

# HRM Resources

Location	DJ Basin	Slot	Slot 4
Field	WATTENBERG	Well	Lehl 30-4
Installation	Lehl Pad - Rev 2 - 2016-07-15	Wellbore	Lehl 30-4 (PWB)

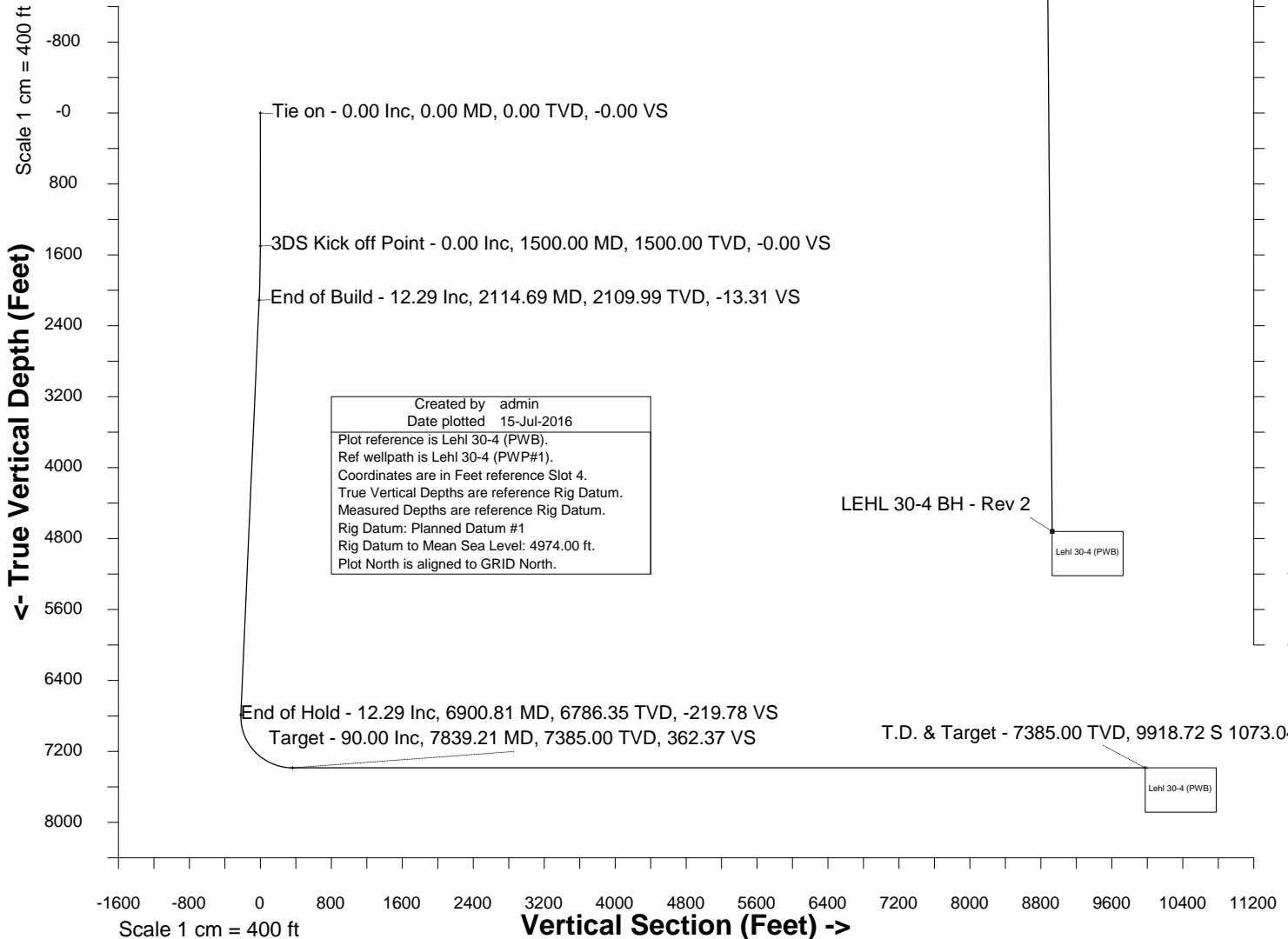
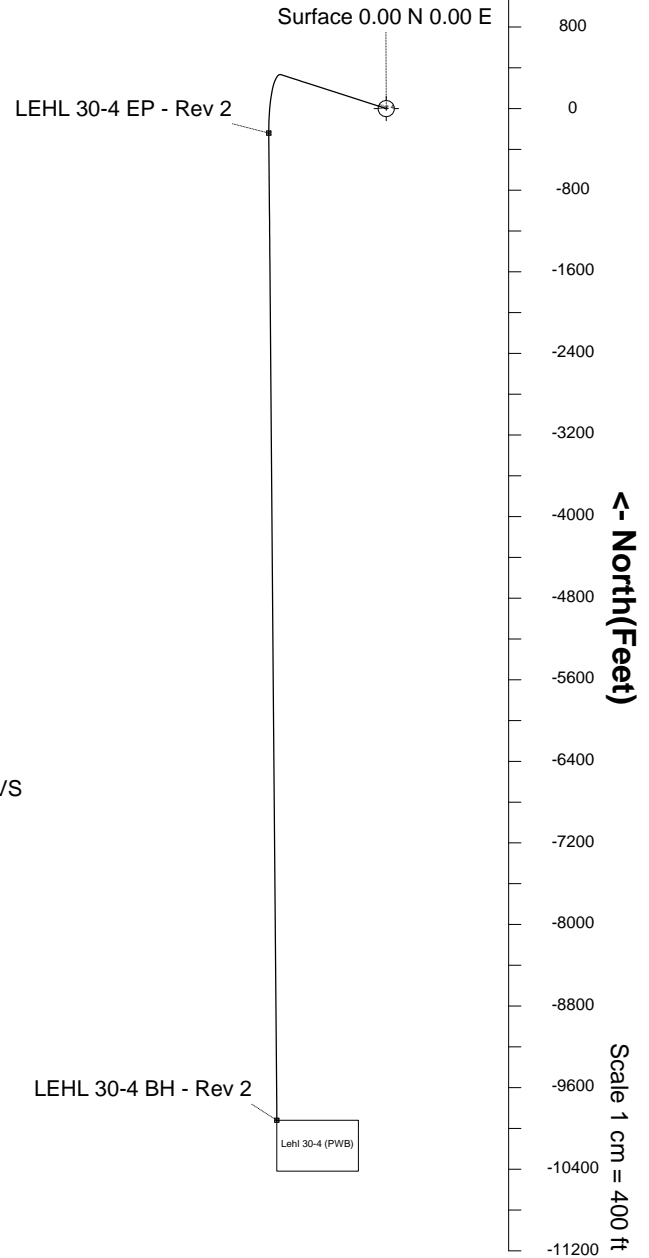
Scale 1 cm = 400 ft

East (Feet) ->

-2400 -1600 -800 0 800

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	S 0.00	W 0.00		-0.00
KOP	1500.00	0.00	287.86	1500.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2114.69	12.29	287.86	2109.99	N 20.15	W 62.53	2.00	-13.31
End of Hold	6900.81	12.29	287.86	6786.35	N 332.76	W 1032.48	0.00	-219.78
Target LEHL 3... Rev 2	7839.21	90.00	179.53	7385.00	S 239.90	W 1151.67	10.00	362.37
T.D. & Target LEH...v 2	17518.35	90.00	179.53	7385.00	S 9918.72	W 1073.04	0.00	9976.59



Created by admin  
Date plotted 15-Jul-2016  
Plot reference is Lehl 30-4 (PWB).  
Ref wellpath is Lehl 30-4 (PWP#1).  
Coordinates are in Feet reference Slot 4.  
True Vertical Depths are reference Rig Datum.  
Measured Depths are reference Rig Datum.  
Rig Datum: Planned Datum #1  
Rig Datum to Mean Sea Level: 4974.00 ft.  
Plot North is aligned to GRID North.

Azimuth 186.17 with reference 0.00 N, 0.00 E from Slot 4



SYSDRILL  
Well Design Combined Report  
Wellbore: Lehl 30-4 (PWB)



### Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Slot 4	40.02899000	-104.69843000	1254421.6656	3224464.1977	47.24N	5701.48E	0.00

### Declination

Date	Source	Time
Jun-9-2016	EMM-2015 [2000.0-2020.0]	15:46

### Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Lehl Pad - Rev 2 - 2016-07-15	40.02900000	-104.71878983	1254374.4255	3218762.9369	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

### Summary Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1254421.67	3224464.20
1500.00	0.00	287.860	1500.00	0.00N	0.00E	==>	0.00	1254421.67	3224464.20
2114.69	12.29	287.860	2109.99	20.15N	62.53W	2.00	-13.31	1254441.82	3224401.67
6900.81	12.29	287.860	6786.35	332.76N	1032.48W	==>	-219.78	1254754.42	3223431.75
7839.21	90.00	179.530	7385.00	239.90S	1151.67W	10.00	362.37	1254181.78	3223312.57
17518.35	90.00	179.530	7385.00	9918.72S	1073.04W	==>	9976.59	1244503.32	3223391.20

### Interpolated Wellpath

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	Slot Datum
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	
1400.00	0.00	0.000	1400.00	0.00N	0.00E	==>	0.00	
1500.00	0.00	287.860	1500.00	0.00N	0.00E	==>	0.00	
1600.00	2.00	287.860	1599.98	0.54N	1.66W	2.00	-0.35	
1700.00	4.00	287.860	1699.84	2.14N	6.64W	2.00	-1.41	
1800.00	6.00	287.860	1799.45	4.81N	14.94W	2.00	-3.18	
1900.00	8.00	287.860	1898.70	8.55N	26.54W	2.00	-5.65	
2000.00	10.00	287.860	1997.47	13.35N	41.42W	2.00	-8.82	
2100.00	12.00	287.860	2095.62	19.20N	59.58W	2.00	-12.68	
2200.00	12.29	287.860	2193.34	25.72N	79.82W	==>	-16.99	
2300.00	12.29	287.860	2291.04	32.26N	100.08W	==>	-21.30	
2400.00	12.29	287.860	2388.75	38.79N	120.35W	==>	-25.62	
2500.00	12.29	287.860	2486.46	45.32N	140.61W	==>	-29.93	
2600.00	12.29	287.860	2584.17	51.85N	160.88W	==>	-34.25	
2700.00	12.29	287.860	2681.87	58.38N	181.15W	==>	-38.56	
2800.00	12.29	287.860	2779.58	64.91N	201.41W	==>	-42.87	
2900.00	12.29	287.860	2877.29	71.45N	221.68W	==>	-47.19	
3000.00	12.29	287.860	2974.99	77.98N	241.94W	==>	-51.50	
3100.00	12.29	287.860	3072.70	84.51N	262.21W	==>	-55.82	
3200.00	12.29	287.860	3170.41	91.04N	282.48W	==>	-60.13	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4974.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 186.170 degrees  
Bottom hole distance is 9976.59 Feet on azimuth 186.17 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by IPT  
Date Printed: 15-Jul-2016



SYS DRILL  
Well Design Combined Report  
Wellbore: Lehl 30-4 (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
3300.00	12.29	287.860	3268.11	97.57N	302.74W	==>	-64.44	
3400.00	12.29	287.860	3365.82	104.10N	323.01W	==>	-68.76	
3500.00	12.29	287.860	3463.53	110.64N	343.27W	==>	-73.07	
3600.00	12.29	287.860	3561.23	117.17N	363.54W	==>	-77.39	
3700.00	12.29	287.860	3658.94	123.70N	383.81W	==>	-81.70	
3800.00	12.29	287.860	3756.65	130.23N	404.07W	==>	-86.01	
3900.00	12.29	287.860	3854.35	136.76N	424.34W	==>	-90.33	
4000.00	12.29	287.860	3952.06	143.29N	444.60W	==>	-94.64	
4100.00	12.29	287.860	4049.77	149.83N	464.87W	==>	-98.96	
4200.00	12.29	287.860	4147.47	156.36N	485.14W	==>	-103.27	
4300.00	12.29	287.860	4245.18	162.89N	505.40W	==>	-107.58	
4400.00	12.29	287.860	4342.89	169.42N	525.67W	==>	-111.90	
4500.00	12.29	287.860	4440.60	175.95N	545.93W	==>	-116.21	
4600.00	12.29	287.860	4538.30	182.48N	566.20W	==>	-120.53	
4700.00	12.29	287.860	4636.01	189.01N	586.47W	==>	-124.84	
4800.00	12.29	287.860	4733.72	195.55N	606.73W	==>	-129.15	
4900.00	12.29	287.860	4831.42	202.08N	627.00W	==>	-133.47	
5000.00	12.29	287.860	4929.13	208.61N	647.26W	==>	-137.78	
5100.00	12.29	287.860	5026.84	215.14N	667.53W	==>	-142.10	
5200.00	12.29	287.860	5124.54	221.67N	687.80W	==>	-146.41	
5300.00	12.29	287.860	5222.25	228.20N	708.06W	==>	-150.73	
5400.00	12.29	287.860	5319.96	234.74N	728.33W	==>	-155.04	
5500.00	12.29	287.860	5417.66	241.27N	748.59W	==>	-159.35	
5600.00	12.29	287.860	5515.37	247.80N	768.86W	==>	-163.67	
5700.00	12.29	287.860	5613.08	254.33N	789.13W	==>	-167.98	
5800.00	12.29	287.860	5710.78	260.86N	809.39W	==>	-172.30	
5900.00	12.29	287.860	5808.49	267.39N	829.66W	==>	-176.61	
6000.00	12.29	287.860	5906.20	273.93N	849.92W	==>	-180.92	
6100.00	12.29	287.860	6003.90	280.46N	870.19W	==>	-185.24	
6200.00	12.29	287.860	6101.61	286.99N	890.46W	==>	-189.55	
6300.00	12.29	287.860	6199.32	293.52N	910.72W	==>	-193.87	
6400.00	12.29	287.860	6297.03	300.05N	930.99W	==>	-198.18	
6500.00	12.29	287.860	6394.73	306.58N	951.25W	==>	-202.49	
6600.00	12.29	287.860	6492.44	313.12N	971.52W	==>	-206.81	
6700.00	12.29	287.860	6590.15	319.65N	991.79W	==>	-211.12	
6800.00	12.29	287.860	6687.85	326.18N	1012.05W	==>	-215.44	
6900.00	12.29	287.860	6785.56	332.71N	1032.32W	==>	-219.75	
7000.00	13.15	241.800	6883.34	330.66N	1052.53W	10.00	-215.54	
7100.00	19.79	214.630	6979.32	311.31N	1072.23W	10.00	-194.18	
7200.00	28.41	202.020	7070.58	275.24N	1090.82W	10.00	-156.32	
7300.00	37.68	195.070	7154.34	223.54N	1107.72W	10.00	-103.10	
7400.00	47.21	190.570	7228.07	157.79N	1122.44W	10.00	-36.15	
7500.00	56.87	187.290	7289.51	79.99N	1134.52W	10.00	42.50	
7600.00	66.61	184.670	7336.81	7.51S	1143.59W	10.00	130.46	
7700.00	76.37	182.410	7368.52	102.03S	1149.39W	10.00	225.06	
7800.00	86.16	180.330	7383.69	200.72S	1151.72W	10.00	323.43	
7900.00	90.00	179.530	7385.00	300.69S	1151.18W	==>	422.76	
8000.00	90.00	179.530	7385.00	400.68S	1150.37W	==>	522.09	
8100.00	90.00	179.530	7385.00	500.68S	1149.56W	==>	621.42	
8200.00	90.00	179.530	7385.00	600.68S	1148.74W	==>	720.75	
8300.00	90.00	179.530	7385.00	700.67S	1147.93W	==>	820.08	
8400.00	90.00	179.530	7385.00	800.67S	1147.12W	==>	919.41	
8500.00	90.00	179.530	7385.00	900.67S	1146.31W	==>	1018.73	
8600.00	90.00	179.530	7385.00	1000.66S	1145.49W	==>	1118.06	
8700.00	90.00	179.530	7385.00	1100.66S	1144.68W	==>	1217.39	
8800.00	90.00	179.530	7385.00	1200.66S	1143.87W	==>	1316.72	
8900.00	90.00	179.530	7385.00	1300.65S	1143.06W	==>	1416.05	
9000.00	90.00	179.530	7385.00	1400.65S	1142.24W	==>	1515.38	
9100.00	90.00	179.530	7385.00	1500.65S	1141.43W	==>	1614.71	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4974.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 186.170 degrees  
Bottom hole distance is 9976.59 Feet on azimuth 186.17 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by IPT  
Date Printed: 15-Jul-2016

Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
9200.00	90.00	179.530	7385.00	1600.64S	1140.62W	==>	1714.04	
9300.00	90.00	179.530	7385.00	1700.64S	1139.81W	==>	1813.37	
9400.00	90.00	179.530	7385.00	1800.64S	1138.99W	==>	1912.70	
9500.00	90.00	179.530	7385.00	1900.63S	1138.18W	==>	2012.03	
9600.00	90.00	179.530	7385.00	2000.63S	1137.37W	==>	2111.36	
9700.00	90.00	179.530	7385.00	2100.63S	1136.56W	==>	2210.69	
9800.00	90.00	179.530	7385.00	2200.63S	1135.74W	==>	2310.01	
9900.00	90.00	179.530	7385.00	2300.62S	1134.93W	==>	2409.34	
10000.00	90.00	179.530	7385.00	2400.62S	1134.12W	==>	2508.67	
10100.00	90.00	179.530	7385.00	2500.62S	1133.31W	==>	2608.00	
10200.00	90.00	179.530	7385.00	2600.61S	1132.49W	==>	2707.33	
10300.00	90.00	179.530	7385.00	2700.61S	1131.68W	==>	2806.66	
10400.00	90.00	179.530	7385.00	2800.61S	1130.87W	==>	2905.99	
10500.00	90.00	179.530	7385.00	2900.60S	1130.06W	==>	3005.32	
10600.00	90.00	179.530	7385.00	3000.60S	1129.24W	==>	3104.65	
10700.00	90.00	179.530	7385.00	3100.60S	1128.43W	==>	3203.98	
10800.00	90.00	179.530	7385.00	3200.59S	1127.62W	==>	3303.31	
10900.00	90.00	179.530	7385.00	3300.59S	1126.81W	==>	3402.64	
11000.00	90.00	179.530	7385.00	3400.59S	1125.99W	==>	3501.97	
11100.00	90.00	179.530	7385.00	3500.58S	1125.18W	==>	3601.30	
11200.00	90.00	179.530	7385.00	3600.58S	1124.37W	==>	3700.62	
11300.00	90.00	179.530	7385.00	3700.58S	1123.56W	==>	3799.95	
11400.00	90.00	179.530	7385.00	3800.57S	1122.75W	==>	3899.28	
11500.00	90.00	179.530	7385.00	3900.57S	1121.93W	==>	3998.61	
11600.00	90.00	179.530	7385.00	4000.57S	1121.12W	==>	4097.94	
11700.00	90.00	179.530	7385.00	4100.56S	1120.31W	==>	4197.27	
11800.00	90.00	179.530	7385.00	4200.56S	1119.50W	==>	4296.60	
11900.00	90.00	179.530	7385.00	4300.56S	1118.68W	==>	4395.93	
12000.00	90.00	179.530	7385.00	4400.55S	1117.87W	==>	4495.26	
12100.00	90.00	179.530	7385.00	4500.55S	1117.06W	==>	4594.59	
12200.00	90.00	179.530	7385.00	4600.55S	1116.25W	==>	4693.92	
12300.00	90.00	179.530	7385.00	4700.54S	1115.43W	==>	4793.25	
12400.00	90.00	179.530	7385.00	4800.54S	1114.62W	==>	4892.58	
12500.00	90.00	179.530	7385.00	4900.54S	1113.81W	==>	4991.90	
12600.00	90.00	179.530	7385.00	5000.53S	1113.00W	==>	5091.23	
12700.00	90.00	179.530	7385.00	5100.53S	1112.18W	==>	5190.56	
12800.00	90.00	179.530	7385.00	5200.53S	1111.37W	==>	5289.89	
12900.00	90.00	179.530	7385.00	5300.52S	1110.56W	==>	5389.22	
13000.00	90.00	179.530	7385.00	5400.52S	1109.75W	==>	5488.55	
13100.00	90.00	179.530	7385.00	5500.52S	1108.93W	==>	5587.88	
13200.00	90.00	179.530	7385.00	5600.51S	1108.12W	==>	5687.21	
13300.00	90.00	179.530	7385.00	5700.51S	1107.31W	==>	5786.54	
13400.00	90.00	179.530	7385.00	5800.51S	1106.50W	==>	5885.87	
13500.00	90.00	179.530	7385.00	5900.50S	1105.68W	==>	5985.20	
13600.00	90.00	179.530	7385.00	6000.50S	1104.87W	==>	6084.53	
13700.00	90.00	179.530	7385.00	6100.50S	1104.06W	==>	6183.86	
13800.00	90.00	179.530	7385.00	6200.49S	1103.25W	==>	6283.18	
13900.00	90.00	179.530	7385.00	6300.49S	1102.43W	==>	6382.51	
14000.00	90.00	179.530	7385.00	6400.49S	1101.62W	==>	6481.84	
14100.00	90.00	179.530	7385.00	6500.48S	1100.81W	==>	6581.17	
14200.00	90.00	179.530	7385.00	6600.48S	1100.00W	==>	6680.50	
14300.00	90.00	179.530	7385.00	6700.48S	1099.18W	==>	6779.83	
14400.00	90.00	179.530	7385.00	6800.47S	1098.37W	==>	6879.16	
14500.00	90.00	179.530	7385.00	6900.47S	1097.56W	==>	6978.49	
14600.00	90.00	179.530	7385.00	7000.47S	1096.75W	==>	7077.82	
14700.00	90.00	179.530	7385.00	7100.46S	1095.93W	==>	7177.15	
14800.00	90.00	179.530	7385.00	7200.46S	1095.12W	==>	7276.48	
14900.00	90.00	179.530	7385.00	7300.46S	1094.31W	==>	7375.81	
15000.00	90.00	179.530	7385.00	7400.45S	1093.50W	==>	7475.14	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4974.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 186.170 degrees  
Bottom hole distance is 9976.59 Feet on azimuth 186.17 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by IPT  
Date Printed: 15-Jul-2016



SYS DRILL  
Well Design Combined Report  
Wellbore: Lehl 30-4 (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
15100.00	90.00	179.530	7385.00	7500.45S	1092.68W	==>	7574.46	
15200.00	90.00	179.530	7385.00	7600.45S	1091.87W	==>	7673.79	
15300.00	90.00	179.530	7385.00	7700.44S	1091.06W	==>	7773.12	
15400.00	90.00	179.530	7385.00	7800.44S	1090.25W	==>	7872.45	
15500.00	90.00	179.530	7385.00	7900.44S	1089.43W	==>	7971.78	
15600.00	90.00	179.530	7385.00	8000.43S	1088.62W	==>	8071.11	
15700.00	90.00	179.530	7385.00	8100.43S	1087.81W	==>	8170.44	
15800.00	90.00	179.530	7385.00	8200.43S	1087.00W	==>	8269.77	
15900.00	90.00	179.530	7385.00	8300.42S	1086.18W	==>	8369.10	
16000.00	90.00	179.530	7385.00	8400.42S	1085.37W	==>	8468.43	
16100.00	90.00	179.530	7385.00	8500.42S	1084.56W	==>	8567.76	
16200.00	90.00	179.530	7385.00	8600.41S	1083.75W	==>	8667.09	
16300.00	90.00	179.530	7385.00	8700.41S	1082.93W	==>	8766.42	
16400.00	90.00	179.530	7385.00	8800.41S	1082.12W	==>	8865.75	
16500.00	90.00	179.530	7385.00	8900.40S	1081.31W	==>	8965.07	
16600.00	90.00	179.530	7385.00	9000.40S	1080.50W	==>	9064.40	
16700.00	90.00	179.530	7385.00	9100.40S	1079.68W	==>	9163.73	
16800.00	90.00	179.530	7385.00	9200.39S	1078.87W	==>	9263.06	
16900.00	90.00	179.530	7385.00	9300.39S	1078.06W	==>	9362.39	
17000.00	90.00	179.530	7385.00	9400.39S	1077.25W	==>	9461.72	
17100.00	90.00	179.530	7385.00	9500.38S	1076.44W	==>	9561.05	
17200.00	90.00	179.530	7385.00	9600.38S	1075.62W	==>	9660.38	
17300.00	90.00	179.530	7385.00	9700.38S	1074.81W	==>	9759.71	
17400.00	90.00	179.530	7385.00	9800.37S	1074.00W	==>	9859.04	
17500.00	90.00	179.530	7385.00	9900.37S	1073.19W	==>	9958.37	
17518.35	90.00	179.530	7385.00	9918.72S	1073.04W	==>	9976.59	

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4974.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 186.170 degrees  
Bottom hole distance is 9976.59 Feet on azimuth 186.17 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by IPT  
Date Printed: 15-Jul-2016



SYS DRILL  
Well Design Combined Report  
Wellbore: Lehl 30-4 (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
LEHL 30-4 BH - Rev 2	9918.72S	1073.04W	7385.00	40.00179000	-104.70258000	1244503.32	3223391.20
LEHL 30-4 EP - Rev 2	239.90S	1151.67W	7385.00	40.02836000	-104.70255000	1254181.78	3223312.57

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
505933	Planned	17518.35	7385.00	ISCWSA MWD	Rev 4 + SAG	

Notes



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: Lehl 30-4 (PWB)



Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Scan limit is calculated on CENTRE to CENTRE distance
Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore		
Name	Created	Last Revised
Lehl 30-4 (PWB)	Jun-13-2016	Jul-15-2016

Well		
Name	Government ID	Last Revised
Lehl 30-4		Jun-13-2016

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
Slot 4	40.02899000	-104.69843000	1254421.6656	3224464.1977	47.24N	5701.48E

Installation						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Easting	Northing	Coord System Name	North Alignment
Lehl Pad - Rev 2 - 2016-07-15	40.02900000	-104.71878983	3218762.9369	1254374.4255	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
Lehl 30-3	14.44	1509.19	1607.61	-2.63	1919.29	0.86	1853.67
Lehl 30-5	16.79	1533.52	7874.02	-2.59	2132.55	0.88	2103.33
Lehl 30-2	30.99	1509.19	1509.19	15.17	1656.82	1.52	17518.35
Lehl 30-6	33.60	1533.71	7874.02	14.86	2100.00	1.50	17518.35
Lehl 30-1	47.74	1509.19	1509.19	32.42	1558.40	1.97	17518.35
Lehl 30-7	50.40	1533.90	1906.80	31.83	2114.69	2.53	2165.35
Lehl 30-8	61.72	1500.00	1500.00				
W Sack-Dreyer 1	272.07	14691.23	14691.23	90.89	14681.76	1.50	14681.76
W Lutz 1	391.81	13391.66	13391.66	241.40	13418.64	2.59	13435.04
W Dreyer 1	413.11	16017.83	16017.83	199.24	16043.31	1.93	16043.31
MARGUERITE B LEHL #A-1	503.72	9257.45	9257.45	422.05	9284.78	6.01	9366.80
M B LEHL A #1	543.68	9362.76	9362.76	454.22	9383.20	5.94	9481.63
W Adam Ten 1-A	887.09	17332.14	17332.14	641.82	17332.14	3.62	17332.14
ELLS #XX 19-4D	966.58	6564.53	6564.53	902.13	6758.53	14.52	6955.38
W Lochbuie 2H-31H D165	1073.13	13265.11	13265.11	858.32	17518.35	4.45	17518.35
W Lochbuie 2G-31H D165	1458.82	13274.54	13274.54	1243.92	17518.35	6.00	17518.35
W Adam Ten Ltd 1	1506.75	17518.35	17518.35	1396.82	17518.35	13.71	17518.35
W Lochbuie 2F-31H D165	1661.71	14691.17	14691.17	1478.02	14895.01	7.32	17518.35

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4974.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 186.170 degrees  
Prepared by IPT  
Date Printed: 15-Jul-2016



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: Lehl 30-4 (PWB)



Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Lutz 1A	1812.08	14671.12	14671.12	1630.55	14730.97	9.74	14993.44
W Lochbuie 21-31	1867.90	13159.37	13159.37	1722.74	13221.78	12.35	13566.27
CHARLES M BROWN GAS UNIT #1	1902.46	1500.00	1500.00	1883.95	1541.99	42.96	7000.00
W Highland 01N-65W-29-1N	1903.22	17506.26	17506.26	1654.70	17518.35	7.66	17518.35
GILMORE #1-30	1975.74	8540.64	8540.64	1906.09	8579.40	24.64	9514.44
W Lochbuie 2E-31H D165	2156.59	13271.00	13271.00	1941.24	17518.35	8.78	17518.35
W Eppinger 1	2241.96	16978.49	16978.49	2004.20	17043.96	9.25	17322.83
W Sawyer/Powell 32-4	2294.06	15912.07	15910.10	2083.22	15944.88	10.81	16108.92
KILKER #1	2416.03	11673.31	11673.31	2282.47	11712.60	17.72	12057.09
W Dreyer 32-1	2435.71	14642.24	14642.24	2255.60	14681.76	13.38	14911.42
DECHANT #1-19	2450.43	7201.44	7201.44	2390.77	7217.85	39.84	7726.38
W Sack-Hiett 1	2465.96	16961.94	16961.94	2229.52	16994.75	10.37	17175.20
LEHL #1	2800.02	11033.01	11033.01	2680.30	11122.05	20.92	12057.09



