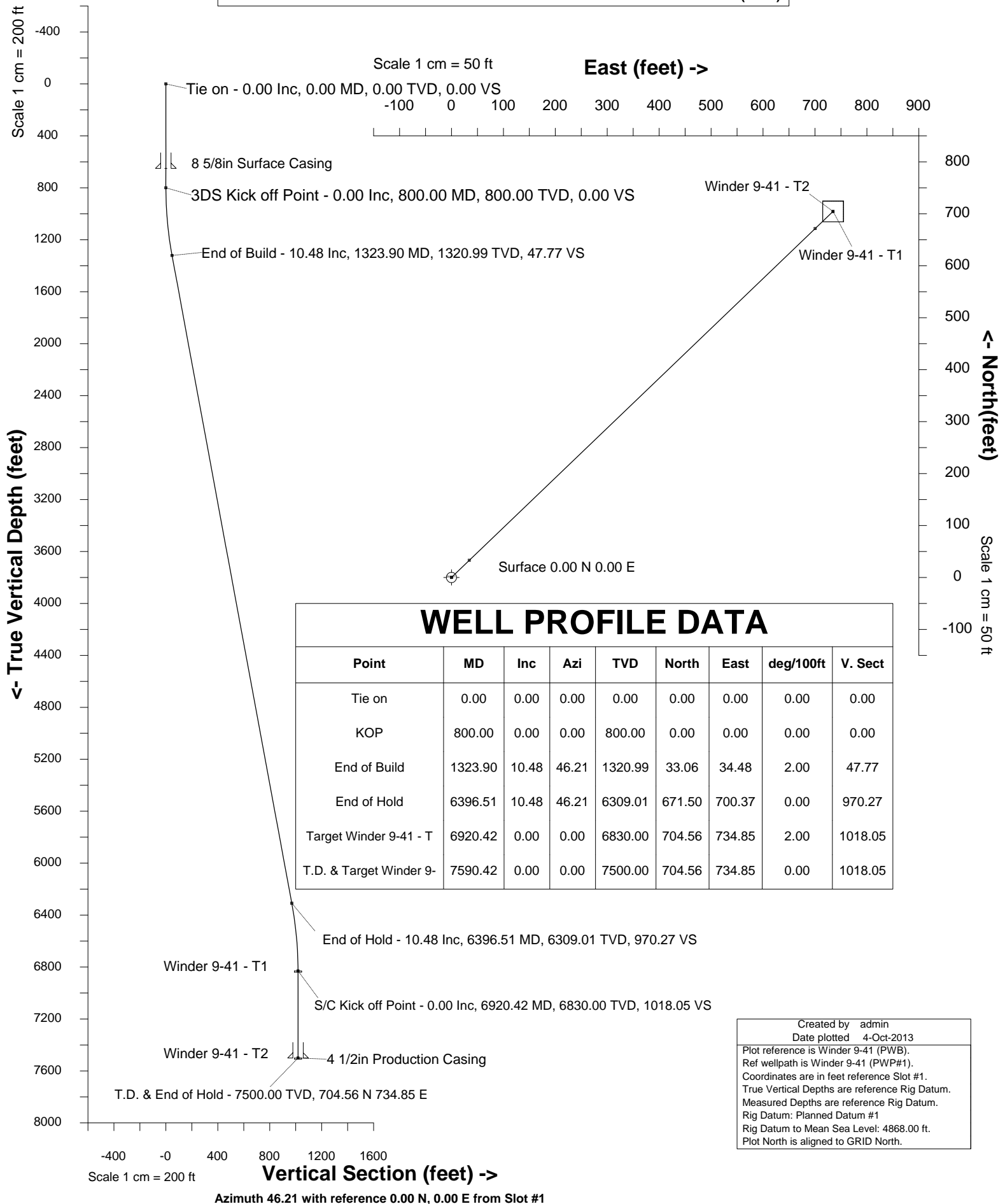


Extraction Oil & Gas LLC			
Location	Weld County, CO, USA(Imported)	Slot	Slot #1
Field	Wattenberg	Well	Winder 9-41
Installation	Winder	Wellbore	Winder 9-41 (PWB)

<b>Slot</b>	<b>Slot #1</b>
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Well Winder 9-41

Wellbore Winder 9-41 (PWB)





INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL  
Well Design Combined Report  
Wellbore: Winder 9-41 (PWB)

Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Slot #1	1428201.7578	3169265.3596	40.50722000	-104.89128000	0.00N	0.00E	-0.00

Declination			
Date	Source	Time	
4-Oct-2013	IGRF Model [1900.0-2015.0]		09:25

Site Details				
Name	Northing	Easting	Coord System Name	North Alignment
Winder	1428201.7578	3169265.3596	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	1428201.76	3169265.36
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
1323.90	10.48	46.210	1320.99	33.06N	34.48E	2.00	47.77	1428234.82	3169299.84
6396.51	10.48	46.210	6309.01	671.50N	700.37E	==>	970.27	1428873.24	3169965.70
6920.42	0.00	0.000	6830.00	704.56N	734.85E	2.00	1018.05	1428906.30	3170000.19
7590.42	0.00	0.000	7500.00	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19

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	1428201.76	3169265.36
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1428201.76	3169265.36
900.00	2.00	46.210	899.98	1.21N	1.26E	2.00	1.75	1428202.97	3169266.62
1000.00	4.00	46.210	999.84	4.83N	5.04E	2.00	6.98	1428206.59	3169270.40
1100.00	6.00	46.210	1099.45	10.86N	11.33E	2.00	15.69	1428212.62	3169276.69
1200.00	8.00	46.210	1198.70	19.30N	20.12E	2.00	27.88	1428221.05	3169285.48
1300.00	10.00	46.210	1297.47	30.12N	31.42E	2.00	43.52	1428231.88	3169296.77
1323.90	10.48	46.210	1320.99	33.06N	34.48E	2.00	47.77	1428234.82	3169299.84
1400.00	10.48	46.210	1395.82	42.64N	44.47E	==>	61.61	1428244.40	3169309.83
1500.00	10.48	46.210	1494.15	55.23N	57.60E	==>	79.80	1428256.98	3169322.96
1600.00	10.48	46.210	1592.48	67.81N	70.73E	==>	97.98	1428269.57	3169336.08
1700.00	10.48	46.210	1690.81	80.40N	83.85E	==>	116.17	1428282.15	3169349.21
1800.00	10.48	46.210	1789.15	92.98N	96.98E	==>	134.35	1428294.74	3169362.34
1900.00	10.48	46.210	1887.48	105.57N	110.11E	==>	152.54	1428307.32	3169375.46
2000.00	10.48	46.210	1985.81	118.16N	123.23E	==>	170.73	1428319.91	3169388.59
2100.00	10.48	46.210	2084.14	130.74N	136.36E	==>	188.91	1428332.49	3169401.72
2200.00	10.48	46.210	2182.48	143.33N	149.49E	==>	207.10	1428345.08	3169414.84
2300.00	10.48	46.210	2280.81	155.91N	162.62E	==>	225.28	1428357.67	3169427.97
2400.00	10.48	46.210	2379.14	168.50N	175.74E	==>	243.47	1428370.25	3169441.10
2500.00	10.48	46.210	2477.47	181.09N	188.87E	==>	261.66	1428382.84	3169454.22
2600.00	10.48	46.210	2575.81	193.67N	202.00E	==>	279.84	1428395.42	3169467.35
2700.00	10.48	46.210	2674.14	206.26N	215.12E	==>	298.03	1428408.01	3169480.48
2800.00	10.48	46.210	2772.47	218.84N	228.25E	==>	316.21	1428420.59	3169493.60
2900.00	10.48	46.210	2870.80	231.43N	241.38E	==>	334.40	1428433.18	3169506.73
3000.00	10.48	46.210	2969.13	244.02N	254.51E	==>	352.59	1428445.77	3169519.86
3100.00	10.48	46.210	3067.47	256.60N	267.63E	==>	370.77	1428458.35	3169532.98
3200.00	10.48	46.210	3165.80	269.19N	280.76E	==>	388.96	1428470.94	3169546.11
3300.00	10.48	46.210	3264.13	281.77N	293.89E	==>	407.14	1428483.52	3169559.24
3400.00	10.48	46.210	3362.46	294.36N	307.01E	==>	425.33	1428496.11	3169572.36
3500.00	10.48	46.210	3460.80	306.95N	320.14E	==>	443.52	1428508.69	3169585.49
3600.00	10.48	46.210	3559.13	319.53N	333.27E	==>	461.70	1428521.28	3169598.62

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig ( Planned Datum #1 4868.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 46.210 degrees  
Bottom hole distance is 1018.05 Feet on azimuth 46.21 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 4-Oct-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL  
Well Design Combined Report  
Wellbore: Winder 9-41 (PWB)

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
3700.00	10.48	46.210	3657.46	332.12N	346.39E	==>	479.89	1428533.86	3169611.74
3800.00	10.48	46.210	3755.79	344.70N	359.52E	==>	498.07	1428546.45	3169624.87
3900.00	10.48	46.210	3854.13	357.29N	372.65E	==>	516.26	1428559.04	3169638.00
4000.00	10.48	46.210	3952.46	369.88N	385.78E	==>	534.45	1428571.62	3169651.12
4100.00	10.48	46.210	4050.79	382.46N	398.90E	==>	552.63	1428584.21	3169664.25
4200.00	10.48	46.210	4149.12	395.05N	412.03E	==>	570.82	1428596.79	3169677.38
4300.00	10.48	46.210	4247.46	407.63N	425.16E	==>	589.00	1428609.38	3169690.50
4400.00	10.48	46.210	4345.79	420.22N	438.28E	==>	607.19	1428621.96	3169703.63
4500.00	10.48	46.210	4444.12	432.81N	451.41E	==>	625.38	1428634.55	3169716.76
4600.00	10.48	46.210	4542.45	445.39N	464.54E	==>	643.56	1428647.13	3169729.88
4700.00	10.48	46.210	4640.79	457.98N	477.67E	==>	661.75	1428659.72	3169743.01
4800.00	10.48	46.210	4739.12	470.56N	490.79E	==>	679.93	1428672.31	3169756.14
4900.00	10.48	46.210	4837.45	483.15N	503.92E	==>	698.12	1428684.89	3169769.26
5000.00	10.48	46.210	4935.78	495.74N	517.05E	==>	716.30	1428697.48	3169782.39
5100.00	10.48	46.210	5034.12	508.32N	530.17E	==>	734.49	1428710.06	3169795.52
5200.00	10.48	46.210	5132.45	520.91N	543.30E	==>	752.68	1428722.65	3169808.64
5300.00	10.48	46.210	5230.78	533.50N	556.43E	==>	770.86	1428735.23	3169821.77
5400.00	10.48	46.210	5329.11	546.08N	569.56E	==>	789.05	1428747.82	3169834.90
5500.00	10.48	46.210	5427.45	558.67N	582.68E	==>	807.23	1428760.41	3169848.02
5600.00	10.48	46.210	5525.78	571.25N	595.81E	==>	825.42	1428772.99	3169861.15
5700.00	10.48	46.210	5624.11	583.84N	608.94E	==>	843.61	1428785.58	3169874.27
5800.00	10.48	46.210	5722.44	596.43N	622.06E	==>	861.79	1428798.16	3169887.40
5900.00	10.48	46.210	5820.78	609.01N	635.19E	==>	879.98	1428810.75	3169900.53
6000.00	10.48	46.210	5919.11	621.60N	648.32E	==>	898.16	1428823.33	3169913.65
6100.00	10.48	46.210	6017.44	634.18N	661.45E	==>	916.35	1428835.92	3169926.78
6200.00	10.48	46.210	6115.77	646.77N	674.57E	==>	934.54	1428848.50	3169939.91
6300.00	10.48	46.210	6214.11	659.36N	687.70E	==>	952.72	1428861.09	3169953.03
6396.51	10.48	46.210	6309.01	671.50N	700.37E	==>	970.27	1428873.24	3169965.70
6496.51	8.48	46.210	6407.64	682.90N	712.25E	2.00	986.74	1428884.63	3169977.59
6596.51	6.48	46.210	6506.78	691.91N	721.65E	2.00	999.75	1428893.64	3169986.98
6696.51	4.48	46.210	6606.32	698.51N	728.54E	2.00	1009.30	1428900.25	3169993.87
6796.51	2.48	46.210	6706.13	702.71N	732.92E	2.00	1015.37	1428904.44	3169998.25
6896.51	0.48	46.210	6806.10	704.50N	734.78E	2.00	1017.95	1428906.23	3170000.11
6920.42	0.00	0.000	6830.00	704.56N	734.85E	2.00	1018.05	1428906.30	3170000.19
7000.00	0.00	0.000	6909.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7100.00	0.00	0.000	7009.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7200.00	0.00	0.000	7109.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7300.00	0.00	0.000	7209.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7400.00	0.00	0.000	7309.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7500.00	0.00	0.000	7409.58	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19
7590.42	0.00	0.000	7500.00	704.56N	734.85E	==>	1018.05	1428906.30	3170000.19

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 4868.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 46.210 degrees  
Bottom hole distance is 1018.05 Feet on azimuth 46.21 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 4-Oct-2013



INTEGRATED PETROLEUM TECHNOLOGIES, INC  
SYSDRILL  
Well Design Combined Report  
Wellbore: Winder 9-41 (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	0.00	0.00	0.00N	0.00E	650.00	650.00	0.00N	0.00E
7 7/8	650.00	650.00	0.00N	0.00E	7590.42	7500.00	704.56N	734.85E

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]
8 5/8in Surface Casing	0.00	0.00	0.00N	0.00E	650.00	650.00	0.00N	0.00E
4 1/2in Production Casing	0.00	0.00	0.00N	0.00E	7590.42	7500.00	704.56N	734.85E

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Winder 9-41 - T1	704.56N	734.85E	6830.00	40.50914000	-104.88862000	1428906.30	3170000.19	4-Oct-2013
Winder 9-41 - T2	704.56N	734.85E	7500.00	40.50914000	-104.88862000	1428906.30	3170000.19	4-Oct-2013

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
65290	Planned	7590.42	7500.00	WdW Rate Gyro	Standard	

Notes

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Vertical Section is from 0.00N 0.00E on azimuth 46.210 degrees  
Bottom hole distance is 1018.05 Feet on azimuth 46.21 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 4-Oct-2013



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: Winder 9-41 (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
Winder 9-41 (PWB)	4-Oct-2013	4-Oct-2013

Well		
Name	Government ID	Last Revised
Winder 9-41		4-Oct-2013

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #1	1428201.7578	3169265.3596	40.50722000	-104.89128000	0.00N	0.00E

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Winder	3169265.3596	1428201.7578	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]
Winder 1-9	Winder 1-9 (AWB)	Winder 1-9	Winder Offsets	24.64	1107.58	1107.58	16.83	1115.49	3.14	1131.89
Winder 9-31	Winder 9-31 (AWB)	Winder 9-31	Winder Offsets	1274.35	803.81	7590.42	1265.45	820.21	68.88	7590.42
Winder 9-42	Winder 9-42 (AWB)	Winder 9-42	Winder Offsets	1300.81	803.81	7590.42	1291.92	820.21	67.02	7590.42
Winder 9-32	Winder 9-32 (AWB)	Winder 9-32	Winder Offsets	1867.62	803.81	803.81	1858.75	820.21	109.58	4658.79
Frye 1-10	Frye 1-10 (AWB)	Frye 1-10	Winder Offsets	1887.37	1410.76	1410.76	1878.15	1640.42	113.80	3838.58