

KERR-MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
 Field: WELD COUNTY (KERR MCGEE) Well: STEWARD 36C-6HZ
 Facility: SEC.07-T1N-R65W Wellbore: STEWARD 36C-6HZ PWB

Plot reference wellpath is STEWARD 36C-6HZ (PERMIT REV-1) PWB

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#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: precin 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°03'36.230"N	104°41'55.637"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)	-74.49	-3065.97	3221196.613	1265637.571	40°03'35.492"N	104°42'35.068"W
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07))				5018ft		
Mean Sea Level to Mud line (At Slot: SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07))				0ft		
PERMIT (17KB) (RKB) to Mean Sea Level				5018ft		

Survey Program

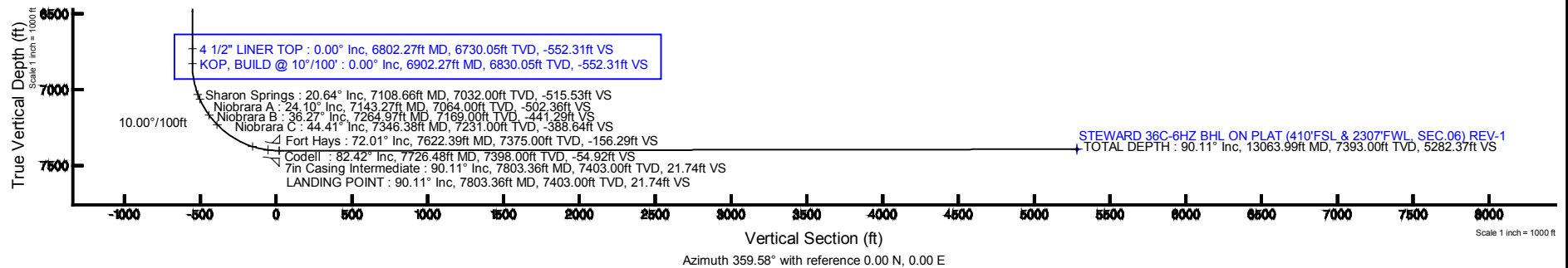
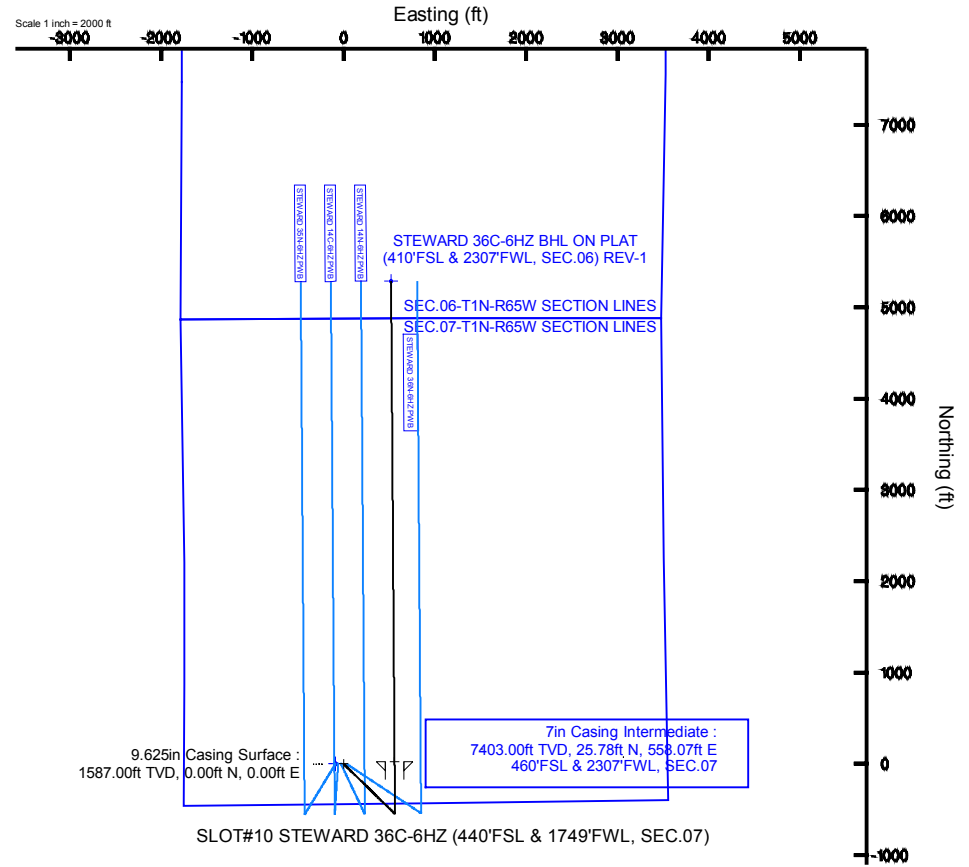
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	13063.99	NaviTrak	NaviTrak (MAGCORR,IFR)		STEWARD 36C-6HZ PWB

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	134.279	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1700.00	0.000	134.279	1700.00	0.00	0.00	0.00	0.00
END NUDGE	2250.00	11.000	134.279	2246.63	-36.75	37.68	2.00	-37.02
BEGIN DROP	5813.85	11.000	134.279	5745.00	-511.50	524.54	0.00	-515.29
END DROP	6363.85	0.000	359.585	6291.63	-548.25	562.22	2.00	-552.31
KOP, BUILD @ 10°/100'	6902.27	0.000	359.585	6830.05	-548.25	562.22	0.00	-552.31
LANDING POINT	7803.36	90.109	359.585	7403.00	25.78	558.07	10.00	21.74
TOTAL DEPTH	13063.99	90.109	359.585	7393.00	5286.27	520.01	0.00	5282.37

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	-0.30	-89.81	3221108.82	1265636.47	40°03'35.489"N	104°42'36.223"W
SEC.07-T1N-R65W SECTION LINES		0.00	-0.30	-89.81	3221108.82	1265636.47	40°03'35.489"N	104°42'36.223"W
STEWARD 36C-6HZ BHL ON PLAT (410'FSL & 2307'FWL, SEC.06) REV-1	13063.99	7393.00	5286.27	520.01	3221469.47	1270928.06	40°04'27.732"N	104°42'28.379"W



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-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 13:19
Convergence at slot	n/a	Database/Source file	WellArchitectDB/STEWARD_36C-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	-74.49	-3065.97	3221196.61	1265637.57	40°03'35.492"N	104°42'35.068"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#10 STEWARD 36C-6HZ (440'FSL & 1749'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	359.58°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-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	134.279	0.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
17.00	0.000	134.279	17.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	TIE-ON
117.00†	0.000	134.279	117.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
217.00†	0.000	134.279	217.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
317.00†	0.000	134.279	317.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
417.00†	0.000	134.279	417.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
517.00†	0.000	134.279	517.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
617.00†	0.000	134.279	617.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
717.00†	0.000	134.279	717.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
817.00†	0.000	134.279	817.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
917.00†	0.000	134.279	917.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1017.00†	0.000	134.279	1017.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1117.00†	0.000	134.279	1117.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1217.00†	0.000	134.279	1217.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1317.00†	0.000	134.279	1317.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1417.00†	0.000	134.279	1417.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1517.00†	0.000	134.279	1517.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1537.00†	0.000	134.279	1537.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	Fox Hills Marker
1617.00†	0.000	134.279	1617.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	
1700.00	0.000	134.279	1700.00	0.00	0.00	0.00	40°03'35.492"N	104°42'35.068"W	0.00	BEGIN NUDGE
1717.00†	0.340	134.279	1717.00	-0.04	-0.04	0.04	40°03'35.492"N	104°42'35.068"W	2.00	
1817.00†	2.340	134.279	1816.97	-1.68	-1.67	1.71	40°03'35.476"N	104°42'35.046"W	2.00	
1917.00†	4.340	134.279	1916.79	-5.78	-5.74	5.88	40°03'35.435"N	104°42'34.992"W	2.00	
2017.00†	6.340	134.279	2016.35	-12.32	-12.23	12.54	40°03'35.371"N	104°42'34.907"W	2.00	
2117.00†	8.340	134.279	2115.53	-21.31	-21.15	21.69	40°03'35.283"N	104°42'34.789"W	2.00	
2217.00†	10.340	134.279	2214.20	-32.72	-32.48	33.31	40°03'35.171"N	104°42'34.640"W	2.00	
2250.00	11.000	134.279	2246.63	-37.02	-36.75	37.68	40°03'35.129"N	104°42'34.583"W	2.00	END NUDGE
2317.00†	11.000	134.279	2312.40	-46.01	-45.67	46.84	40°03'35.041"N	104°42'34.466"W	0.00	
2417.00†	11.000	134.279	2410.56	-59.43	-58.99	60.50	40°03'34.909"N	104°42'34.290"W	0.00	
2517.00†	11.000	134.279	2508.72	-72.85	-72.31	74.16	40°03'34.777"N	104°42'34.114"W	0.00	
2617.00†	11.000	134.279	2606.88	-86.27	-85.64	87.82	40°03'34.646"N	104°42'33.939"W	0.00	
2717.00†	11.000	134.279	2705.05	-99.69	-98.96	101.48	40°03'34.514"N	104°42'33.763"W	0.00	
2817.00†	11.000	134.279	2803.21	-113.11	-112.28	115.14	40°03'34.382"N	104°42'33.587"W	0.00	
2917.00†	11.000	134.279	2901.37	-126.53	-125.60	128.80	40°03'34.251"N	104°42'33.412"W	0.00	
3017.00†	11.000	134.279	2999.54	-139.95	-138.92	142.46	40°03'34.119"N	104°42'33.236"W	0.00	
3117.00†	11.000	134.279	3097.70	-153.37	-152.24	156.12	40°03'33.987"N	104°42'33.060"W	0.00	
3217.00†	11.000	134.279	3195.86	-166.79	-165.56	169.78	40°03'33.856"N	104°42'32.884"W	0.00	
3317.00†	11.000	134.279	3294.02	-180.21	-178.89	183.45	40°03'33.724"N	104°42'32.709"W	0.00	
3417.00†	11.000	134.279	3392.19	-193.63	-192.21	197.11	40°03'33.593"N	104°42'32.533"W	0.00	
3517.00†	11.000	134.279	3490.35	-207.05	-205.53	210.77	40°03'33.461"N	104°42'32.357"W	0.00	
3617.00†	11.000	134.279	3588.51	-220.47	-218.85	224.43	40°03'33.329"N	104°42'32.182"W	0.00	
3717.00†	11.000	134.279	3686.67	-233.89	-232.17	238.09	40°03'33.198"N	104°42'32.006"W	0.00	
3817.00†	11.000	134.279	3784.84	-247.31	-245.49	251.75	40°03'33.066"N	104°42'31.830"W	0.00	
3917.00†	11.000	134.279	3883.00	-260.73	-258.81	265.41	40°03'32.934"N	104°42'31.655"W	0.00	
4017.00†	11.000	134.279	3981.16	-274.15	-272.14	279.07	40°03'32.803"N	104°42'31.479"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-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
4117.00†	11.000	134.279	4079.33	-287.57	-285.46	292.73	40°03'32.671"N	104°42'31.303"W	0.00	
4167.60†	11.000	134.279	4129.00	-294.36	-292.20	299.65	40°03'32.604"N	104°42'31.214"W	0.00	Parkman
4217.00†	11.000	134.279	4177.49	-300.99	-298.78	306.39	40°03'32.539"N	104°42'31.128"W	0.00	
4317.00†	11.000	134.279	4275.65	-314.41	-312.10	320.06	40°03'32.408"N	104°42'30.952"W	0.00	
4417.00†	11.000	134.279	4373.81	-327.83	-325.42	333.72	40°03'32.276"N	104°42'30.776"W	0.00	
4510.91†	11.000	134.279	4466.00	-340.43	-337.93	346.55	40°03'32.152"N	104°42'30.611"W	0.00	Sussex
4517.00†	11.000	134.279	4471.98	-341.25	-338.74	347.38	40°03'32.144"N	104°42'30.600"W	0.00	
4617.00†	11.000	134.279	4570.14	-354.67	-352.06	361.04	40°03'32.013"N	104°42'30.425"W	0.00	
4717.00†	11.000	134.279	4668.30	-368.09	-365.39	374.70	40°03'31.881"N	104°42'30.249"W	0.00	
4817.00†	11.000	134.279	4766.46	-381.51	-378.71	388.36	40°03'31.750"N	104°42'30.073"W	0.00	
4917.00†	11.000	134.279	4864.63	-394.93	-392.03	402.02	40°03'31.618"N	104°42'29.898"W	0.00	
5017.00†	11.000	134.279	4962.79	-408.35	-405.35	415.68	40°03'31.486"N	104°42'29.722"W	0.00	
5117.00†	11.000	134.279	5060.95	-421.77	-418.67	429.34	40°03'31.355"N	104°42'29.546"W	0.00	
5217.00†	11.000	134.279	5159.12	-435.19	-431.99	443.00	40°03'31.223"N	104°42'29.371"W	0.00	
5317.00†	11.000	134.279	5257.28	-448.61	-445.31	456.66	40°03'31.091"N	104°42'29.195"W	0.00	
5417.00†	11.000	134.279	5355.44	-462.03	-458.64	470.33	40°03'30.960"N	104°42'29.019"W	0.00	
5517.00†	11.000	134.279	5453.60	-475.45	-471.96	483.99	40°03'30.828"N	104°42'28.844"W	0.00	
5617.00†	11.000	134.279	5551.77	-488.87	-485.28	497.65	40°03'30.696"N	104°42'28.668"W	0.00	
5717.00†	11.000	134.279	5649.93	-502.29	-498.60	511.31	40°03'30.565"N	104°42'28.492"W	0.00	
5813.85	11.000	134.279	5745.00	-515.29	-511.50	524.54	40°03'30.437"N	104°42'28.322"W	0.00	BEGIN DROP
5817.00†	10.937	134.279	5748.09	-515.71	-511.92	524.97	40°03'30.433"N	104°42'28.317"W	2.00	
5917.00†	8.937	134.279	5846.59	-527.84	-523.97	537.32	40°03'30.314"N	104°42'28.158"W	2.00	
6017.00†	6.937	134.279	5945.62	-537.56	-533.61	547.21	40°03'30.219"N	104°42'28.031"W	2.00	
6117.00†	4.937	134.279	6045.08	-544.83	-540.83	554.61	40°03'30.147"N	104°42'27.935"W	2.00	
6217.00†	2.937	134.279	6144.84	-549.66	-545.62	559.53	40°03'30.100"N	104°42'27.872"W	2.00	
6317.00†	0.937	134.279	6244.78	-552.04	-547.98	561.95	40°03'30.077"N	104°42'27.841"W	2.00	
6363.85	0.000	359.585	6291.63	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	2.00	END DROP
6417.00†	0.000	359.585	6344.78	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	
6517.00†	0.000	359.585	6444.78	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	
6617.00†	0.000	359.585	6544.78	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	
6717.00†	0.000	359.585	6644.78	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	
6802.27†	0.000	359.585	6730.05	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	4 1/2" LINER TOP
6817.00†	0.000	359.585	6744.78	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	
6902.27	0.000	359.585	6830.05	-552.31	-548.25	562.22	40°03'30.074"N	104°42'27.837"W	0.00	KOP, BUILD @ 10°/100'
6917.00†	1.473	359.585	6844.78	-552.12	-548.06	562.22	40°03'30.076"N	104°42'27.838"W	10.00	
7017.00†	11.473	359.585	6944.01	-540.86	-536.80	562.14	40°03'30.187"N	104°42'27.839"W	10.00	
7108.66†	20.639	359.585	7032.00	-515.53	-511.48	561.96	40°03'30.437"N	104°42'27.841"W	10.00	Sharon Springs
7117.00†	21.473	359.585	7039.79	-512.54	-508.48	561.93	40°03'30.467"N	104°42'27.841"W	10.00	
7143.27†	24.100	359.585	7064.00	-502.36	-498.31	561.86	40°03'30.568"N	104°42'27.842"W	10.00	Niobrara A
7217.00†	31.473	359.585	7129.19	-468.02	-463.96	561.61	40°03'30.907"N	104°42'27.845"W	10.00	
7264.97†	36.269	359.585	7169.00	-441.29	-437.24	561.42	40°03'31.171"N	104°42'27.848"W	10.00	Niobrara B
7317.00†	41.473	359.585	7209.50	-408.65	-404.59	561.18	40°03'31.494"N	104°42'27.851"W	10.00	
7346.38†	44.410	359.585	7231.00	-388.64	-384.58	561.04	40°03'31.691"N	104°42'27.853"W	10.00	Niobrara C
7417.00†	51.473	359.585	7278.28	-336.23	-332.18	560.66	40°03'32.209"N	104°42'27.858"W	10.00	
7517.00†	61.473	359.585	7333.44	-252.98	-248.93	560.06	40°03'33.032"N	104°42'27.865"W	10.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-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
7617.00†	71.473	359.585	7373.31	-161.41	-157.36	559.39	40°03'33.937"N	104°42'27.874"W	10.00	
7622.39†	72.012	359.585	7375.00	-156.29	-152.24	559.36	40°03'33.987"N	104°42'27.874"W	10.00	Fort Hays
7717.00†	81.473	359.585	7396.67	-64.30	-60.26	558.69	40°03'34.896"N	104°42'27.883"W	10.00	
7726.48†	82.421	359.585	7398.00	-54.92	-50.87	558.62	40°03'34.989"N	104°42'27.884"W	10.00	Codell
7803.36	90.109	359.585	7403.00	21.74	25.78	558.07	40°03'35.747"N	104°42'27.891"W	10.00	LANDING POINT
7817.00†	90.109	359.585	7402.98	35.38	39.42	557.97	40°03'35.882"N	104°42'27.892"W	0.00	
7917.00†	90.109	359.585	7402.79	135.38	139.42	557.25	40°03'36.870"N	104°42'27.901"W	0.00	
8017.00†	90.109	359.585	7402.60	235.38	239.42	556.52	40°03'37.858"N	104°42'27.911"W	0.00	
8117.00†	90.109	359.585	7402.41	335.38	339.42	555.80	40°03'38.846"N	104°42'27.920"W	0.00	
8217.00†	90.109	359.585	7402.22	435.38	439.41	555.08	40°03'39.834"N	104°42'27.929"W	0.00	
8317.00†	90.109	359.585	7402.03	535.38	539.41	554.35	40°03'40.823"N	104°42'27.938"W	0.00	
8417.00†	90.109	359.585	7401.84	635.38	639.41	553.63	40°03'41.811"N	104°42'27.948"W	0.00	
8517.00†	90.109	359.585	7401.65	735.38	739.40	552.91	40°03'42.799"N	104°42'27.957"W	0.00	
8617.00†	90.109	359.585	7401.46	835.38	839.40	552.18	40°03'43.787"N	104°42'27.966"W	0.00	
8717.00†	90.109	359.585	7401.27	935.38	939.40	551.46	40°03'44.775"N	104°42'27.975"W	0.00	
8817.00†	90.109	359.585	7401.08	1035.38	1039.40	550.74	40°03'45.763"N	104°42'27.985"W	0.00	
8917.00†	90.109	359.585	7400.89	1135.38	1139.39	550.01	40°03'46.752"N	104°42'27.994"W	0.00	
9017.00†	90.109	359.585	7400.70	1235.38	1239.39	549.29	40°03'47.740"N	104°42'28.003"W	0.00	
9117.00†	90.109	359.585	7400.51	1335.38	1339.39	548.57	40°03'48.728"N	104°42'28.013"W	0.00	
9217.00†	90.109	359.585	7400.32	1435.38	1439.38	547.84	40°03'49.716"N	104°42'28.022"W	0.00	
9317.00†	90.109	359.585	7400.13	1535.38	1539.38	547.12	40°03'50.704"N	104°42'28.031"W	0.00	
9417.00†	90.109	359.585	7399.94	1635.38	1639.38	546.39	40°03'51.693"N	104°42'28.040"W	0.00	
9517.00†	90.109	359.585	7399.75	1735.38	1739.38	545.67	40°03'52.681"N	104°42'28.050"W	0.00	
9617.00†	90.109	359.585	7399.56	1835.38	1839.37	544.95	40°03'53.669"N	104°42'28.059"W	0.00	
9717.00†	90.109	359.585	7399.37	1935.38	1939.37	544.22	40°03'54.657"N	104°42'28.068"W	0.00	
9817.00†	90.109	359.585	7399.17	2035.38	2039.37	543.50	40°03'55.645"N	104°42'28.078"W	0.00	
9917.00†	90.109	359.585	7398.98	2135.38	2139.37	542.78	40°03'56.634"N	104°42'28.087"W	0.00	
10017.00†	90.109	359.585	7398.79	2235.38	2239.36	542.05	40°03'57.622"N	104°42'28.096"W	0.00	
10117.00†	90.109	359.585	7398.60	2335.38	2339.36	541.33	40°03'58.610"N	104°42'28.105"W	0.00	
10217.00†	90.109	359.585	7398.41	2435.38	2439.36	540.61	40°03'59.598"N	104°42'28.115"W	0.00	
10317.00†	90.109	359.585	7398.22	2535.38	2539.35	539.88	40°04'00.586"N	104°42'28.124"W	0.00	
10417.00†	90.109	359.585	7398.03	2635.38	2639.35	539.16	40°04'01.575"N	104°42'28.133"W	0.00	
10517.00†	90.109	359.585	7397.84	2735.38	2739.35	538.44	40°04'02.563"N	104°42'28.142"W	0.00	
10617.00†	90.109	359.585	7397.65	2835.38	2839.35	537.71	40°04'03.551"N	104°42'28.152"W	0.00	
10717.00†	90.109	359.585	7397.46	2935.38	2939.34	536.99	40°04'04.539"N	104°42'28.161"W	0.00	
10817.00†	90.109	359.585	7397.27	3035.38	3039.34	536.27	40°04'05.527"N	104°42'28.170"W	0.00	
10917.00†	90.109	359.585	7397.08	3135.38	3139.34	535.54	40°04'06.516"N	104°42'28.180"W	0.00	
11017.00†	90.109	359.585	7396.89	3235.38	3239.33	534.82	40°04'07.504"N	104°42'28.189"W	0.00	
11117.00†	90.109	359.585	7396.70	3335.38	3339.33	534.10	40°04'08.492"N	104°42'28.198"W	0.00	
11217.00†	90.109	359.585	7396.51	3435.38	3439.33	533.37	40°04'09.480"N	104°42'28.207"W	0.00	
11317.00†	90.109	359.585	7396.32	3535.38	3539.33	532.65	40°04'10.468"N	104°42'28.217"W	0.00	
11417.00†	90.109	359.585	7396.13	3635.38	3639.32	531.93	40°04'11.457"N	104°42'28.226"W	0.00	
11517.00†	90.109	359.585	7395.94	3735.38	3739.32	531.20	40°04'12.445"N	104°42'28.235"W	0.00	
11617.00†	90.109	359.585	7395.75	3835.37	3839.32	530.48	40°04'13.433"N	104°42'28.245"W	0.00	
11717.00†	90.109	359.585	7395.56	3935.37	3939.32	529.75	40°04'14.421"N	104°42'28.254"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-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
11817.00†	90.109	359.585	7395.37	4035.37	4039.31	529.03	40°04'15.409"N	104°42'28.263"W	0.00	
11917.00†	90.109	359.585	7395.18	4135.37	4139.31	528.31	40°04'16.397"N	104°42'28.272"W	0.00	
12017.00†	90.109	359.585	7394.99	4235.37	4239.31	527.58	40°04'17.386"N	104°42'28.282"W	0.00	
12117.00†	90.109	359.585	7394.80	4335.37	4339.30	526.86	40°04'18.374"N	104°42'28.291"W	0.00	
12217.00†	90.109	359.585	7394.61	4435.37	4439.30	526.14	40°04'19.362"N	104°42'28.300"W	0.00	
12317.00†	90.109	359.585	7394.42	4535.37	4539.30	525.41	40°04'20.350"N	104°42'28.309"W	0.00	
12417.00†	90.109	359.585	7394.23	4635.37	4639.30	524.69	40°04'21.338"N	104°42'28.319"W	0.00	
12517.00†	90.109	359.585	7394.04	4735.37	4739.29	523.97	40°04'22.327"N	104°42'28.328"W	0.00	
12617.00†	90.109	359.585	7393.85	4835.37	4839.29	523.24	40°04'23.315"N	104°42'28.337"W	0.00	
12717.00†	90.109	359.585	7393.66	4935.37	4939.29	522.52	40°04'24.303"N	104°42'28.347"W	0.00	
12817.00†	90.109	359.585	7393.47	5035.37	5039.28	521.80	40°04'25.291"N	104°42'28.356"W	0.00	
12917.00†	90.109	359.585	7393.28	5135.37	5139.28	521.07	40°04'26.279"N	104°42'28.365"W	0.00	
13017.00†	90.109	359.585	7393.09	5235.37	5239.28	520.35	40°04'27.268"N	104°42'28.374"W	0.00	
13063.99	90.109	359.585	7393.00 ¹	5282.37	5286.27	520.01	40°04'27.732"N	104°42'28.379"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: STEWARD 36C-6HZ PWB Ref Wellpath: STEWARD 36C-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	7803.36	6216.36	1587.00	7403.00	0.00	0.00	25.78	558.07
7in Casing Intermediate	17.00	7803.36	7786.36	17.00	7403.00	0.00	0.00	25.78	558.07
6.125in Open Hole	7803.36	13063.99	5260.63	7403.00	7393.00	25.78	558.07	5286.27	520.01
4.5in Casing Production	17.00	13063.99	13046.99	17.00	7393.00	0.00	0.00	5286.27	520.01

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-R65W		

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	-0.30	-89.81	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
SEC.07-T1N-R65W SECTION LINES		0.00	-0.30	-89.81	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
1) STEWARD 36C-6HZ BHL ON PLAT (410'FSL & 2307'FWL, SEC.06) REV-1	13063.99	7393.00	5286.27	520.01	3221669.47	1270928.06	40°04'27.732"N	104°42'28.379"W	point

SURVEY PROGRAM - Ref Wellbore: STEWARD 36C-6HZ PWB Ref Wellpath: STEWARD 36C-6HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	13063.99	NaviTrak (MAGCORR,IFR)		STEWARD 36C-6HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#10 STEWARD 36C-6HZ (440'FSL & 1749'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 36C-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 36C-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1537.00	0.000	134.279	1537.00	Fox Hills Marker
4167.60	11.000	134.279	4129.00	Parkman
4510.91	11.000	134.279	4466.00	Sussex
6802.27	0.000	359.585	6730.05	4 1/2" LINER TOP
7108.66	20.639	359.585	7032.00	Sharon Springs
7143.27	24.100	359.585	7064.00	Niobrara A
7264.97	36.269	359.585	7169.00	Niobrara B
7346.38	44.410	359.585	7231.00	Niobrara C
7622.39	72.012	359.585	7375.00	Fort Hays
7726.48	82.421	359.585	7398.00	Codell

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	134.279	17.00	TIE-ON
1700.00	0.000	134.279	1700.00	BEGIN NUDGE
2250.00	11.000	134.279	2246.63	END NUDGE
5813.85	11.000	134.279	5745.00	BEGIN DROP
6363.85	0.000	359.585	6291.63	END DROP
6902.27	0.000	359.585	6830.05	KOP, BUILD @ 10°/100'
7803.36	90.109	359.585	7403.00	LANDING POINT
13063.99	90.109	359.585	7393.00	TOTAL DEPTH