



KERR-MCGEE OIL & GAS ONSHORE LP

Location: COLORADO Slot: SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Field: WELD COUNTY (KERR MCGEE) Well: HANSEN STATE 26C-36HZ
Facility: SEC.35-T3N-R68W Wellbore: HANSEN STATE 26C-36HZ PWB



Plot reference wellpath is HANSEN STATE 26C-36HZ (PERMIT REV-1) PWB

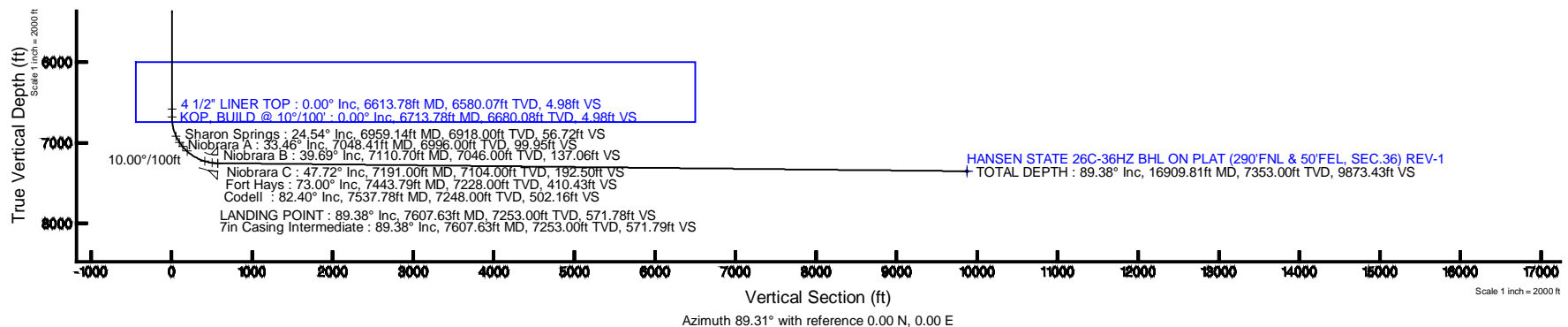
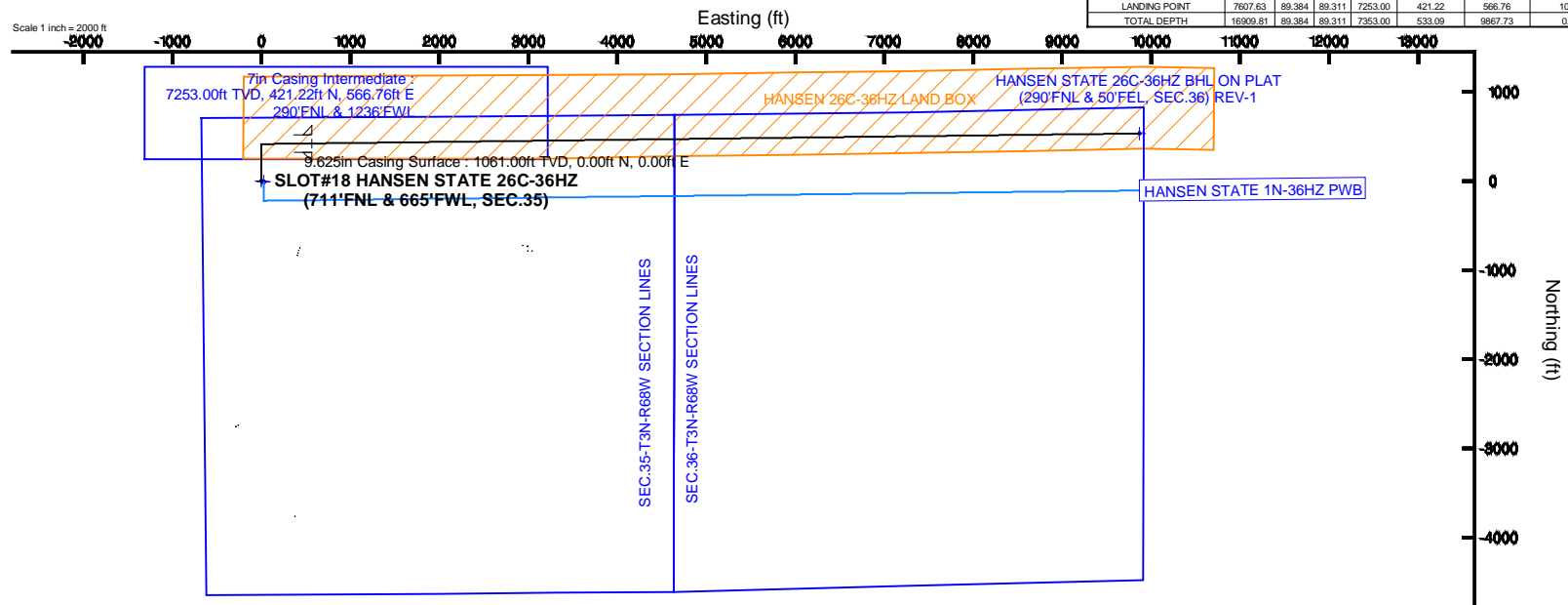
True vertical depth and reference to PERMIT (TVD) (ft)	Grid Square (NAD83) Lambert Colorado SP North Zone (500, 100, 100)
Measured depth and reference to PERMIT (MD) (ft)	North Reference True north
PERMIT (TVD) (ft) to Mean Sea Level (MSL) (ft)	Scale True distance
Mean Sea Level to MSL (ft) to Slot (SLOT) HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35) (ft)	Depth in inches
Coordinates are in feet reference to Slot	Created by person on 1/14/2014

Location Information					
Path/Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SEC.35-T3N-R68W	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	
Slot	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	
PERMIT (TVD) (ft) to Mean Sea Level (MSL) (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
PERMIT (TVD) (ft) to Mean Sea Level (MSL) (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Mean Sea Level to MSL (ft) to Slot (SLOT) HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
PERMIT (TVD) (ft) to Mean Sea Level (MSL) (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	1300.00	Generic gyro - continuous	Generic gyro - continuous (Standard)		HANSEN STATE 26C-36HZ PWB
1300.00	7607.63	NavTrak	NavTrak (FIR)		HANSEN STATE 26C-36HZ PWB
7607.63	16909.81	NavTrak	NavTrak (FIR)		HANSEN STATE 26C-36HZ PWB

Targets							
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Local E (ft)	DLS (ft/100ft)	VS (ft)
SEC.35-T3N-R68W SECTION LINES	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	107°02'00.00"W		
SEC.35-T3N-R68W SECTION LINES	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	107°02'00.00"W		
HANSEN STATE 26C-36HZ BHL ON PLAT (290'FNL & 50'FWL, SEC.36)	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	107°02'00.00"W		
HANSEN STATE 1N-36HZ PWB	42400.00	12000.00	40°11'00.00"N	107°02'00.00"W	107°02'00.00"W		

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
TIE-ON	17.00	0.00	0.00	17.00	0.00	0.00	0.00
BEGIN NUDGE	1161.00	0.00	0.00	1161.00	0.00	0.00	0.00
END NUDGE	1661.00	10.00	0.00	1658.47	43.52	0.00	0.52
BEGIN DROP	3546.17	10.00	0.00	3515.00	370.88	0.00	4.46
END DROP	4046.17	0.00	89.31	4012.47	414.40	0.00	4.98
KOP BUILD @ 10°/100'	6713.78	0.00	89.31	6680.08	414.40	0.00	4.98
LANDING POINT	7607.63	89.38	89.31	7253.00	421.22	566.76	10.00
TOTAL DEPTH	16909.81	89.38	89.31	7353.00	533.09	9867.73	0.00



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-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	14/Jan/2014 at 12:02
Convergence at slot	n/a	Database/Source file	WellArchitectDB/HANSEN_STATE_26C-36HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	777.07	-420.49	3146042.04	1311675.21	40°11'15.947"N	104°58'38.154"W
Facility Reference Pt			3146467.10	1310900.67	40°11'08.268"N	104°58'32.736"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	4953.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4953.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35))	4953.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.31°

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH DATA (187 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	0.000	0.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
17.00	0.000	0.000	17.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	TIE-ON
117.00†	0.000	0.000	117.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
217.00†	0.000	0.000	217.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
317.00†	0.000	0.000	317.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
417.00†	0.000	0.000	417.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
517.00†	0.000	0.000	517.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
617.00†	0.000	0.000	617.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
717.00†	0.000	0.000	717.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
817.00†	0.000	0.000	817.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
917.00†	0.000	0.000	917.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
1011.00†	0.000	0.000	1011.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	Fox Hills Marker
1017.00†	0.000	0.000	1017.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
1117.00†	0.000	0.000	1117.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	
1161.00	0.000	0.000	1161.00	0.00	0.00	0.00	40°11'15.947"N	104°58'38.154"W	0.00	BEGIN NUDGE
1217.00†	1.120	0.000	1217.00	0.01	0.55	0.00	40°11'15.952"N	104°58'38.154"W	2.00	
1317.00†	3.120	0.000	1316.92	0.05	4.25	0.00	40°11'15.989"N	104°58'38.154"W	2.00	
1417.00†	5.120	0.000	1416.66	0.14	11.43	0.00	40°11'16.060"N	104°58'38.154"W	2.00	
1517.00†	7.120	0.000	1516.08	0.27	22.09	0.00	40°11'16.165"N	104°58'38.154"W	2.00	
1617.00†	9.120	0.000	1615.08	0.44	36.22	0.00	40°11'16.305"N	104°58'38.154"W	2.00	
1661.00	10.000	0.000	1658.47	0.52	43.52	0.00	40°11'16.377"N	104°58'38.154"W	2.00	END NUDGE
1717.00†	10.000	0.000	1713.61	0.64	53.25	0.00	40°11'16.473"N	104°58'38.154"W	0.00	
1817.00†	10.000	0.000	1812.10	0.85	70.61	0.00	40°11'16.645"N	104°58'38.154"W	0.00	
1917.00†	10.000	0.000	1910.58	1.06	87.98	0.00	40°11'16.816"N	104°58'38.154"W	0.00	
2017.00†	10.000	0.000	2009.06	1.27	105.34	0.00	40°11'16.988"N	104°58'38.154"W	0.00	
2117.00†	10.000	0.000	2107.54	1.48	122.71	0.00	40°11'17.160"N	104°58'38.154"W	0.00	
2217.00†	10.000	0.000	2206.02	1.68	140.07	0.00	40°11'17.331"N	104°58'38.154"W	0.00	
2317.00†	10.000	0.000	2304.50	1.89	157.44	0.00	40°11'17.503"N	104°58'38.154"W	0.00	
2417.00†	10.000	0.000	2402.98	2.10	174.80	0.00	40°11'17.674"N	104°58'38.154"W	0.00	
2517.00†	10.000	0.000	2501.46	2.31	192.17	0.00	40°11'17.846"N	104°58'38.154"W	0.00	
2617.00†	10.000	0.000	2599.94	2.52	209.53	0.00	40°11'18.018"N	104°58'38.154"W	0.00	
2717.00†	10.000	0.000	2698.42	2.73	226.90	0.00	40°11'18.189"N	104°58'38.154"W	0.00	
2817.00†	10.000	0.000	2796.90	2.94	244.26	0.00	40°11'18.361"N	104°58'38.154"W	0.00	
2917.00†	10.000	0.000	2895.38	3.15	261.62	0.00	40°11'18.532"N	104°58'38.154"W	0.00	
3017.00†	10.000	0.000	2993.86	3.35	278.99	0.00	40°11'18.704"N	104°58'38.154"W	0.00	
3117.00†	10.000	0.000	3092.35	3.56	296.35	0.00	40°11'18.876"N	104°58'38.154"W	0.00	
3217.00†	10.000	0.000	3190.83	3.77	313.72	0.00	40°11'19.047"N	104°58'38.154"W	0.00	
3317.00†	10.000	0.000	3289.31	3.98	331.08	0.00	40°11'19.219"N	104°58'38.154"W	0.00	
3417.00†	10.000	0.000	3387.79	4.19	348.45	0.00	40°11'19.390"N	104°58'38.154"W	0.00	
3517.00†	10.000	0.000	3486.27	4.40	365.81	0.00	40°11'19.562"N	104°58'38.154"W	0.00	
3546.17	10.000	0.000	3515.00	4.46	370.88	0.00	40°11'19.612"N	104°58'38.154"W	0.00	BEGIN DROP
3617.00†	8.583	0.000	3584.89	4.60	382.32	0.00	40°11'19.725"N	104°58'38.154"W	2.00	
3666.60†	7.592	0.000	3634.00	4.68	389.29	0.00	40°11'19.794"N	104°58'38.154"W	2.00	Parkman
3717.00†	6.583	0.000	3684.01	4.76	395.51	0.00	40°11'19.855"N	104°58'38.154"W	2.00	
3817.00†	4.583	0.000	3783.54	4.87	405.24	0.00	40°11'19.952"N	104°58'38.154"W	2.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	2.583	0.000	3883.33	4.95	411.49	0.00	40°11'20.013"N	104°58'38.154"W	2.00	
4017.00†	0.583	0.000	3983.29	4.98	414.25	0.00	40°11'20.041"N	104°58'38.154"W	2.00	
4046.17	0.000	89.311	4012.47	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	2.00	END DROP
4065.71†	0.000	89.311	4032.00	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	Sussex
4117.00†	0.000	89.311	4083.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4217.00†	0.000	89.311	4183.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4317.00†	0.000	89.311	4283.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4417.00†	0.000	89.311	4383.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4517.00†	0.000	89.311	4483.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4617.00†	0.000	89.311	4583.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4717.00†	0.000	89.311	4683.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4817.00†	0.000	89.311	4783.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
4917.00†	0.000	89.311	4883.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5017.00†	0.000	89.311	4983.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5117.00†	0.000	89.311	5083.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5217.00†	0.000	89.311	5183.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5317.00†	0.000	89.311	5283.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5417.00†	0.000	89.311	5383.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5517.00†	0.000	89.311	5483.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5617.00†	0.000	89.311	5583.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5717.00†	0.000	89.311	5683.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5817.00†	0.000	89.311	5783.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
5917.00†	0.000	89.311	5883.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6017.00†	0.000	89.311	5983.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6117.00†	0.000	89.311	6083.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6217.00†	0.000	89.311	6183.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6317.00†	0.000	89.311	6283.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6417.00†	0.000	89.311	6383.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6517.00†	0.000	89.311	6483.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6613.78†	0.000	89.311	6580.07	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	4 1/2" LINER TOP
6617.00†	0.000	89.311	6583.29	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	
6713.78	0.000	89.311	6680.08	4.98	414.40	0.00	40°11'20.042"N	104°58'38.154"W	0.00	KOP, BUILD @ 10°/100'
6717.00†	0.322	89.311	6683.29	4.99	414.40	0.01	40°11'20.042"N	104°58'38.154"W	10.00	
6817.00†	10.322	89.311	6782.73	14.25	414.51	9.27	40°11'20.043"N	104°58'38.035"W	10.00	
6917.00†	20.322	89.311	6879.06	40.64	414.83	35.66	40°11'20.046"N	104°58'37.695"W	10.00	
6959.14†	24.535	89.311	6918.00	56.72	415.02	51.73	40°11'20.048"N	104°58'37.487"W	10.00	Sharon Springs
7017.00†	30.322	89.311	6969.33	83.36	415.34	78.37	40°11'20.051"N	104°58'37.144"W	10.00	
7048.41†	33.463	89.311	6996.00	99.95	415.54	94.96	40°11'20.053"N	104°58'36.930"W	10.00	Niobrara A
7110.70†	39.692	89.311	7046.00	137.06	415.99	132.06	40°11'20.058"N	104°58'36.452"W	10.00	Niobrara B
7117.00†	40.322	89.311	7050.82	141.10	416.04	136.11	40°11'20.058"N	104°58'36.400"W	10.00	
7191.00†	47.722	89.311	7104.00	192.50	416.66	187.50	40°11'20.064"N	104°58'35.738"W	10.00	Niobrara C
7217.00†	50.322	89.311	7121.05	212.12	416.89	207.12	40°11'20.067"N	104°58'35.485"W	10.00	
7317.00†	60.322	89.311	7177.87	294.25	417.88	289.25	40°11'20.076"N	104°58'34.427"W	10.00	
7417.00†	70.322	89.311	7219.57	385.00	418.97	379.99	40°11'20.087"N	104°58'33.258"W	10.00	
7443.79†	73.001	89.311	7228.00	410.43	419.28	405.42	40°11'20.090"N	104°58'32.930"W	10.00	Fort Hays

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7517.00†	80.322	89.311	7244.88	481.62	420.13	476.60	40°11'20.099"N	104°58'32.013"W	10.00	
7537.78†	82.400	89.311	7248.00	502.16	420.38	497.14	40°11'20.101"N	104°58'31.748"W	10.00	Codell
7607.63	89.384	89.311	7253.00	571.78	421.22	566.76	40°11'20.109"N	104°58'30.851"W	10.00	LANDING POINT
7617.00†	89.384	89.311	7253.10	581.16	421.33	576.13	40°11'20.111"N	104°58'30.730"W	0.00	
7717.00†	89.384	89.311	7254.18	681.15	422.53	676.12	40°11'20.122"N	104°58'29.442"W	0.00	
7817.00†	89.384	89.311	7255.25	781.14	423.74	776.11	40°11'20.134"N	104°58'28.154"W	0.00	
7917.00†	89.384	89.311	7256.33	881.14	424.94	876.09	40°11'20.146"N	104°58'26.865"W	0.00	
8017.00†	89.384	89.311	7257.40	981.13	426.14	976.08	40°11'20.158"N	104°58'25.577"W	0.00	
8117.00†	89.384	89.311	7258.48	1081.13	427.35	1076.07	40°11'20.170"N	104°58'24.289"W	0.00	
8217.00†	89.384	89.311	7259.55	1181.12	428.55	1176.05	40°11'20.182"N	104°58'23.000"W	0.00	
8317.00†	89.384	89.311	7260.63	1281.12	429.75	1276.04	40°11'20.193"N	104°58'21.712"W	0.00	
8417.00†	89.384	89.311	7261.70	1381.11	430.95	1376.03	40°11'20.205"N	104°58'20.424"W	0.00	
8517.00†	89.384	89.311	7262.78	1481.10	432.16	1476.01	40°11'20.217"N	104°58'19.135"W	0.00	
8617.00†	89.384	89.311	7263.85	1581.10	433.36	1576.00	40°11'20.229"N	104°58'17.847"W	0.00	
8717.00†	89.384	89.311	7264.93	1681.09	434.56	1675.99	40°11'20.241"N	104°58'16.559"W	0.00	
8817.00†	89.384	89.311	7266.00	1781.09	435.76	1775.97	40°11'20.253"N	104°58'15.270"W	0.00	
8917.00†	89.384	89.311	7267.08	1881.08	436.97	1875.96	40°11'20.264"N	104°58'13.982"W	0.00	
9017.00†	89.384	89.311	7268.15	1981.08	438.17	1975.95	40°11'20.276"N	104°58'12.693"W	0.00	
9117.00†	89.384	89.311	7269.23	2081.07	439.37	2075.94	40°11'20.288"N	104°58'11.405"W	0.00	
9217.00†	89.384	89.311	7270.30	2181.06	440.57	2175.92	40°11'20.300"N	104°58'10.117"W	0.00	
9317.00†	89.384	89.311	7271.38	2281.06	441.78	2275.91	40°11'20.312"N	104°58'08.828"W	0.00	
9417.00†	89.384	89.311	7272.45	2381.05	442.98	2375.90	40°11'20.323"N	104°58'07.540"W	0.00	
9517.00†	89.384	89.311	7273.53	2481.05	444.18	2475.88	40°11'20.335"N	104°58'06.252"W	0.00	
9617.00†	89.384	89.311	7274.60	2581.04	445.39	2575.87	40°11'20.347"N	104°58'04.963"W	0.00	
9717.00†	89.384	89.311	7275.68	2681.03	446.59	2675.86	40°11'20.359"N	104°58'03.675"W	0.00	
9817.00†	89.384	89.311	7276.75	2781.03	447.79	2775.84	40°11'20.371"N	104°58'02.387"W	0.00	
9917.00†	89.384	89.311	7277.83	2881.02	448.99	2875.83	40°11'20.382"N	104°58'01.098"W	0.00	
10017.00†	89.384	89.311	7278.90	2981.02	450.20	2975.82	40°11'20.394"N	104°57'59.810"W	0.00	
10117.00†	89.384	89.311	7279.98	3081.01	451.40	3075.81	40°11'20.406"N	104°57'58.522"W	0.00	
10217.00†	89.384	89.311	7281.05	3181.01	452.60	3175.79	40°11'20.418"N	104°57'57.233"W	0.00	
10317.00†	89.384	89.311	7282.13	3281.00	453.80	3275.78	40°11'20.429"N	104°57'55.945"W	0.00	
10417.00†	89.384	89.311	7283.20	3380.99	455.01	3375.77	40°11'20.441"N	104°57'54.656"W	0.00	
10517.00†	89.384	89.311	7284.28	3480.99	456.21	3475.75	40°11'20.453"N	104°57'53.368"W	0.00	
10617.00†	89.384	89.311	7285.35	3580.98	457.41	3575.74	40°11'20.465"N	104°57'52.080"W	0.00	
10717.00†	89.384	89.311	7286.43	3680.98	458.61	3675.73	40°11'20.476"N	104°57'50.791"W	0.00	
10817.00†	89.384	89.311	7287.50	3780.97	459.82	3775.71	40°11'20.488"N	104°57'49.503"W	0.00	
10917.00†	89.384	89.311	7288.58	3880.97	461.02	3875.70	40°11'20.500"N	104°57'48.215"W	0.00	
11017.00†	89.384	89.311	7289.65	3980.96	462.22	3975.69	40°11'20.512"N	104°57'46.926"W	0.00	
11117.00†	89.384	89.311	7290.73	4080.95	463.42	4075.68	40°11'20.523"N	104°57'45.638"W	0.00	
11217.00†	89.384	89.311	7291.80	4180.95	464.63	4175.66	40°11'20.535"N	104°57'44.350"W	0.00	
11317.00†	89.384	89.311	7292.88	4280.94	465.83	4275.65	40°11'20.547"N	104°57'43.061"W	0.00	
11417.00†	89.384	89.311	7293.95	4380.94	467.03	4375.64	40°11'20.558"N	104°57'41.773"W	0.00	
11517.00†	89.384	89.311	7295.03	4480.93	468.24	4475.62	40°11'20.570"N	104°57'40.485"W	0.00	
11617.00†	89.384	89.311	7296.10	4580.92	469.44	4575.61	40°11'20.582"N	104°57'39.196"W	0.00	
11717.00†	89.384	89.311	7297.18	4680.92	470.64	4675.60	40°11'20.594"N	104°57'37.908"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH DATA (187 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11817.00†	89.384	89.311	7298.25	4780.91	471.84	4775.58	40°11'20.605"N	104°57'36.619"W	0.00	
11917.00†	89.384	89.311	7299.33	4880.91	473.05	4875.57	40°11'20.617"N	104°57'35.331"W	0.00	
12017.00†	89.384	89.311	7300.40	4980.90	474.25	4975.56	40°11'20.629"N	104°57'34.043"W	0.00	
12117.00†	89.384	89.311	7301.48	5080.90	475.45	5075.55	40°11'20.640"N	104°57'32.754"W	0.00	
12217.00†	89.384	89.311	7302.55	5180.89	476.65	5175.53	40°11'20.652"N	104°57'31.466"W	0.00	
12317.00†	89.384	89.311	7303.63	5280.88	477.86	5275.52	40°11'20.664"N	104°57'30.178"W	0.00	
12417.00†	89.384	89.311	7304.70	5380.88	479.06	5375.51	40°11'20.675"N	104°57'28.889"W	0.00	
12517.00†	89.384	89.311	7305.78	5480.87	480.26	5475.49	40°11'20.687"N	104°57'27.601"W	0.00	
12617.00†	89.384	89.311	7306.85	5580.87	481.46	5575.48	40°11'20.699"N	104°57'26.313"W	0.00	
12717.00†	89.384	89.311	7307.93	5680.86	482.67	5675.47	40°11'20.710"N	104°57'25.024"W	0.00	
12817.00†	89.384	89.311	7309.00	5780.86	483.87	5775.45	40°11'20.722"N	104°57'23.736"W	0.00	
12917.00†	89.384	89.311	7310.08	5880.85	485.07	5875.44	40°11'20.734"N	104°57'22.447"W	0.00	
13017.00†	89.384	89.311	7311.15	5980.84	486.28	5975.43	40°11'20.745"N	104°57'21.159"W	0.00	
13117.00†	89.384	89.311	7312.23	6080.84	487.48	6075.42	40°11'20.757"N	104°57'19.871"W	0.00	
13217.00†	89.384	89.311	7313.30	6180.83	488.68	6175.40	40°11'20.769"N	104°57'18.582"W	0.00	
13317.00†	89.384	89.311	7314.38	6280.83	489.88	6275.39	40°11'20.780"N	104°57'17.294"W	0.00	
13417.00†	89.384	89.311	7315.45	6380.82	491.09	6375.38	40°11'20.792"N	104°57'16.006"W	0.00	
13517.00†	89.384	89.311	7316.53	6480.81	492.29	6475.36	40°11'20.803"N	104°57'14.717"W	0.00	
13617.00†	89.384	89.311	7317.60	6580.81	493.49	6575.35	40°11'20.815"N	104°57'13.429"W	0.00	
13717.00†	89.384	89.311	7318.68	6680.80	494.69	6675.34	40°11'20.827"N	104°57'12.141"W	0.00	
13817.00†	89.384	89.311	7319.75	6780.80	495.90	6775.32	40°11'20.838"N	104°57'10.852"W	0.00	
13917.00†	89.384	89.311	7320.83	6880.79	497.10	6875.31	40°11'20.850"N	104°57'09.564"W	0.00	
14017.00†	89.384	89.311	7321.90	6980.79	498.30	6975.30	40°11'20.862"N	104°57'08.275"W	0.00	
14117.00†	89.384	89.311	7322.98	7080.78	499.50	7075.29	40°11'20.873"N	104°57'06.987"W	0.00	
14217.00†	89.384	89.311	7324.05	7180.77	500.71	7175.27	40°11'20.885"N	104°57'05.699"W	0.00	
14317.00†	89.384	89.311	7325.13	7280.77	501.91	7275.26	40°11'20.896"N	104°57'04.410"W	0.00	
14417.00†	89.384	89.311	7326.20	7380.76	503.11	7375.25	40°11'20.908"N	104°57'03.122"W	0.00	
14517.00†	89.384	89.311	7327.28	7480.76	504.32	7475.23	40°11'20.919"N	104°57'01.834"W	0.00	
14617.00†	89.384	89.311	7328.35	7580.75	505.52	7575.22	40°11'20.931"N	104°57'00.545"W	0.00	
14717.00†	89.384	89.311	7329.43	7680.75	506.72	7675.21	40°11'20.943"N	104°56'59.257"W	0.00	
14817.00†	89.384	89.311	7330.50	7780.74	507.92	7775.19	40°11'20.954"N	104°56'57.969"W	0.00	
14917.00†	89.384	89.311	7331.58	7880.73	509.13	7875.18	40°11'20.966"N	104°56'56.680"W	0.00	
15017.00†	89.384	89.311	7332.65	7980.73	510.33	7975.17	40°11'20.977"N	104°56'55.392"W	0.00	
15117.00†	89.384	89.311	7333.73	8080.72	511.53	8075.16	40°11'20.989"N	104°56'54.104"W	0.00	
15217.00†	89.384	89.311	7334.80	8180.72	512.73	8175.14	40°11'21.001"N	104°56'52.815"W	0.00	
15317.00†	89.384	89.311	7335.88	8280.71	513.94	8275.13	40°11'21.012"N	104°56'51.527"W	0.00	
15417.00†	89.384	89.311	7336.95	8380.71	515.14	8375.12	40°11'21.024"N	104°56'50.238"W	0.00	
15517.00†	89.384	89.311	7338.03	8480.70	516.34	8475.10	40°11'21.035"N	104°56'48.950"W	0.00	
15617.00†	89.384	89.311	7339.10	8580.69	517.54	8575.09	40°11'21.047"N	104°56'47.662"W	0.00	
15717.00†	89.384	89.311	7340.18	8680.69	518.75	8675.08	40°11'21.058"N	104°56'46.373"W	0.00	
15817.00†	89.384	89.311	7341.25	8780.68	519.95	8775.06	40°11'21.070"N	104°56'45.085"W	0.00	
15917.00†	89.384	89.311	7342.33	8880.68	521.15	8875.05	40°11'21.081"N	104°56'43.797"W	0.00	
16017.00†	89.384	89.311	7343.40	8980.67	522.36	8975.04	40°11'21.093"N	104°56'42.508"W	0.00	
16117.00†	89.384	89.311	7344.48	9080.66	523.56	9075.03	40°11'21.104"N	104°56'41.220"W	0.00	
16217.00†	89.384	89.311	7345.55	9180.66	524.76	9175.01	40°11'21.116"N	104°56'39.931"W	0.00	

REFERENCE WELLPATH IDENTIFICATION

Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16317.00†	89.384	89.311	7346.63	9280.65	525.96	9275.00	40°11'21.127"N	104°56'38.643"W	0.00	
16417.00†	89.384	89.311	7347.70	9380.65	527.17	9374.99	40°11'21.139"N	104°56'37.355"W	0.00	
16517.00†	89.384	89.311	7348.78	9480.64	528.37	9474.97	40°11'21.150"N	104°56'36.066"W	0.00	
16617.00†	89.384	89.311	7349.85	9580.64	529.57	9574.96	40°11'21.162"N	104°56'34.778"W	0.00	
16717.00†	89.384	89.311	7350.93	9680.63	530.77	9674.95	40°11'21.173"N	104°56'33.490"W	0.00	
16817.00†	89.384	89.311	7352.00	9780.62	531.98	9774.93	40°11'21.185"N	104°56'32.201"W	0.00	
16909.81	89.384	89.311	7353.00 ¹	9873.43	533.09	9867.73	40°11'21.196"N	104°56'31.006"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS -

Ref Wellbore: HANSEN STATE 26C-36HZ PWB Ref Wellpath: HANSEN STATE 26C-36HZ (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	1061.00	1044.00	17.00	1061.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	1061.00	1044.00	17.00	1061.00	0.00	0.00	0.00	0.00
8.75in Open Hole	1061.00	7607.63	6546.63	1061.00	7253.00	0.00	0.00	421.22	566.76
7in Casing Intermediate	17.00	7607.63	7590.63	17.00	7253.00	0.00	0.00	421.22	566.76
6.125in Open Hole	7607.63	16909.81	9302.18	7253.00	NA	421.22	566.76	NA	NA
4.5in Casing Production	17.00	16909.81	16892.81	17.00	NA	0.00	0.00	NA	NA

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.35-T3N-R68W SECTION LINES		0.00	-10.22	28.25	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
SEC.36-T3N-R68W SECTION LINES		0.00	-10.22	28.25	3146070.35	1311665.15	40°11'15.846"N	104°58'37.790"W	polygon
HANSEN 26C-36HZ LAND BOX		7353.00	0.00	0.00	3146042.04	1311675.21	40°11'15.947"N	104°58'38.154"W	polygon
1) HANSEN STATE 26C-36HZ BHL ON PLAT (290'FNL & 50'FEL, SEC.36) REV-1	16909.81	7353.00	533.09	9867.73	3155906.01	1312266.43	40°11'21.196"N	104°56'31.006"W	point

SURVEY PROGRAM - Ref Wellbore: HANSEN STATE 26C-36HZ PWB Ref Wellpath: HANSEN STATE 26C-36HZ (PERMIT REV-1) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	1300.00	Generic gyro - continuous (Standard)		HANSEN STATE 26C-36HZ PWB
1300.00	7607.63	NaviTrak (IFR)		HANSEN STATE 26C-36HZ PWB
7607.63	16909.81	NaviTrak (IFR)		HANSEN STATE 26C-36HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#18 HANSEN STATE 26C-36HZ (711'FNL & 665'FWL, SEC.35)
Area	COLORADO	Well	HANSEN STATE 26C-36HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	HANSEN STATE 26C-36HZ PWB
Facility	SEC.35-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1011.00	0.000	0.000	1011.00	Fox Hills Marker
3666.60	7.592	0.000	3634.00	Parkman
4065.71	0.000	89.311	4032.00	Sussex
6613.78	0.000	89.311	6580.07	4 1/2" LINER TOP
6959.14	24.535	89.311	6918.00	Sharon Springs
7048.41	33.463	89.311	6996.00	Niobrara A
7110.70	39.692	89.311	7046.00	Niobrara B
7191.00	47.722	89.311	7104.00	Niobrara C
7443.79	73.001	89.311	7228.00	Fort Hays
7537.78	82.400	89.311	7248.00	Codell

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	0.000	17.00	TIE-ON
1161.00	0.000	0.000	1161.00	BEGIN NUDGE
1661.00	10.000	0.000	1658.47	END NUDGE
3546.17	10.000	0.000	3515.00	BEGIN DROP
4046.17	0.000	89.311	4012.47	END DROP
6713.78	0.000	89.311	6680.08	KOP, BUILD @ 10°/100'
7607.63	89.384	89.311	7253.00	LANDING POINT
16909.81	89.384	89.311	7353.00	TOTAL DEPTH