

# KERR-MCGEE OIL & GAS ONSHORE LP



Location: COLORADO Slot: SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)  
 Field: WELD COUNTY (KERR MCGEE) Well: STEWARD 35N-6HZ  
 Facility: SEC.07-T1N-R65W Wellbore: STEWARD 35N-6HZ PWB

Plot reference wellpath is STEWARD 35N-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#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: preacin 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)
SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)	-74.78	-3155.77	3221106.815	1265636.467
PERMIT (17KB) (RKB) to Mud line (At Slot: SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07):				5018ft
Mean Sea Level to Mud line (At Slot: SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07):				0ft
PERMIT (17KB) (RKB) to Mean Sea Level				5018ft

## Survey Program

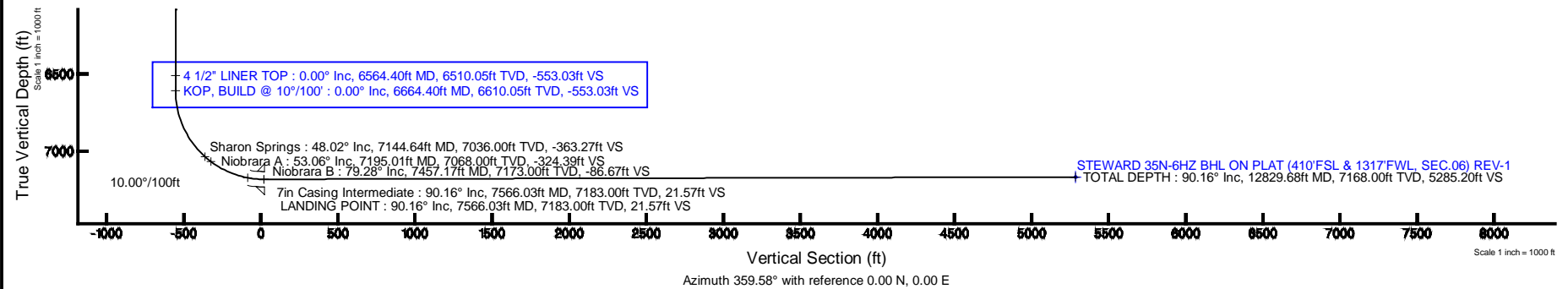
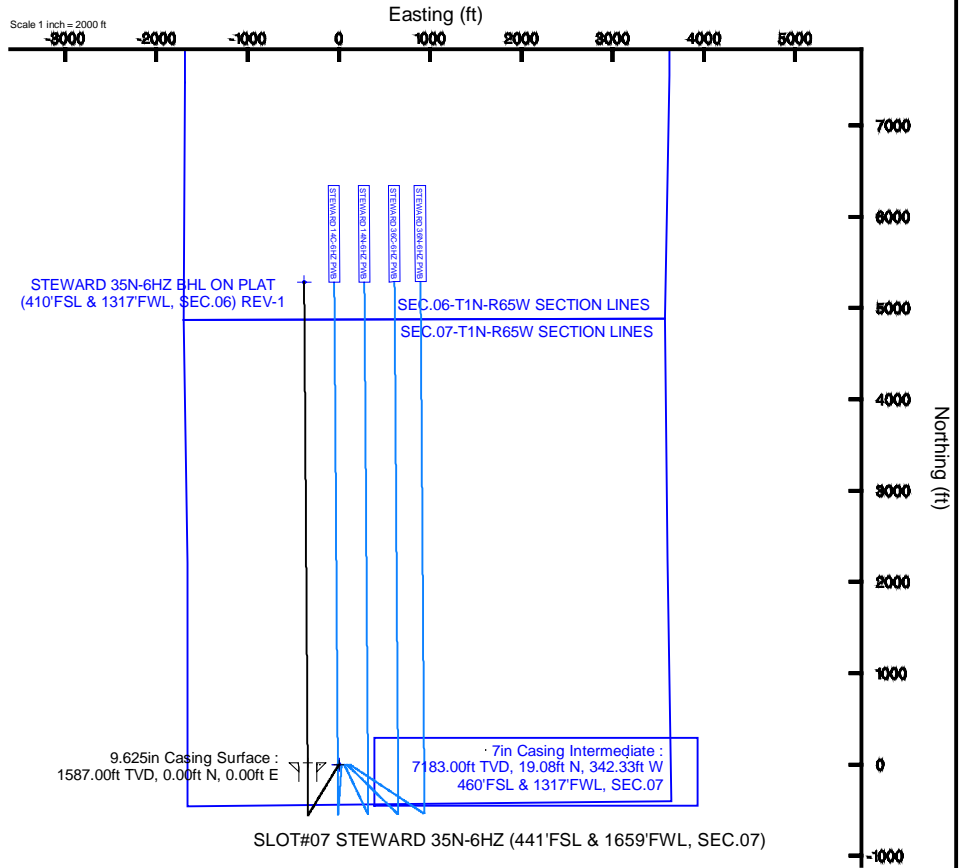
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12829.68	NaviTrak	NaviTrak (IFR)		STEWARD 35N-6HZ PWB

## 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	211.330	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1700.00	0.000	211.330	1700.00	0.00	0.00	0.00	0.00
END NUDGE	2200.00	10.000	211.330	2197.47	-37.18	-22.63	2.00	-37.01
BEGIN DROP	5443.82	10.000	211.330	5392.00	-518.32	-315.52	0.00	-516.01
END DROP	5943.82	0.000	359.583	5889.47	-555.50	-338.15	2.00	-553.03
KOP, BUILD @ 10°/100'	6664.40	0.000	359.583	6610.05	-555.50	-338.15	0.00	-553.03
LANDING POINT	7566.03	90.163	359.583	7183.00	19.07	-342.33	10.00	21.57
TOTAL DEPTH	12829.68	90.163	359.583	7168.00	5282.57	-380.62	0.00	5285.20

## 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	0.00	0.00	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W
SEC.07-T1N-R65W SECTION LINES		0.00	0.00	0.00	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W
STEWARD 35N-6HZ BHL ON PLAT (410'FSL & 1317'FWL, SEC.06) REV-1	12829.68	7168.00	5282.57	-380.62	3220679.17	1270915.22	40°04'27.692"N	104°42'41.119"W



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 35N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 35N-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 12:21
Convergence at slot	n/a	Database/Source file	WellArchitectDB/STEWARD_35N-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	-74.78	-3155.77	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W
Facility Reference Pt			3224261.66	1265739.76	40°03'36.230"N	104°41'55.637"W
Field Reference Pt			<b>3197771.84</b>	<b>1268891.29</b>	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#07 STEWARD 35N-6HZ (441'FSL & 1659'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	<b>KERR-MCGEE OIL &amp; GAS ONSHORE LP</b>	Slot	<b>SLOT#07 STEWARD 35N-6HZ (441'FSL &amp; 1659'FWL, SEC.07)</b>
Area	<b>COLORADO</b>	Well	<b>STEWARD 35N-6HZ</b>
Field	<b>WELD COUNTY (KERR MCGEE)</b>	Wellbore	<b>STEWARD 35N-6HZ PWB</b>
Facility	<b>SEC.07-T1N-R65W</b>		

WELLPATH DATA (144 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	211.330	0.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
17.00	0.000	211.330	17.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	TIE-ON
117.00†	0.000	211.330	117.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
217.00†	0.000	211.330	217.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
317.00†	0.000	211.330	317.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
417.00†	0.000	211.330	417.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
517.00†	0.000	211.330	517.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
617.00†	0.000	211.330	617.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
717.00†	0.000	211.330	717.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
817.00†	0.000	211.330	817.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
917.00†	0.000	211.330	917.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1017.00†	0.000	211.330	1017.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1117.00†	0.000	211.330	1117.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1217.00†	0.000	211.330	1217.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1317.00†	0.000	211.330	1317.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1417.00†	0.000	211.330	1417.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1517.00†	0.000	211.330	1517.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1537.00†	0.000	211.330	1537.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	Fox Hills Marker
1617.00†	0.000	211.330	1617.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	
1700.00	0.000	211.330	1700.00	0.00	0.00	0.00	40°03'35.489"N	104°42'36.223"W	0.00	BEGIN NUDGE
1717.00†	0.340	211.330	1717.00	-0.04	-0.04	-0.03	40°03'35.489"N	104°42'36.223"W	2.00	
1817.00†	2.340	211.330	1816.97	-2.03	-2.04	-1.24	40°03'35.469"N	104°42'36.239"W	2.00	
1917.00†	4.340	211.330	1916.79	-6.99	-7.02	-4.27	40°03'35.420"N	104°42'36.278"W	2.00	
2017.00†	6.340	211.330	2016.35	-14.90	-14.97	-9.11	40°03'35.341"N	104°42'36.340"W	2.00	
2117.00†	8.340	211.330	2115.53	-25.76	-25.88	-15.75	40°03'35.233"N	104°42'36.426"W	2.00	
2200.00	10.000	211.330	2197.47	-37.01	-37.18	-22.63	40°03'35.122"N	104°42'36.514"W	2.00	END NUDGE
2217.00†	10.000	211.330	2214.21	-39.52	-39.70	-24.17	40°03'35.097"N	104°42'36.534"W	0.00	
2317.00†	10.000	211.330	2312.69	-54.29	-54.53	-33.19	40°03'34.950"N	104°42'36.650"W	0.00	
2417.00†	10.000	211.330	2411.17	-69.05	-69.36	-42.22	40°03'34.804"N	104°42'36.766"W	0.00	
2517.00†	10.000	211.330	2509.65	-83.82	-84.20	-51.25	40°03'34.657"N	104°42'36.882"W	0.00	
2617.00†	10.000	211.330	2608.13	-98.59	-99.03	-60.28	40°03'34.510"N	104°42'36.998"W	0.00	
2717.00†	10.000	211.330	2706.61	-113.35	-113.86	-69.31	40°03'34.364"N	104°42'37.114"W	0.00	
2817.00†	10.000	211.330	2805.09	-128.12	-128.69	-78.34	40°03'34.217"N	104°42'37.231"W	0.00	
2917.00†	10.000	211.330	2903.57	-142.89	-143.53	-87.37	40°03'34.071"N	104°42'37.347"W	0.00	
3017.00†	10.000	211.330	3002.05	-157.65	-158.36	-96.40	40°03'33.924"N	104°42'37.463"W	0.00	
3117.00†	10.000	211.330	3100.53	-172.42	-173.19	-105.43	40°03'33.777"N	104°42'37.579"W	0.00	
3217.00†	10.000	211.330	3199.01	-187.19	-188.03	-114.46	40°03'33.631"N	104°42'37.695"W	0.00	
3317.00†	10.000	211.330	3297.50	-201.95	-202.86	-123.49	40°03'33.484"N	104°42'37.811"W	0.00	
3417.00†	10.000	211.330	3395.98	-216.72	-217.69	-132.51	40°03'33.338"N	104°42'37.927"W	0.00	
3517.00†	10.000	211.330	3494.46	-231.49	-232.52	-141.54	40°03'33.191"N	104°42'38.043"W	0.00	
3617.00†	10.000	211.330	3592.94	-246.25	-247.36	-150.57	40°03'33.045"N	104°42'38.159"W	0.00	
3717.00†	10.000	211.330	3691.42	-261.02	-262.19	-159.60	40°03'32.898"N	104°42'38.276"W	0.00	
3817.00†	10.000	211.330	3789.90	-275.79	-277.02	-168.63	40°03'32.751"N	104°42'38.392"W	0.00	
3917.00†	10.000	211.330	3888.38	-290.55	-291.86	-177.66	40°03'32.605"N	104°42'38.508"W	0.00	
4017.00†	10.000	211.330	3986.86	-305.32	-306.69	-186.69	40°03'32.458"N	104°42'38.624"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 35N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 35N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4117.00†	10.000	211.330	4085.34	-320.09	-321.52	-195.72	40°03'32.312"N	104°42'38.740"W	0.00	
4165.39†	10.000	211.330	4133.00	-327.23	-328.70	-200.09	40°03'32.241"N	104°42'38.796"W	0.00	Parkman
4217.00†	10.000	211.330	4183.82	-334.85	-336.35	-204.75	40°03'32.165"N	104°42'38.856"W	0.00	
4317.00†	10.000	211.330	4282.30	-349.62	-351.19	-213.78	40°03'32.018"N	104°42'38.972"W	0.00	
4417.00†	10.000	211.330	4380.78	-364.39	-366.02	-222.81	40°03'31.872"N	104°42'39.088"W	0.00	
4507.59†	10.000	211.330	4470.00	-377.77	-379.46	-230.99	40°03'31.739"N	104°42'39.194"W	0.00	Sussex
4517.00†	10.000	211.330	4479.26	-379.15	-380.85	-231.84	40°03'31.725"N	104°42'39.205"W	0.00	
4617.00†	10.000	211.330	4577.75	-393.92	-395.69	-240.86	40°03'31.579"N	104°42'39.321"W	0.00	
4717.00†	10.000	211.330	4676.23	-408.69	-410.52	-249.89	40°03'31.432"N	104°42'39.437"W	0.00	
4817.00†	10.000	211.330	4774.71	-423.45	-425.35	-258.92	40°03'31.286"N	104°42'39.553"W	0.00	
4917.00†	10.000	211.330	4873.19	-438.22	-440.18	-267.95	40°03'31.139"N	104°42'39.669"W	0.00	
5017.00†	10.000	211.330	4971.67	-452.99	-455.02	-276.98	40°03'30.992"N	104°42'39.785"W	0.00	
5117.00†	10.000	211.330	5070.15	-467.76	-469.85	-286.01	40°03'30.846"N	104°42'39.901"W	0.00	
5217.00†	10.000	211.330	5168.63	-482.52	-484.68	-295.04	40°03'30.699"N	104°42'40.017"W	0.00	
5317.00†	10.000	211.330	5267.11	-497.29	-499.51	-304.07	40°03'30.553"N	104°42'40.134"W	0.00	
5417.00†	10.000	211.330	5365.59	-512.06	-514.35	-313.10	40°03'30.406"N	104°42'40.250"W	0.00	
5443.82	10.000	211.330	5392.00	-516.01	-518.32	-315.52	40°03'30.367"N	104°42'40.281"W	0.00	BEGIN DROP
5517.00†	8.536	211.330	5464.23	-526.04	-528.39	-321.65	40°03'30.267"N	104°42'40.360"W	2.00	
5617.00†	6.536	211.330	5563.36	-537.19	-539.60	-328.47	40°03'30.157"N	104°42'40.447"W	2.00	
5717.00†	4.536	211.330	5662.89	-545.39	-547.84	-333.48	40°03'30.075"N	104°42'40.512"W	2.00	
5817.00†	2.536	211.330	5762.69	-550.64	-553.10	-336.69	40°03'30.023"N	104°42'40.553"W	2.00	
5917.00†	0.536	211.330	5862.65	-552.92	-555.39	-338.08	40°03'30.000"N	104°42'40.571"W	2.00	
5943.82	0.000	359.583	5889.47	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	2.00	END DROP
6017.00†	0.000	359.583	5962.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6117.00†	0.000	359.583	6062.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6217.00†	0.000	359.583	6162.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6317.00†	0.000	359.583	6262.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6417.00†	0.000	359.583	6362.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6517.00†	0.000	359.583	6462.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6564.40†	0.000	359.583	6510.05	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	4 1/2" LINER TOP
6617.00†	0.000	359.583	6562.65	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	
6664.40	0.000	359.583	6610.05	-553.03	-555.50	-338.15	40°03'29.999"N	104°42'40.572"W	0.00	KOP, BUILD @ 10°/100'
6717.00†	5.260	359.583	6662.58	-550.61	-553.09	-338.17	40°03'30.023"N	104°42'40.572"W	10.00	
6817.00†	15.260	359.583	6760.85	-532.82	-535.30	-338.30	40°03'30.199"N	104°42'40.574"W	10.00	
6917.00†	25.260	359.583	6854.55	-498.24	-500.72	-338.55	40°03'30.541"N	104°42'40.577"W	10.00	
7017.00†	35.260	359.583	6940.81	-447.91	-450.39	-338.91	40°03'31.038"N	104°42'40.582"W	10.00	
7117.00†	45.260	359.583	7017.03	-383.36	-385.84	-339.38	40°03'31.676"N	104°42'40.588"W	10.00	
7144.64†	48.025	359.583	7036.00	-363.27	-365.75	-339.53	40°03'31.875"N	104°42'40.590"W	10.00	Sharon Springs
7195.01†	53.062	359.583	7068.00	-324.39	-326.87	-339.81	40°03'32.259"N	104°42'40.593"W	10.00	Niobrara A
7217.00†	55.260	359.583	7080.87	-306.57	-309.05	-339.94	40°03'32.435"N	104°42'40.595"W	10.00	
7317.00†	65.260	359.583	7130.42	-219.85	-222.33	-340.57	40°03'33.292"N	104°42'40.603"W	10.00	
7417.00†	75.260	359.583	7164.15	-125.84	-128.33	-341.26	40°03'34.221"N	104°42'40.612"W	10.00	
7457.17†	79.277	359.583	7173.00	-86.67	-89.16	-341.54	40°03'34.608"N	104°42'40.616"W	10.00	Niobrara B
7517.00†	85.260	359.583	7181.04	-27.41	-29.90	-341.97	40°03'35.194"N	104°42'40.621"W	10.00	
7566.03	90.163	359.583	7183.00	21.57	19.07	-342.33	40°03'35.677"N	104°42'40.626"W	10.00	LANDING POINT

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 35N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 35N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7617.00†	90.163	359.583	7182.86	72.54	70.04	-342.70	40°03'36.181"N	104°42'40.630"W	0.00	
7717.00†	90.163	359.583	7182.57	172.54	170.04	-343.43	40°03'37.169"N	104°42'40.640"W	0.00	
7817.00†	90.163	359.583	7182.29	272.54	270.04	-344.15	40°03'38.158"N	104°42'40.649"W	0.00	
7917.00†	90.163	359.583	7182.00	372.54	370.04	-344.88	40°03'39.146"N	104°42'40.659"W	0.00	
8017.00†	90.163	359.583	7181.72	472.53	470.03	-345.61	40°03'40.134"N	104°42'40.668"W	0.00	
8117.00†	90.163	359.583	7181.43	572.53	570.03	-346.34	40°03'41.122"N	104°42'40.677"W	0.00	
8217.00†	90.163	359.583	7181.15	672.53	670.03	-347.07	40°03'42.110"N	104°42'40.687"W	0.00	
8317.00†	90.163	359.583	7180.86	772.53	770.02	-347.79	40°03'43.099"N	104°42'40.696"W	0.00	
8417.00†	90.163	359.583	7180.58	872.53	870.02	-348.52	40°03'44.087"N	104°42'40.705"W	0.00	
8517.00†	90.163	359.583	7180.29	972.53	970.02	-349.25	40°03'45.075"N	104°42'40.715"W	0.00	
8617.00†	90.163	359.583	7180.01	1072.53	1070.01	-349.98	40°03'46.063"N	104°42'40.724"W	0.00	
8717.00†	90.163	359.583	7179.72	1172.53	1170.01	-350.70	40°03'47.051"N	104°42'40.734"W	0.00	
8817.00†	90.163	359.583	7179.44	1272.53	1270.01	-351.43	40°03'48.039"N	104°42'40.743"W	0.00	
8917.00†	90.163	359.583	7179.15	1372.53	1370.00	-352.16	40°03'49.028"N	104°42'40.752"W	0.00	
9017.00†	90.163	359.583	7178.87	1472.53	1470.00	-352.89	40°03'50.016"N	104°42'40.762"W	0.00	
9117.00†	90.163	359.583	7178.58	1572.53	1570.00	-353.61	40°03'51.004"N	104°42'40.771"W	0.00	
9217.00†	90.163	359.583	7178.30	1672.53	1670.00	-354.34	40°03'51.992"N	104°42'40.780"W	0.00	
9317.00†	90.163	359.583	7178.01	1772.53	1769.99	-355.07	40°03'52.980"N	104°42'40.790"W	0.00	
9417.00†	90.163	359.583	7177.73	1872.53	1869.99	-355.80	40°03'53.969"N	104°42'40.799"W	0.00	
9517.00†	90.163	359.583	7177.44	1972.53	1969.99	-356.52	40°03'54.957"N	104°42'40.809"W	0.00	
9617.00†	90.163	359.583	7177.16	2072.53	2069.98	-357.25	40°03'55.945"N	104°42'40.818"W	0.00	
9717.00†	90.163	359.583	7176.87	2172.53	2169.98	-357.98	40°03'56.933"N	104°42'40.827"W	0.00	
9817.00†	90.163	359.583	7176.59	2272.53	2269.98	-358.71	40°03'57.921"N	104°42'40.837"W	0.00	
9917.00†	90.163	359.583	7176.30	2372.53	2369.97	-359.43	40°03'58.910"N	104°42'40.846"W	0.00	
10017.00†	90.163	359.583	7176.02	2472.53	2469.97	-360.16	40°03'59.898"N	104°42'40.855"W	0.00	
10117.00†	90.163	359.583	7175.73	2572.53	2569.97	-360.89	40°04'00.886"N	104°42'40.865"W	0.00	
10217.00†	90.163	359.583	7175.45	2672.53	2669.96	-361.62	40°04'01.874"N	104°42'40.874"W	0.00	
10317.00†	90.163	359.583	7175.16	2772.53	2769.96	-362.34	40°04'02.862"N	104°42'40.884"W	0.00	
10417.00†	90.163	359.583	7174.88	2872.53	2869.96	-363.07	40°04'03.851"N	104°42'40.893"W	0.00	
10517.00†	90.163	359.583	7174.59	2972.52	2969.96	-363.80	40°04'04.839"N	104°42'40.902"W	0.00	
10617.00†	90.163	359.583	7174.31	3072.52	3069.95	-364.53	40°04'05.827"N	104°42'40.912"W	0.00	
10717.00†	90.163	359.583	7174.02	3172.52	3169.95	-365.25	40°04'06.815"N	104°42'40.921"W	0.00	
10817.00†	90.163	359.583	7173.74	3272.52	3269.95	-365.98	40°04'07.803"N	104°42'40.930"W	0.00	
10917.00†	90.163	359.583	7173.45	3372.52	3369.94	-366.71	40°04'08.791"N	104°42'40.940"W	0.00	
11017.00†	90.163	359.583	7173.17	3472.52	3469.94	-367.44	40°04'09.780"N	104°42'40.949"W	0.00	
11117.00†	90.163	359.583	7172.88	3572.52	3569.94	-368.16	40°04'10.768"N	104°42'40.959"W	0.00	
11217.00†	90.163	359.583	7172.60	3672.52	3669.93	-368.89	40°04'11.756"N	104°42'40.968"W	0.00	
11317.00†	90.163	359.583	7172.31	3772.52	3769.93	-369.62	40°04'12.744"N	104°42'40.977"W	0.00	
11417.00†	90.163	359.583	7172.03	3872.52	3869.93	-370.35	40°04'13.732"N	104°42'40.987"W	0.00	
11517.00†	90.163	359.583	7171.74	3972.52	3969.93	-371.07	40°04'14.721"N	104°42'40.996"W	0.00	
11617.00†	90.163	359.583	7171.46	4072.52	4069.92	-371.80	40°04'15.709"N	104°42'41.005"W	0.00	
11717.00†	90.163	359.583	7171.17	4172.52	4169.92	-372.53	40°04'16.697"N	104°42'41.015"W	0.00	
11817.00†	90.163	359.583	7170.89	4272.52	4269.92	-373.26	40°04'17.685"N	104°42'41.024"W	0.00	
11917.00†	90.163	359.583	7170.60	4372.52	4369.91	-373.98	40°04'18.673"N	104°42'41.034"W	0.00	
12017.00†	90.163	359.583	7170.32	4472.52	4469.91	-374.71	40°04'19.662"N	104°42'41.043"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 35N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 35N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH DATA (144 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12117.00†	90.163	359.583	7170.03	4572.52	4569.91	-375.44	40°04'20.650"N	104°42'41.052"W	0.00	
12217.00†	90.163	359.583	7169.75	4672.52	4669.90	-376.17	40°04'21.638"N	104°42'41.062"W	0.00	
12317.00†	90.163	359.583	7169.46	4772.52	4769.90	-376.89	40°04'22.626"N	104°42'41.071"W	0.00	
12417.00†	90.163	359.583	7169.18	4872.52	4869.90	-377.62	40°04'23.614"N	104°42'41.080"W	0.00	
12517.00†	90.163	359.583	7168.89	4972.52	4969.89	-378.35	40°04'24.603"N	104°42'41.090"W	0.00	
12617.00†	90.163	359.583	7168.61	5072.52	5069.89	-379.08	40°04'25.591"N	104°42'41.099"W	0.00	
12717.00†	90.163	359.583	7168.32	5172.52	5169.89	-379.80	40°04'26.579"N	104°42'41.109"W	0.00	
12817.00†	90.163	359.583	7168.04	5272.52	5269.89	-380.53	40°04'27.567"N	104°42'41.118"W	0.00	
12829.68	90.163	359.583	7168.00 <sup>1</sup>	5285.20	5282.57	-380.62	40°04'27.692"N	104°42'41.119"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: STEWARD 35N-6HZ PWB Ref Wellpath: STEWARD 35N-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	7566.03	5979.03	1587.00	7183.00	0.00	0.00	19.08	-342.33
7in Casing Intermediate	17.00	7566.03	7549.03	17.00	7183.00	0.00	0.00	19.08	-342.33
6.125in Open Hole	7566.03	12829.68	5263.65	7183.00	7168.00	19.08	-342.33	5282.57	-380.62
4.5in Casing Production	17.00	12829.68	12812.68	17.00	7168.00	0.00	0.00	5282.57	-380.62

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	0.00	0.00	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
SEC.07-T1N-R65W SECTION LINES		0.00	0.00	0.00	3221106.82	1265636.47	40°03'35.489"N	104°42'36.223"W	polygon
1) STEWARD 35N-6HZ BHL ON PLAT (410'FSL & 1317'FWL, SEC.06) REV-1	12829.68	7168.00	5282.57	-380.62	3220679.17	1270915.22	40°04'27.692"N	104°42'41.119"W	point

SURVEY PROGRAM - Ref Wellbore: STEWARD 35N-6HZ PWB Ref Wellpath: STEWARD 35N-6HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12829.68	NaviTrak (IFR)		STEWARD 35N-6HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#07 STEWARD 35N-6HZ (441'FSL & 1659'FWL, SEC.07)
Area	COLORADO	Well	STEWARD 35N-6HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	STEWARD 35N-6HZ PWB
Facility	SEC.07-T1N-R65W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1537.00	0.000	211.330	1537.00	Fox Hills Marker
4165.39	10.000	211.330	4133.00	Parkman
4507.59	10.000	211.330	4470.00	Sussex
6564.40	0.000	359.583	6510.05	4 1/2" LINER TOP
7144.64	48.025	359.583	7036.00	Sharon Springs
7195.01	53.062	359.583	7068.00	Niobrara A
7457.17	79.277	359.583	7173.00	Niobrara B

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	211.330	17.00	TIE-ON
1700.00	0.000	211.330	1700.00	BEGIN NUDGE
2200.00	10.000	211.330	2197.47	END NUDGE
5443.82	10.000	211.330	5392.00	BEGIN DROP
5943.82	0.000	359.583	5889.47	END DROP
6664.40	0.000	359.583	6610.05	KOP, BUILD @ 10°/100'
7566.03	90.163	359.583	7183.00	LANDING POINT
12829.68	90.163	359.583	7168.00	TOTAL DEPTH