISCWSA MWD, Rev. 2	ISCWSA MWD, Rev. 2 (Standard)		SUMMIT 13N-32HZ AWB
1078.00	7447.87	Navitrak	Navitrak (MAGCORR, IFR)		SUMMIT 13N-32HZ PWB
7447.87	12776.41	Navitrak	Navitrak (MAGCORR, IFR)		SUMMIT 13N-32HZ PWB

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE-INTO MWD SURVEYS	1078.00	0.600	268.300	1077.98	0.68	2.16	0.52	-0.70
BEGIN MUD	1300.03	0.600	268.300	1300.00	0.61	-0.16	0.00	-0.61
END NUDDGE	1913.06	12.680	313.000	1907.86	46.58	-52.78	2.00	-46.01
BEGIN DROP	2465.06	12.680	313.000	2446.40	129.21	-141.40	0.00	-127.70
END DROP	3099.06	0.000	180.780	3075.24	176.86	-192.50	2.00	-174.81
KOP, BUILD 10°/100'	6547.87	0.000	180.780	6524.05	176.86	-192.50	0.00	-174.81
LANDING POINT	7447.87	90.000	180.780	7097.00	-396.04	-200.30	10.00	398.15
BEGIN TURN	7647.87	90.000	180.780	7097.00	-596.02	-203.02	0.00	598.15
END TURN	7711.88	90.000	179.500	7097.00	-660.03	-203.18	2.00	662.16
BEGIN TURN	9511.88	90.000	179.500	7097.00	-2459.96	-187.47	0.00	2461.82
END TURN	9598.75	90.000	181.237	7097.00	-2546.82	-188.03	2.00	2548.68
TOTAL DEPTH	12776.41	90.000	181.237	7097.00	-5723.75	-256.64	0.00	5726.16

Targets

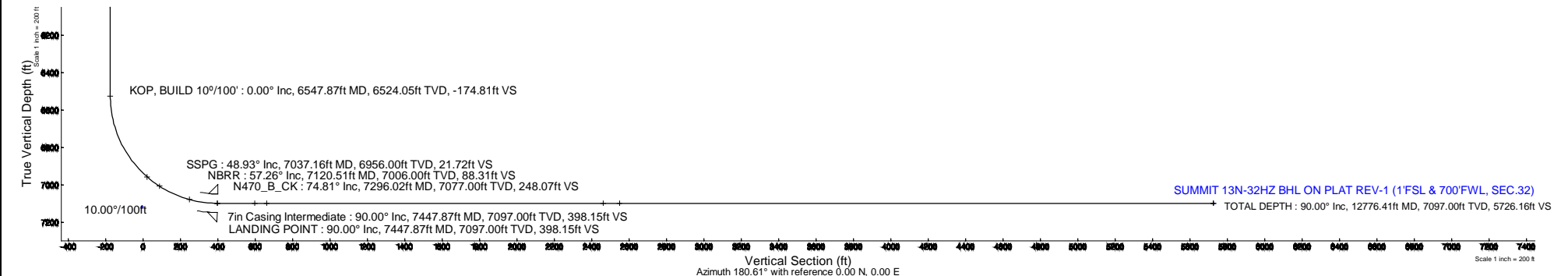
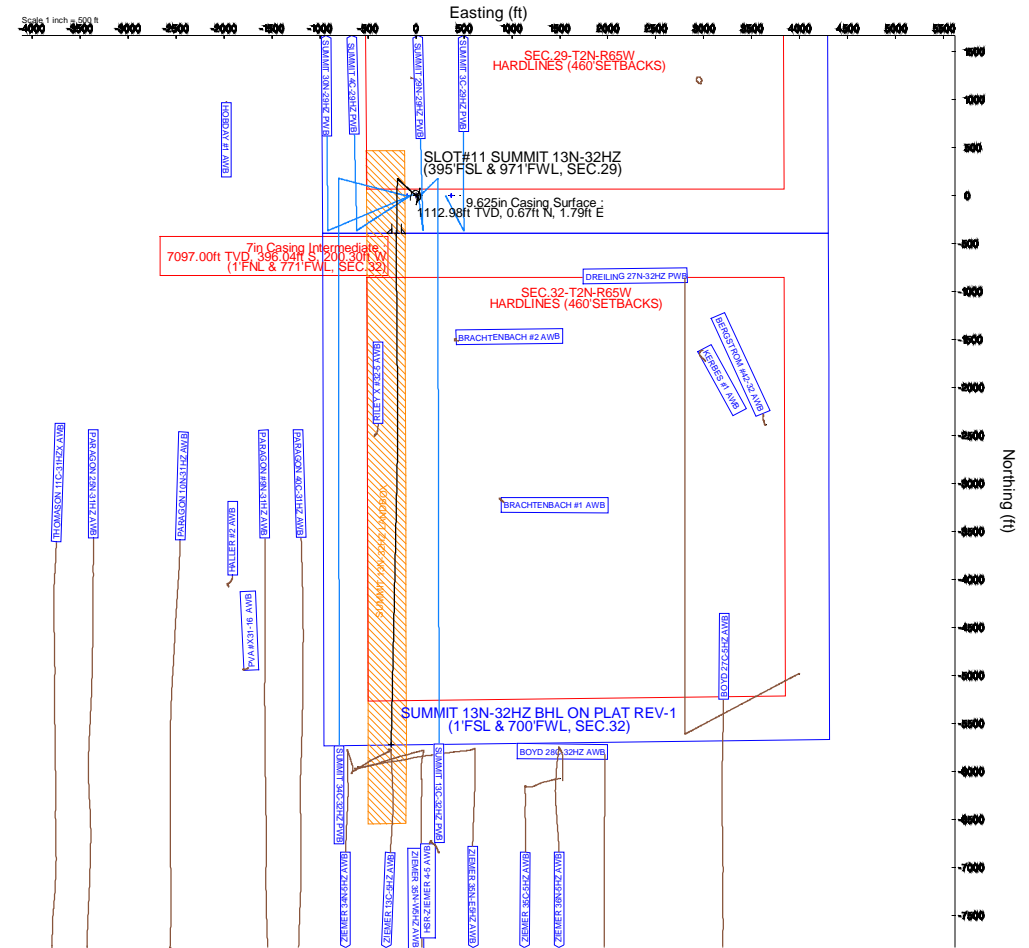
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SUMMIT 13N-32HZ BHL ON PLAT REV-1 (1'FSL & 700'FWL, SEC.32)	12776.41	7097.00	-5723.75	-256.64	3225343.83	1275783.67	40°05'15.389"N	104°41'40.548"W
SUMMIT 13N-32HZ LANDING BOX	7097.00	0.00	-0.03	322546.38	1281509.28	40°06'11.952"N	104°41'37.244"W	
SEC.29-T2N-R65W SECTION LINES	7118.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	
SEC.32-T2N-R65W SECTION LINES	7118.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	
SEC.29-T2N-R65W HARDLINES (460'SETBACKS)	7343.00	0.00	-90.11	3225458.31	1281508.46	40°06'11.952"N	104°41'38.404"W	
SEC.32-T2N-R65W HARDLINES (460'SETBACKS)	7343.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	

Approval

Baker Hughes Representatives		Reviewed by	
Prepared by	Signature	Signature	
Position	Date	Position	Date
KERR-MCGEE OIL & GAS ONSHORE LP Representative			
Approved by	Signature	Position	Date
Comment			



XTREME 6



Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Amarcar
Scale	0.99996	Report Generated	10/9/2014 at 9:32:14 AM
Convergence at slot	n/a	Database/Source file	WellArchitectDB/SUMMIT_13N-32HZ_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-0.20	-369.80	3225548.41	1281509.28	40°06'11.952"N	104°41'37.244"W
Facility Reference Pt			3225918.18	1281512.85	40°06'11.954"N	104°41'32.485"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 6 (16'KB) (RKB) to Facility Vertical Datum	4957.00ft
Horizontal Reference Pt	Slot	XTREME 6 (16'KB) (RKB) to Mean Sea Level	4957.00ft
Vertical Reference Pt	XTREME 6 (16'KB) (RKB)	XTREME 6 (16'KB) (RKB) to Mud Line at Slot (SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29))	4957.00ft
MD Reference Pt	XTREME 6 (16'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.61°

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (149 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	279.900	0.00	0.00	0.00	0.00	40°06'11.952"N	104°41'37.244"W	0.00	
16.00	0.000	279.900	16.00	0.00	0.00	0.00	40°06'11.952"N	104°41'37.244"W	0.00	
62.00	0.100	279.900	62.00	-0.01	0.01	-0.04	40°06'11.952"N	104°41'37.245"W	0.22	
131.00	0.200	50.400	131.00	-0.09	0.09	-0.01	40°06'11.953"N	104°41'37.244"W	0.40	
229.00	0.200	105.700	229.00	-0.16	0.16	0.29	40°06'11.954"N	104°41'37.240"W	0.19	
328.00	0.500	60.900	328.00	-0.33	0.32	0.83	40°06'11.955"N	104°41'37.233"W	0.39	
408.00	0.400	82.100	408.00	-0.54	0.53	1.42	40°06'11.957"N	104°41'37.226"W	0.24	
488.00	0.600	71.100	487.99	-0.72	0.70	2.09	40°06'11.959"N	104°41'37.217"W	0.28	
568.00	0.200	81.100	567.99	-0.89	0.86	2.62	40°06'11.960"N	104°41'37.210"W	0.51	
648.00	0.300	66.600	647.99	-1.00	0.96	2.95	40°06'11.962"N	104°41'37.206"W	0.15	
728.00	0.100	181.400	727.99	-1.01	0.98	3.14	40°06'11.962"N	104°41'37.204"W	0.44	
808.00	0.200	209.800	807.99	-0.82	0.79	3.07	40°06'11.960"N	104°41'37.204"W	0.15	
888.00	0.100	98.400	887.99	-0.69	0.66	3.07	40°06'11.958"N	104°41'37.204"W	0.32	
968.00	0.200	250.500	967.99	-0.63	0.60	3.01	40°06'11.958"N	104°41'37.205"W	0.37	
975.01†	0.229	257.622	975.00	-0.62	0.59	2.98	40°06'11.958"N	104°41'37.206"W	0.56	FOX HILLS BASE
1048.00	0.600	283.100	1047.99	-0.67	0.65	2.47	40°06'11.958"N	104°41'37.212"W	0.56	
1078.00	0.600	268.300	1077.98	-0.70	0.68	2.16	40°06'11.959"N	104°41'37.216"W	0.52	TIE-INTO MWD SURVEYS
1178.00†	0.600	268.300	1177.98	-0.66	0.65	1.11	40°06'11.958"N	104°41'37.230"W	0.00	
1278.00†	0.600	268.300	1277.97	-0.62	0.62	0.07	40°06'11.958"N	104°41'37.243"W	0.00	
1300.03	0.600	268.300	1300.00	-0.61	0.61	-0.16	40°06'11.958"N	104°41'37.246"W	0.00	BEGIN NUDGE
1378.00†	2.019	302.467	1377.95	-1.32	1.33	-1.73	40°06'11.965"N	104°41'37.266"W	2.00	
1478.00†	3.995	308.681	1477.81	-4.39	4.46	-5.94	40°06'11.996"N	104°41'37.320"W	2.00	
1578.00†	5.987	310.776	1577.42	-9.91	10.04	-12.61	40°06'12.051"N	104°41'37.406"W	2.00	
1678.00†	7.983	311.827	1676.68	-17.85	18.08	-21.73	40°06'12.131"N	104°41'37.524"W	2.00	
1778.00†	9.981	312.460	1775.45	-28.21	28.56	-33.30	40°06'12.234"N	104°41'37.673"W	2.00	
1878.00†	11.979	312.883	1873.61	-40.97	41.48	-47.30	40°06'12.362"N	104°41'37.853"W	2.00	
1913.06	12.680	313.000	1907.86	-46.01	46.58	-52.78	40°06'12.412"N	104°41'37.923"W	2.00	END NUDGE
1978.00†	12.680	313.000	1971.22	-55.62	56.30	-63.21	40°06'12.508"N	104°41'38.057"W	0.00	
2078.00†	12.680	313.000	2068.78	-70.42	71.27	-79.26	40°06'12.656"N	104°41'38.264"W	0.00	
2178.00†	12.680	313.000	2166.34	-85.22	86.24	-95.31	40°06'12.804"N	104°41'38.471"W	0.00	
2278.00†	12.680	313.000	2263.90	-100.02	101.21	-111.37	40°06'12.952"N	104°41'38.677"W	0.00	
2378.00†	12.680	313.000	2361.46	-114.82	116.18	-127.42	40°06'13.100"N	104°41'38.884"W	0.00	
2465.06	12.680	313.000	2446.40	-127.70	129.21	-141.40	40°06'13.229"N	104°41'39.064"W	0.00	BEGIN DROP
2478.00†	12.421	313.000	2459.03	-129.60	131.13	-143.45	40°06'13.248"N	104°41'39.090"W	2.00	
2578.00†	10.421	313.000	2557.04	-142.95	144.63	-157.93	40°06'13.381"N	104°41'39.276"W	2.00	
2678.00†	8.421	313.000	2655.69	-153.98	155.80	-169.91	40°06'13.492"N	104°41'39.431"W	2.00	
2778.00†	6.421	313.000	2754.85	-162.69	164.60	-179.35	40°06'13.579"N	104°41'39.552"W	2.00	
2878.00†	4.421	313.000	2854.40	-169.06	171.05	-186.26	40°06'13.642"N	104°41'39.641"W	2.00	
2978.00†	2.421	313.000	2954.21	-173.08	175.12	-190.62	40°06'13.683"N	104°41'39.697"W	2.00	
3078.00†	0.421	313.000	3054.18	-174.75	176.81	-192.44	40°06'13.699"N	104°41'39.721"W	2.00	
3099.06	0.000	180.780	3075.24	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	2.00	END DROP
3178.00†	0.000	180.780	3154.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3278.00†	0.000	180.780	3254.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3378.00†	0.000	180.780	3354.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3478.00†	0.000	180.780	3454.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (149 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3578.00†	0.000	180.780	3554.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3678.00†	0.000	180.780	3654.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3778.00†	0.000	180.780	3754.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3878.00†	0.000	180.780	3854.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
3978.00†	0.000	180.780	3954.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4078.00†	0.000	180.780	4054.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4154.82†	0.000	180.780	4131.00	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	PARKMAN
4178.00†	0.000	180.780	4154.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4278.00†	0.000	180.780	4254.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4378.00†	0.000	180.780	4354.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4478.00†	0.000	180.780	4454.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4507.82†	0.000	180.780	4484.00	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	SUSSEX
4578.00†	0.000	180.780	4554.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4678.00†	0.000	180.780	4654.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4778.00†	0.000	180.780	4754.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4878.00†	0.000	180.780	4854.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
4978.00†	0.000	180.780	4954.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5078.00†	0.000	180.780	5054.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5178.00†	0.000	180.780	5154.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5278.00†	0.000	180.780	5254.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5378.00†	0.000	180.780	5354.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5478.00†	0.000	180.780	5454.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5578.00†	0.000	180.780	5554.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5678.00†	0.000	180.780	5654.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5778.00†	0.000	180.780	5754.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5878.00†	0.000	180.780	5854.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
5978.00†	0.000	180.780	5954.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6078.00†	0.000	180.780	6054.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6178.00†	0.000	180.780	6154.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6278.00†	0.000	180.780	6254.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6378.00†	0.000	180.780	6354.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6478.00†	0.000	180.780	6454.18	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	
6547.87	0.000	180.780	6524.05	-174.81	176.86	-192.50	40°06'13.700"N	104°41'39.721"W	0.00	KOP, BUILD 10°/100'
6578.00†	3.013	180.780	6554.16	-174.01	176.07	-192.51	40°06'13.692"N	104°41'39.721"W	10.00	
6678.00†	13.013	180.780	6653.06	-160.09	162.15	-192.70	40°06'13.554"N	104°41'39.724"W	10.00	
6778.00†	23.013	180.780	6748.04	-129.21	131.27	-193.12	40°06'13.249"N	104°41'39.729"W	10.00	
6878.00†	33.013	180.780	6836.21	-82.30	84.36	-193.75	40°06'12.786"N	104°41'39.737"W	10.00	
6978.00†	43.013	180.780	6914.90	-20.79	22.86	-194.59	40°06'12.178"N	104°41'39.748"W	10.00	
7037.16†	48.929	180.780	6956.00	21.72	-19.65	-195.17	40°06'11.758"N	104°41'39.756"W	10.00	SSPG
7078.00†	53.013	180.780	6981.71	53.44	-51.36	-195.60	40°06'11.444"N	104°41'39.761"W	10.00	
7120.51†	57.263	180.780	7006.00	88.31	-86.23	-196.08	40°06'11.100"N	104°41'39.767"W	10.00	NBRR
7178.00†	63.013	180.780	7034.61	138.15	-136.06	-196.76	40°06'10.607"N	104°41'39.776"W	10.00	
7278.00†	73.013	180.780	7072.01	230.76	-228.67	-198.02	40°06'09.692"N	104°41'39.792"W	10.00	
7296.02†	74.815	180.780	7077.00	248.07	-245.98	-198.25	40°06'09.521"N	104°41'39.795"W	10.00	N470_B_CK
7378.00†	83.013	180.780	7092.75	328.45	-326.35	-199.35	40°06'08.727"N	104°41'39.809"W	10.00	

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (149 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7447.87	90.000	180.780	7097.00	398.15	-396.04	-200.30	40°06'08.038"N	104°41'39.822"W	10.00	LANDING POINT
7478.00†	90.000	180.780	7097.00	428.28	-426.17	-200.71	40°06'07.741"N	104°41'39.827"W	0.00	
7578.00†	90.000	180.780	7097.00	528.28	-526.16	-202.07	40°06'06.752"N	104°41'39.844"W	0.00	
7647.87	90.000	180.780	7097.00	598.15	-596.02	-203.02	40°06'06.062"N	104°41'39.857"W	0.00	BEGIN TURN
7678.00†	90.000	180.178	7097.00	628.28	-626.15	-203.27	40°06'05.764"N	104°41'39.860"W	2.00	
7711.88	90.000	179.500	7097.00	662.16	-660.03	-203.18	40°06'05.429"N	104°41'39.859"W	2.00	END TURN
7778.00†	90.000	179.500	7097.00	728.26	-726.15	-202.60	40°06'04.776"N	104°41'39.851"W	0.00	
7878.00†	90.000	179.500	7097.00	828.24	-826.15	-201.73	40°06'03.788"N	104°41'39.840"W	0.00	
7978.00†	90.000	179.500	7097.00	928.22	-926.14	-200.85	40°06'02.800"N	104°41'39.829"W	0.00	
8078.00†	90.000	179.500	7097.00	1028.21	-1026.14	-199.98	40°06'01.812"N	104°41'39.817"W	0.00	
8178.00†	90.000	179.500	7097.00	1128.19	-1126.13	-199.11	40°06'00.823"N	104°41'39.806"W	0.00	
8278.00†	90.000	179.500	7097.00	1228.17	-1226.13	-198.24	40°05'59.835"N	104°41'39.795"W	0.00	
8378.00†	90.000	179.500	7097.00	1328.15	-1326.13	-197.36	40°05'58.847"N	104°41'39.784"W	0.00	
8478.00†	90.000	179.500	7097.00	1428.13	-1426.12	-196.49	40°05'57.859"N	104°41'39.773"W	0.00	
8578.00†	90.000	179.500	7097.00	1528.11	-1526.12	-195.62	40°05'56.871"N	104°41'39.761"W	0.00	
8678.00†	90.000	179.500	7097.00	1628.09	-1626.12	-194.75	40°05'55.882"N	104°41'39.750"W	0.00	
8778.00†	90.000	179.500	7097.00	1728.07	-1726.11	-193.87	40°05'54.894"N	104°41'39.739"W	0.00	
8878.00†	90.000	179.500	7097.00	1828.06	-1826.11	-193.00	40°05'53.906"N	104°41'39.728"W	0.00	
8978.00†	90.000	179.500	7097.00	1928.04	-1926.10	-192.13	40°05'52.918"N	104°41'39.716"W	0.00	
9078.00†	90.000	179.500	7097.00	2028.02	-2026.10	-191.26	40°05'51.930"N	104°41'39.705"W	0.00	
9178.00†	90.000	179.500	7097.00	2128.00	-2126.10	-190.38	40°05'50.942"N	104°41'39.694"W	0.00	
9278.00†	90.000	179.500	7097.00	2227.98	-2226.09	-189.51	40°05'49.953"N	104°41'39.683"W	0.00	
9378.00†	90.000	179.500	7097.00	2327.96	-2326.09	-188.64	40°05'48.965"N	104°41'39.671"W	0.00	
9478.00†	90.000	179.500	7097.00	2427.94	-2426.08	-187.76	40°05'47.977"N	104°41'39.660"W	0.00	
9511.88	90.000	179.500	7097.00	2461.82	-2459.96	-187.47	40°05'47.642"N	104°41'39.656"W	0.00	BEGIN TURN
9578.00†	90.000	180.822	7097.00	2527.93	-2526.08	-187.66	40°05'46.989"N	104°41'39.659"W	2.00	
9598.75	90.000	181.237	7097.00	2548.68	-2546.82	-188.03	40°05'46.784"N	104°41'39.663"W	2.00	END TURN
9678.00†	90.000	181.237	7097.00	2627.93	-2626.06	-189.74	40°05'46.001"N	104°41'39.686"W	0.00	
9778.00†	90.000	181.237	7097.00	2727.92	-2726.04	-191.90	40°05'45.013"N	104°41'39.713"W	0.00	
9878.00†	90.000	181.237	7097.00	2827.92	-2826.01	-194.06	40°05'44.025"N	104°41'39.741"W	0.00	
9978.00†	90.000	181.237	7097.00	2927.91	-2925.99	-196.22	40°05'43.037"N	104°41'39.769"W	0.00	
10078.00†	90.000	181.237	7097.00	3027.90	-3025.97	-198.38	40°05'42.049"N	104°41'39.797"W	0.00	
10178.00†	90.000	181.237	7097.00	3127.90	-3125.94	-200.54	40°05'41.061"N	104°41'39.824"W	0.00	
10278.00†	90.000	181.237	7097.00	3227.89	-3225.92	-202.70	40°05'40.073"N	104°41'39.852"W	0.00	
10378.00†	90.000	181.237	7097.00	3327.89	-3325.90	-204.85	40°05'39.085"N	104°41'39.880"W	0.00	
10478.00†	90.000	181.237	7097.00	3427.88	-3425.87	-207.01	40°05'38.097"N	104°41'39.908"W	0.00	
10578.00†	90.000	181.237	7097.00	3527.87	-3525.85	-209.17	40°05'37.109"N	104°41'39.935"W	0.00	
10678.00†	90.000	181.237	7097.00	3627.87	-3625.83	-211.33	40°05'36.121"N	104°41'39.963"W	0.00	
10778.00†	90.000	181.237	7097.00	3727.86	-3725.80	-213.49	40°05'35.133"N	104°41'39.991"W	0.00	
10878.00†	90.000	181.237	7097.00	3827.86	-3825.78	-215.65	40°05'34.145"N	104°41'40.019"W	0.00	
10978.00†	90.000	181.237	7097.00	3927.85	-3925.76	-217.81	40°05'33.157"N	104°41'40.047"W	0.00	
11078.00†	90.000	181.237	7097.00	4027.84	-4025.73	-219.97	40°05'32.169"N	104°41'40.074"W	0.00	
11178.00†	90.000	181.237	7097.00	4127.84	-4125.71	-222.13	40°05'31.181"N	104°41'40.102"W	0.00	
11278.00†	90.000	181.237	7097.00	4227.83	-4225.69	-224.29	40°05'30.193"N	104°41'40.130"W	0.00	
11378.00†	90.000	181.237	7097.00	4327.83	-4325.66	-226.45	40°05'29.205"N	104°41'40.158"W	0.00	

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

WELLPATH DATA (149 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11478.00†	90.000	181.237	7097.00	4427.82	-4425.64	-228.61	40°05'28.217"N	104°41'40.185"W	0.00	
11578.00†	90.000	181.237	7097.00	4527.81	-4525.62	-230.77	40°05'27.229"N	104°41'40.213"W	0.00	
11678.00†	90.000	181.237	7097.00	4627.81	-4625.59	-232.93	40°05'26.241"N	104°41'40.241"W	0.00	
11778.00†	90.000	181.237	7097.00	4727.80	-4725.57	-235.08	40°05'25.253"N	104°41'40.269"W	0.00	
11878.00†	90.000	181.237	7097.00	4827.80	-4825.55	-237.24	40°05'24.265"N	104°41'40.297"W	0.00	
11978.00†	90.000	181.237	7097.00	4927.79	-4925.52	-239.40	40°05'23.277"N	104°41'40.324"W	0.00	
12078.00†	90.000	181.237	7097.00	5027.78	-5025.50	-241.56	40°05'22.289"N	104°41'40.352"W	0.00	
12178.00†	90.000	181.237	7097.00	5127.78	-5125.48	-243.72	40°05'21.301"N	104°41'40.380"W	0.00	
12278.00†	90.000	181.237	7097.00	5227.77	-5225.45	-245.88	40°05'20.313"N	104°41'40.408"W	0.00	
12378.00†	90.000	181.237	7097.00	5327.77	-5325.43	-248.04	40°05'19.325"N	104°41'40.435"W	0.00	
12478.00†	90.000	181.237	7097.00	5427.76	-5425.41	-250.20	40°05'18.337"N	104°41'40.463"W	0.00	
12578.00†	90.000	181.237	7097.00	5527.75	-5525.38	-252.36	40°05'17.349"N	104°41'40.491"W	0.00	
12678.00†	90.000	181.237	7097.00	5627.75	-5625.36	-254.52	40°05'16.361"N	104°41'40.519"W	0.00	
12776.41	90.000	181.237	7097.00 [†]	5726.16	-5723.75	-256.64	40°05'15.389"N	104°41'40.546"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: SUMMIT 13N-32HZ PWB Ref Wellpath: SUMMIT 13N-32HZ PWP (REV-A.0)

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	1123.00	1107.00	16.00	1122.98	0.00	0.00	0.66	1.69
9.625in Casing Surface	16.00	1113.00	1097.00	16.00	1112.98	0.00	0.00	0.67	1.79
8.75in Open Hole	1123.00	7447.87	6324.87	1122.98	7097.00	0.66	1.69	-396.04	-200.30
7in Casing Intermediate	16.00	7447.87	7431.87	16.00	7097.00	0.00	0.00	-396.04	-200.30
6.125in Open Hole	7447.87	12776.41	5328.54	7097.00	7097.00	-396.04	-200.30	-5723.75	-256.64
4.5in Casing Production	16.00	12776.41	12760.41	16.00	7097.00	0.00	0.00	-5723.75	-256.64

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) SUMMIT 13N-32HZ BHL ON PLAT REV-1 (1'FSL & 700'FWL, SEC.32)	12776.41	7097.00	-5723.75	-256.64	3225343.83	1275783.67	40°05'15.389"N	104°41'40.546"W	point
SUMMIT 13N-32HZ LANDBOX		7097.00	0.00	-0.03	3225548.38	1281509.28	40°06'11.952"N	104°41'37.244"W	polygon
SEC.29-T2N-R65W SECTION LINES		7118.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	polygon
SEC.32-T2N-R65W SECTION LINES		7118.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	polygon
SEC.29-T2N-R65W HARDLINES (460'SETBACKS)		7343.00	0.00	-90.11	3225458.31	1281508.46	40°06'11.952"N	104°41'38.404"W	polygon
SEC.32-T2N-R65W HARDLINES (460'SETBACKS)		7343.00	0.41	369.80	3225918.18	1281513.05	40°06'11.956"N	104°41'32.485"W	polygon

SURVEY PROGRAM - Ref Wellbore: SUMMIT 13N-32HZ PWB Ref Wellpath: SUMMIT 13N-32HZ PWP (REV-A.0)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1078.00	ISCWSA MWD, Rev. 2 (Standard)		SUMMIT 13N-32HZ AWB
1078.00	7447.87	NaviTrak (MAGCORR,IFR)		SUMMIT 13N-32HZ PWB
7447.87	12776.41	NaviTrak (MAGCORR,IFR)		SUMMIT 13N-32HZ PWB

Planned Wellpath Report

SUMMIT 13N-32HZ PWP (REV-A.0)

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REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 SUMMIT 13N-32HZ (395'FSL & 971'FWL, SEC.29)
Area	COLORADO	Well	SUMMIT 13N-32HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	SUMMIT 13N-32HZ PWB
Facility	SEC.29-T2N-R65W		

WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
975.01	0.229	257.622	975.00	FOX HILLS BASE
4154.82	0.000	180.780	4131.00	PARKMAN
4507.82	0.000	180.780	4484.00	SUSSEX
7037.16	48.929	180.780	6956.00	SSPG
7120.51	57.263	180.780	7006.00	NBRR
7296.02	74.815	180.780	7077.00	N470_B_CK

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1078.00	0.600	268.300	1077.98	TIE-INTO MWD SURVEYS
1300.03	0.600	268.300	1300.00	BEGIN NUDGE
1913.06	12.680	313.000	1907.86	END NUDGE
2465.06	12.680	313.000	2446.40	BEGIN DROP
3099.06	0.000	180.780	3075.24	END DROP
6547.87	0.000	180.780	6524.05	KOP, BUILD 10°/100'
7447.87	90.000	180.780	7097.00	LANDING POINT
7647.87	90.000	180.780	7097.00	BEGIN TURN
7711.88	90.000	179.500	7097.00	END TURN
9511.88	90.000	179.500	7097.00	BEGIN TURN
9598.75	90.000	181.237	7097.00	END TURN
12776.41	90.000	181.237	7097.00	TOTAL DEPTH