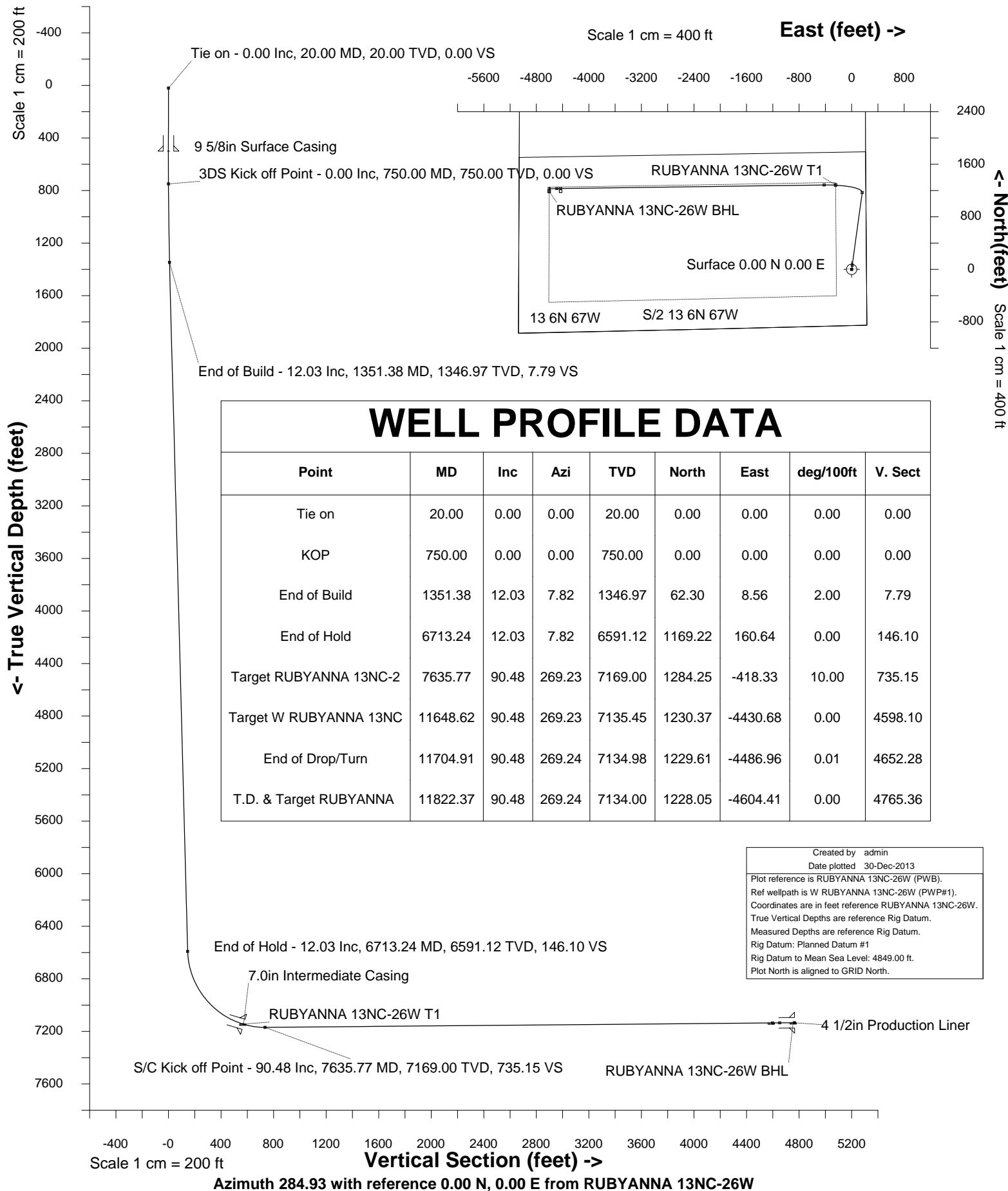


# EXTRACTION OIL & GAS, LLC

<b>Location</b>	Weld County, CO, USA (Original)	<b>Slot</b>	RUBYANNA 13NC-26W
<b>Field</b>	Wattenberg	<b>Well</b>	W RUBYANNA 13NC-26W
<b>Installation</b>	Rubyanna Pad	<b>Wellbore</b>	RUBYANNA 13NC-26W (PWB)





INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL  
Well Design Combined Report  
Wellbore: RUBYANNA 13NC-26W (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
RUBYANNA 13NC-26W	1419192.3101	3185481.0798	40.48217000	-104.83321000	25.50S	0.19E	-1.00

Declination			
Date	Source	Time	
21-Oct-2013	IGRF Model [1900.0-2015.0]	13:49	

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
Rubyanna Pad	1419217.8106	3185480.8881	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
20.00	0.00	0.000	20.00	0.00N	0.00E		0.00	1419192.31	3185481.08
750.00	0.00	0.000	750.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
1351.38	12.03	7.820	1346.97	62.30N	8.56E	2.00	7.79	1419254.61	3185489.64
6713.24	12.03	7.820	6591.12	1169.22N	160.64E	==>	146.10	1420361.49	3185641.71
7635.77	90.48	269.230	7169.00	1284.25N	418.33W	10.00	735.15	1420476.51	3185062.77
11648.62	90.48	269.230	7135.45	1230.37N	4430.68W	==>	4598.10	1420422.63	3181050.57
11704.91	90.48	269.240	7134.98	1229.61N	4486.96W	==>	4652.28	1420421.88	3180994.29
11822.37	90.48	269.240	7134.00	1228.05N	4604.41W	==>	4765.36	1420420.32	3180876.84

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	1419192.31	3185481.08
20.00	0.00	0.000	20.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
730.00	0.00	0.000	730.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
750.00	0.00	0.000	750.00	0.00N	0.00E	==>	0.00	1419192.31	3185481.08
830.00	1.60	7.820	829.99	1.11N	0.15E	2.00	0.14	1419193.42	3185481.23
930.00	3.60	7.820	929.88	5.60N	0.77E	2.00	0.70	1419197.91	3185481.85
1030.00	5.60	7.820	1029.55	13.55N	1.86E	2.00	1.69	1419205.85	3185482.94
1130.00	7.60	7.820	1128.89	24.93N	3.43E	2.00	3.12	1419217.24	3185484.50
1230.00	9.60	7.820	1227.76	39.75N	5.46E	2.00	4.97	1419232.05	3185486.54
1330.00	11.60	7.820	1326.05	57.97N	7.96E	2.00	7.24	1419250.28	3185489.04
1351.38	12.03	7.820	1346.97	62.30N	8.56E	2.00	7.79	1419254.61	3185489.64
1400.00	12.03	7.820	1394.53	72.34N	9.94E	==>	9.04	1419264.65	3185491.02
1500.00	12.03	7.820	1492.33	92.99N	12.78E	==>	11.62	1419285.29	3185493.85
1600.00	12.03	7.820	1590.14	113.63N	15.61E	==>	14.20	1419305.94	3185496.69
1700.00	12.03	7.820	1687.94	134.27N	18.45E	==>	16.78	1419326.58	3185499.53
1800.00	12.03	7.820	1785.74	154.92N	21.28E	==>	19.36	1419347.22	3185502.36
1900.00	12.03	7.820	1883.55	175.56N	24.12E	==>	21.94	1419367.87	3185505.20
2000.00	12.03	7.820	1981.35	196.21N	26.96E	==>	24.52	1419388.51	3185508.04
2100.00	12.03	7.820	2079.16	216.85N	29.79E	==>	27.10	1419409.15	3185510.87
2200.00	12.03	7.820	2176.96	237.50N	32.63E	==>	29.68	1419429.80	3185513.71
2300.00	12.03	7.820	2274.77	258.14N	35.47E	==>	32.26	1419450.44	3185516.54
2400.00	12.03	7.820	2372.57	278.78N	38.30E	==>	34.83	1419471.08	3185519.38
2500.00	12.03	7.820	2470.38	299.43N	41.14E	==>	37.41	1419491.73	3185522.22
2600.00	12.03	7.820	2568.18	320.07N	43.97E	==>	39.99	1419512.37	3185525.05
2700.00	12.03	7.820	2665.99	340.72N	46.81E	==>	42.57	1419533.02	3185527.89
2800.00	12.03	7.820	2763.79	361.36N	49.65E	==>	45.15	1419553.66	3185530.72
2900.00	12.03	7.820	2861.60	382.01N	52.48E	==>	47.73	1419574.30	3185533.56
3000.00	12.03	7.820	2959.40	402.65N	55.32E	==>	50.31	1419594.95	3185536.40

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 4849.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 284.930 degrees  
Bottom hole distance is 4765.36 Feet on azimuth 284.93 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 30-Dec-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL

Well Design Combined Report  
Wellbore: RUBYANNA 13NC-26W (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3100.00	12.03	7.820	3057.21	423.29N	58.16E	==>	52.89	1419615.59	3185539.23
3200.00	12.03	7.820	3155.01	443.94N	60.99E	==>	55.47	1419636.23	3185542.07
3300.00	12.03	7.820	3252.82	464.58N	63.83E	==>	58.05	1419656.88	3185544.91
3400.00	12.03	7.820	3350.62	485.23N	66.66E	==>	60.63	1419677.52	3185547.74
3500.00	12.03	7.820	3448.43	505.87N	69.50E	==>	63.21	1419698.16	3185550.58
3600.00	12.03	7.820	3546.23	526.52N	72.34E	==>	65.79	1419718.81	3185553.41
3700.00	12.03	7.820	3644.03	547.16N	75.17E	==>	68.37	1419739.45	3185556.25
3800.00	12.03	7.820	3741.84	567.80N	78.01E	==>	70.95	1419760.09	3185559.09
3900.00	12.03	7.820	3839.64	588.45N	80.85E	==>	73.53	1419780.74	3185561.92
4000.00	12.03	7.820	3937.45	609.09N	83.68E	==>	76.11	1419801.38	3185564.76
4100.00	12.03	7.820	4035.25	629.74N	86.52E	==>	78.69	1419822.02	3185567.60
4200.00	12.03	7.820	4133.06	650.38N	89.35E	==>	81.27	1419842.67	3185570.43
4300.00	12.03	7.820	4230.86	671.03N	92.19E	==>	83.85	1419863.31	3185573.27
4400.00	12.03	7.820	4328.67	691.67N	95.03E	==>	86.43	1419883.96	3185576.10
4500.00	12.03	7.820	4426.47	712.31N	97.86E	==>	89.01	1419904.60	3185578.94
4600.00	12.03	7.820	4524.28	732.96N	100.70E	==>	91.59	1419925.24	3185581.78
4700.00	12.03	7.820	4622.08	753.60N	103.54E	==>	94.16	1419945.89	3185584.61
4800.00	12.03	7.820	4719.89	774.25N	106.37E	==>	96.74	1419966.53	3185587.45
4900.00	12.03	7.820	4817.69	794.89N	109.21E	==>	99.32	1419987.17	3185590.28
5000.00	12.03	7.820	4915.50	815.54N	112.05E	==>	101.90	1420007.82	3185593.12
5100.00	12.03	7.820	5013.30	836.18N	114.88E	==>	104.48	1420028.46	3185595.96
5200.00	12.03	7.820	5111.11	856.83N	117.72E	==>	107.06	1420049.10	3185598.79
5300.00	12.03	7.820	5208.91	877.47N	120.55E	==>	109.64	1420069.75	3185601.63
5400.00	12.03	7.820	5306.72	898.11N	123.39E	==>	112.22	1420090.39	3185604.47
5500.00	12.03	7.820	5404.52	918.76N	126.23E	==>	114.80	1420111.03	3185607.30
5600.00	12.03	7.820	5502.32	939.40N	129.06E	==>	117.38	1420131.68	3185610.14
5700.00	12.03	7.820	5600.13	960.05N	131.90E	==>	119.96	1420152.32	3185612.97
5800.00	12.03	7.820	5697.93	980.69N	134.74E	==>	122.54	1420172.96	3185615.81
5900.00	12.03	7.820	5795.74	1001.34N	137.57E	==>	125.12	1420193.61	3185618.65
6000.00	12.03	7.820	5893.54	1021.98N	140.41E	==>	127.70	1420214.25	3185621.48
6100.00	12.03	7.820	5991.35	1042.62N	143.24E	==>	130.28	1420234.90	3185624.32
6200.00	12.03	7.820	6089.15	1063.27N	146.08E	==>	132.86	1420255.54	3185627.16
6300.00	12.03	7.820	6186.96	1083.91N	148.92E	==>	135.44	1420276.18	3185629.99
6400.00	12.03	7.820	6284.76	1104.56N	151.75E	==>	138.02	1420296.83	3185632.83
6500.00	12.03	7.820	6382.57	1125.20N	154.59E	==>	140.60	1420317.47	3185635.66
6600.00	12.03	7.820	6480.37	1145.85N	157.43E	==>	143.18	1420338.11	3185638.50
6700.00	12.03	7.820	6578.18	1166.49N	160.26E	==>	145.76	1420358.76	3185641.34
6713.24	12.03	7.820	6591.12	1169.22N	160.64E	==>	146.10	1420361.49	3185641.71
6800.00	13.74	328.880	6675.86	1187.03N	156.54E	10.00	154.65	1420379.30	3185637.61
6900.00	20.58	303.470	6771.48	1206.94N	135.69E	10.00	179.93	1420399.20	3185616.76
7000.00	29.25	291.440	6862.14	1225.61N	98.19E	10.00	220.96	1420417.87	3185579.27
7100.00	38.52	284.680	6945.10	1242.47N	45.20E	10.00	276.52	1420434.74	3185526.27
7200.00	48.05	280.250	7017.82	1257.02N	21.69W	10.00	344.90	1420449.28	3185459.39
7300.00	57.71	276.980	7078.11	1268.80N	100.44W	10.00	424.02	1420461.07	3185380.64
7400.00	67.44	274.350	7124.12	1277.47N	188.66W	10.00	511.50	1420469.73	3185292.42
7500.00	77.20	272.080	7154.46	1282.75N	283.67W	10.00	604.65	1420475.02	3185197.42
7600.00	86.98	269.970	7168.21	1284.50N	382.58W	10.00	700.67	1420476.76	3185098.52
7635.77	90.48	269.230	7169.00	1284.25N	418.33W	10.00	735.15	1420476.51	3185062.77
7700.00	90.48	269.230	7168.46	1283.39N	482.55W	==>	796.98	1420475.65	3184998.55
7800.00	90.48	269.230	7167.63	1282.04N	582.54W	==>	893.25	1420474.31	3184898.56
7900.00	90.48	269.230	7166.79	1280.70N	682.53W	==>	989.51	1420472.96	3184798.58
8000.00	90.48	269.230	7165.95	1279.36N	782.51W	==>	1085.78	1420471.62	3184698.59
8100.00	90.48	269.230	7165.12	1278.02N	882.50W	==>	1182.04	1420470.28	3184598.61
8200.00	90.48	269.230	7164.28	1276.67N	982.49W	==>	1278.31	1420468.94	3184498.63
8300.00	90.48	269.230	7163.45	1275.33N	1082.48W	==>	1374.57	1420467.59	3184398.64
8400.00	90.48	269.230	7162.61	1273.99N	1182.46W	==>	1470.83	1420466.25	3184298.66
8500.00	90.48	269.230	7161.77	1272.64N	1282.45W	==>	1567.10	1420464.91	3184198.68
8600.00	90.48	269.230	7160.94	1271.30N	1382.44W	==>	1663.36	1420463.56	3184098.69
8700.00	90.48	269.230	7160.10	1269.96N	1482.43W	==>	1759.63	1420462.22	3183998.71
8800.00	90.48	269.230	7159.27	1268.62N	1582.41W	==>	1855.89	1420460.88	3183898.72
8900.00	90.48	269.230	7158.43	1267.27N	1682.40W	==>	1952.16	1420459.54	3183798.74

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Vertical Section is from 0.00N 0.00E on azimuth 284.930 degrees  
Bottom hole distance is 4765.36 Feet on azimuth 284.93 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 30-Dec-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL  
Well Design Combined Report  
Wellbore: RUBYANNA 13NC-26W (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
9000.00	90.48	269.230	7157.59	1265.93N	1782.39W	==>	2048.42	1420458.19	3183698.76
9100.00	90.48	269.230	7156.76	1264.59N	1882.38W	==>	2144.68	1420456.85	3183598.77
9200.00	90.48	269.230	7155.92	1263.25N	1982.36W	==>	2240.95	1420455.51	3183498.79
9300.00	90.48	269.230	7155.09	1261.90N	2082.35W	==>	2337.21	1420454.17	3183398.81
9400.00	90.48	269.230	7154.25	1260.56N	2182.34W	==>	2433.48	1420452.82	3183298.82
9500.00	90.48	269.230	7153.41	1259.22N	2282.33W	==>	2529.74	1420451.48	3183198.84
9600.00	90.48	269.230	7152.58	1257.87N	2382.31W	==>	2626.01	1420450.14	3183098.85
9700.00	90.48	269.230	7151.74	1256.53N	2482.30W	==>	2722.27	1420448.80	3182998.87
9800.00	90.48	269.230	7150.91	1255.19N	2582.29W	==>	2818.54	1420447.45	3182898.89
9900.00	90.48	269.230	7150.07	1253.85N	2682.28W	==>	2914.80	1420446.11	3182798.90
10000.00	90.48	269.230	7149.23	1252.50N	2782.26W	==>	3011.06	1420444.77	3182698.92
10100.00	90.48	269.230	7148.40	1251.16N	2882.25W	==>	3107.33	1420443.43	3182598.93
10200.00	90.48	269.230	7147.56	1249.82N	2982.24W	==>	3203.59	1420442.08	3182498.95
10300.00	90.48	269.230	7146.73	1248.48N	3082.23W	==>	3299.86	1420440.74	3182398.97
10400.00	90.48	269.230	7145.89	1247.13N	3182.21W	==>	3396.12	1420439.40	3182298.98
10500.00	90.48	269.230	7145.05	1245.79N	3282.20W	==>	3492.39	1420438.05	3182199.00
10600.00	90.48	269.230	7144.22	1244.45N	3382.19W	==>	3588.65	1420436.71	3182099.02
10700.00	90.48	269.230	7143.38	1243.11N	3482.18W	==>	3684.91	1420435.37	3181999.03
10800.00	90.48	269.230	7142.54	1241.76N	3582.16W	==>	3781.18	1420434.03	3181899.05
10900.00	90.48	269.230	7141.71	1240.42N	3682.15W	==>	3877.44	1420432.68	3181799.06
11000.00	90.48	269.230	7140.87	1239.08N	3782.14W	==>	3973.71	1420431.34	3181699.08
11100.00	90.48	269.230	7140.04	1237.73N	3882.13W	==>	4069.97	1420430.00	3181599.10
11200.00	90.48	269.230	7139.20	1236.39N	3982.11W	==>	4166.24	1420428.66	3181499.11
11300.00	90.48	269.230	7138.36	1235.05N	4082.10W	==>	4262.50	1420427.31	3181399.13
11400.00	90.48	269.230	7137.53	1233.71N	4182.09W	==>	4358.77	1420425.97	3181299.15
11500.00	90.48	269.230	7136.69	1232.36N	4282.08W	==>	4455.03	1420424.63	3181199.16
11600.00	90.48	269.230	7135.86	1231.02N	4382.06W	==>	4551.29	1420423.29	3181099.18
11648.62	90.48	269.230	7135.45	1230.37N	4430.68W	==>	4598.10	1420422.63	3181050.57
11700.00	90.48	269.240	7135.02	1229.68N	4482.05W	==>	4647.56	1420421.94	3180999.19
11704.91	90.48	269.240	7134.98	1229.61N	4486.96W	==>	4652.28	1420421.88	3180994.29
11800.00	90.48	269.240	7134.19	1228.35N	4582.04W	==>	4743.83	1420420.61	3180899.21
11822.37	90.48	269.240	7134.00	1228.05N	4604.41W	==>	4765.36	1420420.32	3180876.84

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SYSDRILL  
Well Design Combined Report  
Wellbore: RUBYANNA 13NC-26W (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]
12 1/4	20.00	20.00	0.00N	0.00E	700.00	700.00	0.00N	0.00E
8 3/4	700.00	700.00	0.00N	0.00E	7465.00	7145.69	1281.30N	249.82W
6 1/8	7465.00	7145.69	1281.30N	249.82W	11822.37	7134.00	1228.05N	4604.41W

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	20.00	20.00	0.00N	0.00E	700.00	700.00	0.00N	0.00E
7.0in Intermediate Casing	20.00	20.00	0.00N	0.00E	7465.00	7145.69	1281.30N	249.82W
4 1/2in Production Liner	6713.00	6590.89	1169.17N	160.63E	11822.37	7134.00	1228.05N	4604.41W

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
RUBYANNA 13NC-26W BHL	1186.30N	4604.41W	7134.00	40.48552000	-104.84973000	1420378.57	3180876.84	23-Oct-2013
RUBYANNA 13NC-26W T1	1284.25N	243.33W	7144.00	40.48570000	-104.83405000	1420476.51	3185237.76	23-Oct-2013
W RUBYANNA 13NC-26W - OFFSET	1190.37N	4430.68W	7135.45	40.48552766	-104.84910536	1420382.63	3181050.57	23-Oct-2013

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
93289	Planned	11822.37	7134.00	WdW Rate Gyro	Standard

Notes

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 4849.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 284.930 degrees  
Bottom hole distance is 4765.36 Feet on azimuth 284.93 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 30-Dec-2013



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: RUBYANNA 13NC-26W (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
RUBYANNA 13NC-26W (PWB)	23-Oct-2013	30-Dec-2013

Well		
Name	Government ID	Last Revised
W RUBYANNA 13NC-26W		23-Oct-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
RUBYANNA 13NC-26W	1419192.3101	3185481.0798	40.48217000	-104.83321000	25.50S	0.19E

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Rubyanna Pad	3185480.8881	1419217.8106	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
Wattenberg	3169265.3596	1428201.7578	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]
RUBYANN A 13NB-27W	RUBYANNA 13NB-27W (PWB)	RUBYANN A 13NB-27W	Rubyanna Pad	25.50	750.00	750.00	23.62	692.57	4.72	11822.37
RUBYANN A 13C-25W	RUBYANNA 13C-25W (PWB)	RUBYANN A 13C-25W	Rubyanna Pad	25.50	699.00	11810.78	23.61	699.00	5.91	11822.37
RUBYANN A 13C-28W	RUBYANNA 13C-28W (PWB)	RUBYANN A 13C-28W	Rubyanna Pad	54.65	750.00	750.00	52.76	692.57	8.47	11822.37
RUBYANN A 13NB-29W	RUBYANNA 13NB-29W (PWB)	RUBYANN A 13NB-29W	Rubyanna Pad	80.15	750.00	750.00	78.26	692.57	12.52	11822.37
RUBYANN A 13C-30W	RUBYANNA 13C-30W (PWB)	RUBYANN A 13C-30W	Rubyanna Pad	105.65	750.00	750.00	103.77	692.57	16.37	11822.37
RUBYANN A 13NB-31W	RUBYANNA 13NB-31W (PWB)	RUBYANN A 13NB-31W	Rubyanna Pad	131.15	750.00	750.00	129.27	692.57	20.37	11822.37
W STROMBERGER #13-32	W STROMBERGER #13-32 (AWB)	STROMBERGER #13-32	Rubyanna Offsets	152.00	11662.25	11662.25	88.50	11650.58	2.38	11648.62
RUBYANN A 13C-32W	RUBYANNA 13C-32W (PWB)	RUBYANN A 13C-32W	Rubyanna Pad	156.66	750.00	750.00	154.77	692.57	26.29	11822.37
W STROMBERGER #13-31	W STROMBERGER #13-31 (AWB)	STROMBERGER #13-31	Rubyanna Offsets	202.00	10506.42	10506.42	148.57	10502.28	3.75	10485.88

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Vertical Section is from 0.00N 0.00E on azimuth 284.930 degrees  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 30-Dec-2013



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: RUBYANNA 13NC-26W (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]
R A #1	R A #1 (AWB)	R A #1	Rubyanna Offsets	661.21	6729.32	6729.32	627.00	6729.32	19.29	6762.13
W DUNBAR #1-18	W DUNBAR #1-18 (AWB)	DUNBAR #1-18	Rubyanna Offsets	759.79	750.00	750.00	752.85	774.59	66.62	4071.84
W DUNBAR #18-33	W DUNBAR #18-33 (AWB)	DUNBAR #18-33	Rubyanna Offsets	933.11	1922.89	1922.89	918.33	2021.31	42.27	5351.36
W STROMBERGER #13-35	W STROMBERGER #13-35 (AWB)	STROMBERGER #13-35	Rubyanna Offsets	1163.85	11224.07	11224.07	1104.37	11224.07	19.57	11207.66
W STROMBERGER #1-13	W STROMBERGER #1-13 (AWB)	STROMBERGER #1-13	Rubyanna Offsets	1841.12	9960.94	9960.94	1790.02	9960.94	35.92	10075.77
W FREE ENTERPRISE #1-13	W FREE ENTERPRISE #1-13 (AWB)	FREE ENTERPRISE #1-13	Rubyanna Offsets	2213.54	4603.80	4603.80	2191.27	4613.18	98.21	4859.24