

Commonwealth of Virginia

Department of Mines, Minerals, and Energy

Division of Gas and Oil

P.O. Drawer 159, Lebanon, VA 24266

Telephone: (276) 415-9700

Tracking Number: 2403

CNX Gas Company LLC Company:

File Number: RU-0590

Operations Name: CBM AV115A W/PL

Operation Type: Coalbed/Pipeline

Drilling Report Type:

Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data

Date drilling commenced: Drilling Contractor: NOAH HORN 11/11/2009

Date drilling completed: 11/14/2009 Rig Type: Rotary & Cable

Driller's Total Depth (feet): 2465.00

Log Total Depth (feet): 2481.79 Coal Seam at Total **Pocahontas**

Depth:

2. Final Location Plat (as required by 4 VAC25-150-360.C.)

Permitted State Plane X: Final Plat State Plane X: 10475442.8700 10475438.6200

Permitted State Plane Y: 3587180.3000 Final Plat State Plane Y: 3587178.9500

Plat Previously Submitted Or... F

List of Attached Items:

Form DGO-GO-14-E

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Description	FileName			
PLAT	AV115A Plat.pdf			

3. Geological Data

Fresh Water At:

Depth (in feet) Rate Unit of Measure

Salt Water At:

Depth (in feet) Rate Unit of Measure

Coal Seams:

List of Attached Items:

Description	FileName			
EXHIBIT A	AV115A Exh A.pdf			

Gas and Oil Shows:

List of Attached Items:

Description	FileName			
GAS SHOW	AV115A Gas Show.xlsx			

R

4. Electric Logs (As required by 4VAC25-150-280.A)

List all logs run: CALIPER GAMMA DENSITY TEMP DEVIATION

Did logs disclose vertical locations of a coal seam?

5. Survery Results (As required by 4VAC25-150-280.B.2)

List of Attached Items:

Description	FileName			
DEVIATION	AV115A Dev.pdf			

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6. Casing and Tubing Program

List of Attached Items:

Description	FileName			
CASING	AV115A Casing.xlsx			

7. Remarks

Use this space to note any conditions or occurrences, such as lost circulation, fishing jobs, junk left in hole, sidetracks, squeeze jobs, etc., not shown above. Include data and depth of condition/occurence.

Void at 657 ft; 7" casing cemented on backside to surface.

8. Drillers Log	8.	Dril	lers	Log
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Compiled By: NOAH HORN

List of Attached Items:

Description	FileName			
DRILL DATA	AV115A Drill Data.pdf			

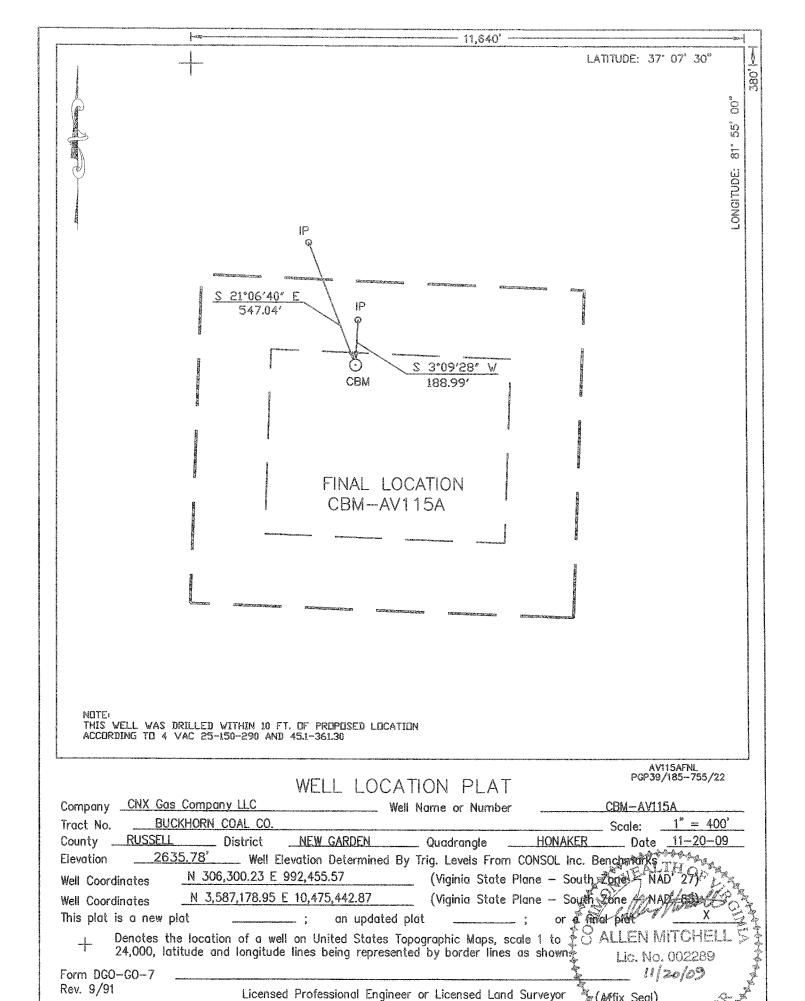
9. Comments

0. Signature						
Permitee:	CNX G	as Company LLC	Date:	2/1/2010		
Signed By:	Jerry E	Boothe	Title:	Manager		
			-			
INTERNAL	USE	ONLY				
Submi	t Date:	2/1/2010				
\$	Status:	A		Date:	2/26/2010	
Final PDF	Date:	2/26/2010				

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TO SURVE

AV115A EXHIBIT A

HOLE	NO	<u></u>	09	CBM	AV115A
1100	180		200	ا المستاسية	The want of the

STATE = VIRGINIA COUNTY = BUCHANAN

S ELEV = 2636

N-COOR =	306300	E-COOR =	992456		
STRATA ELEV (TOP) 2589.88	FROM 45.90	DEPTH TO 46.20	STRATA THICK .30	SEAM CODE LB1	COMMENTS
2589.58 2455.78	46.20 180.00	180.00 181.60	133.80	KN2	
2454.18 2429.68	181.60 206.10	206.10 206.80	24.50	COAL	
2428.98 2247.88	206.80 387.90	387.90 389.00	181.10 1.10	AL2	
2246.78 2163.28	389.00 472.50	472.50 473.90	83.50 1.40 186.10	RA2	WITHIN 893 FT OF OLD WORKS.
2161.88 1975.78	473.90 660.00	660.00 663.50 687.00	3.50 23.50	JB1	MINED OUT
1972.28 1948.78	663.50 687.00	689.70 768.00	2.70 78.30	T1	
1946.08 1867.78 1867.58	689.70 768.00 768.20	768.20 940.00	.20 171.80	TI	
1695.78 1694.98	940.00 940.80	940.80 955.10	.80 14.30	*US1	
1680.68 1679.08	955.10 956.70	956.70 958.10	1.60 1.40	*LC3 *LC4	
1677.68 1537.98	958.10 1097.80	1097.80 1100.20	139.70 2.40	*GC1	
1535.58	1100.20 1196.00	1196.00 1196.80	95.80 .80	*SE1	
1438.98 1408.48	1196.80 1227.30	1227.30 1228.60	30.50 1.30	*SE2	
1407.18 1397.08	1228.60 1238.70	1238.70 1238.90	10.10 .20	*COAL	
1396.88	1238.90 1270.00	1270.00 1271.80	31.10 1.80	*LS1	
1363.98 1298.88	1271.80 1336.90	1336.90 1337.60	65.10 .70	*UH1	
1298.18 1264.28	1337.60 1371.50	1371.50 1371.80	33.90 .30	*COAL	
1263.98 1250.68	1371.80 1385.10	1385.10 1386.70	13.30 1.60	*UH2	
1247 68	1386.70 1388.10	1388.10 1445.00	1.40 56.90	*UH3	
1189.38	1445.00 1446.40	1446.40 1506.40	$\frac{1.40}{60.00}$	*MH1	
1129.38 1128.88	1506.90	1506.90 1551.00	.50 44.10	*MH2	
1084.78 1082.78	1551.00 1553.00	1553.00 1575.80	2.00 22.80	*P11	
1059.98 1058.98	1575.80 1576.80	1576.80 1604.50	1.00 27.70	*P10	
1031.28 1030.68	1604.50 1605.10	1605.10 1720.90	.60 115.80	*LH1	
914.88 913.68	1720.90 1722.10	1722.10 1739.00	1.20 16.90	*P81	
				Page 1	

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AV115A
         1739.00
                    1739.70
896.78
                                    .70
                                               *P71
         1739.70
                    1743.10
                                   3.40
896.08
892.68
         1743.10
                    1743.90
                                   . 80
                                               *COAL
                                114.30
891.88
777.58
775.88
775.48
                    1858.20
         1743.90
         1858.20
                    1859.90
                                               *P72
                    1860.30
         1859.90
                                    .40
                                    . 60
                                               *COAL
         1860.30
                    1860.90
774.88
                                 31.10
         1860.90
                    1892.00
                                    .70
                    1892.70
743.78
         1892.00
                                               *COAL
                    2042.90
743.08
         1892.70
                                150.20
         2042.90
2043.80
2115.20
                    2043.80
2115.20
                                   .90
592.88
                                               *P51
591.98
520.58
                                 71.40
                    2116.80
                                   1.60
                                               *P41
                                 22.20
                    2139.00
518.98
         2116.80
                                 .90
44.10
496.78
         2139.00
                    2139.90
                                               *P42
         2139.90
                    2184.00
495.88
451.78
         2184.00
                    2185.00
                                   1.00
                                               *P31
450.78
         2185.00
                    2296.80
                                111.80
         2296.80
2297.10
                    2297.10
                                               *P01
338.98
                                    .30
338.68
                    2481.79
                                184.69
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BOTTOM HOLE

COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO TOPOGRAPHY. GAMMA-CALIPER LOG FROM 0 TO 718.50

 $\ensuremath{\mathsf{GAMMA}}\xspace\ensuremath{\mathsf{-DENSITY}}\xspace\ensuremath{\mathsf{LOG}}\xspace\ensuremath{\mathsf{FROM}}\xspace\ensuremath{\mathsf{718.50}}\xspace\ensuremath{\mathsf{TO}}\xspace\ensuremath{\mathsf{TD}}\xspace.$

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION

Well: AV115A

Oil & Gas Show

Formation	Top	Bottom	Thickness	IPF	Pressure	Hours
				(MCFD/BOPD)		Tested
Lee/Norton	955.1	1722.1	767.0			
Pocahontas	1858.2	2185.0	326.8			
Total IPF				NOT TAKEN		

PLÂN VIEW

COMPU-LOG DEVIATION

LIENT: CONSOL EMERGY

CATION:

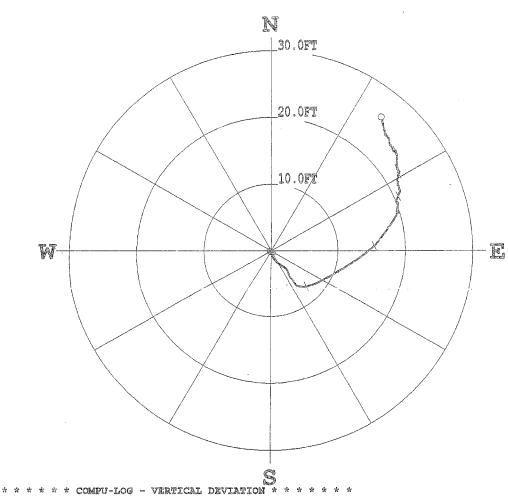
DLE ID: 09-CNX-AV-115-A MIE OF LOG: 11/14/09 ROBE: 9136CA 9

MAG DECL: -6.2

SCALE: 10 FT/IN

TRUE DEPTH: 2480.24 FT

AZIMUTH: 39.3 DISTANCE: 25.9 FT + = 300 FT INCR o = bottom of hole



CLIENT : CONSOL ENERGY HOLE ID. : 09-CNX-AV-115 -6.200 115~³ DATE OF LOG : 11/14/09 PROBE : 9136CA , DEPTH UNITS : FEET FIELD OFFICE : DATA FROM : MAG. DECL. LOG: 09-CNK-AV-115-A_11-14-09_06-34_9136CA_.02_0.00_2480.89_DEVI.log

ele depth	TRUE DEPTH	NORTH DEV.	east dev.	distance	azimuth	sang s	angb
50.00	50.00	0.19	-0.36	0.4	290.7	0.9	250.8
60.00	59.99	0.10	-0.48	0.5	282.0	0.9	213.2
70.00	69.99	~0.06	-0.52	0.5	263.8	1.1	174.2
80.00	79.99	-0.21	-0.47	0.5	245.4	0.9	151.4
90.00	89.99	-0.34	-0.36	0.5	226.3	0.9	132.0
100.00	99.99	-0.43	-0.21	0.5	205.7	0.9	104.5
110.00	109.99	-0.48	-0.04	0.5	185.2	1.0	101.3
120.00	119.99	-0.50	0.12	0.5	166.8	0.9	91.5
130.00	129.98	-0.50	0.27	0.6	151.9	0.8	89.2
140.00	139.98	-0.47	0.40	0.6	139.7	0.7	72.0
150.00	149.98	-0.43	0.52	0.7	129.8	0.7	73.6
160.00	159.98	-0.37	0.59	0.7	121.9	0.5	38.9
170.00	169.98	-0.30	0.59	0.7	116.5	0.4	323.2
180.00	179.98	-0.23	0.53	0.6	113.5	0.6	298.7
190.00	189.98	-0.20	0.42	0.5	115.4	0.7	275.1
200.00	199.98	-0.20	0.28	0.3	124.6	1.0	246.5
210.00	209.98	-0.30	0.15	0.3	153.4	1.0	221.5
220.00	219.98	-0.47	0.10	0.5	167.9	1.2	177.7
230.00	229.97	-0.68	0.14	0.7	168.6	1.2	162.4
240.00	239.97	-0.68	0.21	0.9	166.4	1.3	155.4
250.00	249.97	-1.08	0.32	1.1	163.4	1.2	143.7
260.00	259.97	-1.26	0.46	1.3	159.7	1.3	136.4
270.00	269.96	-1.42	0.61	1.5	156.6	1.2	132.0
280.00	279.96	-1.60	0.77	1.8	154.3	1.4	137.9

90.000 1120.000 1200.
99999999999999999999999999999999999999
438007370300078886205903702821075162604703566630477453763210591089077751288630559262998777784429000000000001111111122222333444445555555555443322222111110000001111222223334444555555555555555555555555
\$2142702993285041226173197886477510643789008491162017792659299906904570124479135020960000000000000000111122222222223333333333
5555667776533579135802468035791356802457901345780246802579147035691470258147025813681368146914697000000000000000000000000000000000000
3725978954447631634608907427379654345797810626737012752641139507529988888888887777777654 22186532211111111111111111111111111111111111
0.9 104.3.5.2.0.8.9.2.7.1.5.5.7.6.5.2.3.0.0.7.6.6.1.3.7.6.5.2.3.9.9.2.7.3.6.3.2.3.7.6.5.2.3.0.0.7.3.6.3.2.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3

990.00	989.58	3.27	17.33	27.6	79.3	Z.1 31.3	
1000.00	999.57	3.58	17.50	17.9		2.2 63.2	
1010.00 1020.00	1009.56 1019.56	3,84	17.72	18.1	77.8	2.0 29.6	
1030.00	1029.55	4.14 4.42	17.90 18.09	18.4 18.6	77.0 76.3	2.0 36.7 1.9 36.9	
1040.00	1039.55	4.69	18.26	10.9	75.6	1.9 26.9	
1050.00	1049.54	4.99	18.40	19.1	74.8	1.6 24.8	
1060.00 1070.00	1059.54 1069.53	5.23 5.52	18.59 18.68	19.3 19.5	74.3 73.5	1.6 34.3 1.9 28.6	
1080.00	1079.53	5.75	18.86	19.7	73.1	1.9 28.6 1.5 29.7	
1090.00	1089.52	5.98	18.88	19.8	72.4	1.7 246.6	
1100.00 1110.00	1099.52 1109.51	6.04 6.37	18.70 18.73	19.6 19.8	72.1 71.2	2.0 5.9 1.8 34.2	
1120.00	1119.51	6.63	13.81	19.9	70.6	1.8 34.2 1.7 8.7	
1130.00	1129.50	6.92	18.87	20.1	69.9	1.6 12.3	
1140.00 1150.00	1139.50 1149.50	7.16 7.34	16.88 18.70	20.2 20.1	69.2 68.6	1.7 295.5 1.1 359.5	
1160.00		7.40	18.54	20.0	68.2	1.3 345.2	
1170.00	1169.49	7.59	18.64	20.1	67.8	1.1 31.3	
1180.00 1190.00	1179.49 1189.49	7.7 8 7.96	18.71 18.80	20.3 20.4	67.4 67.1	1.2 17.2 1.1 35.7	
1200.00	1199.49	8.17	18.69	20.6	66.6	1.4 20.4	
1210.00	1209.46	8.36	18.95	20.7	66.1	1.2 5.6	
1220.00 1230.00	1219.48 1229.48	8.57 8.74	19.03 19.10	20.9	65.7 65.4	1.1 357.4 1.3 45.0	
1240.00	1239.46	6.92	19.17	21.1	65.1	1.0 28.7	
1250.00	1249.46	9.07	19.23	21.3	64.8	1.0 0.4	
1260.00 1270.00	1259.47 1269.47	9.06 9.20	19.09 19.07	21.1	64.6	0.9 347.2	
1280.00	1279.47	9.36	19.04	21.2 21.2	64.2 63.8	0.9 352.5 1.0 352.5	
1290.00	1269.47	9.53	19.02	21.3	63.4	0.8 352.2	
1300.00 1310.00	1299.47 1309.47	9.67 9.79	19.00 18.94	21.3 21.3	63.0 62.7	0.9 352.5	
1320.00	1319.47	9.84	18.84	21.3 21.3	62.4	1.0 261.6 0.6 2.6	
1330.00	1329.47	9.94	18.83	21.3	62.2	0.5 339.4	
1340.00 1350.00	1339.47 1349.47	9.95 10.08	18.76 16.81	21.2 21.3	62.1 61.8	0.7 18.2 0.9 10.9	
1360.00	1359.46	10.20	18.87	21.4	61.6	0.9 10.9	
1370.00 1380.00	1369.46	10.31	18.90	21.5	61.4	0.9 217.1	
1390.00	1379.46 1389.46	10.34 10.46	18.81 18.77	21.5 21.5	61.2 60.9	0.7 2.6 1.1 359.8	
1400.00	1399.46	10.62	18.79	21.6	60.5	0.8 2.6	
1410.00	1409.46	10.75	18.80	21.7	60.2	0.6 8.7	
1420.00 1430.00	1419.46 1429.46	10.90 11.03	18.82 18.84	21.7 21.8	59.9 59.7	0.9 9.0 0.8 7.0	
1440.00	1439.46	11.19	18.86	21.9	59.3	0.9 2.8	
1450.00	1449.46	11.31	18.84	22.0	59.0	0.9 251.9	
1460.00 1470.00	1459.45 1469.45	11.25 11.30	18.81 18.86	21.9 22.0	59.1 59.1	0.4 22.5 0.5 54.0	
1480.00	1479.45	11.35	18.91	22.1	59.0	0.4 46.8	
1490.00	1489.45	11.61	18.97		59.0	0.4 48.5	
1500.00 1510.00	1499.45 1509.45	11.47 11.52	19.02 19.07	22.2 22.3	58.9 58.9	0.5 46.5 0.5 44.7	
1520.00	1519.45	11.61	19.11	22.4	58.7	0.5 14.8	
1530.00 1540.00	1529.45 1539.45	11.63	19.03	22.3 22.3	58.6 58.4	0.7 298.4	
1550.00	1549.45	11.71 11.70	19.00 18.91	22.2	58.3	0.5 339.2 0.2 229.8	
1560.00	1559.45	11.70	18.92	22.2	58.3	0.4 26.2	
1570.00 1560.00	1569.45 1579.45	11.72 11.72	18.95 18.99	22.3	50.3 50.3	0.2 63.0	
1590.00	1589.45	11.74	19.02	22.3 22.4	58.3	0.3 55.2 0.2 71.6	
1600.00	1599.45	11.75	19.06	22.4	58.3	0.2 86.1	
1610.00 1620.00	1609.45 1619.45	11.76 11.79	19.10 19.11	22.4 22.5	58.4 58.3	0.2 94.2 0.3 329.5	
1630.00	1629.45	11.84	19.09	22.5	58.2	0.3 328.5	
1640.00	1639.45	11.87	19.06	22.5	58.1	0.2 314.2	
1650.00 1660.00	1649.45 1659.45	11.89 11.90	19.02 18.98	22.4 22.4	58.0 57.9	0.3 289.5 0.3 198.9	
1670.00	1669.45	11.87	18.96	22.4	57.9	0.0 233.3	
1680.00 1690.00	1679.45 1689.45	11.85 11.84	18.95	22.4	58.0	0.1 183.0	
1700.00	1699.45	11.64	18.95 18.96	22.3 22.4	58.0 58.0	0.1 270.2 0.1 4.0	
1710.00	1709.45	11.86	19.00	22.4	59.0	0.2 43.2	
1720.00 1730.00	1719.45 1729.45	11.89 11.92	19.02 19.04	22.4 22.5	58.0 57.9	0.2 41.3 0.2 340.2	
1740.00	1739.45	11.96	19.00	22.4	57.9 57.8	0.4 336.7	
1750.00	1749.45	12.03	18.97	22.5	57.6	0.4 339.9	
1760.00 1770.00	1759.45 1769.45	12.09 12.13	18.91 18.87	22.4 22.4	57.4 57.3	0.5 304.6 0.3 312.1	
1700.00	1779.45	12.18	18.83	22.4	57.1	0.4 324.1	
1790.00	1789.45	12.24	18.78	22.4	56.9	0.5 323.9	
1800.00 1810.00	1799.45 1809.45	12.29 12.28	18.73 18.74	22.4 22.4	56.7 56.8	0.5 331.0 0.5 135.7	
1820.00	1819.45	12.30	18.77	22.4	56.8	0.3 31.0	
1830.00 1840.00	1829.45 1839.45	12.35	18.80	22.5	56.7	0.3 29.9	
1850.00	1849.45	12.41 12.47	18.82 18.84	22.5 22.6	56.6 56.5	0.4 32.6 0.4 345.6	
19 60 .00	1959.45	12.47	18.78	22.5	56.4	0.3 327.5	
1670.00 1880.00	1869.45 1879.45	12.54	18.73	22.5	56.2	0.6 334.3	
1890.00	1889.44	12.62 12.63	18.67 18.65	22.5 22.5	55.9 55.9	0.5 316.6 0.7 145.2	
1900.00	1899.44	12.64	18.67	22.5	55 .9	0.3 2.2	
1910.00 1920.00	1909.44 1919.44	12.73 12.83	18.68	22.6	55.7	0.7 7.2	
1930.00	1919.44 1929.44	12.63	18.69 18.71	22.7 22.7	55.5 55.4	0.6 6.7 0.4 8.5	
1940.00	1939.44	13.04	18.71	22.8	55.1	0.6 15.4	
SAPA A.							
1950.00	1949.44	13.16	18.72	22.9	54.9 54.6	0.7 4.8	

1790.00	1789.45	12.24	18.78	22.4	56.9	0.5	323.9	
1800.00	1799.45	12.29	18.73	22.4		0.5	331.0	
1810 00	780 0.81	12 28	19 74	22.4	56.8	0.5	135.7	
1820 00	1016 AE	40 96	10.73 10.74 10.77	6-6-173 19-9-1	ଅନ୍ତ ଅକ୍ଟେମ	0.3	31.0	
4020.00 4020.00	1000 AE	& & • ⊕ V ≪ 6 • ⊕ E	20.77	66.8	56.8			
1930.00	1629.40	14.55	18.80	22.3	56.7	0.3	29.9	
1640.00	1639.45	12.41	18.82	22.5	56.6	0.4	32.6	
1850.00	1849.45	12.47	18.84	22.6	56.5	0.4	345.6	
1860.00	1859.45	12.47	18.78	22.5	56.4	0.3	327.5	
1870.00	1869.45	12.54	18.73	22.5	56.2	0.6	334.3	
1880.00	1879.45	12.62	18.67	22.5	55.9	0.5	316.6	
1890.00	1889.44	12.63	18.65	22.5	55.9	0.7	145.2	
1900.00	1899.44	12.64	18.67	22 E	55.9	ñз	2.2	
1910 00	1000 44	12 79	10.68	20 6	55.7	0.3 0.7 0.6	7.2	
1000 00	1050 44	କଳ । ଜେବ	10.69	66.V	99:(EE E	0.1		
4884.VV	4848° 48	44.03	26.00	44.1	55.5	0.5	6.7	
1330.00	1929.46	12.93	18.71	22.7	55.4	0.4	8.5	
1940.00	1939.44	13.04	18.71	22.8	55.1	0,.6		
1950.00	1949.44	13.16	16.72	22.9	54.9	0.7	4.8	
1960.00	1959.44	13.29	18.72	23.0	54.6	0.8	6.1	
1970.00	1969.44	13.44	10.73	23.0	54.3	0.9	0.9	
1980.00	1979,44	13.59	16.73	23.1	54.0	0.9	359.5	
1990.00	1989.44	13.75	18.73	23.2	53.7	0.9	357.3	
2000.00	1999.44	13.90	18.73	29 3	53.4	0.9	0.8	
2010.00	2009 43	14 05	18.74	20.0	53.1	0.9	1.0	
2020.00	2010 42	44 94	18.74	చింది. మ	20 B	0.8		
2020.00	5055.45 5056 45	±%.62	20.72 12 72	40.0 99.0	52.8		3.2	
2040 VV	4V69.33	70.30	18.75	25.0	52.6		11.2	
6444.VV	4438.45 6846 46	1.6.66	18.70	23.0	52.3		210.7	
2050.00	2049.43	14.45	18.60	23.6	52.1		329.5	
2060.00	2059.43	14.66	18.52	23.6	51.6	1.1	341.4	
2070.00	2069.42	14.63	10.58	23.6	51.8	1.4	134.9	
2080.00	2079.42	14.73	18.59	23.7	51.6	1.0	358.8	
2090.00	2089.42	14.91	18.58	23.8	51.2	0.9	0.6	
2100.00	2099.42	15.02	18.50	23.8	50.9	1.0	226.0	
2110.00	2109.42	14.99	18.35	23.7	51.6 51.6 51.2 50.9 50.8	1.3	252.8	
2120.00	2119.42	14.97	18.17	23.5	50.5	0.6	347.9	
2130.00	2129.41	15.11	18.12	23.6	50.2	1.1	340.1	
2140.00	2139.41	15.31	18.04	23.7	49.7	1.1 1.2 0.9 0.9	332.7	
2150.00	2149.41	15.45	17.98	23.7	49.3	0.9	337.6	
2160.00	2159.41	15.60	17.91	23.8	49.0	n o	23U 3	
2170.00	2169 41	15 74	17.85	23.8	48.6	0.0	320.5	
2180.00	2170 41	15 00	17.78	23.0	48.2	4 4	275 7	
2190.00	2180 41	1E 97	17.67	23.3	46.1	0.5	274.2	
2200.00	2100 /0	16 02	17.64	ର୍କ - ମ ମନ୍ତ	47.7	1.1	356.3	
2210 00	2200 40	16 90	17.60	20.0 73.0	42 1 + 1 A 17 A			
2520.00	22V3.9V	10.20	17.00	43.3	47.4		325.3	
2220.00	2213.80	10.51	17.58	24.0	47.0		344.0	
2630.00	2223.40	10.52	17.56	24.1	46.7	0.7	343.6	
42 %V. VV	2239.60	16.66	17.56	24.2	46.5	0.7	2.3	
2250.00	2249.40	16.80	17.54	24.3	46.2		356.5	
2260.00	2259.40	16.87	17.52	24.3	46.1		182.5	
2270.00	2269.40	16.86	17.47	24.3	46.0		332.5	
2280.00	2279.39	16.99	17.37	24.3	45.6		330.3	
2290.00	2289.39	17.16	17.26	24.3	45.2		207.7	
2300.00	1799.455 1799.455 1899.455 18619.455	17.32	17.15	14555555556778900123456666678875677889789012333344433 222222222222222222355533333334444444444	44.7		348.0	
2310.00	2309.39	17.45	17.04	24.4	44.3	1.1	247.4	
2320.00	2319.39	17.31	16.99	24.3	44.5	1.0	334.3	
2330.00	2329.38	17.47	16.93	24.3	44.1	1.0	337.4	
2340.00	2339.38	17.64	16.88	24.4	43.7	0.9	345.2	
2350.00	2349.38	17.81	16.85	24.5	43.4		345.8	
2360.00	2359.38	17.98	16.82	24.6	43.1	1.1	346.9	
2370.00	2369.38	18.15	16.78	24.7	42.8	0.8	350.3	
2380.00	2379.38	18.33	16.75	24.8	42.4	1.3	338.7	
2390.00	2389.38	18.51	16.71	24.9	42.1	1.1	350.5	
2400.00	2399.37	18.68	16.68	25.0	41.8	0.9	356.0	
2410.00	2409.37	18.85	16.65	25.2	41.5	1.1	338.3	
2420.00	2419.37	19.04	16.61	25.3	%1.1	0.9	357.0	
2430.00	2429.37	19.21	16.58	25.4	40.8	1.1	340.9	
2440.00	2439.37	19.39	16.54	25.5	40.5	1.0	0.7	
2450.00	2449.37	19.56	16.51	25.6	40.2	1.1	349.8	
2460.00	2459.36	19.75	16.48	25.7 25.7	39.8	1.0	349.4	
2470.00	2469.36	19.93	16.42	25.8	39.5	1.2	345.2	
2480.00	2479.36	20.01	16.35	25.8	39.3	1.1	13.9	
2480.88	2480.24	20.01	16.35 16.36	25.8 25.8	39.3 39.3	0.9	92.2	
≈ 30 A + AA	€.8AA+ © .2	6V.V4	7A.9B	& •• · · · · · ·	- F	. A.2	3 to . to	

Well: AV115A

Casing & Tubing Program

	Casing	Casing	Hole	Cement	Ceme	nted	Date	Packers or
		Interval	Size	used in cu/ft	to Sur	face	Cemented	Bridge Plugs
					Yes	No		
Conductor	13 3/8"	26.28	15"			Х	11/11/09	
Surface	7"	720.27	8 7/8"	180	Χ		11/12/09	Basket@508
Water Protection	4 1/2"	2247.40	6 1/2"	341.6	Χ		11/14/09	
Coal Protection	4 1/2"	2247.40	6 1/2"	341.6	Χ		11/14/09	
Other Casing & Tubing								
Other Casing & Tubing								
Liners								

COMPANY: CNX GAS CO LLC HOLE: AV-115-A

RIG: 243

LOCATION: BOSTIC STRIP, VA

DATE STARTED: 11/11/2009
DATE COMPLETED: 11/14/2009

ELECTRIC LOGGED: YES GROUTED: YES

DEPTH	THICKNESS			STRATA
FROM	ТО	FT		DESCRIPTION, VOIDS ETC
				OVERBURDEN
26	.28			SAND / SHALE
	30	60		SAND / SHALE
	60	90		SAND / SHALE
	90	120		SAND / SHALE
	120	150		SAND / SHALE
	150	180		SAND / SHALE / COAL
	180	210		SAND / SHALE / COAL
	210	240		SAND / SHALE
	240	270		SAND / SHALE
	270	300		SAND / SHALE
	300	330		SAND / SHALE / COAL
	330	360		SAND / SHALE / COAL
	360	390		SAND / SHALE / COAL
	390	420		SAND / SHALE
	120	450		SAND / SHALE
	150	480		SAND / SHALE / COAL
	180	510		SAND / SHALE
5	510	540		SAND / SHALE / COAL
	540	570		SAND / SHALE / COAL
	570	600		SANDY SHALE / SAND
6	500	630		SAND / SANDY SHALE
	530	657		SANDY SHALE / SAND
6	557	662	5 ∖	/OID
6	562	690	28 S	SANDY SHALE / COAL / SAND
6	590	720	30 S	SAND / COAL / SANDY SHALE
7	720	740	20 S	SANDY SHALE / COAL / SANDY SHALE
7	740	755		SAND / SHALE
7	755	785	30 S	SAND / SHALE / COAL
7	785	815	30 S	SAND / SHALE
8	315	845	30 S	SAND / SHALE
8	345	875	30 S	SAND / SHALE
8	375	905		SAND / SHALE
9	905	935	30 S	SAND / SHALE / COAL
g	935	965	30 S	SAND / SHALE / COAL
S	965	995	30 S	SAND / SHALE / COAL

995	1025	30 SAND / SHALE
1025	1055	30 SAND / SANDY SHALE
1055	1085	30 SANDY SHALE
1085	1115	30 SANDY SHALE / COAL / SAND
1115	1145	30 SAND / SANDY SHALE
1145	1175	30 SANDY SHALE
1175	1205	30 SANDY SHALE / COAL / SAND
1205	1235	30 SAND / SANDY SHALE
1235	1265	30 SANDY SHALE / COAL / SAND
1265	1295	30 SAND
1295	1325	30 SAND / SANDY SHALE
1325	1355	30 SANDY SHALE
1355	1385	30 SANDY SHALE / COAL / SAND
1385	1415	30 SAND / SANDY SHALE
1415	1445	30 SANDY SHALE / SAND
1445	1475	30 SAND / COAL / SANDY SHALE
1475	1505	30 SANDY SHALE
1505		
	1535	30 SANDY SHALE / SAND
1535	1565	30 SAND / COAL / SANDY SHALE
1565	1595	30 SANDY SHALE / SAND
1595	1625	30 SAND
1625	1655	30 SAND (CANDYCHALE
1655	1685	30 SANDY SHALE
1685	1715	30 SANDY SHALE / SAND
1715	1745	30 SAND / SANDY SHALE
1745	1775	30 SANDY SHALE
1775	1805	30 SANDY SHALE / SAND
1805	1835	30 SAND / SANDY SHALE
1835	1865	30 SAND (SAND) SHALE / COAL / SAND
1865	1895	30 SANDY SHALE
1895	1925	30 SANDY SHALE / COAL / SANDY SHALE
1925	1955	30 SANDY SHALE
1955	1985	30 SANDY SHALE / SAND
1985	2015	30 SAND
2015	2045	30 SAND / COAL / SANDY SHALE
2045	2075	30 SAND
2075	2105	30 SAND
2105	2135	30 SAND
2135	2165	30 SAND / SANDY SHALE
2165	2173	8 SANDY SHALE / COAL / SAND
2173	2175	2 POCA 3 COAL
2175	2195	20 SANDY SHALE / COAL / SAND
2195	2225	30 SAND / SANDY SHALE
2225	2255	30 SANDY SHALE / SAND
2255	2285	30 SANDY SHALE
2285	2315	30 SANDY SHALE / COAL
2315	2345	30 SANDY SHALE / SAND

2345	2375	30 SANDY SHALE
2375	2405	30 SAND / SHALE / COAL
2405	2435	30 SAND / SHALE
2435	2465	30 SAND / SHALE

2465' TOTAL DEPTH 26.28' OF 13 3/8" CASING 720.27' OF 7" CASING 2247.4' OF 4 1/2" CASING