



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:	<u>2461</u>
Company:	<u>CNX Gas Company LLC</u>
File Number:	<u>RU-0598</u>
Operations Name:	<u>CBM BK109 W/PL</u>
Operation Type:	<u>Coalbed/Pipeline</u>
Drilling Report Type:	<u>Original</u>

DRILLING REPORT (DGO-GO-14)

1. Drilling Data

Date drilling commenced:	<u>12/3/2009</u>	Drilling Contractor:	<u>NOAH HORN</u>
Date drilling completed:	<u>12/9/2009</u>	Rig Type:	<input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Cable
Driller's Total Depth (feet):	<u>2500.00</u>		
Log Total Depth (feet):	<u>2456.60</u>	Coal Seam at Total Depth:	<u>Pocahontas</u>

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

Permitted State Plane X:	<u>10465022.0000</u>	Final Plat State Plane X:	<u>10465019.3700</u>
Permitted State Plane Y:	<u>3562887.0000</u>	Final Plat State Plane Y:	<u>3562880.0200</u>

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
PLAT	BK109 Plat.pdf

3. Geological Data

Fresh Water At:

Depth (in feet)	Rate	Unit of Measure
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Salt Water At:

Depth (in feet)	Rate	Unit of Measure
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Coal Seams:

List of Attached Items:

Description	FileName
EXHIBIT A	BK109 Exh A.pdf

Gas and Oil Shows:

List of Attached Items:

Description	FileName
GAS SHOW	BK109 Gas Show.xlsx

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? R

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

List of Attached Items:

Description	FileName
DEVIATION	BK109 Dev.pdf

6. Casing and Tubing Program

List of Attached Items:

Description	FileName
CASING	BK109Casing.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/occurrence.

8. Drillers Log

Compiled By: NOAH HORN

List of Attached Items:

Description	FileName
DRILL DATA	BK109 Drill Data.pdf

9. Comments

10. Signature

Permittee: CNX Gas Company LLC

Date: 3/11/2010

Signed By: Jerry Boothe

Title: Manager

INTERNAL USE ONLY

Submit Date: 3/11/2010

Status: A

Date: 3/31/2010

Final PDF Date: 4/2/2010

9,010'

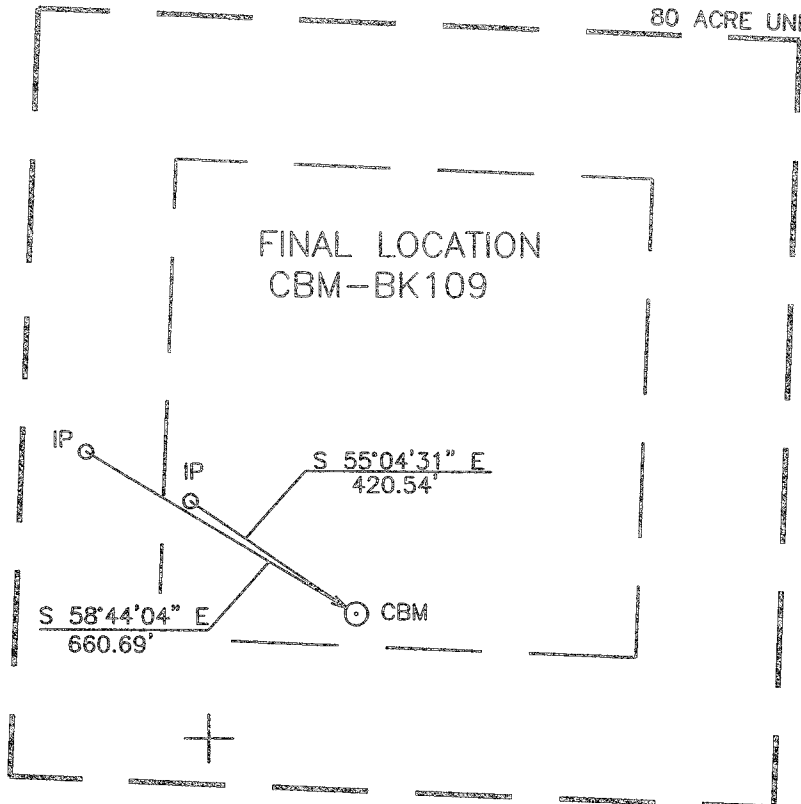
LATITUDE: 37° 05' 00"

LONGITUDE: 81° 57' 30"

9,870'

80 ACRE UNIT

FINAL LOCATION
CBM-BK109



NOTE:
THIS WELL WAS DRILLED WITHIN 10 FT. OF PROPOSED LOCATION
ACCORDING TO 4 VAC 25-150-290 AND 45.1-361.30

WELL LOCATION PLAT

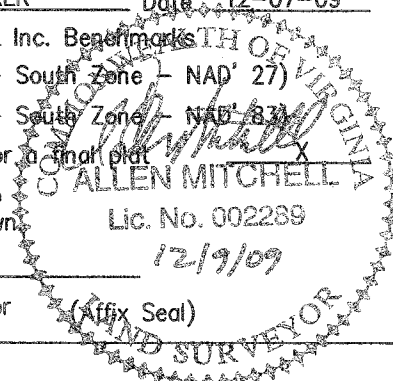
BK109FNL
PGP40/45-755/32

Company CNX Gas Company LLC Well Name or Number CBM-BK109
 Tract No. HAROLD L KEENE Scale: 1" = 400'
 County RUSSELL District NEW GARDEN Quadrangle HONAKER Date 12-07-09
 Elevation 2138.46' Well Elevation Determined By Trig. Levels From CONSOL Inc. Benchmarks
 Well Coordinates N 282,002.13 E 982,032.54 (Virginia State Plane - South Zone - NAD' 27)
 Well Coordinates N 3,562,880.02 E 10,465,019.37 (Virginia State Plane - South Zone - NAD' 83)
 This plat is a new plat _____ ; an updated plat _____ ; or a final plat _____

+ Denotes the location of a well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

Form DGO-GO-7
Rev. 9/91

Licensed Professional Engineer or Licensed Land Surveyor



(Affix Seal)

BK109
EXHIBIT A

HOLE NO = 09 CBM BK109

STATE = VIRGINIA COUNTY = BUCHANAN

S ELEV = 2138

N-COOR = 282002 E-COOR = 982033

STRATA ELEV (TOP)	STRATA FROM	DEPTH TO	STRATA THICK	SEAM CODE	COMMENTS
1964.46	174.00	175.10	1.10	KN2	MINE PILLAR?
1963.36	175.10	232.80	57.70		
1905.66	232.80	232.90	.10	COAL	
1905.56	232.90	296.00	63.10		
1842.46	296.00	296.60	.60	AL1	
1841.86	296.60	356.40	59.80		
1782.06	356.40	358.30	1.90	AL2	
1780.16	358.30	449.40	91.10		
1689.06	449.40	451.90	2.50	RA2	
1686.56	451.90	470.20	18.30		
1668.26	470.20	470.50	.30	RA3	
1667.96	470.50	492.70	22.20		
1645.76	492.70	492.80	.10	COAL	
1645.66	492.80	493.10	.30		
1645.36	493.10	493.30	.20	COAL	
1645.16	493.30	608.60	115.30		
1529.86	608.60	610.20	1.60	JB1	
1528.26	610.20	639.20	29.00		
1499.26	639.20	641.20	2.00	JB3	
1497.26	641.20	769.00	127.80		
1369.46	769.00	770.40	1.40	TI	
1368.06	770.40	779.80	9.40		
1358.66	779.80	779.90	.10	TI	
1358.56	779.90	891.90	112.00		
1246.56	891.90	892.10	.20	US1	
1246.36	892.10	953.00	60.90		
1185.46	953.00	954.80	1.80	LC4	
1183.66	954.80	1088.70	133.90		
1049.76	1088.70	1089.10	.40	COAL	
1049.36	1089.10	1091.00	1.90		
1047.46	1091.00	1092.10	1.10	GC1	
1046.36	1092.10	1203.80	111.70		
934.66	1203.80	1204.10	.30	SE1	
934.36	1204.10	1228.60	24.50		
909.86	1228.60	1229.40	.80	SE2	
909.06	1229.40	1247.40	18.00		
891.06	1247.40	1247.50	.10	SE3	
890.96	1247.50	1346.40	98.90		
792.06	1346.40	1347.70	1.30	*LS3	
790.76	1347.70	1347.90	.20		
790.56	1347.90	1349.00	1.10	*LS3	
789.46	1349.00	1398.40	49.40		
740.06	1398.40	1400.00	1.60	*UH1	
738.46	1400.00	1406.80	6.80		
731.66	1406.80	1407.40	.60	*UH2	
731.06	1407.40	1420.00	12.60		
718.46	1420.00	1421.10	1.10	*UH3	
717.36	1421.10	1463.20	42.10		
675.26	1463.20	1464.90	1.70	*MH1	
673.56	1464.90	1546.90	82.00		

591.56	1546.90	1547.80	.90	BK109
590.66	1547.80	1561.00	13.20	*MH2
577.46	1561.00	1562.00	1.00	*P11
576.46	1562.00	1567.40	5.40	
571.06	1567.40	1568.60	1.20	*113
569.86	1568.60	1592.90	24.30	
545.56	1592.90	1594.00	1.10	*P10
544.46	1594.00	1637.90	43.90	
500.56	1637.90	1639.10	1.20	*LH3
499.36	1639.10	1639.70	.60	
498.76	1639.70	1640.90	1.20	*LH3
497.56	1640.90	1641.10	.20	
497.36	1641.10	1641.90	.80	*LH3
496.56	1641.90	1679.40	37.50	
459.06	1679.40	1679.50	.10	*COAL
458.96	1679.50	1679.90	.40	
458.56	1679.90	1681.40	1.50	*P91
457.06	1681.40	1735.50	54.10	
402.96	1735.50	1736.10	.60	*P81
402.36	1736.10	1736.80	.70	
401.66	1736.80	1737.20	.40	*COAL
401.26	1737.20	1738.40	1.20	
400.06	1738.40	1738.90	.50	*P82
399.56	1738.90	1747.00	8.10	
391.46	1747.00	1747.50	.50	*COAL
390.96	1747.50	1794.90	47.40	
343.56	1794.90	1796.00	1.10	*COAL
342.46	1796.00	1796.30	.30	
342.16	1796.30	1797.10	.80	*COAL
341.36	1797.10	1803.90	6.80	
334.56	1803.90	1804.00	.10	*COAL
334.46	1804.00	1889.00	85.00	
249.46	1889.00	1890.90	1.90	*P72
247.56	1890.90	1924.70	33.80	
213.76	1924.70	1924.90	.20	*COAL
213.56	1924.90	1933.90	9.00	
204.56	1933.90	1934.10	.20	*COAL
204.36	1934.10	1943.60	9.50	
194.86	1943.60	1944.10	.50	*COAL
194.36	1944.10	2017.20	73.10	
121.26	2017.20	2017.50	.30	*COAL
120.96	2017.50	2093.70	76.20	
44.76	2093.70	2094.00	.30	*COAL
44.46	2094.00	2153.80	59.80	
-15.34	2153.80	2153.90	.10	*COAL
-15.44	2153.90	2159.20	5.30	
-20.74	2159.20	2159.60	.40	*COAL
-21.14	2159.60	2174.90	15.30	
-36.44	2174.90	2177.50	2.60	*P41
-39.04	2177.50	2180.80	3.30	*P42
-42.34	2180.80	2209.10	28.30	
-70.64	2209.10	2210.50	1.40	*P32
-72.04	2210.50	2211.60	1.10	*P33
-73.14	2211.60	2251.00	39.40	
-112.54	2251.00	2251.30	.30	*P34
-112.84	2251.30	2251.80	.50	*P35
-113.34	2251.80	2348.80	97.00	
-210.34	2348.80	2348.90	.10	*P1L
-210.44	2348.90	2500.00	151.10	

BOTTOM HOLE

COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO TOPOGRAPHY.
GAMMA-CALIPER LOG FROM 0 TO 216.00

BK103

GAMMA-DENSITY LOG FROM 216.00 TO TD.

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION

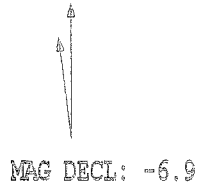
Well: **BK109**

Oil & Gas Show

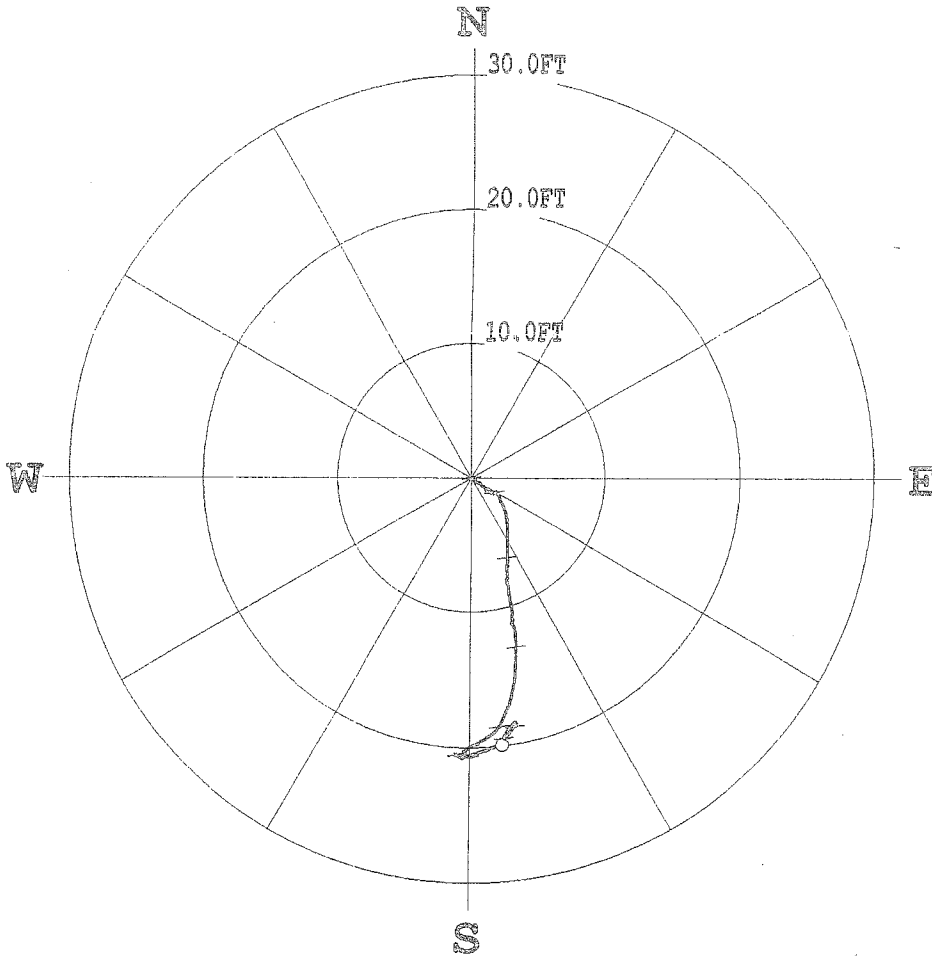
Formation	Top	Bottom	Thickness	IPF (MCFD/BOPD)	Pressure	Hours Tested
Lee/Norton	1346.4	1796.0	449.6			
Pocahontas	1889.0	2211.6	322.6			
Total IPF			0	NOT TAKEN		

PLAN VIEW COMPU-LOG DEVIATION

CLIENT: CONSOL ENERGY
 FIELD OFFICE: BLUEFIELD
 HOLE ID: CNX-09-BK-109
 DATE OF LOG: 12/08/09
 PROBE: 9136CH 1244



SCALE: 10 FT/IN
 TRUE DEPTH: 2455.66 FT
 AZIMUTH: 172.8
 DISTANCE: 19.9 FT
 + = 300 FT INCR
 O = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * *

CLIENT : CONSOL ENERGY HOLE ID. : CNX-09-BK-109
 FIELD OFFICE : BLUEFIELD DATE OF LOG : 12/08/09
 DATA FROM : PROBE : 9136CH , 1244
 MAG. DECL. : -6.900 DEPTH UNITS : FEET
 LOG: CNX-09-BK-109_12-08-09_21-45_9136CH_10_0.00_2456.00_DEVI.log

LE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGE
0.50	0.50	0.00	0.00	0.0	0.0	0.0	0.0
10.00	10.00	-0.01	0.01	0.0	142.8	0.2	168.8
20.00	20.00	-0.03	0.02	0.0	147.3	0.4	168.2
30.00	30.00	-0.07	0.06	0.1	139.8	0.4	105.8
40.00	40.00	-0.10	0.16	0.2	123.4	0.5	102.7
50.00	50.00	-0.11	0.22	0.2	116.2	0.3	100.0
60.00	60.00	-0.12	0.27	0.3	114.3	0.1	86.2
70.00	70.00	-0.16	0.30	0.3	117.9	0.2	177.1
80.00	80.00	-0.22	0.33	0.4	124.2	0.5	146.1
90.00	90.00	-0.29	0.40	0.5	125.8	0.5	121.8
100.00	100.00	-0.33	0.49	0.6	123.9	0.5	106.0
110.00	110.00	-0.36	0.59	0.7	121.6	0.4	105.7
120.00	120.00	-0.38	0.66	0.8	119.9	0.4	110.1

CLIENT : CONSOL ENERGY HOLE ID. : CNX-09-BK-109
 FIELD OFFICE : BLUEFIELD DATE OF LOG : 12/08/09
 DATA FROM : PROBE : 9136CH 1244
 MAG. DECL. : -6.900 DEPTH UNITS : FEET
 LOG: CNX-09-BK-109_12-08-09_21-45_9136CH_10_0.00_2456.00_DEVT.log

MLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGE
0.50	0.50	0.00	0.00	0.0	0.0	0.0	0.0
10.00	10.00	-0.01	0.01	0.0	142.8	0.2	168.6
20.00	20.00	-0.03	0.02	0.0	147.3	0.4	168.2
30.00	30.00	-0.07	0.06	0.1	139.8	0.4	165.8
40.00	40.00	-0.10	0.16	0.2	123.4	0.5	162.7
50.00	50.00	-0.11	0.22	0.2	116.3	0.3	160.0
60.00	60.00	-0.12	0.27	0.3	114.3	0.1	166.2
70.00	70.00	-0.16	0.30	0.3	117.9	0.2	177.1
80.00	80.00	-0.22	0.33	0.4	124.2	0.5	146.1
90.00	90.00	-0.29	0.40	0.5	125.6	0.5	121.8
100.00	100.00	-0.33	0.49	0.6	123.9	0.5	106.0
110.00	110.00	-0.36	0.59	0.7	121.6	0.4	105.7
120.00	120.00	-0.38	0.66	0.8	119.9	0.4	110.1
130.00	130.00	-0.42	0.70	0.8	120.8	0.4	165.3
140.00	140.00	-0.49	0.73	0.9	124.0	0.6	146.1
150.00	150.00	-0.56	0.80	1.0	124.9	0.7	125.4
160.00	159.99	-0.62	0.91	1.1	124.3	0.5	113.1
170.00	169.99	-0.64	0.98	1.2	123.3	0.4	123.4
180.00	179.99	-0.71	1.02	1.2	124.8	0.5	162.1
190.00	189.99	-0.78	1.05	1.3	126.8	0.5	158.8
200.00	199.99	-0.88	1.10	1.4	128.7	0.5	156.2
210.00	209.99	-0.97	1.14	1.5	130.3	0.6	153.7
220.00	219.99	-1.00	1.20	1.6	130.0	0.4	27.9
230.00	229.99	-1.01	1.27	1.6	128.5	0.3	81.6
240.00	239.99	-1.06	1.34	1.7	128.2	0.5	72.4
250.00	249.99	-1.07	1.41	1.8	127.3	0.3	158.3
260.00	259.99	-1.08	1.48	1.8	126.2	0.4	58.8
270.00	269.99	-1.06	1.53	1.9	124.7	0.9	100.4
280.00	279.99	-1.08	1.59	1.9	124.1	0.6	117.6
290.00	289.99	-1.14	1.67	2.0	124.3	0.7	124.6
300.00	299.99	-1.08	1.71	2.0	122.1	0.8	73.9
310.00	309.99	-1.11	1.81	2.1	121.4	0.5	63.4
320.00	319.99	-1.07	1.86	2.1	119.9	0.2	46.6
330.00	329.99	-1.04	1.89	2.2	118.8	0.7	143.9
340.00	339.99	-1.11	1.94	2.2	119.9	0.5	151.1
350.00	349.99	-1.20	1.98	2.3	121.3	0.6	140.7
360.00	359.98	-1.30	2.02	2.4	122.7	0.8	163.3
370.00	369.98	-1.40	2.10	2.5	123.7	0.6	158.0
380.00	379.98	-1.52	2.15	2.6	125.2	0.8	163.7
390.00	389.98	-1.60	2.16	2.7	126.6	0.9	215.2
400.00	399.98	-1.67	2.14	2.7	128.0	0.7	214.0
410.00	409.98	-1.77	2.18	2.8	129.2	0.8	179.5
420.00	419.98	-1.87	2.27	2.9	129.4	1.1	157.0
430.00	429.98	-2.00	2.33	3.1	130.6	0.9	160.9
440.00	439.98	-2.14	2.39	3.2	131.8	0.9	145.0
450.00	449.98	-2.27	2.45	3.3	132.8	0.9	170.2
460.00	459.97	-2.44	2.50	3.5	134.3	1.2	150.2
470.00	469.97	-2.60	2.56	3.6	135.5	1.1	160.1
480.00	479.97	-2.79	2.61	3.8	136.9	1.2	161.1
490.00	489.97	-2.99	2.63	4.0	136.7	1.1	146.3
500.00	499.97	-3.20	2.66	4.2	140.3	1.4	198.1
510.00	509.96	-3.45	2.68	4.4	142.1	1.3	179.6
520.00	519.96	-3.69	2.69	4.6	143.9	1.6	178.4
530.00	529.96	-3.94	2.69	4.8	145.6	1.5	183.4
540.00	539.95	-4.24	2.72	5.0	147.3	1.7	177.1
550.00	549.95	-4.50	2.73	5.3	148.6	1.5	179.1
560.00	559.95	-4.76	2.70	5.5	150.5	1.5	178.8
570.00	569.94	-5.06	2.70	5.7	151.9	1.8	177.9
580.00	579.94	-5.35	2.70	6.0	153.2	1.7	176.5
590.00	589.93	-5.65	2.73	6.3	154.2	1.6	177.0
600.00	599.93	-5.92	2.70	6.5	155.5	1.6	174.3
610.00	609.92	-6.22	2.74	6.8	156.2	1.8	194.9
620.00	619.92	-6.49	2.72	7.0	157.3	1.6	180.5
630.00	629.92	-6.56	2.71	7.1	157.6	1.4	232.4
640.00	639.91	-6.64	2.69	7.2	158.0	1.3	195.2
650.00	649.91	-6.88	2.70	7.4	158.6	1.5	178.7
660.00	659.91	-7.12	2.71	7.6	159.2	1.5	174.9
670.00	669.90	-7.36	2.73	7.9	159.7	1.4	149.9
680.00	679.90	-7.58	2.66	8.0	160.7	1.3	186.4
690.00	689.90	-7.79	2.73	8.3	160.7	1.7	194.3
700.00	699.89	-8.05	2.81	8.5	160.8	1.6	192.1
710.00	709.89	-8.32	2.81	8.8	161.3	1.6	164.5
720.00	719.89	-8.58	2.84	9.0	161.7	1.5	185.0
730.00	729.88	-8.82	2.93	9.3	161.7	1.6	185.3
740.00	739.88	-9.08	2.94	9.5	162.1	1.5	165.8
750.00	749.88	-9.33	3.02	9.8	162.1	1.4	171.9
760.00	759.87	-9.56	3.08	10.0	162.1	1.5	152.9
770.00	769.87	-9.79	3.10	10.3	162.4	1.1	163.2
780.00	779.87	-9.99	3.12	10.5	162.7	1.3	172.0
790.00	789.87	-10.20	3.11	10.7	163.0	1.1	175.4
800.00	799.86	-10.41	3.10	10.9	163.4	1.3	137.1
810.00	809.86	-10.61	3.19	11.1	163.3	1.5	199.7
820.00	819.86	-10.80	3.06	11.2	164.2	1.6	142.7
830.00	829.85	-11.02	3.26	11.5	163.5	1.9	167.1
840.00	839.85	-11.30	3.33	11.8	163.6	1.5	168.9

750.00	759.87	-9.56	3.08	10.0	162.1	1.5	152.9
770.00	769.87	-9.79	3.10	10.3	162.4	1.1	163.2
780.00	779.87	-9.99	3.12	10.5	162.7	1.3	172.0
790.00	769.87	-10.20	3.11	10.7	163.0	1.1	175.4
800.00	799.86	-10.41	3.10	10.9	163.4	1.3	137.1
810.00	809.86	-10.61	3.19	11.1	163.3	1.5	199.7
820.00	819.86	-10.80	3.06	11.2	164.2	1.6	142.7
830.00	829.85	-11.02	3.26	11.5	163.5	1.9	167.1
840.00	839.85	-11.30	3.33	11.8	163.6	1.5	166.9
850.00	849.84	-11.57	3.37	12.0	163.8	1.5	172.2
860.00	859.84	-11.80	3.39	12.3	164.0	1.3	176.9
870.00	869.84	-12.02	3.40	12.5	164.2	1.2	173.2
880.00	879.84	-12.21	3.42	12.7	164.3	1.0	173.3
890.00	889.84	-12.37	3.42	12.8	164.5	0.9	191.6
900.00	899.84	-12.53	3.42	13.0	164.8	1.1	170.7
910.00	909.83	-12.71	3.42	13.2	164.9	0.9	186.2
920.00	919.83	-12.87	3.42	13.3	165.1	1.0	176.2
930.00	929.83	-13.04	3.44	13.5	165.2	1.0	166.1
940.00	939.83	-13.20	3.42	13.6	165.5	0.9	188.5
950.00	949.83	-13.38	3.43	13.8	165.6	0.9	189.3
960.00	959.83	-13.54	3.42	14.0	165.8	1.0	191.9
970.00	969.82	-13.72	3.40	14.1	166.1	1.0	184.9
980.00	979.82	-13.91	3.39	14.3	166.3	1.2	189.1
990.00	989.82	-14.12	3.39	14.5	166.5	1.1	187.4
1000.00	999.82	-14.33	3.38	14.7	166.7	1.4	177.6
1010.00	1009.82	-14.56	3.37	14.9	167.0	1.2	192.0
1020.00	1019.81	-14.77	3.34	15.1	167.3	1.2	189.3
1030.00	1029.81	-14.98	3.30	15.3	167.6	1.2	185.1
1040.00	1039.81	-15.19	3.28	15.5	167.8	1.3	193.7
1050.00	1049.81	-15.41	3.25	15.8	168.1	1.3	184.1
1060.00	1059.80	-15.63	3.20	16.0	168.4	1.3	193.5
1070.00	1069.80	-15.84	3.16	16.1	168.7	1.2	190.9
1080.00	1079.80	-16.04	3.11	16.3	169.0	1.2	187.3
1090.00	1089.80	-16.26	3.06	16.5	169.3	1.4	203.4
1100.00	1099.79	-16.47	2.99	16.7	169.7	1.3	193.4
1110.00	1109.79	-16.67	2.94	16.9	170.0	1.1	204.7
1120.00	1119.79	-16.84	2.89	17.1	170.3	1.1	214.9
1130.00	1129.79	-17.00	2.81	17.2	170.6	1.2	201.5
1140.00	1139.79	-17.19	2.74	17.4	171.0	1.1	197.0
1150.00	1149.78	-17.36	2.65	17.6	171.3	0.9	184.7
1160.00	1159.78	-17.55	2.59	17.7	171.6	1.2	207.4
1170.00	1169.78	-17.72	2.50	17.9	172.0	1.1	225.4
1180.00	1179.78	-17.92	2.42	18.1	172.3	1.4	199.1
1190.00	1189.78	-18.12	2.32	18.3	172.7	1.4	190.6
1200.00	1199.77	-18.33	2.22	18.5	173.1	1.2	237.6
1210.00	1209.77	-18.49	2.10	18.6	173.5	1.3	218.0
1220.00	1219.77	-18.66	1.96	18.8	174.0	1.3	229.3
1230.00	1229.77	-18.80	1.81	18.9	174.5	1.4	225.6
1240.00	1239.76	-18.94	1.63	19.0	175.1	1.2	241.0
1250.00	1249.76	-19.07	1.45	19.1	175.7	1.3	226.3
1260.00	1259.76	-19.23	1.23	19.3	176.3	1.6	230.3
1270.00	1269.75	-19.35	1.01	19.4	177.0	1.5	241.1
1280.00	1279.75	-19.53	0.77	19.5	177.7	1.8	225.5
1290.00	1289.74	-19.68	0.51	19.7	178.5	1.7	238.2
1300.00	1299.74	-19.76	0.40	19.8	178.9	1.7	256.8
1310.00	1309.74	-19.78	0.27	19.9	179.2	1.2	237.1
1320.00	1319.74	-19.88	0.08	19.9	179.8	1.2	240.8
1330.00	1329.73	-19.99	-0.09	20.0	180.3	1.1	235.9
1340.00	1339.73	-20.10	-0.26	20.1	180.7	1.1	232.1
1350.00	1349.73	-20.21	-0.40	20.2	181.1	1.0	225.9
1360.00	1359.73	-20.25	-0.39	20.3	181.1	0.8	328.3
1370.00	1369.73	-20.27	-0.44	20.3	181.2	0.7	63.0
1380.00	1379.73	-20.34	-0.43	20.3	181.2	0.5	106.6
1390.00	1389.73	-20.39	-0.39	20.4	181.1	0.5	177.9
1400.00	1399.73	-20.43	-0.42	20.4	181.2	0.3	123.1
1410.00	1409.73	-20.49	-0.43	20.5	181.2	0.5	217.6
1420.00	1419.73	-20.54	-0.39	20.5	181.1	0.4	143.6
1430.00	1429.73	-20.62	-0.44	20.6	181.2	0.6	226.1
1440.00	1439.73	-20.67	-0.51	20.7	181.4	0.5	245.5
1450.00	1449.73	-20.68	-0.58	20.7	181.6	0.4	297.9
1460.00	1459.72	-20.66	-0.64	20.7	181.8	0.4	287.0
1470.00	1469.72	-20.62	-0.71	20.6	182.0	0.4	305.0
1480.00	1479.72	-20.56	-0.79	20.6	182.2	0.5	300.2
1490.00	1489.72	-20.50	-0.87	20.5	182.4	0.6	301.9
1500.00	1499.72	-20.44	-0.94	20.5	182.6	0.5	310.5
1510.00	1509.72	-20.41	-1.01	20.4	182.8	0.4	245.7
1520.00	1519.72	-20.40	-1.04	20.4	182.9	0.1	294.5
1530.00	1529.72	-20.43	-1.07	20.5	183.0	0.3	208.2
1540.00	1539.72	-20.45	-1.06	20.5	183.0	0.2	116.5
1550.00	1549.72	-20.44	-1.04	20.5	182.9	0.2	46.3
1560.00	1559.72	-20.42	-1.03	20.4	182.9	0.1	357.7
1570.00	1569.72	-20.40	-1.04	20.4	182.9	0.2	326.8
1580.00	1579.72	-20.39	-1.06	20.4	183.0	0.2	311.4
1590.00	1589.72	-20.38	-1.07	20.4	183.0	0.0	64.8
1600.00	1599.72	-20.38	-1.07	20.4	183.0	0.1	165.0
1610.00	1609.72	-20.38	-1.04	20.4	182.9	0.2	94.2
1620.00	1619.72	-20.40	-0.99	20.4	182.8	0.3	125.6
1630.00	1629.72	-20.43	-0.91	20.4	182.6	0.4	116.7
1640.00	1639.72	-20.45	-0.82	20.5	182.3	0.5	119.1
1650.00	1649.72	-20.47	-0.70	20.5	182.0	0.8	104.3
1660.00	1659.72	-20.50	-0.59	20.5	181.6	0.9	126.9
1670.00	1669.72	-20.52	-0.46	20.5	181.3	0.7	76.7
1680.00	1679.72	-20.55	-0.33	20.5	180.9	0.8	73.8
1690.00	1689.72	-20.53	-0.18	20.5	180.5	0.8	97.6
1700.00	1699.72	-20.55	-0.06	20.5	180.2	0.8	100.6
1710.00	1709.71	-20.56	0.09	20.6	179.7	0.8	96.2

1590.00	1589.72	-20.38	-1.07	20.4	183.0	0.0	64.6
1600.00	1599.72	-20.38	-1.07	20.4	183.0	0.1	165.0
1610.00	1609.72	-20.38	-1.04	20.4	182.9	0.2	94.2
1620.00	1619.72	-20.40	-0.99	20.4	182.8	0.3	125.6
1630.00	1629.72	-20.43	-0.91	20.4	182.6	0.4	118.7
1640.00	1639.72	-20.45	-0.82	20.5	182.3	0.5	119.1
1650.00	1649.72	-20.47	-0.70	20.5	182.0	0.6	104.3
1660.00	1659.72	-20.50	-0.59	20.5	181.6	0.9	128.9
1670.00	1669.72	-20.52	-0.46	20.5	181.3	0.7	76.7
1680.00	1679.72	-20.55	-0.33	20.5	180.9	0.8	73.8
1690.00	1689.72	-20.53	-0.18	20.5	180.5	0.8	97.6
1700.00	1699.72	-20.55	-0.06	20.5	180.2	0.8	100.6
1710.00	1709.71	-20.56	0.09	20.6	179.7	0.8	96.2
1720.00	1719.71	-20.53	0.14	20.5	179.6	0.8	237.8
1730.00	1729.71	-20.52	0.18	20.5	179.5	0.3	107.2
1740.00	1739.71	-20.50	0.19	20.5	179.5	0.5	11.6
1750.00	1749.71	-20.51	0.28	20.5	179.2	0.6	100.5
1760.00	1759.71	-20.48	0.37	20.5	179.0	0.9	22.0
1770.00	1769.71	-20.46	0.45	20.5	179.7	0.8	122.3
1780.00	1779.71	-20.40	0.53	20.4	178.5	0.9	46.1
1790.00	1789.71	-20.40	0.65	20.4	178.2	1.1	346.1
1800.00	1799.71	-20.27	0.71	20.3	176.0	1.0	67.6
1810.00	1809.70	-20.21	0.86	20.2	177.6	0.8	80.9
1820.00	1819.70	-20.17	1.00	20.2	177.2	0.9	72.2
1830.00	1829.70	-20.13	1.15	20.2	176.7	1.1	65.0
1840.00	1839.70	-20.05	1.32	20.1	176.2	1.0	80.0
1850.00	1849.70	-20.02	1.48	20.1	175.8	1.1	64.1
1860.00	1859.70	-19.92	1.64	20.0	175.3	1.1	63.8
1870.00	1869.70	-19.91	1.78	20.0	174.9	0.7	63.8
1880.00	1879.70	-19.86	1.80	19.9	174.6	0.8	328.5
1890.00	1889.70	-19.87	1.78	20.0	174.9	0.1	237.4
1900.00	1899.70	-19.86	1.82	19.9	174.6	0.5	88.3
1910.00	1909.69	-19.84	1.89	19.9	174.6	0.4	75.2
1920.00	1919.69	-19.81	1.97	19.9	174.3	0.5	66.2
1930.00	1929.69	-19.78	2.03	19.9	174.1	0.4	70.0
1940.00	1939.69	-19.74	2.10	19.9	173.9	0.5	73.9
1950.00	1949.69	-19.66	2.16	19.8	173.7	0.7	18.6
1960.00	1959.69	-19.60	2.24	19.7	173.5	0.5	42.3
1970.00	1969.69	-19.51	2.31	19.6	173.2	0.7	41.9
1980.00	1979.69	-19.40	2.39	19.5	173.0	0.6	47.2
1990.00	1989.69	-19.32	2.47	19.5	172.7	0.6	40.5
2000.00	1999.69	-19.23	2.55	19.4	172.5	0.7	45.3
2010.00	2009.69	-19.13	2.63	19.3	172.2	0.7	35.8
2020.00	2019.69	-19.07	2.69	19.3	172.0	0.7	70.2
2030.00	2029.69	-19.01	2.76	19.2	171.7	0.9	36.5
2040.00	2039.69	-18.91	2.85	19.1	171.4	0.7	42.9
2050.00	2049.69	-18.82	2.93	19.0	171.1	0.6	48.3
2060.00	2059.68	-18.73	3.03	19.0	170.8	0.9	37.9
2070.00	2069.68	-18.61	3.11	18.9	170.5	0.7	48.8
2080.00	2079.68	-18.53	3.20	18.8	170.2	0.8	25.0
2090.00	2089.68	-18.40	3.27	18.7	169.9	1.0	61.3
2100.00	2099.68	-18.32	3.36	18.6	169.6	0.6	36.4
2110.00	2109.68	-18.26	3.39	18.6	169.5	0.7	22.9
2120.00	2119.68	-18.28	3.40	18.6	169.5	0.2	334.7
2130.00	2129.68	-18.22	3.45	18.5	169.3	0.5	40.4
2140.00	2139.68	-18.16	3.49	18.5	169.1	0.4	26.8
2150.00	2149.68	-18.10	3.49	18.4	169.1	0.5	237.6
2160.00	2159.68	-18.09	3.48	18.4	169.1	0.1	308.4
2170.00	2169.68	-18.08	3.45	18.4	169.2	0.1	278.5
2180.00	2179.68	-18.09	3.44	18.4	169.2	0.1	29.3
2190.00	2189.68	-18.06	3.45	18.4	169.2	0.3	15.8
2200.00	2199.68	-18.02	3.45	18.4	169.2	0.2	3.8
2210.00	2209.68	-18.01	3.43	18.3	169.2	0.2	187.6
2220.00	2219.68	-18.04	3.42	18.4	169.3	0.2	186.9
2230.00	2229.68	-18.04	3.43	18.4	169.2	0.2	320.4
2240.00	2239.68	-18.02	3.42	18.3	169.3	0.2	267.0
2250.00	2249.68	-18.01	3.40	18.3	169.3	0.2	270.8
2260.00	2259.68	-18.03	3.36	18.3	169.4	0.3	147.7
2270.00	2269.68	-18.05	3.31	18.4	169.6	0.5	208.5
2280.00	2279.68	-18.11	3.28	18.4	169.7	0.5	194.6
2290.00	2289.68	-18.19	3.24	18.5	169.9	0.7	221.4
2300.00	2299.68	-18.25	3.14	18.5	170.3	0.8	228.3
2310.00	2309.69	-18.36	3.09	18.6	170.4	0.8	213.9
2320.00	2319.67	-18.45	3.01	18.7	170.7	0.7	221.6
2330.00	2329.67	-18.56	2.94	18.8	171.0	0.8	204.6
2340.00	2339.67	-18.65	2.90	18.9	171.2	0.7	10.2
2350.00	2349.67	-18.66	2.83	18.9	171.4	0.3	226.1
2360.00	2359.67	-18.76	2.77	19.0	171.6	0.8	209.1
2370.00	2369.67	-18.87	2.71	19.1	171.8	0.7	208.3
2380.00	2379.67	-18.99	2.65	19.2	172.1	0.7	201.1
2390.00	2389.67	-19.10	2.60	19.3	172.3	0.6	205.8
2400.00	2399.67	-19.21	2.55	19.4	172.4	0.8	191.4
2410.00	2409.67	-19.37	2.53	19.5	172.5	1.0	163.9
2420.00	2419.67	-19.45	2.52	19.6	172.6	1.4	194.9
2430.00	2429.66	-19.58	2.47	19.7	172.8	1.0	186.9
2440.00	2439.66	-19.76	2.48	19.9	172.8	0.9	160.3
2450.00	2449.66	-19.78	2.49	19.9	172.8	0.4	189.6
2456.00	2455.66	-19.73	2.48	19.9	172.6	1.0	345.2

COMPANY CNX GAS CO LLC
 HOLE BK-109
 RIG #: 90
 LOCATION: GRISSOM CREEK RD

DATE STARTED: 12/3/2009
 DATE COMPLETED: 12/9/2009

ELECTRIC LOGGED: YES
 GROUTED: YES

DEPTH FROM	THICKNESS TO	FT	STRATA DESCRIPTION, VOIDS ETC.
	0	24	24 OVERBURDEN
	24	40	16 SAND/SHALE/COAL
	40	71	31 SAND/SHALE
	71	102	31 SAND/SHALE
	102	133	31 SAND/SHALE
	133	163	30 SHALE/COAL/SHALE
	163	193	30 SAND/SHALE
	193	223	30 SAND/SHALE
	223	240	17 SAND/SHALE
	240	270	30 SAND/SHALE/COAL
	270	280	10 SAND/SHALE
	280	310	30 SAND/SHALE/COAL
	310	340	30 SAND/SHALE
	340	370	30 SAND/SHALE/COAL
	370	400	30 SAND/SHALE
	400	430	30 SAND/SHALE/COAL
	430	460	30 SAND/SHALE
	460	490	30 SAND/SHALE/COAL
	490	520	30 SAND/SHALE
	520	550	30 SAND/SHALE
	550	580	30 SAND/SHALE/COAL
	580	610	30 SAND/SHALE
	610	640	30 SAND/SHALE/COAL
	640	670	30 SAND/SHALE
	670	700	30 SAND/SHALE/COAL
	700	730	30 SAND/SHALE
	730	760	30 SAND/SHALE/COAL
	760	790	30 SAND/SHALE/COAL
	790	820	30 SAND/SHALE
	820	850	30 SAND/SHALE
	850	880	30 SAND/SHALE
	880	910	30 SAND/SHALE/COAL
	910	940	30 SAND/SHALE
	940	970	30 SAND/SHALE/COAL
	970	1000	30 SAND/SHALE
	1000	1030	30 SAND/SHALE
	1030	1060	30 SAND/SHALE
	1060	1090	30 SAND/SHALE/COAL
	1090	1120	30 SAND/SHALE/COAL

1120	1150	30 SAND/SHALE
1150	1180	30 SAND/SHALE
1180	1210	30 SAND/SHALE/COAL
1210	1240	30 SAND/SHALE/COAL
1240	1270	30 SAND/SHALE/COAL
1270	1300	30 SAND/SHALE/COAL
1300	1330	30 SAND/SHALE
1330	1360	30 SAND/SHALE/COAL
1360	1390	30 SAND/SHALE
1390	1420	30 SAND/SHALE
1420	1450	30 SAND/SHALE
1450	1480	30 SAND/SHALE/COAL
1480	1510	30 SAND/SHALE/COAL
1510	1540	30 SAND/SHALE
1540	1570	30 SAND/SHALE/COAL
1570	1600	30 SHALE/COAL/SHALE
1600	1630	30 SAND/SHALE
1630	1660	30 SHALE/COAL/SHALE
1660	1690	30 SHALE/COAL/SHALE
1690	1720	30 SHALE/SAND/SHALE
1720	1750	30 SHALE/COAL/SHALE
1750	1780	30 SAND/SHALE
1780	1810	30 SHALE/COAL/SHALE
1810	1840	30 SAND/SHALE
1840	1870	30 SAND/SHALE
1870	1900	30 SAND/SHALE
1900	1930	30 SAND/SHALE
1930	1960	30 SAND/SHALE/COAL
1960	1990	30 SAND/SHALE
1990	2020	30 SAND/SHALE/COAL
2020	2050	30 SHALE/COAL/SHALE
2050	2080	30 SAND/SHALE
2080	2110	30 SHALE/COAL/SHALE
2110	2140	30 SAND/SHALE
2140	2170	30 SAND/SHALE
2170	2200	30 SHALE/COAL/SHALE
2200	2230	30 COAL/SHALE
		POCA-3 @ 2210-2212
2230	2260	30 SHALE/COAL/SHALE
2260	2290	30 SAND/SHALE/COAL/SHALE
2290	2320	30 SAND/SHALE
2320	2350	30 SAND/SHALE/COAL/SHALE
2350	2380	30 SAND/SHALE
2380	2410	30 SAND/SHALE/COAL
2410	2440	30 SAND/SHALE
2440	2470	30 SAND/SHALE
2470	2500	30 SHALE/RED SHALE

2500' TOTAL DEPTH
24' OF 13 3/8" CASING
210' OF 9 5/8" CASING
2303.26' OF 4 1/2" CASING