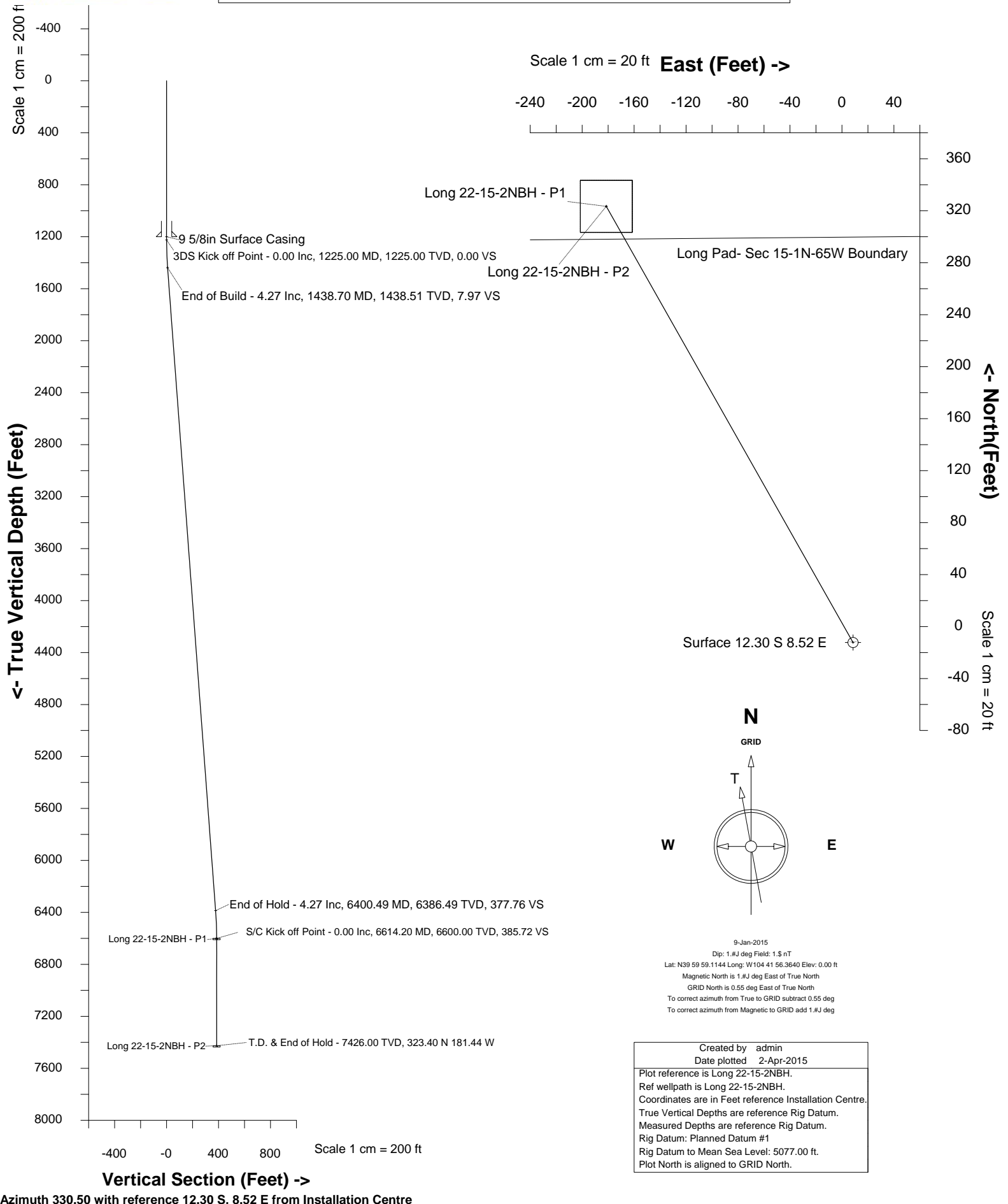




Edge Energy LLC

Location DJ Basin
Field Wattenberg
Installation Long Pad

Slot Long 22-15-2NBH
Well Long 22-15-2NBH
Wellbore Long 22-15-2NBH





Wellhead Details

Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Long 22-15-2NBH	1259764.1926	3237752.8073	40.04331600	-104.65079600	12.30S	8.52E	-0.00

Declination

Date	Source	Time
9-Jan-2015		09:02

Installation Details

Name	Northing	Easting	Coord System Name	North Alignment
Long Pad	1259776.4969	3237744.2898	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
25.00	0.00	0.000	25.00	0.00N	0.00E		0.00	1259764.19	3237752.81
7440.20	0.00	224.980	7426.00	335.70N	189.96W	==>	385.72	1260099.88	3237562.85

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	Rig Datum
25.00	0.00	0.000	25.00	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	1.50	330.500	1299.99	0.85N	0.48W	2.00	0.98	
1400.00	3.50	330.500	1399.89	4.65N	2.63W	2.00	5.34	
1500.00	4.27	330.500	1499.63	10.91N	6.17W	==>	12.54	
1600.00	4.27	330.500	1599.35	17.40N	9.84W	==>	19.99	
1700.00	4.27	330.500	1699.08	23.88N	13.51W	==>	27.44	
1800.00	4.27	330.500	1798.80	30.37N	17.18W	==>	34.89	
1900.00	4.27	330.500	1898.52	36.85N	20.85W	==>	42.35	
2000.00	4.27	330.500	1998.24	43.34N	24.53W	==>	49.80	
2100.00	4.27	330.500	2097.96	49.83N	28.20W	==>	57.25	
2200.00	4.27	330.500	2197.68	56.31N	31.87W	==>	64.70	
2300.00	4.27	330.500	2297.41	62.80N	35.54W	==>	72.16	
2400.00	4.27	330.500	2397.13	69.29N	39.21W	==>	79.61	
2500.00	4.27	330.500	2496.85	75.77N	42.88W	==>	87.06	
2600.00	4.27	330.500	2596.57	82.26N	46.55W	==>	94.52	
2700.00	4.27	330.500	2696.29	88.75N	50.22W	==>	101.97	
2800.00	4.27	330.500	2796.02	95.23N	53.89W	==>	109.42	
2900.00	4.27	330.500	2895.74	101.72N	57.56W	==>	116.87	
3000.00	4.27	330.500	2995.46	108.20N	61.23W	==>	124.33	
3100.00	4.27	330.500	3095.18	114.69N	64.90W	==>	131.78	
3200.00	4.27	330.500	3194.90	121.18N	68.57W	==>	139.23	
3300.00	4.27	330.500	3294.63	127.66N	72.24W	==>	146.68	
3400.00	4.27	330.500	3394.35	134.15N	75.91W	==>	154.14	
3500.00	4.27	330.500	3494.07	140.64N	79.58W	==>	161.59	
3600.00	4.27	330.500	3593.79	147.12N	83.25W	==>	169.04	
3700.00	4.27	330.500	3693.51	153.61N	86.92W	==>	176.50	
3800.00	4.27	330.500	3793.24	160.09N	90.59W	==>	183.95	
3900.00	4.27	330.500	3892.96	166.58N	94.26W	==>	191.40	

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 5077.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 330.500 degrees
Bottom hole distance is 385.72 Feet on azimuth 330.50 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 2-Apr-2015



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
4000.00	4.27	330.500	3992.68	173.07N	97.93W	==>	198.85	
4100.00	4.27	330.500	4092.40	179.55N	101.60W	==>	206.31	
4200.00	4.27	330.500	4192.12	186.04N	105.27W	==>	213.76	
4300.00	4.27	330.500	4291.84	192.53N	108.94W	==>	221.21	
4400.00	4.27	330.500	4391.57	199.01N	112.61W	==>	228.66	
4500.00	4.27	330.500	4491.29	205.50N	116.28W	==>	236.12	
4600.00	4.27	330.500	4591.01	211.98N	119.95W	==>	243.57	
4700.00	4.27	330.500	4690.73	218.47N	123.62W	==>	251.02	
4800.00	4.27	330.500	4790.45	224.96N	127.29W	==>	258.48	
4900.00	4.27	330.500	4890.18	231.44N	130.96W	==>	265.93	
5000.00	4.27	330.500	4989.90	237.93N	134.63W	==>	273.38	
5100.00	4.27	330.500	5089.62	244.42N	138.30W	==>	280.83	
5200.00	4.27	330.500	5189.34	250.90N	141.98W	==>	288.29	
5300.00	4.27	330.500	5289.06	257.39N	145.65W	==>	295.74	
5400.00	4.27	330.500	5388.79	263.88N	149.32W	==>	303.19	
5500.00	4.27	330.500	5488.51	270.36N	152.99W	==>	310.64	
5600.00	4.27	330.500	5588.23	276.85N	156.66W	==>	318.10	
5700.00	4.27	330.500	5687.95	283.33N	160.33W	==>	325.55	
5800.00	4.27	330.500	5787.67	289.82N	164.00W	==>	333.00	
5900.00	4.27	330.500	5887.39	296.31N	167.67W	==>	340.46	
6000.00	4.27	330.500	5987.12	302.79N	171.34W	==>	347.91	
6100.00	4.27	330.500	6086.84	309.28N	175.01W	==>	355.36	
6200.00	4.27	330.500	6186.56	315.77N	178.68W	==>	362.81	
6300.00	4.27	330.500	6286.28	322.25N	182.35W	==>	370.27	
6400.00	4.27	330.500	6386.00	328.74N	186.02W	==>	377.72	
6500.00	2.28	330.500	6485.84	333.72N	188.84W	2.00	383.45	
6600.00	0.28	330.500	6585.80	335.67N	189.94W	2.00	385.69	
6700.00	0.00	330.500	6685.80	335.70N	189.96W	==>	385.72	
6800.00	0.00	330.500	6785.80	335.70N	189.96W	==>	385.72	
6900.00	0.00	330.500	6885.80	335.70N	189.96W	==>	385.72	
7000.00	0.00	330.500	6985.80	335.70N	189.96W	==>	385.72	
7100.00	0.00	330.500	7085.80	335.70N	189.96W	==>	385.72	
7200.00	0.00	330.500	7185.80	335.70N	189.96W	==>	385.72	
7300.00	0.00	330.500	7285.80	335.70N	189.96W	==>	385.72	
7400.00	0.00	330.500	7385.80	335.70N	189.96W	==>	385.72	
7440.20	0.00	224.980	7426.00	335.70N	189.96W	==>	385.72	



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	25.00	25.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E
8 3/4	1200.00	1200.00	0.00N	0.00E	7440.20	7426.00	335.70N	189.96W

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	25.00	25.00	0.00N	0.00E	1200.00	1200.00	0.00N	0.00E

Targets								
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
Long 22-15-2NBH - P1	335.70N	189.96W	6600.00	40.04424248	-104.65146296	1260099.88	3237562.85	19-Mar-2015
Long 22-15-2NBH - P2	335.70N	189.96W	7426.00	40.04424248	-104.65146296	1260099.88	3237562.85	19-Mar-2015

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
364939	Planned	7440.20	7426.00	WdW Rate Gyro	Standard

Notes

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Long 22-15-2NBH



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
Long 22-15-2NBH	31-Mar-2015	2-Apr-2015

Well		
Name	Government ID	Last Revised
Long 22-15-2NBH		19-Mar-2015

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Long 22-15-2NBH	1259764.1926	3237752.8073	40.04331600	-104.65079600	12.30S	8.52E

Installation				
Name	Easting	Northing	Coord System Name	North Alignment
Long Pad	3237744.2898	1259776.4969	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Field				
Name	Easting	Northing	Coord System Name	North Alignment
Wattenberg	3224403.5855	1243770.7568	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]
Long 22-15-2NBH	0.00	6614.20	6614.20	0.58	6652.30	1.79	6652.30
Long 22-15-1CH	14.70	1780.25	1780.25	11.02	1829.46	3.78	1960.70
Long 22-15-1CH	14.70	1780.25	1780.25	11.02	1829.46	3.78	1960.70
LONG 22-15-3NCH	14.90	1358.97	1358.97	12.08	1392.40	5.23	1392.40
LONG 22-15-4NBH	27.57	1460.21	1460.21	24.60	1460.21	9.21	1484.97
Long 22-15-16NCH	29.91	1189.70	1189.70	27.07	1189.70	10.53	1189.70
Long 22-15-18NBH	30.09	1189.70	1189.70	27.25	1189.70	10.60	1189.70
Long 22-15-15NBH	32.84	1189.70	1189.70	30.00	1189.70	11.56	1189.70
Long 22-15-17CH	34.32	1189.70	1189.70	31.48	1189.70	12.08	1189.70
LONG 22-15-5CH	40.15	1507.52	1507.52	37.10	1517.78	13.01	1550.59
Long 22-15-14NCH	40.21	1408.01	1408.01	37.62	1408.01	14.56	1189.70
Long 22-15-19CH	45.05	1189.70	1189.70	42.21	1189.70	15.87	1189.70
Long 22-15-6NCH	45.29	1845.87	1845.87	41.98	1862.27	13.09	2009.91
Long 22-15-6NCH	45.29	1845.87	7426.94	41.98	1862.27	13.09	2009.91
Long 22-15-13CH	47.06	1493.53	7168.74	44.33	1493.53	17.00	1534.19
Long 22-15-12NBH	53.94	1584.89	6996.78	51.04	1584.89	18.18	1665.42
Long 22-15-20NBH	60.02	1189.70	1189.70	57.18	1189.70	21.13	1189.70
Long 22-15 11NCH	69.05	1625.00	1625.00	66.09	1625.00	22.84	1698.23
Long 22-15-7NBH	72.63	1496.72	1496.72	69.90	1496.72	25.72	1599.80
Long 22-15-10NBH	83.91	1619.04	1619.04	80.96	1625.00	27.57	1731.04
Long 22-15-8NCH	85.33	1681.82	7095.21	82.28	1698.23	24.49	2272.38

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 5077.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 330.500 degrees
Prepared by Integrated Petroleum Technologies, Inc.
Date Printed: 2-Apr-2015

SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: Long 22-15-2NBH



Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
Long 22-15-9CH	102.03	1517.78	1517.78	99.25	1525.00	35.15	1665.42
Drake #01N-65W-22-1C	1187.35	7440.20	7440.20	1144.33	7440.20	27.60	7440.20
Drake #01N-65W-22-2N	1331.27	7386.43	7386.43	1286.68	7386.43	29.85	7390.49
Drake #01N-65W-22-3N	1485.63	7386.37	7386.37	1439.94	7386.37	32.51	7406.89
Drake #01N-65W-22-4N	1642.70	7386.37	7386.37	1596.14	7390.49	35.28	7406.89