

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: _____
API #: 47-4702812

Farm name: Berwind Land Company Operator Well No.: CBM-MC90

LOCATION: Elevation: 2,404.65' Quadrangle: War

District: Big Creek County: McDowell
Latitude: 5,975 Feet South of 37 Deg. 17 Min. 30 Sec.
Longitude 7,415 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: CNX Gas Company LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
2481 John Nash Blvd., Bluefield, WV 24701	13 3/8"	24'	24'	n/a
Agent: John H. Johnston	7"	381.50'	381.50'	100 sks
Inspector: Gary L. Kennedy	4 1/2"	1,960.03'	1,960.03'	130 sks
Date Permit Issued: 7/20/2011				
Date Well Work Commenced: 12/15/2011				
Date Well Work Completed: 12/21/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 2,080 DTD				
Total Measured Depth (ft):				
Fresh Water Depth (ft.): 1,450 (damp)				
Salt Water Depth (ft.): n/a				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation NO OPEN FLOW TEST CONDUCTED Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Butford Myers
Signature
Butford Myers, Vice Pres-VA Gas Ops.
Date 5/1/12

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Y/Y/N Electrical, Y/Y/N Mechanical, Y/Y/N or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Formations Encountered: _____ Top Depth / _____ Bottom Depth
Surface:

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Well Number MC-90
 Completion Date 1/10/2012
 Total Depth 2047.19
 Permit Number 47-4702812

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Coals	SJ, P1, P3	P5, P5R, P6L, P6, COALS	COALS, P8, P9	MH1, "BY"	LSE1, SE1, GC
MC-90	MC-90	MC-90	MC-90	MC-90	MC-90
Nitrogen (MSCF)	0.267	0.281	0.23	0.211	0.255
Water (BBLs)	144	146	134	118	108
Sand (SXS 20/40)	225	250	225	150	150
Sand (SXS 12/20)	56	53	55	54	82
Top Perf	1689.5	1320	1156	808	685
Bottom Perf.	1887	1574	1262.5	923.5	773
# Perfs	16	28	20	16	12
Perf Size	0.45	0.45	0.45	0.45	0.45
Break. Press.	2661	2002	2414	2344	2331
Avg. Rate	11.6	12.2	12.9	12.1	11.4
ISIP	1431	1117	1011	1006	850
Min	5	5	5	5	5
Min Press.					
Avg. Press.	2218	2397	2339	2276	2779
Stimulated	Y	Y	Y	Y	Y
Stim. Date	1/10/2012	1/10/2012	1/10/2012	1/10/2012	1/10/2012

Permittee CNX GAS LLC

Exhibit A

Well Name: 11 CBM MC90
 SURFACE ELEV: 2404.65 EASTING: 1059236.38 NORTHING:
 359050.59

SEAM REMARKS	DEPTH FROM (FT)	DEPTH TO (FT)	ELEVATION (TOSE)	THK. (FT)
COAL	73.90	74.80	2330.75	0.90
	74.80	118.00	2329.85	43.20
COAL	118.00	120.20	2286.65	2.20
	120.20	121.10	2284.45	0.90
COAL	121.10	122.00	2283.55	0.90
	122.00	152.00	2282.65	30.00
J3	152.00	153.60	2252.65	1.60
	153.60	162.40	2251.05	8.80
COAL	162.40	162.90	2242.25	0.50
	162.90	187.10	2241.75	24.20
JB	187.10	188.50	2217.55	1.40
	188.50	224.00	2216.15	35.50
COAL	224.00	225.20	2180.65	1.20
	225.20	242.00	2179.45	16.80
COAL	242.00	242.90	2162.65	0.90
	242.90	243.40	2161.75	0.50
COAL	243.40	244.00	2161.25	0.60
	244.00	275.00	2160.65	31.00
T1	275.00	275.90	2129.65	0.90
	275.90	277.30	2128.75	1.40
TI	277.30	278.20	2127.35	0.90
	278.20	417.20	2126.45	139.00
CS	417.20	417.90	1987.45	0.70
	417.90	418.90	1986.75	1.00
COAL	418.90	419.00	1985.75	0.10
	419.00	489.20	1985.65	70.20
COAL	489.20	489.40	1915.45	0.20
	489.40	685.00	1915.25	195.60
*GC	685.00	685.90	1719.65	0.90
	685.90	735.80	1718.75	49.90
*COAL	735.80	735.90	1668.85	0.10
	735.90	737.00	1668.75	1.10
*SE	737.00	738.20	1667.65	1.20
	738.20	772.00	1666.45	33.80
*LS	772.00	772.90	1632.65	0.90
	772.90	808.20	1631.75	35.30
*BY	808.20	810.00	1596.45	1.80
	810.00	859.20	1594.65	49.20
*UH1	859.20	859.40	1545.45	0.20

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	859.40	869.10	1545.25	9.70
*UH	869.10	869.40	1535.55	0.30
	869.40	922.00	1535.25	52.60
*MH	922.00	923.30	1482.65	1.30
	923.30	1014.80	1481.35	91.50
*COAL	1014.80	1014.90	1389.85	0.10
	1014.90	1156.10	1389.75	141.20
*P9	1156.10	1156.70	1248.55	0.60
	1156.70	1220.60	1247.95	63.90
*COAL	1220.60	1221.10	1184.05	0.50
	1221.10	1222.00	1183.55	0.90
*P8	1222.00	1224.00	1182.65	2.00
	1224.00	1237.60	1180.65	13.60
*COAL	1237.60	1237.90	1167.05	0.30
	1237.90	1241.40	1166.75	3.50
*COAL	1241.40	1241.60	1163.25	0.20
	1241.60	1250.70	1163.05	9.10
*COAL	1250.70	1251.60	1153.95	0.90
	1251.60	1261.90	1153.05	10.30
*COAL	1261.90	1262.40	1142.75	0.50
	1262.40	1272.80	1142.25	10.40
*COAL	1272.80	1273.10	1131.85	0.30
	1273.10	1290.90	1131.55	17.80
*COAL	1290.90	1291.20	1113.75	0.30
	1291.20	1320.30	1113.45	29.10
*COAL	1320.30	1321.30	1084.35	1.00
	1321.30	1354.90	1083.35	33.60
*COAL	1354.90	1355.10	1049.75	0.20
	1355.10	1376.00	1049.55	20.90
*COAL	1376.00	1376.60	1028.65	0.60
	1376.60	1438.90	1028.05	62.30
*COAL	1438.90	1439.10	965.75	0.20
	1439.10	1488.60	965.55	49.50
*P6	1488.60	1489.90	916.05	1.30
	1489.90	1509.10	914.75	19.20
*P6L	1509.10	1510.00	895.55	0.90
	1510.00	1510.60	894.65	0.60
*COAL	1510.60	1510.70	894.05	0.10
	1510.70	1532.90	893.95	22.20
*5R	1532.90	1534.40	871.75	1.50
	1534.40	1535.00	870.25	0.60
*COAL	1535.00	1535.20	869.65	0.20
	1535.20	1572.70	869.45	37.50
*P5	1572.70	1573.60	831.95	0.90
	1573.60	1628.60	831.05	55.00
*COAL	1628.60	1628.90	776.05	0.30
	1628.90	1689.90	775.75	61.00
*P3	1689.90	1691.70	714.75	1.80
	1691.70	1748.60	712.95	56.90
*P21	1748.60	1748.70	656.05	0.10
	1748.70	1757.80	655.95	9.10
*P22	1757.80	1757.90	646.85	0.10

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	1757.90	1797.40	646.75	39.50
*P01	1797.40	1798.00	607.25	0.60
	1798.00	1811.20	606.65	13.20
*P1L	1811.20	1811.30	593.45	0.10
	1811.30	1884.00	593.35	72.70
*COAL	1884.00	1884.10	520.65	0.10
	1884.10	1885.20	520.55	1.10
*SJ	1885.20	1886.80	519.45	1.60
	1886.80	1893.30	517.85	6.50
*SJ1	1893.30	1893.50	511.35	0.20
	1893.50	2080.00	511.15	186.50

GAMMA-CALIPER LOG FROM 0 TO 391.00

GAMMA-DENSITY LOG FROM 391.00 TO TD.

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION

FILE: C:\COMPLETE\MC90.CMP

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COMPANY: CNX GAS CO LLC
 HOLE: MC-90
 RIG: 294
 LOCATION: BERWIND LAKE RD

DATE STARTED: 12/15/2011
 DATE COMPLETED: 12/21/2011

ELECTRIC LOGGED: YES
 GROUTED: YES

DEPTH FROM	THICKNESS TO	FT	STRATA DESCRIPTION, VOIDS ETC
	0	24	24 OVERBURDEN
	24	30	6 SAND/SHALE
	30	60	30 SAND/SHALE
	60	75	15 SAND/SHALE
	75	76	1 COAL
	76	90	14 SHALE/SAND
	90	120	30 SAND/SHALE
	120	150	30 SAND/SHALE
	150	160	10 SHALE
	160	161	1 COAL
	161	180	19 SHALE/SAND
	180	195	15 SAND/SHALE
	195	196	1 COAL
	196	210	14 SHALE/SAND
	210	230	20 SAND/SHALE
	230	231	1 COAL
	231	240	9 SHALE/SAND
	240	270	30 SAND/SHALE
	270	300	30 SAND/SHALE
	300	330	30 SAND/SHALE
	330	360	30 SAND/SHALE
	360	390	30 SAND/SHALE
	390	401	11 SAND/SHALE
	401	425	24 SAND/SHALE
	425	427	2 COAL
	427	430	3 SAND/SHALE
	430	460	30 SAND/SHALE
	460	490	30 SAND/SHALE
	490	520	30 SAND/SHALE
	520	550	30 SAND/SHALE
	550	576	26 SAND/SHALE
	576	577	1 COAL
	577	580	3 SAND/SHALE
	580	610	30 SAND/SHALE
	610	640	30 SAND/SHALE
	640	658	18 SAND/SHALE
	658	660	2 COAL
	660	670	10 SAND/SHALE
	670	690	20 SAND/SHALE

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690	692	2 COAL
692	700	8 SAND/SHALE
700	730	30 SAND/SHALE
730	745	15 SAND/SHALE
745	746	1 COAL
746	760	14 SHALE/SAND
760	790	30 SAND/SHALE
790	815	25 SAND/SHALE
815	816	1 COAL
816	820	4 SHALE
820	850	30 SHALE/SAND
850	875	25 SAND/SHALE
875	876	1 COAL
876	880	4 SHALE
880	910	30 SHALE/SAND/SHALE
910	925	15 SAND/SHALE
925	926	1 COAL
926	940	14 SHALE/SAND
940	970	30 SAND/SHALE
970	1000	30 SAND/SHALE
1000	1030	30 SAND/SHALE
1030	1060	30 SAND/SHALE
1060	1090	30 SAND/SHALE
1090	1120	30 SAND/SHALE
1120	1150	30 SAND/SHALE
1150	1160	10 SAND/SHALE
1160	1161	1 COAL
1161	1180	19 SHALE/SAND
1180	1210	30 SAND/SHALE
1210	1225	15 SAND/SHALE
1225	1226	1 COAL
1226	1240	14 SHALE/SAND
1240	1241	1 COAL
1241	1260	19 SHALE
1260	1261	1 COAL
1261	1270	9 SHALE/SAND
1270	1280	10 SAND/SHALE
1280	1281	1 COAL
1281	1300	19 SHALE/SAND
1300	1320	20 SAND/SHALE
1320	1321	1 COAL
1321	1330	9 SHALE/SAND
1330	1360	30 SAND/SHALE
1360	1380	20 SAND/SHALE
1380	1381	1 COAL
1381	1390	9 SHALE/SAND
1390	1420	30 SAND/SHALE
1420	1450	30 SAND/SHALE
1450	1480	30 SAND/SHALE
1480	1495	15 SAND/SHALE
1495	1496	1 COAL
1496	1510	14 SHALE/SAND

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1510	1511	1 COAL
1511	1540	29 SHALE/SAND
1540	1570	30 SAND/SHALE
1570	1600	30 SAND/SHALE
1600	1630	30 SAND/SHALE
1630	1660	30 SAND/SHALE
1660	1688	28 SAND/SHALE
1688	1689	1 COAL
1689	1690	1 SAND/SHALE
1690	1720	30 SAND/SHALE
1720	1748	28 SAND/SHALE
1748	1749	1 COAL POCA 3
1749	1750	1 SAND/SHALE
1750	1760	10 SAND/SHALE
1760	1761	1 COAL
1761	1780	19 SAND/SHALE
1780	1808	28 SAND/SHALE
1808	1809	1 COAL
1809	1810	1 SAND/SHALE
1810	1840	30 SAND/SHALE
1840	1870	30 SAND/SHALE
1870	1900	30 SAND/SHALE
1900	1915	15 SAND/SHALE
1915	1916	1 COAL
1916	1930	14 SAND/SHALE
1930	1960	30 SAND/SHALE
1960	1990	30 SAND/SHALE
1990	2020	30 SAND/SHALE
2020	2050	30 SAND/SHALE
2050	2080	30 SAND/SHALE/RED SHALE
		2080

2080 FT TOTAL DEPTH
24 FT OF 13 3/8 CASING
381.50 FT OF 7 CASING
1960.03 FT OF 4 1/2 CASING

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