

KERR-MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
 Field: WELD COUNTY (KERR MCGEE) Well: STEWARD 36N-6HZ
 Facility: SEC.07-T1N-R65W Wellbore: STEWARD 36N-6HZ PWB

Plot reference wellpath is STEWARD 36N-6HZ (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: 5018 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: pprecin on 25/Mar/2014

Location Information

Facility Name	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude		
SEC.07-T1N-R65W	3224261.659	1265739.756	40°03'36.2307"N	104°41'55.6337"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)	-74.09	-3035.95	3221266.620	1265638.243	40°03'35.4967"N	104°42'34.6827"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07))						5018ft
Mean Sea Level to Mud line (At Slot: SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07))						0ft
PERMIT (17KB) (RKB) to Mean Sea Level						5018ft

Survey Program

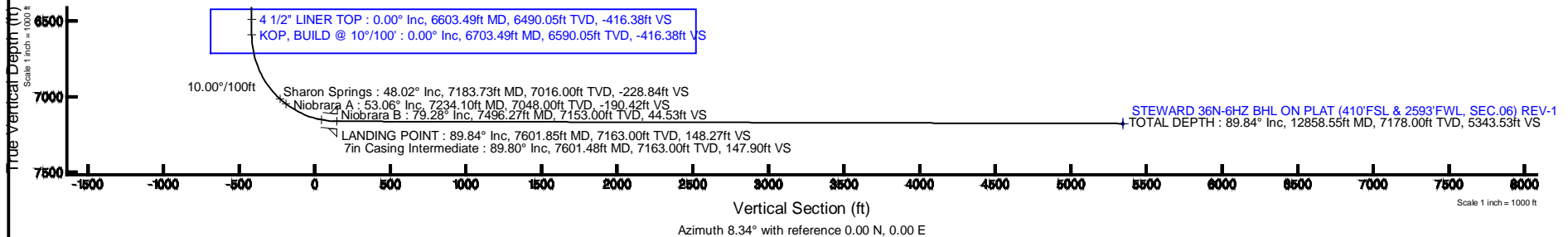
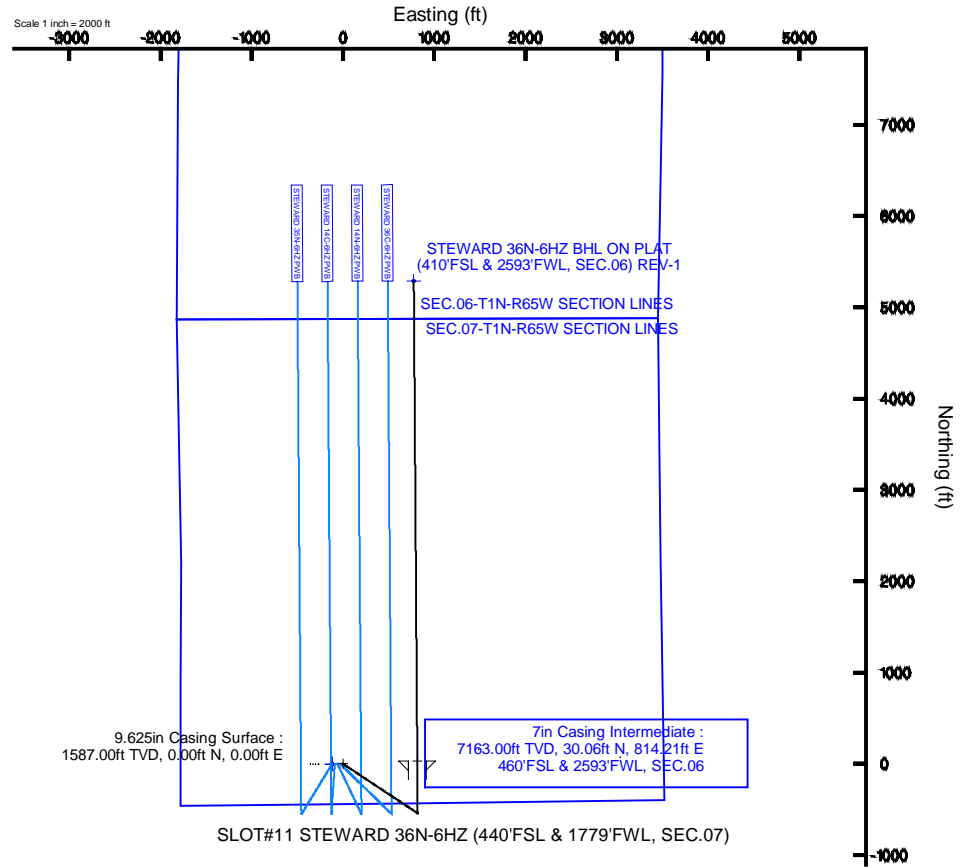
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12858.55	NaviTrak	NaviTrak (IFR)		STEWARD 36N-6HZ PWB

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	123.460	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1700.00	0.000	123.460	1700.00	0.00	0.00	0.00	0.00
END NUDGE	2400.00	14.000	123.460	2393.06	-46.92	70.99	2.00	-36.12
BEGIN DROP	5751.50	14.000	123.460	5645.00	-493.96	747.42	0.00	-380.26
END DROP	6451.50	0.000	359.578	6338.06	-540.88	818.41	2.00	-416.38
KOP, BUILD @ 10°/100'	6703.49	0.000	359.578	6590.05	-540.88	818.41	0.00	-416.38
LANDING POINT	7601.85	89.837	359.578	7163.00	30.43	814.20	10.00	148.27
TOTAL DEPTH	12858.55	89.837	359.578	7178.00	5286.97	775.46	0.00	5343.53

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude
SEC.06-T1N-R65W SECTION LINES		0.00	-0.71	-119.82	3221106.82	1265636.47	40°03'35.4897"N	104°42'36.2237"W
SEC.07-T1N-R65W SECTION LINES		0.00	-0.71	-119.82	3221106.82	1265636.47	40°03'35.4897"N	104°42'36.2237"W
STEWARD 36N-6HZ BHL ON PLAT (410'FSL & 2593'FWL, SEC.06) REV-1	12858.55	7178.00	5286.97	775.46	3221954.90	1270931.70	40°04'27.7437"N	104°42'24.7077"W



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-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	Precain
Scale	0.999962	Report Generated	25/Mar/2014 at 13:38
Convergence at slot	n/a	Database/Source file	WellArchitectDB/STEWARD_36N-6HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-74.09	-3035.95	3221226.62	1265638.24	40°03'35.496"N	104°42'34.682"W
Facility Reference Pt			3224261.66	1265739.76	40°03'36.230"N	104°41'55.637"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	5018.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	5018.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07))	5018.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	8.34°

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Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (137 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	123.460	0.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
17.00	0.000	123.460	17.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	TIE-ON
117.00†	0.000	123.460	117.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
217.00†	0.000	123.460	217.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
317.00†	0.000	123.460	317.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
417.00†	0.000	123.460	417.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
517.00†	0.000	123.460	517.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
617.00†	0.000	123.460	617.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
717.00†	0.000	123.460	717.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
817.00†	0.000	123.460	817.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
917.00†	0.000	123.460	917.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1017.00†	0.000	123.460	1017.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1117.00†	0.000	123.460	1117.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1217.00†	0.000	123.460	1217.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1317.00†	0.000	123.460	1317.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1417.00†	0.000	123.460	1417.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1517.00†	0.000	123.460	1517.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1617.00†	0.000	123.460	1617.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	
1700.00	0.000	123.460	1700.00	0.00	0.00	0.00	40°03'35.496"N	104°42'34.682"W	0.00	BEGIN NUDGE
1717.00†	0.340	123.460	1717.00	-0.02	-0.03	0.04	40°03'35.496"N	104°42'34.681"W	2.00	
1817.00†	2.340	123.460	1816.97	-1.01	-1.32	1.99	40°03'35.483"N	104°42'34.656"W	2.00	
1917.00†	4.340	123.460	1916.79	-3.49	-4.53	6.85	40°03'35.451"N	104°42'34.594"W	2.00	
2017.00†	6.340	123.460	2016.35	-7.44	-9.66	14.62	40°03'35.401"N	104°42'34.494"W	2.00	
2117.00†	8.340	123.460	2115.53	-12.86	-16.70	25.27	40°03'35.331"N	104°42'34.357"W	2.00	
2217.00†	10.340	123.460	2214.20	-19.75	-25.65	38.81	40°03'35.243"N	104°42'34.183"W	2.00	
2317.00†	12.340	123.460	2312.24	-28.09	-36.49	55.22	40°03'35.135"N	104°42'33.972"W	2.00	
2400.00	14.000	123.460	2393.06	-36.12	-46.92	70.99	40°03'35.032"N	104°42'33.769"W	2.00	END NUDGE
2417.00†	14.000	123.460	2409.55	-37.86	-49.19	74.42	40°03'35.010"N	104°42'33.725"W	0.00	
2517.00†	14.000	123.460	2506.58	-48.13	-62.52	94.61	40°03'34.878"N	104°42'33.465"W	0.00	
2617.00†	14.000	123.460	2603.61	-58.40	-75.86	114.79	40°03'34.746"N	104°42'33.206"W	0.00	
2717.00†	14.000	123.460	2700.64	-68.67	-89.20	134.97	40°03'34.614"N	104°42'32.946"W	0.00	
2817.00†	14.000	123.460	2797.67	-78.94	-102.54	155.16	40°03'34.483"N	104°42'32.687"W	0.00	
2917.00†	14.000	123.460	2894.70	-89.21	-115.88	175.34	40°03'34.351"N	104°42'32.427"W	0.00	
3017.00†	14.000	123.460	2991.73	-99.47	-129.22	195.52	40°03'34.219"N	104°42'32.167"W	0.00	
3117.00†	14.000	123.460	3088.76	-109.74	-142.56	215.70	40°03'34.087"N	104°42'31.908"W	0.00	
3217.00†	14.000	123.460	3185.79	-120.01	-155.89	235.89	40°03'33.955"N	104°42'31.648"W	0.00	
3317.00†	14.000	123.460	3282.82	-130.28	-169.23	256.07	40°03'33.824"N	104°42'31.389"W	0.00	
3417.00†	14.000	123.460	3379.85	-140.55	-182.57	276.25	40°03'33.692"N	104°42'31.129"W	0.00	
3517.00†	14.000	123.460	3476.88	-150.82	-195.91	296.44	40°03'33.560"N	104°42'30.870"W	0.00	
3617.00†	14.000	123.460	3573.91	-161.08	-209.25	316.62	40°03'33.428"N	104°42'30.610"W	0.00	
3717.00†	14.000	123.460	3670.93	-171.35	-222.59	336.80	40°03'33.296"N	104°42'30.350"W	0.00	
3817.00†	14.000	123.460	3767.96	-181.62	-235.92	356.98	40°03'33.165"N	104°42'30.091"W	0.00	
3917.00†	14.000	123.460	3864.99	-191.89	-249.26	377.17	40°03'33.033"N	104°42'29.831"W	0.00	
4017.00†	14.000	123.460	3962.02	-202.16	-262.60	397.35	40°03'32.901"N	104°42'29.572"W	0.00	
4117.00†	14.000	123.460	4059.05	-212.43	-275.94	417.53	40°03'32.769"N	104°42'29.312"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4217.00†	14.000	123.460	4156.08	-222.69	-289.28	437.72	40°03'32.637"N	104°42'29.053"W	0.00	
4317.00†	14.000	123.460	4253.11	-232.96	-302.62	457.90	40°03'32.505"N	104°42'28.793"W	0.00	
4417.00†	14.000	123.460	4350.14	-243.23	-315.96	478.08	40°03'32.374"N	104°42'28.534"W	0.00	
4517.00†	14.000	123.460	4447.17	-253.50	-329.29	498.26	40°03'32.242"N	104°42'28.274"W	0.00	
4617.00†	14.000	123.460	4544.20	-263.77	-342.63	518.45	40°03'32.110"N	104°42'28.014"W	0.00	
4717.00†	14.000	123.460	4641.23	-274.04	-355.97	538.63	40°03'31.978"N	104°42'27.755"W	0.00	
4817.00†	14.000	123.460	4738.26	-284.30	-369.31	558.81	40°03'31.846"N	104°42'27.495"W	0.00	
4917.00†	14.000	123.460	4835.29	-294.57	-382.65	579.00	40°03'31.715"N	104°42'27.236"W	0.00	
5017.00†	14.000	123.460	4932.32	-304.84	-395.99	599.18	40°03'31.583"N	104°42'26.976"W	0.00	
5117.00†	14.000	123.460	5029.35	-315.11	-409.32	619.36	40°03'31.451"N	104°42'26.717"W	0.00	
5217.00†	14.000	123.460	5126.38	-325.38	-422.66	639.54	40°03'31.319"N	104°42'26.457"W	0.00	
5317.00†	14.000	123.460	5223.41	-335.65	-436.00	659.73	40°03'31.187"N	104°42'26.197"W	0.00	
5417.00†	14.000	123.460	5320.44	-345.91	-449.34	679.91	40°03'31.055"N	104°42'25.938"W	0.00	
5517.00†	14.000	123.460	5417.47	-356.18	-462.68	700.09	40°03'30.924"N	104°42'25.678"W	0.00	
5617.00†	14.000	123.460	5514.50	-366.45	-476.02	720.28	40°03'30.792"N	104°42'25.419"W	0.00	
5717.00†	14.000	123.460	5611.53	-376.72	-489.36	740.46	40°03'30.660"N	104°42'25.159"W	0.00	
5751.50	14.000	123.460	5645.00	-380.26	-493.96	747.42	40°03'30.614"N	104°42'25.070"W	0.00	BEGIN DROP
5817.00†	12.690	123.460	5708.73	-386.68	-502.29	760.03	40°03'30.532"N	104°42'24.907"W	2.00	
5917.00†	10.690	123.460	5806.65	-395.28	-513.46	776.94	40°03'30.422"N	104°42'24.690"W	2.00	
6017.00†	8.690	123.460	5905.22	-402.42	-522.74	790.98	40°03'30.330"N	104°42'24.510"W	2.00	
6117.00†	6.690	123.460	6004.32	-408.10	-530.12	802.14	40°03'30.257"N	104°42'24.366"W	2.00	
6217.00†	4.690	123.460	6103.82	-412.31	-535.59	810.41	40°03'30.203"N	104°42'24.260"W	2.00	
6317.00†	2.690	123.460	6203.61	-415.04	-539.14	815.78	40°03'30.168"N	104°42'24.191"W	2.00	
6417.00†	0.690	123.460	6303.56	-416.29	-540.76	818.24	40°03'30.152"N	104°42'24.159"W	2.00	
6451.50	0.000	359.578	6338.06	-416.38	-540.88	818.41	40°03'30.151"N	104°42'24.157"W	2.00	END DROP
6517.00†	0.000	359.578	6403.56	-416.38	-540.88	818.41	40°03'30.151"N	104°42'24.157"W	0.00	
6617.00†	0.000	359.578	6503.56	-416.38	-540.88	818.41	40°03'30.151"N	104°42'24.157"W	0.00	
6703.49	0.000	359.578	6590.05	-416.38	-540.88	818.41	40°03'30.151"N	104°42'24.157"W	0.00	KOP, BUILD @ 10°/100'
6717.00†	1.351	359.578	6603.56	-416.22	-540.72	818.41	40°03'30.152"N	104°42'24.157"W	10.00	
6817.00†	11.351	359.578	6702.82	-405.30	-529.67	818.33	40°03'30.262"N	104°42'24.158"W	10.00	
6917.00†	21.351	359.578	6798.65	-377.52	-501.55	818.12	40°03'30.539"N	104°42'24.160"W	10.00	
7017.00†	31.351	359.578	6888.14	-333.70	-457.22	817.80	40°03'30.977"N	104°42'24.165"W	10.00	
7117.00†	41.351	359.578	6968.58	-275.20	-398.03	817.36	40°03'31.562"N	104°42'24.170"W	10.00	
7217.00†	51.351	359.578	7037.52	-203.77	-325.76	816.83	40°03'32.277"N	104°42'24.177"W	10.00	
7317.00†	61.351	359.578	7092.86	-121.61	-242.63	816.22	40°03'33.098"N	104°42'24.185"W	10.00	
7417.00†	71.351	359.578	7132.92	-31.19	-151.14	815.54	40°03'34.002"N	104°42'24.193"W	10.00	
7517.00†	81.351	359.578	7156.49	64.73	-54.09	814.83	40°03'34.961"N	104°42'24.203"W	10.00	
7601.85	89.837	359.578	7163.00	148.27	30.43	814.20	40°03'35.797"N	104°42'24.211"W	10.00	LANDING POINT
7617.00†	89.837	359.578	7163.04	163.24	45.58	814.09	40°03'35.946"N	104°42'24.212"W	0.00	
7717.00†	89.837	359.578	7163.33	262.07	145.57	813.35	40°03'36.934"N	104°42'24.221"W	0.00	
7817.00†	89.837	359.578	7163.61	360.90	245.57	812.62	40°03'37.923"N	104°42'24.231"W	0.00	
7917.00†	89.837	359.578	7163.90	459.73	345.57	811.88	40°03'38.911"N	104°42'24.240"W	0.00	
8017.00†	89.837	359.578	7164.19	558.56	445.57	811.14	40°03'39.899"N	104°42'24.250"W	0.00	
8117.00†	89.837	359.578	7164.47	657.39	545.56	810.41	40°03'40.887"N	104°42'24.259"W	0.00	
8217.00†	89.837	359.578	7164.76	756.22	645.56	809.67	40°03'41.875"N	104°42'24.269"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8317.00†	89.837	359.578	7165.04	855.06	745.56	808.93	40°03'42.864"N	104°42'24.278"W	0.00	
8417.00†	89.837	359.578	7165.33	953.89	845.55	808.20	40°03'43.852"N	104°42'24.288"W	0.00	
8517.00†	89.837	359.578	7165.61	1052.72	945.55	807.46	40°03'44.840"N	104°42'24.297"W	0.00	
8617.00†	89.837	359.578	7165.90	1151.55	1045.55	806.72	40°03'45.828"N	104°42'24.306"W	0.00	
8717.00†	89.837	359.578	7166.18	1250.38	1145.54	805.98	40°03'46.816"N	104°42'24.316"W	0.00	
8817.00†	89.837	359.578	7166.47	1349.21	1245.54	805.25	40°03'47.805"N	104°42'24.325"W	0.00	
8917.00†	89.837	359.578	7166.75	1448.04	1345.54	804.51	40°03'48.793"N	104°42'24.335"W	0.00	
9017.00†	89.837	359.578	7167.04	1546.88	1445.53	803.77	40°03'49.781"N	104°42'24.344"W	0.00	
9117.00†	89.837	359.578	7167.32	1645.71	1545.53	803.04	40°03'50.769"N	104°42'24.354"W	0.00	
9217.00†	89.837	359.578	7167.61	1744.54	1645.53	802.30	40°03'51.757"N	104°42'24.363"W	0.00	
9317.00†	89.837	359.578	7167.89	1843.37	1745.52	801.56	40°03'52.746"N	104°42'24.372"W	0.00	
9417.00†	89.837	359.578	7168.18	1942.20	1845.52	800.82	40°03'53.734"N	104°42'24.382"W	0.00	
9517.00†	89.837	359.578	7168.47	2041.03	1945.52	800.09	40°03'54.722"N	104°42'24.391"W	0.00	
9617.00†	89.837	359.578	7168.75	2139.86	2045.52	799.35	40°03'55.710"N	104°42'24.401"W	0.00	
9717.00†	89.837	359.578	7169.04	2238.70	2145.51	798.61	40°03'56.698"N	104°42'24.410"W	0.00	
9817.00†	89.837	359.578	7169.32	2337.53	2245.51	797.88	40°03'57.686"N	104°42'24.420"W	0.00	
9917.00†	89.837	359.578	7169.61	2436.36	2345.51	797.14	40°03'58.675"N	104°42'24.429"W	0.00	
10017.00†	89.837	359.578	7169.89	2535.19	2445.50	796.40	40°03'59.663"N	104°42'24.439"W	0.00	
10117.00†	89.837	359.578	7170.18	2634.02	2545.50	795.67	40°04'00.651"N	104°42'24.448"W	0.00	
10217.00†	89.837	359.578	7170.46	2732.85	2645.50	794.93	40°04'01.639"N	104°42'24.457"W	0.00	
10317.00†	89.837	359.578	7170.75	2831.68	2745.49	794.19	40°04'02.627"N	104°42'24.467"W	0.00	
10417.00†	89.837	359.578	7171.03	2930.51	2845.49	793.45	40°04'03.616"N	104°42'24.476"W	0.00	
10517.00†	89.837	359.578	7171.32	3029.35	2945.49	792.72	40°04'04.604"N	104°42'24.486"W	0.00	
10617.00†	89.837	359.578	7171.60	3128.18	3045.48	791.98	40°04'05.592"N	104°42'24.495"W	0.00	
10717.00†	89.837	359.578	7171.89	3227.01	3145.48	791.24	40°04'06.580"N	104°42'24.505"W	0.00	
10817.00†	89.837	359.578	7172.17	3325.84	3245.48	790.51	40°04'07.568"N	104°42'24.514"W	0.00	
10917.00†	89.837	359.578	7172.46	3424.67	3345.47	789.77	40°04'08.557"N	104°42'24.524"W	0.00	
11017.00†	89.837	359.578	7172.75	3523.50	3445.47	789.03	40°04'09.545"N	104°42'24.533"W	0.00	
11117.00†	89.837	359.578	7173.03	3622.33	3545.47	788.29	40°04'10.533"N	104°42'24.542"W	0.00	
11217.00†	89.837	359.578	7173.32	3721.17	3645.47	787.56	40°04'11.521"N	104°42'24.552"W	0.00	
11317.00†	89.837	359.578	7173.60	3820.00	3745.46	786.82	40°04'12.509"N	104°42'24.561"W	0.00	
11417.00†	89.837	359.578	7173.89	3918.83	3845.46	786.08	40°04'13.498"N	104°42'24.571"W	0.00	
11517.00†	89.837	359.578	7174.17	4017.66	3945.46	785.35	40°04'14.486"N	104°42'24.580"W	0.00	
11617.00†	89.837	359.578	7174.46	4116.49	4045.45	784.61	40°04'15.474"N	104°42'24.590"W	0.00	
11717.00†	89.837	359.578	7174.74	4215.32	4145.45	783.87	40°04'16.462"N	104°42'24.599"W	0.00	
11817.00†	89.837	359.578	7175.03	4314.15	4245.45	783.14	40°04'17.450"N	104°42'24.608"W	0.00	
11917.00†	89.837	359.578	7175.31	4412.98	4345.44	782.40	40°04'18.438"N	104°42'24.618"W	0.00	
12017.00†	89.837	359.578	7175.60	4511.82	4445.44	781.66	40°04'19.427"N	104°42'24.627"W	0.00	
12117.00†	89.837	359.578	7175.88	4610.65	4545.44	780.92	40°04'20.415"N	104°42'24.637"W	0.00	
12217.00†	89.837	359.578	7176.17	4709.48	4645.43	780.19	40°04'21.403"N	104°42'24.646"W	0.00	
12317.00†	89.837	359.578	7176.45	4808.31	4745.43	779.45	40°04'22.391"N	104°42'24.656"W	0.00	
12417.00†	89.837	359.578	7176.74	4907.14	4845.43	778.71	40°04'23.379"N	104°42'24.665"W	0.00	
12517.00†	89.837	359.578	7177.03	5005.97	4945.42	777.98	40°04'24.368"N	104°42'24.675"W	0.00	
12617.00†	89.837	359.578	7177.31	5104.80	5045.42	777.24	40°04'25.356"N	104°42'24.684"W	0.00	
12717.00†	89.837	359.578	7177.60	5203.64	5145.42	776.50	40°04'26.344"N	104°42'24.693"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12817.00†	89.837	359.578	7177.88	5302.47	5245.42	775.76	40°04'27.332"N	104°42'24.703"W	0.00	
12858.55	89.837	359.578	7178.00 ¹	5343.53	5286.97	775.46	40°04'27.743"N	104°42'24.707"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: STEWARD 36N-6HZ PWB Ref Wellpath: STEWARD 36N-6HZ (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	1587.00	1570.00	17.00	1587.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1587.00	1570.00	17.00	1587.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1587.00	7601.85	6014.85	1587.00	7163.00	0.00	0.00	30.43	814.20
7in Casing Intermediate	17.00	7601.48	7584.48	17.00	7163.00	0.00	0.00	30.06	814.21
6.125in Open Hole	7601.48	12858.55	5257.07	7163.00	7178.00	30.06	814.21	5286.97	775.46
4.5in Casing Production	17.00	12858.55	12841.55	17.00	7178.00	0.00	0.00	5286.97	775.46

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.06-T1N-R65W SECTION LINES		0.00	-0.71	-119.82	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
SEC.07-T1N-R65W SECTION LINES		0.00	-0.71	-119.82	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
1) STEWARD 36N-6HZ BHL ON PLAT (410'FSL & 2593'FWL, SEC.06) REV-1	12858.55	7178.00	5286.97	775.46	3221954.90	1270931.70	40°04'27.743"N	104°42'24.707"W	point

SURVEY PROGRAM - Ref Wellbore: STEWARD 36N-6HZ PWB Ref Wellpath: STEWARD 36N-6HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12858.55	NaviTrak (IFR)		STEWARD 36N-6HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#11 STEWARD 36N-6HZ (440'FSL & 1779'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1537.00	0.000	123.460	1537.00	Fox Hills Marker
4172.60	14.000	123.460	4113.00	Parkman
4519.92	14.000	123.460	4450.00	Sussex
6603.49	0.000	359.578	6490.05	4 1/2" LINER TOP
7183.73	48.025	359.578	7016.00	Sharon Springs
7234.10	53.062	359.578	7048.00	Niobrara A
7496.27	79.278	359.578	7153.00	Niobrara B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	123.460	17.00	TIE-ON
1700.00	0.000	123.460	1700.00	BEGIN NUDGE
2400.00	14.000	123.460	2393.06	END NUDGE
5751.50	14.000	123.460	5645.00	BEGIN DROP
6451.50	0.000	359.578	6338.06	END DROP
6703.49	0.000	359.578	6590.05	KOP, BUILD @ 10°/100'
7601.85	89.837	359.578	7163.00	LANDING POINT
12858.55	89.837	359.578	7178.00	TOTAL DEPTH