

**State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work**

Farm Name: Craig Bessinger 10H

Operator Well No.: 831202

LOCATION Elevation: 2097'
District: Meade
Top Hole Latitude: 6800 ft South of 38° 52' 30"
Top Hole Longitude: 14850 ft West of 80° 15' 00"
Btm Hole Latitude: 5100 ft South of 38° 50' 00"
Btm Hole Longitude: 3800 ft West of xx° xx' xx"

Quadrangle: Rock Cave
County: Upshur

Company: Chesapeake Appalachia, LLC
P.O. Box 18496
Oklahoma City, OK 73154-0496

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill-Up Cu.Ft.
20"		40'	
13 3/8"	505'	505'	CTS
9 5/8"	1848'	1848'	CTS
5 1/2"	13065'	13065'	4132' Calc.
2 3/8"	7749'	7749'	

Agent: Eric Gillespie
Inspector: Bill Hatfield

Date Permit Issued: 08/25/2009
Date Well work commenced: 02/01/2010
Date Well Work completed: 03/18/2010
Verbal Plugging Permission
Granted on / /
Rotary Cable Rig
Total Depth (ft): 13143' TVD: 7328'
Fresh Water Depth (ft): 540'
Salt Water Depth (ft.): NA
Is coal being mined in area (Yes No
Coal Depths (ft): 233' 271' 339'

RECEIVED
Office of Oil & Gas

OCT 05 2010

WV Department of
Environmental Protection

Open Flow Data

1st Producing Formation Marcellus Pay Zone Depth 7,776 ft to 12,898 ft

Gas: Initial Open Flow	<u>1,707 Mcf/day</u>	Oil: Initial Open Flow	<u> </u> bbl/day
Final Open Flow	<u> </u> Mcf/day	Final Open Flow	<u> </u> bbl/day
Time of Open Flow between Initial and Final Tests	<u> </u> hours		
Static Rock Pressure	<u>3,298 psig</u> after		

2nd Producing Formation Marcellus Pay Zone Depth xx ft to xx ft

Gas: Initial Open Flow	<u> </u> Mcf/day	Oil: Initial Open Flow	<u> </u> bbl/day
Final Open Flow	<u>xx</u> Mcf/day	Final Open Flow	<u> </u> bbl/day
Time of Open Flow between Initial and Final Tests	<u>xx</u> hours		
Static Rock Pressure	<u>xx</u> psig after	<u>xx</u> hours	

3rd Producing Formation Marcellus Pay Zone Depth xx ft to xx ft

Gas: Initial Open Flow	<u> </u> Mcf/day	Oil: Initial Open Flow	<u> </u> bbl/day
Final Open Flow	<u>xx</u> Mcf/day	Final Open Flow	<u> </u> bbl/day
Time of Open Flow between Initial and Final Tests	<u>xx</u> hours		
Static Rock Pressure	<u>xx</u> psig after	<u>xx</u> hours	

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Chesapeake Energy
Well No.: 831202

Perforated Intervals

1 st Stage	Marcellus	50	holes from	12,576 ft to	12,898 ft
2 nd Stage	Marcellus	50	holes from	12,176 ft to	12,498 ft
3 rd Stage	Marcellus	50	holes from	11,776 ft to	12,098 ft
4 th Stage	Marcellus	50	holes from	11,376 ft to	11,698 ft
5 th Stage	Marcellus	50	holes from	10,976 ft to	11,298 ft
6 th Stage	Marcellus	50	holes from	10,576 ft to	10,898 ft
7 th Stage	Marcellus	50	holes from	10,176 ft to	10,498 ft
8 th Stage	Marcellus	50	holes from	9,776 ft to	10,098 ft
9 th Stage	Marcellus	50	holes from	9,376 ft to	9,618 ft
10 th Stage	Marcellus	50	holes from	8,976 ft to	9,298 ft
11 th Stage	Marcellus	50	holes from	8,576 ft to	8,898 ft
12 th Stage	Marcellus	50	holes from	8,176 ft to	8,498 ft
13 th Stage	Marcellus	50	holes from	7,776 ft to	8,098 ft

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Fracturing / Stimulation

1 st Stage	Type of Treatment Slickwater		Breakdown Pressure 5,502 psi	
	Total Acid 5,000 Gal of 15% HCl		ATP 7,331 psi MTP 7,906 psi	
	Average Rate 85 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 9,233 bbl	Total Nitrogen 0 scf	Total Sand 201,600 lb of 100 mesh	
			Total Sand 202,300 lb of 40/70	
	ISIP 4,833 psi	5 min 3,103 psi		
2 nd Stage	Type of Treatment Slickwater		Breakdown Pressure 5,309 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,197 psi MTP 8,026 psi	
	Average Rate 86 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 9,474 bbl	Total Nitrogen 0 scf	Total Sand 201,000 lb of 100 mesh	
			Total Sand 205,600 lb of 40/70	
	ISIP 3,900 psi	5 min 3,380 psi		
3 rd Stage	Type of Treatment Slickwater		Breakdown Pressure 5,800 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,419 psi MTP 7,941 psi	
	Average Rate 87 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 9,438 bbl	Total Nitrogen 0 scf	Total Sand 203,200 lb of 100 mesh	
			Total Sand 200,700 lb of 40/70	
	ISIP 4,048 psi	5 min 3,338 psi		
4 th Stage	Type of Treatment Slickwater		Breakdown Pressure 5,314 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,667 psi MTP 7,941 psi	
	Average Rate 86 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 14,558 bbl	Total Nitrogen 0 scf	Total Sand 209,000 lb of 100 mesh	
			Total Sand 114,750 lb of 40/70	
	ISIP 4,064 psi	5 min 3,047 psi		
5 th Stage	Type of Treatment Slickwater		Breakdown Pressure 5,120 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,398 psi MTP 7,985 psi	
	Average Rate 86 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 11,966 bbl	Total Nitrogen 0 scf	Total Sand 200,400 lb of 100 mesh	
			Total Sand 200,000 lb of 40/70	
	ISIP 4,232 psi	5 min 3,555 psi		
6 th Stage	Type of Treatment Slickwater		Breakdown Pressure 5,079 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,364 psi MTP 7,834 psi	
	Average Rate 87 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 9,264 bbl	Total Nitrogen 0 scf	Total Sand 200,200 lb of 100 mesh	
			Total Sand 203,000 lb of 40/70	
	ISIP 4,237 psi	5 min 3,439 psi		
7 th Stage	Type of Treatment Slickwater		Breakdown Pressure 5,042 psi	
	Total Acid 2,500 Gal of 15% HCl		ATP 7,102 psi MTP 7,628 psi	
	Average Rate 87 scf/min <input type="checkbox"/> or bpm <input checked="" type="checkbox"/>			
	Total Fluid 9,040 bbl	Total Nitrogen 0 scf	Total Sand 201,400 lb of 100 mesh	
			Total Sand 201,500 lb of 40/70	
	ISIP 4,211 psi	5 min 3,399 psi		

Survey Calculation Program

 Chesapeake Operating Inc.
 Craig Bessinger 10H
 Upshur Co, WV

M.W.D. OPERATOR: T. Parrilla/D. Scruggs

DIRECTIONAL DRILLERS: A. Palmer/S. McCune

Magnetic Declination: -9.00

Job #: 4320

Minimum Curvature Calculation

Vertical Section 165.0

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No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/ 100
Tie	6838	10.50	45.20	6767.37	625.32	466.38	-483.31	6.90
1	6865	8.70	49.30	6793.99	628.39	469.67	-485.41	7.13
2	6896	8.40	77.60	6824.66	630.40	473.66	-486.33	13.47
3	6927	12.30	101.00	6855.16	630.26	479.12	-484.78	18.26
4	6959	15.80	113.40	6886.21	627.88	486.47	-480.57	14.37
5	6991	18.70	127.50	6916.78	623.02	494.54	-473.79	15.84
6	7023	20.20	139.70	6946.96	615.68	502.19	-464.72	13.50
7	7054	21.90	153.60	6975.91	606.41	508.23	-454.21	16.97
8	7086	24.00	161.70	7005.39	594.88	512.93	-441.86	11.84
9	7117	27.40	167.80	7033.32	581.92	516.41	-428.43	13.88
10	7148	31.20	169.10	7060.35	567.06	519.44	-413.30	12.43
11	7180	35.40	167.40	7087.09	549.87	523.03	-395.76	13.44
12	7212	38.90	165.40	7112.59	531.09	527.59	-376.45	11.57
13	7244	43.60	163.40	7136.65	510.78	533.28	-355.36	15.25
14	7276	48.00	162.90	7158.95	488.83	539.93	-332.43	13.80
15	7308	53.10	163.10	7179.28	465.21	547.15	-307.75	15.94
16	7339	57.80	164.20	7196.85	440.72	554.33	-282.23	15.44
17	7371	63.00	164.30	7212.65	413.95	561.88	-254.42	16.25
18	7403	66.20	164.10	7226.38	386.13	569.75	-225.52	10.02
19	7435	68.40	164.10	7238.73	357.74	577.83	-196.00	6.88
20	7466	70.20	163.50	7249.68	329.90	585.92	-167.01	6.08
21	7498	72.20	163.20	7259.99	300.88	594.60	-136.73	6.31
22	7530	73.80	162.10	7269.35	271.67	603.73	-106.16	5.98
23	7561	75.40	161.90	7277.58	243.25	612.97	-76.31	5.20
24	7592	78.10	160.60	7284.69	214.68	622.67	-46.20	9.62
25	7623	80.70	160.40	7290.39	185.96	632.84	-15.83	8.41
26	7655	82.60	160.70	7295.04	156.10	643.38	15.73	6.01
27	7687	85.00	161.40	7298.49	126.02	653.71	47.47	7.81
28	7717	87.40	162.80	7300.48	97.54	662.91	77.36	9.26
29	7749	89.40	163.10	7301.37	66.96	672.29	109.33	6.32
30	7781	89.40	163.70	7301.71	36.29	681.43	141.31	1.87
31	7844	90.50	164.10	7301.76	-24.24	698.90	204.30	1.86
32	7908	92.30	165.20	7300.20	-85.93	715.83	268.28	3.30
33	7969	91.50	165.00	7298.18	-144.85	731.51	329.24	1.35
34	8032	90.90	163.30	7296.86	-205.44	748.71	392.22	2.86
35	8096	90.20	162.60	7296.24	-266.62	767.48	456.17	1.55
36	8159	91.30	163.30	7295.42	-326.85	785.95	519.13	2.07
37	8223	91.70	163.80	7293.74	-388.20	804.06	583.08	1.00

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DIRECTIONAL DRILLERS: A. Palmer/S. McCune

Magnetic Declination: -9.00

Job #: 4320

Minimum Curvature Calculation

Vertical Section 165.0

No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/100
38	8288	89.40	164.10	7293.12	-450.66	822.03	648.07	3.57
39	8350	90.00	164.40	7293.44	-510.33	838.86	710.06	1.08
40	8413	89.30	163.40	7293.83	-570.86	856.33	773.04	1.94
41	8476	89.10	163.70	7294.71	-631.28	874.17	836.02	0.57
42	8539	90.40	164.50	7294.98	-691.86	891.43	899.01	2.42
43	8602	90.40	164.30	7294.54	-752.54	908.37	962.00	0.32
44	8665	91.10	164.90	7293.72	-813.27	925.10	1025.00	1.46
45	8729	91.40	164.60	7292.32	-875.01	941.93	1088.98	0.66
46	8857	91.40	165.70	7289.20	-998.69	974.72	1216.94	0.86
47	8984	90.20	163.90	7287.42	-1121.23	1008.02	1343.92	1.70
48	9110	90.20	163.60	7286.98	-1242.19	1043.27	1469.89	0.24
49	9237	92.20	167.00	7284.32	-1364.99	1075.49	1596.83	3.11
50	9365	90.70	167.90	7281.08	-1489.88	1103.29	1724.67	1.37
51	9492	90.60	168.30	7279.64	-1614.15	1129.48	1851.48	0.32
52	9620	91.10	168.00	7277.74	-1739.40	1155.76	1979.27	0.46
53	9747	90.80	166.80	7275.64	-1863.32	1183.46	2106.14	0.97
54	9874	91.30	166.60	7273.31	-1986.90	1212.67	2233.06	0.42
55	10001	90.40	164.90	7271.43	-2109.97	1243.93	2360.03	1.51
56	10126	91.00	164.10	7269.90	-2230.41	1277.33	2485.01	0.80
57	10252	90.90	163.90	7267.81	-2351.52	1312.06	2610.98	0.18
58	10376	89.90	164.00	7266.94	-2470.68	1346.34	2734.95	0.81
59	10499	88.90	162.30	7268.23	-2588.39	1381.99	2857.87	1.60
60	10623	90.90	163.40	7268.45	-2706.86	1418.55	2981.78	1.84
61	10748	90.60	164.90	7266.81	-2827.10	1452.69	3106.75	1.22
62	10872	88.60	165.80	7267.68	-2947.06	1484.04	3230.74	1.77
63	10996	89.10	165.80	7270.17	-3067.24	1514.46	3354.70	0.40
64	11120	90.20	165.80	7270.92	-3187.45	1544.87	3478.68	0.89
65	11244	91.20	165.30	7269.41	-3307.52	1575.81	3602.67	0.90
66	11368	93.10	166.10	7264.76	-3427.58	1606.42	3726.56	1.66
67	11491	89.90	164.10	7261.54	-3546.38	1638.03	3849.50	3.07
68	11615	90.50	164.20	7261.11	-3665.67	1671.90	3973.48	0.49
69	11738	90.50	163.60	7260.03	-3783.84	1706.01	4096.45	0.49
70	11862	89.50	161.40	7260.03	-3902.09	1743.29	4220.33	1.95
71	11985	90.90	161.20	7259.60	-4018.59	1782.72	4343.07	1.15
72	12109	93.30	162.60	7255.06	-4136.37	1821.22	4466.79	2.24
73	12233	93.50	162.30	7247.70	-4254.39	1858.54	4590.45	0.29
74	12357	92.00	162.80	7241.76	-4372.54	1895.68	4714.19	1.27
75	12481	91.50	164.10	7237.97	-4491.35	1930.99	4838.08	1.12

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Magnetic Declination: -9.00

Job #: 4320

Minimum Curvature Calculation

Vertical Section 165.0

No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/ 100
76	12603	89.80	165.90	7236.58	-4609.17	1962.56	4960.07	2.03
77	12728	92.30	167.30	7234.29	-4730.74	1991.52	5084.98	2.29
78	12851	93.00	166.90	7228.61	-4850.50	2018.95	5207.77	0.66
79	12975	91.60	166.90	7223.63	-4971.17	2047.03	5331.60	1.13
80	13097	90.90	166.40	7220.97	-5089.85	2075.19	5453.52	0.71
PTB	13143	90.90	166.40	7220.25	-5134.55	2086.01	5499.50	0.00

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