

HRM Resources

Location	DJ Basin	Slot	PC NORTH 1S-66-2928-2NH
Field	WATTENBERG	Well	W PC NORTH 1S-66-2928-2NH
Installation	PC 1S-66-2928 PAD	Wellbore	W PC NORTH 1S-66-2928-2NH (PWB)

East (Feet) ->

-3200 -1600 0 1600 3200 4800 6400 8000 9600 11200
Scale 1 cm = 800 ft

4800

3200

1600

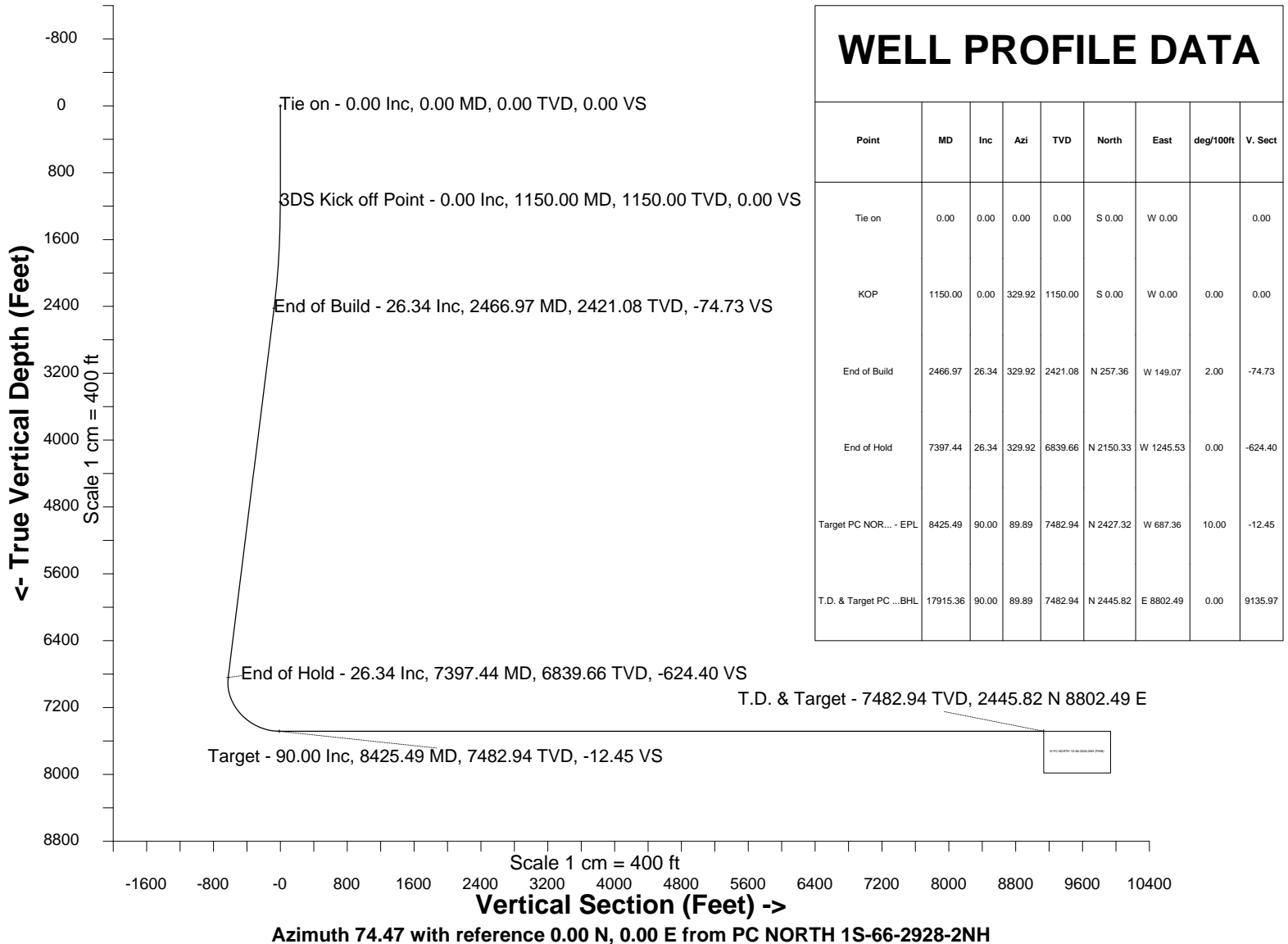
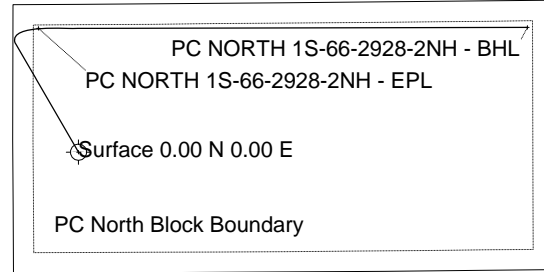
0

-1600

<- North (Feet)

Scale 1 cm = 800 ft

Created by	admin
Date plotted	25-Jan-2017
Plot reference is W PC NORTH 1S-66-2928-2NH (PWB).	
Ref wellpath is W PC NORTH 1S-66-2928-2NH (PWP#1).	
Coordinates are in Feet reference PC NORTH 1S-66-2928-2NH.	
True Vertical Depths are reference Rig Datum.	
Measured Depths are reference Rig Datum.	
Rig Datum: Planned Datum #1	
Rig Datum to Mean Sea Level: 5061.94 ft.	
Plot North is aligned to GRID North.	





SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
PC NORTH 1S-66-2928-2NH	N39 56 7.3320	W104 48 15.5520	1220069.1117	3195079.9503	14.57S	0.11E	0.00

Declination

Date	Source	Time
Jan-24-2017	EMM-2015 [2000.0-2020.0]	09:32

Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
PC 1S-66-2928 PAD	N39 56 7.4760	W104 48 15.5520	1220083.6821	3195079.8360	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	1220069.11	3195079.95
1150.00	0.00	329.920	1150.00	0.00N	0.00E	==>	0.00	1220069.11	3195079.95
2466.97	26.34	329.920	2421.08	257.36N	149.07W	2.00	-74.73	1220326.47	3194930.88
7397.44	26.34	329.920	6839.66	2150.33N	1245.53W	==>	-624.40	1222219.38	3193834.45
8425.49	90.00	89.890	7482.94	2427.32N	687.36W	10.00	-12.45	1222496.36	3194392.61
17915.36	90.00	89.890	7482.94	2445.82N	8802.49E	==>	9135.97	1222514.86	3203882.18

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	1.00	329.920	1200.00	0.38N	0.22W	2.00	-0.11	
1300.00	3.00	329.920	1299.93	3.40N	1.97W	2.00	-0.99	
1400.00	5.00	329.920	1399.68	9.43N	5.46W	2.00	-2.74	
1500.00	7.00	329.920	1499.13	18.48N	10.70W	2.00	-5.37	
1600.00	9.00	329.920	1598.15	30.52N	17.68W	2.00	-8.86	
1700.00	11.00	329.920	1696.63	45.55N	26.38W	2.00	-13.23	
1800.00	13.00	329.920	1794.44	63.54N	36.80W	2.00	-18.45	
1900.00	15.00	329.920	1891.46	84.47N	48.93W	2.00	-24.53	
2000.00	17.00	329.920	1987.58	108.32N	62.74W	2.00	-31.45	
2100.00	19.00	329.920	2082.68	135.06N	78.23W	2.00	-39.22	
2200.00	21.00	329.920	2176.65	164.65N	95.37W	2.00	-47.81	
2300.00	23.00	329.920	2269.36	197.07N	114.15W	2.00	-57.22	
2400.00	25.00	329.920	2360.71	232.26N	134.53W	2.00	-67.44	
2500.00	26.34	329.920	2450.67	270.04N	156.42W	==>	-78.41	
2600.00	26.34	329.920	2540.29	308.44N	178.66W	==>	-89.56	
2700.00	26.34	329.920	2629.91	346.83N	200.89W	==>	-100.71	
2800.00	26.34	329.920	2719.53	385.22N	223.13W	==>	-111.86	
2900.00	26.34	329.920	2809.14	423.62N	245.37W	==>	-123.01	
3000.00	26.34	329.920	2898.76	462.01N	267.61W	==>	-134.15	
3100.00	26.34	329.920	2988.38	500.40N	289.85W	==>	-145.30	

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 5061.9ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 74.470 degrees
Bottom hole distance is 9135.97 Feet on azimuth 74.47 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 25-Jan-2017



SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
3200.00	26.34	329.920	3078.00	538.80N	312.09W	==>	-156.45	
3300.00	26.34	329.920	3167.62	577.19N	334.32W	==>	-167.60	
3400.00	26.34	329.920	3257.23	615.58N	356.56W	==>	-178.75	
3500.00	26.34	329.920	3346.85	653.98N	378.80W	==>	-189.90	
3600.00	26.34	329.920	3436.47	692.37N	401.04W	==>	-201.04	
3700.00	26.34	329.920	3526.09	730.76N	423.28W	==>	-212.19	
3800.00	26.34	329.920	3615.71	769.16N	445.52W	==>	-223.34	
3900.00	26.34	329.920	3705.33	807.55N	467.76W	==>	-234.49	
4000.00	26.34	329.920	3794.94	845.94N	489.99W	==>	-245.64	
4100.00	26.34	329.920	3884.56	884.34N	512.23W	==>	-256.79	
4200.00	26.34	329.920	3974.18	922.73N	534.47W	==>	-267.93	
4300.00	26.34	329.920	4063.80	961.12N	556.71W	==>	-279.08	
4400.00	26.34	329.920	4153.42	999.52N	578.95W	==>	-290.23	
4500.00	26.34	329.920	4243.03	1037.91N	601.19W	==>	-301.38	
4600.00	26.34	329.920	4332.65	1076.30N	623.43W	==>	-312.53	
4700.00	26.34	329.920	4422.27	1114.70N	645.66W	==>	-323.68	
4800.00	26.34	329.920	4511.89	1153.09N	667.90W	==>	-334.82	
4900.00	26.34	329.920	4601.51	1191.48N	690.14W	==>	-345.97	
5000.00	26.34	329.920	4691.12	1229.88N	712.38W	==>	-357.12	
5100.00	26.34	329.920	4780.74	1268.27N	734.62W	==>	-368.27	
5200.00	26.34	329.920	4870.36	1306.66N	756.86W	==>	-379.42	
5300.00	26.34	329.920	4959.98	1345.06N	779.09W	==>	-390.57	
5400.00	26.34	329.920	5049.60	1383.45N	801.33W	==>	-401.72	
5500.00	26.34	329.920	5139.21	1421.84N	823.57W	==>	-412.86	
5600.00	26.34	329.920	5228.83	1460.24N	845.81W	==>	-424.01	
5700.00	26.34	329.920	5318.45	1498.63N	868.05W	==>	-435.16	
5800.00	26.34	329.920	5408.07	1537.02N	890.29W	==>	-446.31	
5900.00	26.34	329.920	5497.69	1575.42N	912.53W	==>	-457.46	
6000.00	26.34	329.920	5587.30	1613.81N	934.76W	==>	-468.61	
6100.00	26.34	329.920	5676.92	1652.20N	957.00W	==>	-479.75	
6200.00	26.34	329.920	5766.54	1690.60N	979.24W	==>	-490.90	
6300.00	26.34	329.920	5856.16	1728.99N	1001.48W	==>	-502.05	
6400.00	26.34	329.920	5945.78	1767.38N	1023.72W	==>	-513.20	
6500.00	26.34	329.920	6035.40	1805.78N	1045.96W	==>	-524.35	
6600.00	26.34	329.920	6125.01	1844.17N	1068.20W	==>	-535.50	
6700.00	26.34	329.920	6214.63	1882.56N	1090.43W	==>	-546.64	
6800.00	26.34	329.920	6304.25	1920.96N	1112.67W	==>	-557.79	
6900.00	26.34	329.920	6393.87	1959.35N	1134.91W	==>	-568.94	
7000.00	26.34	329.920	6483.49	1997.74N	1157.15W	==>	-580.09	
7100.00	26.34	329.920	6573.10	2036.14N	1179.39W	==>	-591.24	
7200.00	26.34	329.920	6662.72	2074.53N	1201.63W	==>	-602.39	
7300.00	26.34	329.920	6752.34	2112.92N	1223.86W	==>	-613.53	
7400.00	26.22	330.430	6841.96	2151.32N	1246.10W	10.00	-624.68	
7500.00	23.35	353.450	6932.95	2190.32N	1259.29W	10.00	-626.95	
7600.00	24.32	18.240	7024.65	2229.66N	1255.10W	10.00	-612.38	
7700.00	28.75	38.460	7114.28	2268.14N	1233.64W	10.00	-581.40	
7800.00	35.36	52.700	7199.11	2304.60N	1195.57W	10.00	-534.96	
7900.00	43.15	62.660	7276.57	2337.92N	1142.05W	10.00	-474.47	
8000.00	51.58	70.000	7344.29	2367.10N	1074.69W	10.00	-401.76	
8100.00	60.37	75.770	7400.23	2391.25N	995.56W	10.00	-319.05	
8200.00	69.36	80.590	7442.68	2409.63N	907.04W	10.00	-228.84	
8300.00	78.48	84.870	7470.36	2421.68N	811.84W	10.00	-133.89	
8400.00	87.66	88.880	7482.42	2427.05N	712.84W	10.00	-37.07	
8500.00	90.00	89.890	7482.94	2427.46N	612.85W	==>	59.38	
8600.00	90.00	89.890	7482.94	2427.66N	512.85W	==>	155.78	
8700.00	90.00	89.890	7482.94	2427.85N	412.85W	==>	252.19	
8800.00	90.00	89.890	7482.94	2428.05N	312.85W	==>	348.59	
8900.00	90.00	89.890	7482.94	2428.24N	212.85W	==>	444.99	
9000.00	90.00	89.890	7482.94	2428.44N	112.85W	==>	541.39	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 5061.9ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 74.470 degrees
Bottom hole distance is 9135.97 Feet on azimuth 74.47 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 25-Jan-2017



SYSDRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
9100.00	90.00	89.890	7482.94	2428.63N	12.85W	==>	637.79	
9200.00	90.00	89.890	7482.94	2428.83N	87.15E	==>	734.20	
9300.00	90.00	89.890	7482.94	2429.02N	187.15E	==>	830.60	
9400.00	90.00	89.890	7482.94	2429.22N	287.15E	==>	927.00	
9500.00	90.00	89.890	7482.94	2429.41N	387.15E	==>	1023.40	
9600.00	90.00	89.890	7482.94	2429.61N	487.15E	==>	1119.80	
9700.00	90.00	89.890	7482.94	2429.80N	587.15E	==>	1216.21	
9800.00	90.00	89.890	7482.94	2430.00N	687.15E	==>	1312.61	
9900.00	90.00	89.890	7482.94	2430.19N	787.15E	==>	1409.01	
10000.00	90.00	89.890	7482.94	2430.39N	887.15E	==>	1505.41	
10100.00	90.00	89.890	7482.94	2430.58N	987.14E	==>	1601.81	
10200.00	90.00	89.890	7482.94	2430.78N	1087.14E	==>	1698.21	
10300.00	90.00	89.890	7482.94	2430.97N	1187.14E	==>	1794.62	
10400.00	90.00	89.890	7482.94	2431.17N	1287.14E	==>	1891.02	
10500.00	90.00	89.890	7482.94	2431.36N	1387.14E	==>	1987.42	
10600.00	90.00	89.890	7482.94	2431.56N	1487.14E	==>	2083.82	
10700.00	90.00	89.890	7482.94	2431.75N	1587.14E	==>	2180.22	
10800.00	90.00	89.890	7482.94	2431.95N	1687.14E	==>	2276.63	
10900.00	90.00	89.890	7482.94	2432.14N	1787.14E	==>	2373.03	
11000.00	90.00	89.890	7482.94	2432.34N	1887.14E	==>	2469.43	
11100.00	90.00	89.890	7482.94	2432.53N	1987.14E	==>	2565.83	
11200.00	90.00	89.890	7482.94	2432.73N	2087.14E	==>	2662.23	
11300.00	90.00	89.890	7482.94	2432.92N	2187.14E	==>	2758.64	
11400.00	90.00	89.890	7482.94	2433.12N	2287.14E	==>	2855.04	
11500.00	90.00	89.890	7482.94	2433.31N	2387.14E	==>	2951.44	
11600.00	90.00	89.890	7482.94	2433.51N	2487.14E	==>	3047.84	
11700.00	90.00	89.890	7482.94	2433.70N	2587.14E	==>	3144.24	
11800.00	90.00	89.890	7482.94	2433.90N	2687.14E	==>	3240.64	
11900.00	90.00	89.890	7482.94	2434.09N	2787.14E	==>	3337.05	
12000.00	90.00	89.890	7482.94	2434.29N	2887.14E	==>	3433.45	
12100.00	90.00	89.890	7482.94	2434.48N	2987.14E	==>	3529.85	
12200.00	90.00	89.890	7482.94	2434.68N	3087.14E	==>	3626.25	
12300.00	90.00	89.890	7482.94	2434.87N	3187.14E	==>	3722.65	
12400.00	90.00	89.890	7482.94	2435.07N	3287.14E	==>	3819.06	
12500.00	90.00	89.890	7482.94	2435.26N	3387.14E	==>	3915.46	
12600.00	90.00	89.890	7482.94	2435.46N	3487.14E	==>	4011.86	
12700.00	90.00	89.890	7482.94	2435.65N	3587.14E	==>	4108.26	
12800.00	90.00	89.890	7482.94	2435.85N	3687.14E	==>	4204.66	
12900.00	90.00	89.890	7482.94	2436.04N	3787.14E	==>	4301.07	
13000.00	90.00	89.890	7482.94	2436.24N	3887.14E	==>	4397.47	
13100.00	90.00	89.890	7482.94	2436.43N	3987.14E	==>	4493.87	
13200.00	90.00	89.890	7482.94	2436.63N	4087.14E	==>	4590.27	
13300.00	90.00	89.890	7482.94	2436.82N	4187.14E	==>	4686.67	
13400.00	90.00	89.890	7482.94	2437.02N	4287.14E	==>	4783.07	
13500.00	90.00	89.890	7482.94	2437.21N	4387.14E	==>	4879.48	
13600.00	90.00	89.890	7482.94	2437.41N	4487.14E	==>	4975.88	
13700.00	90.00	89.890	7482.94	2437.60N	4587.14E	==>	5072.28	
13800.00	90.00	89.890	7482.94	2437.80N	4687.14E	==>	5168.68	
13900.00	90.00	89.890	7482.94	2437.99N	4787.14E	==>	5265.08	
14000.00	90.00	89.890	7482.94	2438.19N	4887.14E	==>	5361.49	
14100.00	90.00	89.890	7482.94	2438.38N	4987.14E	==>	5457.89	
14200.00	90.00	89.890	7482.94	2438.58N	5087.14E	==>	5554.29	
14300.00	90.00	89.890	7482.94	2438.77N	5187.14E	==>	5650.69	
14400.00	90.00	89.890	7482.94	2438.97N	5287.14E	==>	5747.09	
14500.00	90.00	89.890	7482.94	2439.16N	5387.14E	==>	5843.50	
14600.00	90.00	89.890	7482.94	2439.36N	5487.14E	==>	5939.90	
14700.00	90.00	89.890	7482.94	2439.55N	5587.14E	==>	6036.30	
14800.00	90.00	89.890	7482.94	2439.75N	5687.14E	==>	6132.70	
14900.00	90.00	89.890	7482.94	2439.94N	5787.14E	==>	6229.10	

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Vertical Section is from 0.00N 0.00E on azimuth 74.470 degrees
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Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
15000.00	90.00	89.890	7482.94	2440.14N	5887.14E	==>	6325.50	
15100.00	90.00	89.890	7482.94	2440.33N	5987.14E	==>	6421.91	
15200.00	90.00	89.890	7482.94	2440.53N	6087.14E	==>	6518.31	
15300.00	90.00	89.890	7482.94	2440.72N	6187.14E	==>	6614.71	
15400.00	90.00	89.890	7482.94	2440.92N	6287.13E	==>	6711.11	
15500.00	90.00	89.890	7482.94	2441.11N	6387.13E	==>	6807.51	
15600.00	90.00	89.890	7482.94	2441.31N	6487.13E	==>	6903.92	
15700.00	90.00	89.890	7482.94	2441.50N	6587.13E	==>	7000.32	
15800.00	90.00	89.890	7482.94	2441.70N	6687.13E	==>	7096.72	
15900.00	90.00	89.890	7482.94	2441.89N	6787.13E	==>	7193.12	
16000.00	90.00	89.890	7482.94	2442.09N	6887.13E	==>	7289.52	
16100.00	90.00	89.890	7482.94	2442.28N	6987.13E	==>	7385.93	
16200.00	90.00	89.890	7482.94	2442.48N	7087.13E	==>	7482.33	
16300.00	90.00	89.890	7482.94	2442.67N	7187.13E	==>	7578.73	
16400.00	90.00	89.890	7482.94	2442.87N	7287.13E	==>	7675.13	
16500.00	90.00	89.890	7482.94	2443.06N	7387.13E	==>	7771.53	
16600.00	90.00	89.890	7482.94	2443.26N	7487.13E	==>	7867.93	
16700.00	90.00	89.890	7482.94	2443.45N	7587.13E	==>	7964.34	
16800.00	90.00	89.890	7482.94	2443.65N	7687.13E	==>	8060.74	
16900.00	90.00	89.890	7482.94	2443.84N	7787.13E	==>	8157.14	
17000.00	90.00	89.890	7482.94	2444.04N	7887.13E	==>	8253.54	
17100.00	90.00	89.890	7482.94	2444.23N	7987.13E	==>	8349.94	
17200.00	90.00	89.890	7482.94	2444.43N	8087.13E	==>	8446.35	
17300.00	90.00	89.890	7482.94	2444.62N	8187.13E	==>	8542.75	
17400.00	90.00	89.890	7482.94	2444.82N	8287.13E	==>	8639.15	
17500.00	90.00	89.890	7482.94	2445.01N	8387.13E	==>	8735.55	
17600.00	90.00	89.890	7482.94	2445.21N	8487.13E	==>	8831.95	
17700.00	90.00	89.890	7482.94	2445.40N	8587.13E	==>	8928.36	
17800.00	90.00	89.890	7482.94	2445.60N	8687.13E	==>	9024.76	
17900.00	90.00	89.890	7482.94	2445.79N	8787.13E	==>	9121.16	
17915.36	90.00	89.890	7482.94	2445.82N	8802.49E	==>	9135.97	

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 5061.9ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 74.470 degrees
Bottom hole distance is 9135.97 Feet on azimuth 74.47 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 25-Jan-2017



SYS DRILL
Well Design Combined Report
Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
PC NORTH 1S-66-2928-2NH - BHL	2445.82N	8802.49E	7482.94	N39 56 30.8040	W104 46 22.2960	1222514.86	3203882.18
PC NORTH 1S-66-2928-2NH - EPL	2427.32N	787.36W	7482.94	N39 56 31.3800	W104 48 25.4160	1222496.36	3194292.61

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
522991	Planned	1500.00	1499.13	WdW Rate Gyro	Standard
522995	Planned	17915.36	7482.94	ISCWSA MWD	Rev 4 + SAG + FLT

Notes



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W PC NORTH 1S-66-2928-2NH (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
W PC NORTH 1S-66-2928-2NH (PWB)	Jan-24-2017	Jan-24-2017

Well		
Name	Government ID	Last Revised
W PC NORTH 1S-66-2928-2NH		Jan-24-2017

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
PC NORTH 1S-66-2928-2NH	N39 56 7.3320	W104 48 15.5520	1220069.1117	3195079.9503	14.57S	0.11E

Installation						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Easting	Northing	Coord System Name	North Alignment
PC 1S-66-2928 PAD	N39 56 7.4760	W104 48 15.5520	3195079.8360	1220083.6821	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]
W PC NORTH 1S-66-2928-3NH	14.57	1150.00	17915.36	-441.68	17913.39	0.40	17913.39
W PC NORTH 1S-66-2928-1NH	14.57	1100.00	1082.68	-379.90	17915.36	0.49	17915.36
W PC NORTH 1S-66-2928-4CDH	29.14	1150.00	17915.36	-125.63	17915.36	0.81	17915.36
W PC SOUTH 1S-66-2928-12NH	30.85	1150.00	17915.36	28.99	1164.70	3.29	17915.36
W PC SOUTH 1S-66-2928-13CDH	34.12	1150.00	17915.36	32.26	1150.00	3.59	17915.36
W PC NORTH 1S-66-2928-11NH	34.12	1164.70	17915.36	32.22	1213.91	2.80	17915.36
W PC SOUTH 1S-66-2928-14NH	42.44	1150.00	17915.36	40.58	1150.00	3.80	17915.36
W PC NORTH 1S-66-2928-5NH	47.36	1150.00	17915.36	-92.17	17915.36	0.88	17915.36
W PC SOUTH 1S-66-2928-15NH	56.52	1150.00	17915.36	54.66	1150.00	4.31	17915.36
W PC NORTH 1S-66-2928-6NH	61.93	1150.00	17915.36	60.08	1150.00	1.39	17915.36
W PC SOUTH 1S-66-2928-16CDH	69.19	1150.00	17915.36	67.33	1150.00	4.68	17915.36

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Vertical Section is from 0.00N 0.00E on azimuth 74.470 degrees
Prepared by IPT
Date Printed: 25-Jan-2017



SYS DRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W PC NORTH 1S-66-2928-2NH (PWB)



Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W PC NORTH 1S-66-2928-7CD H	76.50	1150.00	17915.36	74.65	1150.00	1.70	17915.36
W PC SOUTH 1S-66-2928-17N H	82.48	1150.00	17915.36	80.63	1150.00	4.82	17915.36
W PC NORTH 1S-66-2928-8NH	91.07	1150.00	17915.36	89.22	1150.00	1.85	17915.36
W PC SOUTH 1S-66-2928-18N H	96.15	1150.00	17915.36	94.30	1150.00	5.32	17915.36
W PC NORTH 1S-66-2928-9NH	105.64	1150.00	17915.36	103.79	1150.00	2.32	17915.36
W PC SOUTH 1S-66-2928-19C DH	110.05	1150.00	17915.36	108.20	1150.00	5.75	17915.36
W PC NORTH 1S-66-2928-10C DH	120.21	1150.00	17915.36	-180.66	17915.36	0.91	17915.36
W PC SOUTH 1S-66-2928-20N H	124.11	1150.00	17915.36	122.25	1150.00	5.86	17915.36
W POLLARD #1	4112.70	13802.15	13802.15	3853.19	13943.57	14.85	14944.23

