

WARD PETROLEUM

Location	ADAMS COUNTY, CO	Slot	Slot #14
Field	West Brighton	Well	Schaefer 25-1-6HC
Installation	Schaefer	Wellbore	Schaefer 25-1-6HC (PWB)

Tie on - 0.00 Inc, 15.00 MD, 15.00 TVD, -0.00 VS

East (feet) ->

Scale 1 cm = 200 ft

-800 -400 -0 400

9 5/8in Surface Casing
3DS Kick off Point - 0.00 Inc, 1300.00 MD, 1300.00 TVD, -0.00 VS
End of Build - 3.70 Inc, 1484.97 MD, 1484.84 TVD, 5.25 VS

Surface 0.00 N 0.00 E

Schaefer 25-1-6HC-T1

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	15.00	0.00	0.00	15.00	0.00	0.00	0.00	-0.00
KOP	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	-0.00
End of Build	1484.97	3.70	210.51	1484.84	-5.14	-3.03	2.00	5.25
End of Hold	7239.23	3.70	210.51	7227.11	-325.01	-191.51	0.00	331.66
Target Schaefer 25-1-6	8104.42	89.70	179.75	7768.00	-894.13	-206.82	10.00	900.96
T.D. & Target Schaefer	12453.98	89.70	179.75	7791.00	-5243.59	-187.84	0.00	5246.95

Created by admin
Date plotted 13-Feb-2014

Plot reference is Schaefer 25-1-6HC (PWB).
Ref wellpath is Schaefer 25-1-6HC (PWP#1).
Coordinates are in feet reference Slot #14.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 5037.00 ft.
Plot North is aligned to GRID North.

End of Hold - 3.70 Inc, 7239.23 MD, 7227.11 TVD, 331.66 VS

7.0in Intermediate Casing

Schaefer 25-1-6HC-T1

T.D. & End of Hold - 7791.00 TVD, 5243.59 S 187.84 W

Schaefer 25-1-6HC-T2

S/C Kick off Point - 89.70 Inc, 8104.42 MD, 7768.00 TVD, 900.96 VS

4 1/2in Production Liner

<- North(feet)

Scale 1 cm = 200 ft

Vertical Section (feet) ->

Azimuth 182.05 with reference 0.00 N, 0.00 E from Slot #14

<- True Vertical Depth (feet)

Scale 1 cm = 200 ft



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: Schaefer 25-1-6HC (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #14	1223332.6678	3186480.0150	39.94451000	-104.83490000	14.07N	67.40W	-0.00

Declination			
Date	Source	Time	
10-Feb-2014	IGRF Model [1900.0-2015.0]		13:06

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
Schaefer	1223318.6021	3186547.4140	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
15.00	0.00	0.000	15.00	0.00N	0.00E		0.00	1223332.67	3186480.01
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1484.97	3.70	210.510	1484.84	5.14S	3.03W	2.00	5.25	1223327.53	3186476.98
7239.23	3.70	210.510	7227.11	325.01S	191.51W	==>	331.66	1223007.67	3186288.51
8104.42	89.70	179.750	7768.00	894.13S	206.82W	10.00	900.96	1222438.57	3186273.21
12453.98	89.70	179.750	7791.00	5243.59S	187.84W	==>	5246.95	1218089.24	3186292.18

Interpolated 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	1223332.67	3186480.01
15.00	0.00	0.000	15.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1285.00	0.00	0.000	1285.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	1223332.67	3186480.01
1385.00	1.70	210.510	1384.99	1.09S	0.64W	2.00	1.11	1223331.58	3186479.37
1484.97	3.70	210.510	1484.84	5.14S	3.03W	2.00	5.25	1223327.53	3186476.98
1500.00	3.70	210.510	1499.84	5.98S	3.52W	==>	6.10	1223326.69	3186476.49
1600.00	3.70	210.510	1599.63	11.54S	6.80W	==>	11.77	1223321.13	3186473.22
1700.00	3.70	210.510	1699.42	17.10S	10.07W	==>	17.45	1223315.57	3186469.94
1800.00	3.70	210.510	1799.22	22.65S	13.35W	==>	23.12	1223310.01	3186466.67
1900.00	3.70	210.510	1899.01	28.21S	16.62W	==>	28.79	1223304.46	3186463.39
2000.00	3.70	210.510	1998.80	33.77S	19.90W	==>	34.46	1223298.90	3186460.12
2100.00	3.70	210.510	2098.59	39.33S	23.18W	==>	40.14	1223293.34	3186456.84
2200.00	3.70	210.510	2198.38	44.89S	26.45W	==>	45.81	1223287.78	3186453.56
2300.00	3.70	210.510	2298.17	50.45S	29.73W	==>	51.48	1223282.22	3186450.29
2400.00	3.70	210.510	2397.96	56.01S	33.00W	==>	57.15	1223276.66	3186447.01
2500.00	3.70	210.510	2497.76	61.57S	36.28W	==>	62.83	1223271.10	3186443.74
2600.00	3.70	210.510	2597.55	67.12S	39.55W	==>	68.50	1223265.54	3186440.46
2700.00	3.70	210.510	2697.34	72.68S	42.83W	==>	74.17	1223259.99	3186437.19
2800.00	3.70	210.510	2797.13	78.24S	46.10W	==>	79.84	1223254.43	3186433.91
2900.00	3.70	210.510	2896.92	83.80S	49.38W	==>	85.52	1223248.87	3186430.64
3000.00	3.70	210.510	2996.71	89.36S	52.65W	==>	91.19	1223243.31	3186427.36
3100.00	3.70	210.510	3096.51	94.92S	55.93W	==>	96.86	1223237.75	3186424.09
3200.00	3.70	210.510	3196.30	100.48S	59.21W	==>	102.53	1223232.19	3186420.81
3300.00	3.70	210.510	3296.09	106.04S	62.48W	==>	108.21	1223226.63	3186417.54
3400.00	3.70	210.510	3395.88	111.60S	65.76W	==>	113.88	1223221.08	3186414.26

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 5037.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 182.050 degrees
Bottom hole distance is 5246.95 Feet on azimuth 182.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 13-Feb-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL

Well Design Combined Report
Wellbore: Schaefer 25-1-6HC (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3500.00	3.70	210.510	3495.67	117.15S	69.03W	==>	119.55	1223215.52	3186410.99
3600.00	3.70	210.510	3595.46	122.71S	72.31W	==>	125.22	1223209.96	3186407.71
3700.00	3.70	210.510	3695.26	128.27S	75.58W	==>	130.90	1223204.40	3186404.43
3800.00	3.70	210.510	3795.05	133.83S	78.86W	==>	136.57	1223198.84	3186401.16
3900.00	3.70	210.510	3894.84	139.39S	82.13W	==>	142.24	1223193.28	3186397.88
4000.00	3.70	210.510	3994.63	144.95S	85.41W	==>	147.91	1223187.72	3186394.61
4100.00	3.70	210.510	4094.42	150.51S	88.68W	==>	153.58	1223182.17	3186391.33
4200.00	3.70	210.510	4194.21	156.07S	91.96W	==>	159.26	1223176.61	3186388.06
4300.00	3.70	210.510	4294.01	161.62S	95.24W	==>	164.93	1223171.05	3186384.78
4400.00	3.70	210.510	4393.80	167.18S	98.51W	==>	170.60	1223165.49	3186381.51
4500.00	3.70	210.510	4493.59	172.74S	101.79W	==>	176.27	1223159.93	3186378.23
4600.00	3.70	210.510	4593.38	178.30S	105.06W	==>	181.95	1223154.37	3186374.96
4700.00	3.70	210.510	4693.17	183.86S	108.34W	==>	187.62	1223148.81	3186371.68
4800.00	3.70	210.510	4792.96	189.42S	111.61W	==>	193.29	1223143.26	3186368.41
4900.00	3.70	210.510	4892.76	194.98S	114.89W	==>	198.96	1223137.70	3186365.13
5000.00	3.70	210.510	4992.55	200.54S	118.16W	==>	204.64	1223132.14	3186361.86
5100.00	3.70	210.510	5092.34	206.09S	121.44W	==>	210.31	1223126.58	3186358.58
5200.00	3.70	210.510	5192.13	211.65S	124.71W	==>	215.98	1223121.02	3186355.30
5300.00	3.70	210.510	5291.92	217.21S	127.99W	==>	221.65	1223115.46	3186352.03
5400.00	3.70	210.510	5391.71	222.77S	131.27W	==>	227.33	1223109.90	3186348.75
5500.00	3.70	210.510	5491.51	228.33S	134.54W	==>	233.00	1223104.35	3186345.48
5600.00	3.70	210.510	5591.30	233.89S	137.82W	==>	238.67	1223098.79	3186342.20
5700.00	3.70	210.510	5691.09	239.45S	141.09W	==>	244.34	1223093.23	3186338.93
5800.00	3.70	210.510	5790.88	245.01S	144.37W	==>	250.02	1223087.67	3186335.65
5900.00	3.70	210.510	5890.67	250.56S	147.64W	==>	255.69	1223082.11	3186332.38
6000.00	3.70	210.510	5990.46	256.12S	150.92W	==>	261.36	1223076.55	3186329.10
6100.00	3.70	210.510	6090.26	261.68S	154.19W	==>	267.03	1223070.99	3186325.83
6200.00	3.70	210.510	6190.05	267.24S	157.47W	==>	272.71	1223065.44	3186322.55
6300.00	3.70	210.510	6289.84	272.80S	160.74W	==>	278.38	1223059.88	3186319.28
6400.00	3.70	210.510	6389.63	278.36S	164.02W	==>	284.05	1223054.32	3186316.00
6500.00	3.70	210.510	6489.42	283.92S	167.30W	==>	289.72	1223048.76	3186312.73
6600.00	3.70	210.510	6589.21	289.48S	170.57W	==>	295.40	1223043.20	3186309.45
6700.00	3.70	210.510	6689.01	295.03S	173.85W	==>	301.07	1223037.64	3186306.17
6800.00	3.70	210.510	6788.80	300.59S	177.12W	==>	306.74	1223032.08	3186302.90
6900.00	3.70	210.510	6888.59	306.15S	180.40W	==>	312.41	1223026.53	3186299.62
7000.00	3.70	210.510	6988.38	311.71S	183.67W	==>	318.09	1223020.97	3186296.35
7100.00	3.70	210.510	7088.17	317.27S	186.95W	==>	323.76	1223015.41	3186293.07
7200.00	3.70	210.510	7187.96	322.83S	190.22W	==>	329.43	1223009.85	3186289.80
7239.23	3.70	210.510	7227.11	325.01S	191.51W	==>	331.66	1223007.67	3186288.51
7300.00	9.45	191.210	7287.46	331.60S	193.47W	10.00	338.31	1223001.08	3186286.55
7400.00	19.34	185.150	7384.21	356.20S	196.56W	10.00	363.01	1222976.48	3186283.46
7500.00	29.31	183.120	7475.22	397.24S	199.39W	10.00	404.13	1222935.44	3186280.63
7600.00	39.29	182.060	7557.72	453.47S	201.86W	10.00	460.41	1222879.21	3186278.16
7700.00	49.28	181.370	7629.21	523.18S	203.91W	10.00	530.14	1222809.50	3186276.11
7800.00	59.27	180.870	7687.52	604.25S	205.47W	10.00	611.22	1222728.44	3186274.55
7900.00	69.27	180.460	7730.88	694.21S	206.50W	10.00	701.16	1222638.48	3186273.53
8000.00	79.26	180.100	7757.97	790.34S	206.96W	10.00	797.24	1222542.35	3186273.07
8100.00	89.26	179.760	7767.96	889.71S	206.83W	10.00	896.55	1222442.98	3186273.19
8104.42	89.70	179.750	7768.00	894.13S	206.82W	10.00	900.96	1222438.57	3186273.21
8200.00	89.70	179.750	7768.51	989.71S	206.40W	==>	996.47	1222342.99	3186273.62
8300.00	89.70	179.750	7769.03	1089.71S	205.96W	==>	1096.38	1222242.99	3186274.06
8400.00	89.70	179.750	7769.56	1189.71S	205.53W	==>	1196.30	1222143.00	3186274.49
8500.00	89.70	179.750	7770.09	1289.70S	205.09W	==>	1296.22	1222043.00	3186274.93
8600.00	89.70	179.750	7770.62	1389.70S	204.65W	==>	1396.14	1221943.01	3186275.37
8700.00	89.70	179.750	7771.15	1489.70S	204.22W	==>	1496.06	1221843.01	3186275.80
8800.00	89.70	179.750	7771.68	1589.70S	203.78W	==>	1595.97	1221743.02	3186276.24
8900.00	89.70	179.750	7772.21	1689.69S	203.35W	==>	1695.89	1221643.03	3186276.68
9000.00	89.70	179.750	7772.74	1789.69S	202.91W	==>	1795.81	1221543.03	3186277.11
9100.00	89.70	179.750	7773.26	1889.69S	202.47W	==>	1895.73	1221443.04	3186277.55
9200.00	89.70	179.750	7773.79	1989.69S	202.04W	==>	1995.64	1221343.04	3186277.98
9300.00	89.70	179.750	7774.32	2089.69S	201.60W	==>	2095.56	1221243.05	3186278.42

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Vertical Section is from 0.00N 0.00E on azimuth 182.050 degrees
Bottom hole distance is 5246.95 Feet on azimuth 182.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
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SYSDRILL

Well Design Combined Report
Wellbore: Schaefer 25-1-6HC (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9400.00	89.70	179.750	7774.85	2189.68S	201.16W	==>	2195.48	1221143.05	3186278.86
9500.00	89.70	179.750	7775.38	2289.68S	200.73W	==>	2295.40	1221043.06	3186279.29
9600.00	89.70	179.750	7775.91	2389.68S	200.29W	==>	2395.32	1220943.06	3186279.73
9700.00	89.70	179.750	7776.44	2489.68S	199.86W	==>	2495.23	1220843.07	3186280.17
9800.00	89.70	179.750	7776.97	2589.67S	199.42W	==>	2595.15	1220743.07	3186280.60
9900.00	89.70	179.750	7777.49	2689.67S	198.98W	==>	2695.07	1220643.08	3186281.04
10000.00	89.70	179.750	7778.02	2789.67S	198.55W	==>	2794.99	1220543.09	3186281.47
10100.00	89.70	179.750	7778.55	2889.67S	198.11W	==>	2894.91	1220443.09	3186281.91
10200.00	89.70	179.750	7779.08	2989.66S	197.67W	==>	2994.82	1220343.10	3186282.35
10300.00	89.70	179.750	7779.61	3089.66S	197.24W	==>	3094.74	1220243.10	3186282.78
10400.00	89.70	179.750	7780.14	3189.66S	196.80W	==>	3194.66	1220143.11	3186283.22
10500.00	89.70	179.750	7780.67	3289.66S	196.36W	==>	3294.58	1220043.11	3186283.66
10600.00	89.70	179.750	7781.20	3389.65S	195.93W	==>	3394.50	1219943.12	3186284.09
10700.00	89.70	179.750	7781.73	3489.65S	195.49W	==>	3494.41	1219843.12	3186284.53
10800.00	89.70	179.750	7782.25	3589.65S	195.06W	==>	3594.33	1219743.13	3186284.96
10900.00	89.70	179.750	7782.78	3689.65S	194.62W	==>	3694.25	1219643.13	3186285.40
11000.00	89.70	179.750	7783.31	3789.65S	194.18W	==>	3794.17	1219543.14	3186285.84
11100.00	89.70	179.750	7783.84	3889.64S	193.75W	==>	3894.09	1219443.15	3186286.27
11200.00	89.70	179.750	7784.37	3989.64S	193.31W	==>	3994.00	1219343.15	3186286.71
11300.00	89.70	179.750	7784.90	4089.64S	192.87W	==>	4093.92	1219243.16	3186287.15
11400.00	89.70	179.750	7785.43	4189.64S	192.44W	==>	4193.84	1219143.16	3186287.58
11500.00	89.70	179.750	7785.96	4289.63S	192.00W	==>	4293.76	1219043.17	3186288.02
11600.00	89.70	179.750	7786.48	4389.63S	191.57W	==>	4393.68	1218943.17	3186288.45
11700.00	89.70	179.750	7787.01	4489.63S	191.13W	==>	4493.59	1218843.18	3186288.89
11800.00	89.70	179.750	7787.54	4589.63S	190.69W	==>	4593.51	1218743.18	3186289.33
11900.00	89.70	179.750	7788.07	4689.62S	190.26W	==>	4693.43	1218643.19	3186289.76
12000.00	89.70	179.750	7788.60	4789.62S	189.82W	==>	4793.35	1218543.19	3186290.20
12100.00	89.70	179.750	7789.13	4889.62S	189.38W	==>	4893.26	1218443.20	3186290.64
12200.00	89.70	179.750	7789.66	4989.62S	188.95W	==>	4993.18	1218343.21	3186291.07
12300.00	89.70	179.750	7790.19	5089.61S	188.51W	==>	5093.10	1218243.21	3186291.51
12400.00	89.70	179.750	7790.71	5189.61S	188.08W	==>	5193.02	1218143.22	3186291.94
12453.98	89.70	179.750	7791.00	5243.59S	187.84W	==>	5246.95	1218089.24	3186292.18

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Vertical Section is from 0.00N 0.00E on azimuth 182.050 degrees
Bottom hole distance is 5246.95 Feet on azimuth 182.05 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 13-Feb-2014



INTEGRATED PETROLEUM TECHNOLOGIES, INC
SYSDRILL
Well Design Combined Report
Wellbore: Schaefer 25-1-6HC (PWB)

Hole Sections								
Diameter [in]	Start MD[ft]	Start TVD[ft]	Start North[ft]	Start East[ft]	End MD[ft]	End TVD[ft]	End North[ft]	End East[ft]
13 1/2	15.00	15.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
8 3/4	1200.00	1200.00	0.00N	0.00E	8104.00	7768.00	893.71S	206.82W
6 1/8	8104.00	7768.00	893.71S	206.82W	12453.00	7790.99	5242.61S	187.84W

Casings								
Name	Top MD[ft]	Top TVD[ft]	Top North[ft]	Top East[ft]	Shoe MD[ft]	Shoe TVD[ft]	Shoe North[ft]	Shoe East[ft]
9 5/8in Surface Casing	15.00	15.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
7.0in Intermediate Casing	15.00	15.00	0.00N	0.00E	8104.00	7768.00	893.71S	206.82W
4 1/2in Production Liner	7904.00	7732.29	697.96S	206.52W	12453.00	7790.99	5242.61S	187.84W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Schaefer 25-1-6HC-T1	894.13S	214.82W	7768.00	39.94206000	-104.83569000	1222438.57	3186265.21	11-Feb-2014
Schaefer 25-1-6HC-T2	5243.59S	187.84W	7791.00	39.93012000	-104.83571000	1218089.24	3186292.18	11-Feb-2014

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
153568	Planned	12453.98	7791.00	WdW Rate Gyro	Standard

Notes

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Schaefer 25-1-6HC (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
Proximities beyond 2500.00ft with expansion rate of 0.00ft/1000ft are not reported
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
Schaefer 25-1-6HC (PWB)	12-Feb-2014	13-Feb-2014

Well		
Name	Government ID	Last Revised
Schaefer 25-1-6HC		12-Feb-2014

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #14	1223332.6678	3186480.0150	39.94451000	-104.83490000	14.07N	67.40W

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Schaefer	3186547.4140	1223318.6021	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
West Brighton	3178196.4983	1231661.3262	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Clearance Summary										
Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
Schaefer 24-3-6HN	Schaefer 24-3-6HN (PWB)	Slot #6	Schaefer	12.61	1517.55	7424.84	8.30	7424.84	1.58	7424.84
Schaefer 25-1-7HN	Schaefer 25-1-7HN (PWB)	Slot #15	Schaefer	14.02	1265.00	12450.64	11.15	1196.10	4.89	1196.10
Schaefer 24-3-5HC	Schaefer 24-3-5HC (PWB)	Slot #5	Schaefer	15.73	1433.62	7553.29	12.77	1458.57	5.27	1474.97
Schaefer 25-1-5HN	Schaefer 25-1-5HN (PWB)	Slot #13	Schaefer	16.82	1300.00	12453.98	13.96	1196.10	5.61	12449.38
Schaefer 24-3-4HN	Schaefer 24-3-4HN (PWB)	Slot #4	Schaefer	26.74	1350.01	1350.01	23.88	1196.10	9.33	1196.10
Schaefer 24-3-7HC	Schaefer 24-3-7HC (PWB)	Slot #7	Schaefer	26.75	1300.05	7572.68	23.88	1196.10	9.00	1507.78
Shaefer 25-1-8HC	Shaefer 25-1-8HC (PWB)	Slot #16	Schaefer	28.04	1215.00	12453.98	25.17	1196.10	9.23	12449.38
Schaefer 25-1-4HC	Schaefer 25-1-4HC (PWB)	Slot #12	Schaefer	30.84	1300.00	11750.74	27.98	1196.10	9.30	12449.38
Schaefer 24-3-8HN	Schaefer 24-3-8HN (PWB)	Slot #8	Schaefer	39.26	1250.00	1250.00	36.39	1196.10	13.70	1196.10
Schaefer	Schaefer	Slot #3	Schaefer	41.87	1300.00	1300.00	39.01	1196.10	14.61	1196.10

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SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Schaefer 25-1-6HC (PWB)

Clearance Summary										
Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
24-3-3HC	24-3-3HC (PWB)									
Schaefer 25-1-3HN	Schaefer 25-1-3HN (PWB)	Slot #11	Schaefer	44.86	1300.00	1300.00	42.00	1196.10	14.25	12449.38
Schaefer 24-3-2HN	Schaefer 24-3-2HN (PWB)	Slot #2	Schaefer	55.23	1250.00	1250.00	52.36	1196.10	19.27	1196.10
Schaefer 25-1-2HC	Schaefer 25-1-2HC (PWB)	Slot #10	Schaefer	61.69	1300.00	1300.00	58.82	1196.10	18.54	12449.38
Schaefer 24-3-1HC	Schaefer 24-3-1HC (PWB)	Slot #1	Schaefer	68.85	1200.00	1200.00	65.98	1200.00	23.97	1200.00
Schaefer 25-1-1HN	Schaefer 25-1-1HN (PWB)	Slot #9	Schaefer	75.71	1250.00	1250.00	72.84	1196.10	23.37	12449.38
W Huebner 25-44	W Huebner 25-44 (AWB)	Huebner 25-44	Offsets	921.04	11933.79	11933.79	852.62	11940.85	13.43	11990.07
Sharp #25-1-9HN	Sharp #25-1-9HN (PWB)	Slot #4	Sharp Pad	1327.96	12453.98	12453.98	1235.54	12449.38	14.37	12449.38
Sharp #24-3-9HC	Sharp #24-3-9HC (PWB)	Slot #10	Sharp Pad	1389.14	7626.55	7626.55	1373.69	7626.55	77.54	8594.40
SHARP #24-3-9HC	SHARP #24-3-9HC (PWB)	Slot #7	Sharp Pad	1390.23	7626.55	7626.55	1374.71	7626.55	77.02	8594.40
Sharp #25-1-10H C	Sharp #25-1-10HC (PWB)	Slot #3	Sharp Pad	1752.93	12453.98	12453.98	1659.48	12449.38	18.75	12449.38
Sharp #24-3-10H N	Sharp #24-3-10HN (PWB)	Slot #9	Sharp Pad	1812.89	7497.99	7497.99	1798.50	7497.99	100.80	8840.46
W LEWIS #1	W LEWIS #1 (AWB)	LEWIS #1	Offsets	1884.65	12453.98	12453.98	1827.14	12453.98	32.62	12449.38
Sharp #25-1-11H N	Sharp #25-1-11HN (PWB)	Slot #2	Sharp Pad	2200.66	12453.98	12453.98	2107.60	12449.38	23.64	12449.38
Sharp #24-3-11H C	Sharp #24-3-11HC (PWB)	Slot #8	Sharp Pad	2249.14	7642.95	7642.95	2234.44	7642.95	116.37	8774.84
SHARP #24-3-11H C	SHARP #24-3-11HC (PWB)	Slot #5	Sharp Pad	2249.86	7642.95	7642.95	2235.14	7642.95	116.31	8774.84

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