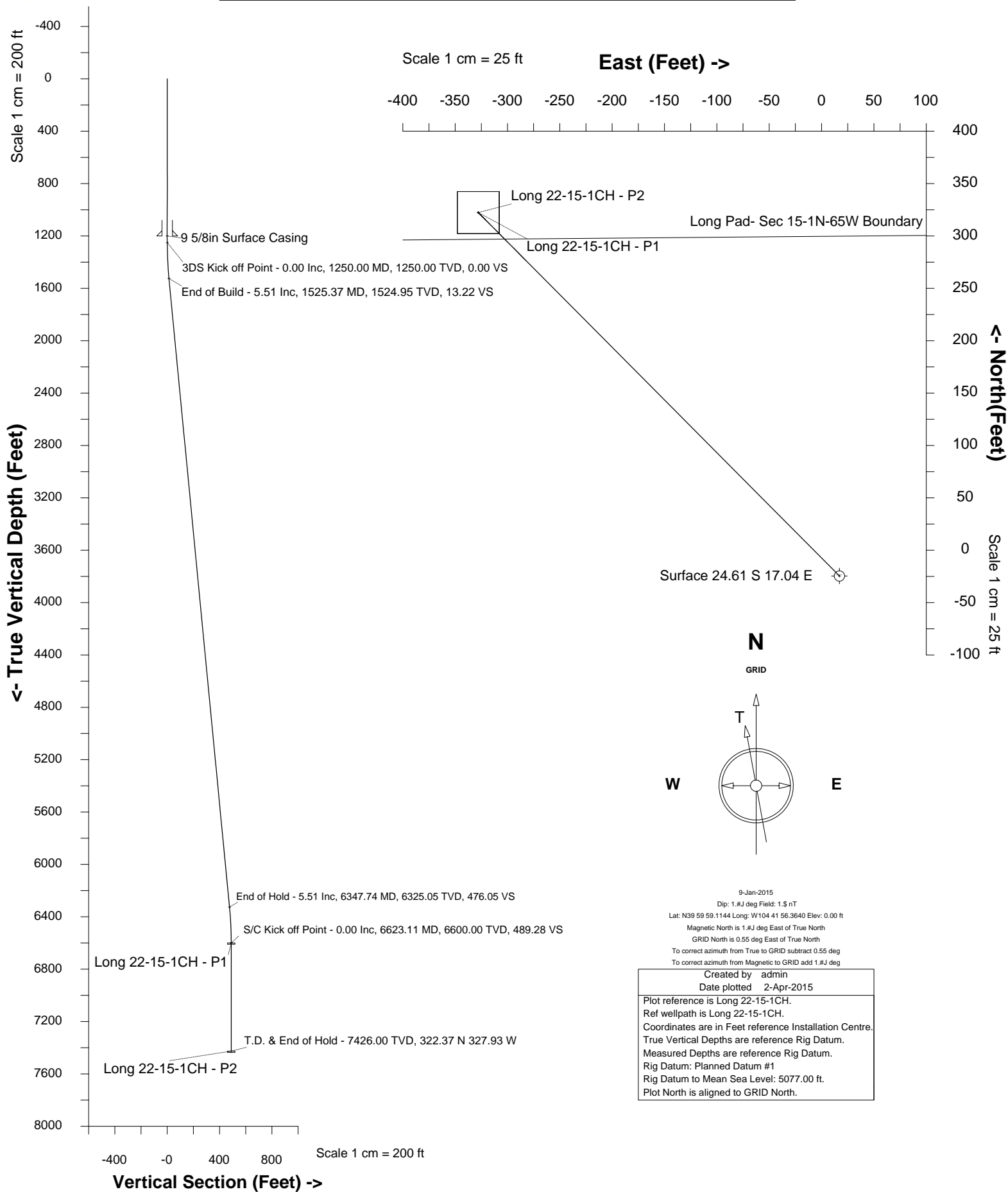




# Edge Energy LLC

Location	DJ Basin	Slot	Long 22-15-1CH
Field	Wattenberg	Well	Long 22-15-1CH
Installation	Long Pad	Wellbore	Long 22-15-1CH





Wellhead Details							
Name	Northing	Easting	Latitude	Longitude	North	East	Elevation Above Inst.
Long 22-15-1CH	1259751.8882	3237761.3248	40.04328200	-104.65076600	24.61S	17.04E	-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	1259751.89	3237761.32
7449.11	0.00	289.990	7426.00	346.98N	344.96W	==>	489.28	1260098.85	3237416.38

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 Slot Datum
25.00	0.00	0.000	25.00	0.00N	0.00E	==>	0.00	
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	1.00	315.170	1300.00	0.31N	0.31W	2.00	0.44	
1400.00	3.00	315.170	1399.93	2.78N	2.77W	2.00	3.93	
1500.00	5.00	315.170	1499.68	7.73N	7.69W	2.00	10.90	
1600.00	5.51	315.170	1599.23	14.46N	14.37W	==>	20.39	
1700.00	5.51	315.170	1698.77	21.26N	21.14W	==>	29.98	
1800.00	5.51	315.170	1798.31	28.07N	27.91W	==>	39.58	
1900.00	5.51	315.170	1897.85	34.88N	34.67W	==>	49.18	
2000.00	5.51	315.170	1997.39	41.68N	41.44W	==>	58.78	
2100.00	5.51	315.170	2096.92	48.49N	48.21W	==>	68.37	
2200.00	5.51	315.170	2196.46	55.29N	54.97W	==>	77.97	
2300.00	5.51	315.170	2296.00	62.10N	61.74W	==>	87.57	
2400.00	5.51	315.170	2395.54	68.91N	68.51W	==>	97.17	
2500.00	5.51	315.170	2495.08	75.71N	75.27W	==>	106.76	
2600.00	5.51	315.170	2594.62	82.52N	82.04W	==>	116.36	
2700.00	5.51	315.170	2694.15	89.33N	88.81W	==>	125.96	
2800.00	5.51	315.170	2793.69	96.13N	95.57W	==>	135.56	
2900.00	5.51	315.170	2893.23	102.94N	102.34W	==>	145.15	
3000.00	5.51	315.170	2992.77	109.74N	109.11W	==>	154.75	
3100.00	5.51	315.170	3092.31	116.55N	115.87W	==>	164.35	
3200.00	5.51	315.170	3191.85	123.36N	122.64W	==>	173.95	
3300.00	5.51	315.170	3291.38	130.16N	129.41W	==>	183.54	
3400.00	5.51	315.170	3390.92	136.97N	136.17W	==>	193.14	
3500.00	5.51	315.170	3490.46	143.78N	142.94W	==>	202.74	
3600.00	5.51	315.170	3590.00	150.58N	149.71W	==>	212.34	
3700.00	5.51	315.170	3689.54	157.39N	156.47W	==>	221.93	
3800.00	5.51	315.170	3789.08	164.19N	163.24W	==>	231.53	
3900.00	5.51	315.170	3888.61	171.00N	170.01W	==>	241.13	

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 315.170 degrees  
Bottom hole distance is 489.28 Feet on azimuth 315.17 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 2-Apr-2015



Interpolated Wellpath								All Station Comments
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	
4000.00	5.51	315.170	3988.15	177.81N	176.77W	==>	250.73	
4100.00	5.51	315.170	4087.69	184.61N	183.54W	==>	260.32	
4200.00	5.51	315.170	4187.23	191.42N	190.31W	==>	269.92	
4300.00	5.51	315.170	4286.77	198.22N	197.07W	==>	279.52	
4400.00	5.51	315.170	4386.31	205.03N	203.84W	==>	289.12	
4500.00	5.51	315.170	4485.84	211.84N	210.61W	==>	298.71	
4600.00	5.51	315.170	4585.38	218.64N	217.37W	==>	308.31	
4700.00	5.51	315.170	4684.92	225.45N	224.14W	==>	317.91	
4800.00	5.51	315.170	4784.46	232.26N	230.91W	==>	327.51	
4900.00	5.51	315.170	4884.00	239.06N	237.67W	==>	337.10	
5000.00	5.51	315.170	4983.54	245.87N	244.44W	==>	346.70	
5100.00	5.51	315.170	5083.07	252.67N	251.21W	==>	356.30	
5200.00	5.51	315.170	5182.61	259.48N	257.97W	==>	365.90	
5300.00	5.51	315.170	5282.15	266.29N	264.74W	==>	375.49	
5400.00	5.51	315.170	5381.69	273.09N	271.51W	==>	385.09	
5500.00	5.51	315.170	5481.23	279.90N	278.27W	==>	394.69	
5600.00	5.51	315.170	5580.77	286.70N	285.04W	==>	404.29	
5700.00	5.51	315.170	5680.30	293.51N	291.81W	==>	413.88	
5800.00	5.51	315.170	5779.84	300.32N	298.57W	==>	423.48	
5900.00	5.51	315.170	5879.38	307.12N	305.34W	==>	433.08	
6000.00	5.51	315.170	5978.92	313.93N	312.11W	==>	442.68	
6100.00	5.51	315.170	6078.46	320.74N	318.87W	==>	452.27	
6200.00	5.51	315.170	6178.00	327.54N	325.64W	==>	461.87	
6300.00	5.51	315.170	6277.54	334.35N	332.41W	==>	471.47	
6400.00	4.46	315.170	6377.12	340.82N	338.84W	2.00	480.59	
6500.00	2.46	315.170	6476.93	345.10N	343.10W	2.00	486.63	
6600.00	0.46	315.170	6576.89	346.91N	344.90W	2.00	489.18	
6700.00	0.00	315.170	6676.89	346.98N	344.96W	==>	489.28	
6800.00	0.00	315.170	6776.89	346.98N	344.96W	==>	489.28	
6900.00	0.00	315.170	6876.89	346.98N	344.96W	==>	489.28	
7000.00	0.00	315.170	6976.89	346.98N	344.96W	==>	489.28	
7100.00	0.00	315.170	7076.89	346.98N	344.96W	==>	489.28	
7200.00	0.00	315.170	7176.89	346.98N	344.96W	==>	489.28	
7300.00	0.00	315.170	7276.89	346.98N	344.96W	==>	489.28	
7400.00	0.00	315.170	7376.89	346.98N	344.96W	==>	489.28	
7449.11	0.00	289.990	7426.00	346.98N	344.96W	==>	489.28	



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	7449.11	7426.00	346.98N	344.96W

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 22-15-1CH - P1	346.98N	344.96W	6600.00	40.04424349	-104.65198616	1260098.85	3237416.38	19-Mar-2015
Long 22-15-1CH - P2	346.98N	344.96W	7426.00	40.04424349	-104.65198616	1260098.85	3237416.38	19-Mar-2015

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
364883	Planned	7449.11	7426.00	WdW Rate Gyro	Standard

Notes

SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: Long 22-15-1CH



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 22-15-1CH	31-Mar-2015	1-Apr-2015

Well		
Name	Government ID	Last Revised
Long 22-15-1CH		19-Mar-2015

Slot						
Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Long 22-15-1CH	1259751.8882	3237761.3248	40.04328200	-104.65076600	24.61S	17.04E

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 22-15-1CH	0.00	6623.11	6623.11	-0.08	6717.91	0.91	6717.91
Long 22-15-2NBH	14.70	1780.25	6705.44	11.45	1813.06	4.38	1911.48
Long 22-15-2NBH	14.70	1780.25	6623.04	11.45	1813.06	4.38	1911.48
Long 22-15-18NBH	15.12	1189.70	1189.70	12.28	1189.70	5.33	1189.70
LONG 22-15-3NCH	29.93	1189.70	1493.98	27.09	1189.70	9.83	1550.59
Long 22-15-19CH	30.09	1189.70	1189.70	27.25	1189.70	10.60	1189.70
Long 22-15-17CH	30.15	1189.70	1189.70	27.31	1189.70	10.62	1189.70
Long 22-15-16NCH	32.84	1189.70	1189.70	30.00	1189.70	11.56	1189.70
Long 22-15-15NBH	41.36	1189.70	1325.54	38.52	1189.70	14.56	1189.70
LONG 22-15-4NBH	42.04	1562.17	1562.17	38.90	1562.17	13.25	1599.80
Long 22-15-20NBH	45.05	1189.70	1189.70	42.21	1189.70	15.87	1189.70
Long 22-15-14NCH	50.54	1459.78	1459.78	47.86	1459.78	18.52	1517.78
LONG 22-15-5CH	53.95	1600.60	1600.60	50.74	1616.21	16.54	1665.42
Long 22-15-13CH	58.88	1534.98	1534.98	56.07	1534.98	20.59	1583.40
Long 22-15-6NCH	60.00	1825.00	1825.00	56.70	1829.46	17.41	1993.50
Long 22-15-6NCH	60.00	1825.00	1825.00	56.70	1829.46	17.41	1993.50
Long 22-15-12NBH	66.17	1625.00	6982.34	63.20	1625.00	21.74	1698.23
Long 22-15 11NCH	82.74	1698.30	1698.30	79.65	1698.30	25.98	1796.65
Long 22-15-8NCH	84.97	2272.38	7113.17	80.90	2305.18	16.45	7094.31
Long 22-15-7NBH	87.37	1599.80	6967.47	84.47	1599.80	28.59	1862.27
Long 22-15-10NBH	97.58	1699.71	1699.71	94.48	1699.71	30.39	1829.46

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 315.170 degrees  
Prepared by Integrated Petroleum Technologies, Inc.  
Date Printed: 2-Apr-2015

SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: Long 22-15-1CH



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	116.55	1602.41	1602.41	113.64	1616.21	37.87	1780.25
Drake #01N-65W-22-1C	1321.46	7449.11	7449.11	1277.55	7449.11	30.09	7449.11
Drake #01N-65W-22-2N	1468.73	7395.34	7395.34	1423.56	7395.34	32.52	7406.89
Drake #01N-65W-22-3N	1624.86	7395.28	7395.28	1578.77	7395.28	35.25	7406.89
Drake #01N-65W-22-4N	1783.23	7395.28	7395.28	1736.41	7395.28	38.08	7423.29