

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: 2436

Company: CNX Gas Company LLC

File Number: RU-0591

Operations Name: CBM AX116A W/PL

Operation Type: Coalbed/Pipeline

Drilling Report Type: Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data

Date drilling commenced: 11/7/2009 Drilling Contractor: NOAH HORN

Date drilling completed: 11/11/2009 Rig Type: Rotary ← Cable

Driller's Total Depth (feet): 2359.10

Log Total Depth (feet): 2363.58 Coal Seam at Total Pocahontas

Depth:

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

Permitted State Plane X: 10476627.5700 Final Plat State Plane X: 10476626.3500

Permitted State Plane Y: 3583656.1200 Final Plat State Plane Y: 3583655.9100

Plat Previously Submitted Or... 🗲

List of Attached Items:

Form DGO-GO-14-E

Page 1 of 3

Rev. 04/2009

Description	FileName		
PLAT	AX116A 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	AX116A Exh A.pdf		

Gas and Oil Shows:

List of Attached Items:

Description	FileName			
GAS SHOW	AX116A 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. Survery Results (As required by 4VAC25-150-280.B.2)

List of Attached Items:

Description	FileName			
DEVIATION	AX116A Dev.pdf			

Form DGO-GO-14-E

Page 2 of 3

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6. Casing and Tubing Program

List of Attached Items:

Description	FileName			
CASING	AX116A 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.

8.	Dril	lers	Log

Compiled By: NOAH HORN

List of Attached Items:

Description	FileName		
DRILL DATA	AX116A Drill Data.pdf		

9. Comments

0. Signature					
Permitee:	CNX G	as Company LLC	Date:	2/24/2010	
Signed By:	Jerry E	Boothe	Title:	Manager	
INTERNAL	USE	ONLY			
Submit	t Date:	2/24/2010			
5	Status:	A		Date:	3/31/2010
Final PDF	Date:	4/1/2010			

Form DGO-GO-14-E

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Rev. 04/2009

S 51'29'36' W			10,325'			-CONTROLLERS CRIME
S 51'29'36" W CBMI O IP S 87'20'21' W 218.10' FINAL LOCATION CBM—AX116A CBM—AX116A COmpany CNX Gas Company LLC Froct No. BUCKHORN COAL CO. South RUSSELL District NEW CARDEN Well Elevation Quadrangle HONAKER Date 11-11-09 Well Coordinates N 302.777.26 E 993.63'9.00 Wighin State Plane South Zord Well Coordinates N 302.777.26 E 993.63'9.00 Wighin State Plane South Zord Well Coordinates N 30.583,655.91 E 10,476,626.35 Well Coordinates N 3,583,655.91 E 10,476,626.35 W			SECOND VICES OF THE CO.	LATITUDE:	37° 07' 30"	- 3,860°
THIS WELL WAS DRILLED WITHIN 10 FT. DF PROPUSED LOCATION WELL LOCATION PLAT WELL LOCATION PLAT AX116AFNL PGP39/172-755/18 WELL LOCATION PLAT Company CNX Gas Company LLC Well Name or Number CBM-AX116A Tract No. BUCKHORN COAL CO. Scale: 1" = 400' County RUSSELL District NEW GARDEN Quadrangle HONAKER Date 11-11-09 Elevation 2480.68' Well Elevation Determined By Trig. Levels From CONSOL Inc. Benchmarks Well Coordinates N 302,777.26 E 993,639.00 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zore NAD' 27)	CHE	S 87°20°21"W 218.10" FINAL LOCATIO CBM—AX116A		TO THE PROPERTY OF THE PROPERT		81°55°
Company CNX Gas Company LLC Well Name or Number CBM-AX116A Fract No. BUCKHORN COAL CO. Scale: 1" = 400' County RUSSELL District NEW GARDEN Quadrangle HONAKER Date 11-11-09 Elevation 2480.68' Well Elevation Determined By Trig. Levels From CONSOL Inc. Benchmark Well Coordinates N 302,777.26 E 993,639.00 (Viginia State Plane - South Zone NAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zone - NAD' 35) This plat is a new plat ; an updated plat ; or a final plat X 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. Lic. No. 002289 Form DGO-GO-7						
Well Coordinates N 302,777.26 E 993,639.00 (Viginia State Plane - South Zone HAD' 27) Well Coordinates N 3,583,655.91 E 10,476,626.35 (Viginia State Plane - South Zone - MAD' 27) This plat is a new plat; an updated plat; or a fine plat	THIS WELL WAS DRILLE	D WITHIN 10 FT. OF PROPOSED LOCATION 5-150-290 AND 45.1-361.30		AX1	16AFNL	
	THIS WELL WAS DRILLE ACCORDING TO 4 VAC 2 Company <u>CNX Gas Com</u> Tract No. <u>BUCKHOI</u> County <u>RUSSELL</u>	WELL LOCATION WELL LOCATION Ipany LLC Well Name RN COAL CO. District NEW GARDEN Qua	or NumberdrangleHONAKE	PGP39/ CBM-AX Scale: R Date	$\frac{172 - 755/18}{116A}$ $\frac{1" = 400'}{11 - 11 - 09}$	
	THIS WELL WAS DRILLE ACCORDING TO 4 VAC 2 Company CNX Gas Com Tract No. BUCKHOI County RUSSELL Elevation 2480.68' Well Coordinates N Well Coordinates N This plat is a new plat Denotes the loc 24,000, latitude	WELL LOCATION Ipany LLC Well Name RN COAL CO. District NEW GARDEN Qua Well Elevation Determined By Trig. If 302,777.26 E 993,639,00 (Vid. 3,583,655.91 E 10,476,626.35 (Vid. an updated plat ation of a well on United States Topograph	or Number drangle HONAKE Levels From CONSOL Inc ginia State Plane — Sou ginia State Plane — Sou , or a	CBM-AX CBM-AX Scale: Date Benchman th Zore ALLE Lic.	172-755/18 116A 1" = 400' 11-11-09 SALTHOWN AD' 27) AD' 27) NO MITCHE NO 002289	

AX116A EXHIBIT A

HOLE NO = 09 CBM AX116A

STATE = VIRGINIA COUNTY = BUCHANAN

S ELEV = 2481

S ELEV =	2481				
N-COOR =	302777	E-COOR =	993639		
STRATA ELEV (TOP 2436.78 2436.58	STRATA) FROM 43.90 44.10	DEPTH TO 44.10 159.00	STRATA THICK .20 114.90	SEAM CODE KN2	COMMENTS
2321.68 2320.78	159.00 159.90	159.90 177.60	17.70	COAL	
2303.08 2302.58	177.60 178.10	178.10 203.00	. 50	ALI	
2277.68 2275.48	203.00	205.20 205.20 291.90	24.90 2.20 86.70	AL2	
2188.78 2185.78	291.90 291.90 294.90	294.90 294.90 471.70	3.00 176.80	RA2	WITHIN 1297 FT
2008.98 2005.68	471.70 475.00	475.00 498.90	3.30	JB1	OF OLD WORKS. MINE PILLAR?
	498.90 499.30	499.30 520.80	.40 21.50	JB3	
1959.88 1958.78	520.80 521.90	521.90 602.50	1.10 80.60	T2	
1878.18 1878.08	602.50 602.60	602.60 763.70	.10 162.10	and the second	
1716.98 1716.68	763.70 764.00	764.00 784.90	20.90	*us1	
1695.78 1695.18	784.90 785.50	785.50 788.90	.60 3.40	*LC2	
1691.78 1690.68	788.90 790.00	790.00 791.30	1.10 1.30	*LC3 *LC4	
1689.38 1553.68	791.30 927.00	927.00 927.60	135.70 .60	*GC1	
1553.08 1552.68	927.60 928.00	928.00 928.90	. 40 . 90	*GC1	
1551.78 1452.68	928.90 1028.00	1028.00 1028.80	99.10 .80	*SE1	
1451.88 1417.28	1028.80 1063.40	1063.40 1064.10	34.60 .70	*SE2	
1416.58 1367.68	1064.10 1113.00	1113.00 1114.60	48.90 1.60	*LSI	
1366.08 1299.08	1114.60 1181.60	1181.60 1182.00	67.00 .40	*LS3	
1298.68 1296.58	1182.00 1184.10	1184.10 1184.60	2.10 .50	*UH1	
1296.08 1238.48	1184.60	1242.20 1243.10	57.60 .90	*UH2	
1237.58 1235.68	1243.10 1245.00	1245.00 1293.90	1.90 48.90	*UH3	
1186.78 1185.68	1293.90 1295.00	1295.00 1352.90	1.10 57.90	*MH1	
1127.78 1126.88	1352.90 1353.80	1353.80 1405.00	.90 51.20	*MH2	
1075.68 1074.18	1405.00 1406.50	1406.50 1431.10	1.50 24.60	*P11	
1049.58 1048.78	1431.10 1431.90	1431.90 1462.90	.80 31.00	*P10	

Page 1

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                                                                                                                    1.10
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                                                                                                                    .40
86.58
                                                                                                                                                                 *SJ3
                                                                                                                                                                    BOTTOM HOLE
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COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO STROW CREEK. GAMMA-CALIPER LOG FROM 0 TO 561.00 GAMMA-DENSITY LOG FROM 561.00 TO TD.

Well: **AX116A**

Oil & Gas Show

Formation	Top	Bottom	Thickness	IPF	Pressure	Hours
				(MCFD/BOPD)		Tested
Lee/Norton	788.9	1582.9	794.0			
Pocahontas	1602.1	2052.8	450.7			
Total IPF				NOT TAKEN		

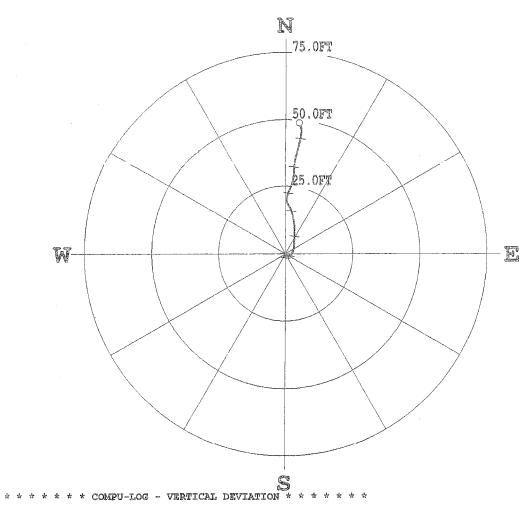
PLAN VIEW COMPU-LOG DEVIATION

LIENT: CONSOL ENERGY

OCATION:

OLE ID: CNK-09-AK-116A WATE OF LOG: 11/11/09 PROBE: 9136CH 1244 MAG DECL: -6.9

SCALE: 25 FT/IN
TRUE DEPTH: 2362.07 F'
AZIMUTH: 6.0
DISTANCE: 48.9 FT
+ = 300 FT INCR
= BOTTOM OF HOLE



CLIENT FIELD OFF DATA FROM MAG. DECL LOG: CNX-	;	eld 00		LOG : 11/ : 913 VITS : FEE	T ,	1244	
ABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	Azimuth	SANG S	angb
0.50	0.50	0.00	0.00	0.0	0.0	0.0	0.0
10.00	10.00	0.00	0.00	0.0	43.9	0.0	27.1
20.00	20.00	-0.01	-0.00	0.0	182.0	0.2	302.1
30.00	30.00	-0.03	-0.00	0.0	180.5	0.1	162.4
40.00	40.00	-0.06	0.00	0.1	178.3	0.1	190.1
50.00	50.00	-0.09	-0.00	0.1	161.1	0.2	212.0
60.00	60.00	-0.12	-0.02	0.1	187.5	0.2	208.3
70.00	70.00	-0.17	-0.03	0.2	190.7	0.6	185.7
80.00	80.00	-0.25	-0.04	0.2	189.2	0.4	182.2
90.00	90.00	-0.31	-0.03	0.3	184.6	0.3	159.8
100.00	100.00	-0.39	-0.01	0.4	181.1	0.3	177.7

DATA FROM : PROBE : 9136CH , 1244
MAG. DECL. : -6.900 DEPTH UNITS : FEET
LOG: CNX-09-AX-116A 11-11-09 00-18 9136CH .10 0.00 2363.00 DEVI.log

CABLE DEPTH 0.50 10.00 20.00 30.00 40.00 50.00 50.00 90.00 1120.00 130.00 140.00 150.00 140.00 150.00 220.00 220.00 220.00 220.00 220.00 220.00 220.00 220.00 220.00 230.00 240.00 250.00 310.00	TRUE DEPTH 0.500 20.000 30.000 40.000 40.000 450.000 450.000 100.000 110.000 1130.000 1150.000 1150.000 1150.000 1150.000 1150.000 1150.000 1200.00	NORTH DEVO. 0.001 -0.031 -0.092 -0.175 -0.319 -0.0642 -0.329 -0.4883 -0.642 -0.339 -0.4883 -0.642 -0.339 -0.4883 -0.4833 -0.4833 -1.1833 -1.1833 -1.1833 -1.1833 -1.1833 -1.1833 -1.1833 -1.1844 -1.1833 -1.1844 -1.333 -1	EAST DEV. 0.000	E000001111223344444445555556666666555555566667889012468024680358021 NO000000000000000011111111111111111111	AZIMUTH 43.0.9.0.5.3.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.5.1.5.7.2.6.1.7.6.6.3.1.2.3.7.7.1.7.7.2.2.3.7.7.1.7.7.2.2.3.7.7.1.7.7.2.2.3.7.7.1.7.7.2.2.3.7.7.1.7.1.7.7.2.2.3.7.7.1.7.1.7.7.2.2.3.7.7.1.7.1.7.7.2.2.3.7.7.1.7.1.7.1.7.1.7.1.7.1.7.1.7.1	SANGE 0.0 27.1 0.2 302.1 0.1 162.4 0.1 1290.1 0.2 212.0 0.2 212.0 0.3 159.7 0.4 177.7 0.6 179.7 0.4 189.7 0.4 1877.1 0.5 158.2 0.3 175.3 0.4 189.7 0.4 1877.1 0.5 158.2 133.3 0.2 133.7 0.4 156.6 0.5 1241.4 0.1 125.6 0.2 133.3 0.2 134.4 105.2 100.1 101.7 101.7 102.6 66.4 103.8 104.6 105.8 106.3 107.9 108.8 109.8 109.8 109.8 100.
840.00 850.00	939.91 849.90	4.72 5.00	3.29 3.30	5.5 5.8 6.0	36.4 34.9 33.5	1.9 359.1 1.6 4.0 1.6 355.3

							~ .		
800.00	799.93	3.50 3.80	3.28 3.31	4.8 5.0	43.2 41.0	2.0 1.5	2.4 359.7		
810.00 820.00	809.92 819.92	4.09	3.30	5.3	38.9	1.7	353.3		
830.00	929.91	4,42	3.26	5.5	36.4	2.9	359.1		
840.00	839.91	4.72	3,29	5.8	34.9	1.6	4.0		
850.00 860.00	849.90 859.90	5.00 5.29	3.30 3. 31	6.0 6.2	33.5 32.0	1.6 1.7	355.3 2.2		
870.00	869.69	5.60	3.31	6.5	30.6	1.8	1.5		
980.00	379.89	5.90	3.32	6.8	29.4	1.6	357.3		
890.00	389.88	6.20	3.30	7.0	28.0	1.9	346.3 125.2		
900.00 910.00	899.88 909.88	6.37 6.62	3.39 3.37	7.2 7.4	28.0 26.9	1.7	324.6		
920.00	919.87	6.95	3.36	7.7	25.8	1.9	0.8		
930.00 940.00	929.86	7.26 7.55	3.34 3.38	8.0 8.3	24.7 24.1	1.7	6.5 17.6		
950.00	939.86 949.85	7.86	3.33	8.5	23.0	2.2	2.1		
960.00	959.85	8.18	3.38	8.9	22.5	1.6	15.7		
970.00	969.84	8.47	3.40	9.1	21.8	1.8	345.6		
980.00 990.00	979.84 989.83	8.79 9.11	3.36 3.40	9.4 9.7	20.9 20.5	1.9	338.0 340.6		
1000.00	999.83	9.46	3.40	10.0	19.7	1.9	351.1		
1010.00	1009.82	9.80	3.36	10.4	18.9	2.0	357.0		
1020.00 1030.00	1019.82 1029.81	10.13 10.46	3.30 3.31	10.7 11.0	18.1 17.6	2.0	359.6 353.9		
1040.00	1039.80	10.80	3.30	11.3	17.0	1.9	356.3		
1050.00	1049.80	11.13	3.28	11.6	16.4	1.9	352.3		
1060.00 1070.00	1059.79 1069.79	11.44 11.74	3.23 3.15	11.9 12.2	15.8 15.0	1.6	0.3 344.2	•	
1080.00	1079.78	12.05	3.14	12.4	14.6	1.7	357.5		
1090.00	1069.78	12.36	3.08	12.7	14.0	2.0	347.8		
1100.00 1110.00	1099.77 1109.77	12.69 13.01	3.03 2.95	13.1	13.4	1.8 1.9	335.5 339.7		
1120.00	1119.76	13.33	2.89	13.3 13.6	12.8 12.2	1.9	345.5		
1130.00	1129.76	13.65	2.83	13.9	11.7	2.0	342.3		
1140.00	1139.75 1149.75	13.99	2.76	14.3	11.1	1.9	350.7		
1150.00 1160.00	1159.74	14.31 14.62	2.67 2.59	14.6 14.9	10.6 10.0	1.9 1.8	352.9 342.1		
1170.00	1169.74	14.92	2.52	15.1	9.6	1.7	347.4		
1180.00	1179.73	15.21	2.43	15.4	9.1	1.8	339.9		
1190.00 1200.00	1189.73 1199.72	15.52 15.79	2.36 2.27	15.7 16.0	8.6 8.2	1.6 1.6	338.2 340.0		
1210.00	1209.72	16.05	2.19	16.2	7.8	1.5	345.2		
1220.00	1219.71	16.29	2.11	16.4	7.4	1.4	343.1		
1230.00 1240.00	1229.71 1239.71	16.54 16.75	2.01 1.84	16.7 16.9	6.9 6.3	1.7	331.0 181.4		
1250.00	1249.70	16.81	1.90	16.9	6.5	0.9	178.8		
1260.00	1259.70	17.02	1.75	17.1	5.9	1.5	327.6		
1270.00 1260.00	12 6 9.69 1279.69	17.28 17.54	1.58 1.39	17.4 17.6	5.2 4.5	1.8 1.7	322.3 337.0		
1290.00	1289.68	17.78	1.27	17.8	4.1	1.6	312.9		
1300.00	1299.68	18.04	1.14	18.1	3.6	1.5	322.4		
1310.00 1320.00	1309.68 1319.67	18.28 18.53	1.00 0.89	18.3 18.6	3.1	1.7 1.5	330.7		
1330.00	1329.67	18.76	0.79	18.8	2.8 2.4	1.4	340.5 332.2		
1340.00	1339.67	18.93	0.66	18.9	2.0	1.3	209.3		
1350.00 1360.00	1349.66 1359.66	19.06 19.29	0.67 0.60	19.1 19.3	2.0	7.4	359.1 344.6		
1370.00	1369.66	19.51	0.56	19.5	1.8 1.6	1.3 1.2	348.8		
1380.00	1379.66	19.73	0.55	19.7	1.6	1.2	351.7		
1390.00 1400.00	1389.65 1399.65	19.91 20.01	0.48 0.53	19.9 20.0	1.4 1.5	1.2 1.1	246.3 9.6		
1410.00	1409.65	20.23	0.53	20.2	1.5	1.2	10.3		
1420.00	1419.65	20.41	0.56	20.4	1.6	1.0	11.9		
1430.00 1440.00	1429.65 1439.64	20.60 20.84	0.59 0.63	20.6 20.8	1.6 1.7	1.2 1.5	3.1 19.7		
1450.00	1449.64	21.09	0.69	21.1	1.9	1.6	19.6		
1460.00	1459.64	21.34	0.75	21.3	2.0	1.5	10.2		
1470.00 1480.00	1469.63 1479.63	21.59 21.83	0.8 <u>1</u> 0.90	21.6 21.8	2.1	1.5	15.3 19.2		
1490.00	1489.63	22.07	0.98	22.1	2.3 2.5	1.5 1.5	27.8		
1500.00	1499.62	22.33	1.08	22.4	2.8	1.7	21.5		
1510.00 1520.00	1509.62 1519.61	22.61 22.88	1.20 1.29	22.6 22.9	3.0 3.2	1.7 1.6	16.9 34.7		
1530.00	1529.61	23.13	1.45	23.2	3.6	2.1	19.3		
1540.00	1539.60	23.48	1.50	23.5	3.9	2.1	22.0		
1550.00 1560.00	1549.60 1559.59	23.80 24.11	1.73 1.89	23.9 24.2	4.2 4.5	1.9 2.0	35.3 25.5		
1570.00	1569.58	24.43	2.02	24.5	4.7	1.9	17.7		
1580.00	1579.58	24.76	2.13	24.9	4.9	2.0	20.7		
1590.00 1600.00	1509.57 1599.57	25.09 25.42	2.26 2.35	25.2 25.5	5.2 5.3	1.9	22.7 10.3		
1610.00	1609.56	25.92 25.78	2.48 2.48	25.5 25.9	5.3 5.5	2.2 2.2	20.5		
1620.00	1619.55	26.16	2.59	26.3	5.7	2.3	11.7		
1630.00	1629.54	26.51	2.69	26.6	5.8	2.1	12.1		
1640.00 1650.00	1639.54 1649.53	26.86 27.22	2.78 2.86	27.0 27.4	5.9 6.0	$\frac{2.1}{2.1}$	15.3 9.7		
1660.00	1659.52	27.62	2.90	27.8	6.0	2.5	5.4		
1670.00	1669.51	28.01	3.01	28.2	6.1	2.0	9.8		
1680.00 1690.00	1679.51 1689.50	28.32 28.52	3.02 3.13	28.5 28.7	6.1 6.3	2.1 2.3	208.9		
1700.00	1699.49	28.93	3.18	29.1	6.3	2.2	10.5		
1710.00	1709.48	29.29	3.20	29.5	6.2	2.0	359.1		
1720.00 1730.00	1719.48 1729.47	29.52 29.83	3.27 3.27	29.7 30.0	6.3 6.3	1.8 2.1	96.7 1.9		
1740.00	1739.47	30.10	3.22	30.3	6.1	2.1	22.5		
1750.00 1760.00	1749.46	30.37 20.74	3.31	30.6	6.2	2.0	4.9		
		-	•	•	-	•			

7.250.00		6 P 6 6	0.10	AP A	963 F62		
1610.00	1609.56	25.78	2.48	25.9	5.5	2.2	20.5
1620.00	1619.55	26.16	2.59	26.3	5.7	2.3	11.7
1630.00	1629.54	26.51	2.69	26.6	5.8	2.1	12.1
1640.00	1639.54	26.86	2.78	27.0	5.9	2.1	15.3
1650.00	1649.53	27.22	2.86	27.4	6.0	2.1	9.7
1660.00	1659.52	27.62	2.90	27.8	6.0	2.5	5.4
1670.00	1669.51	26.01	3.01	28.2			
					6.1	2.0	9.8
1680.00	1679.51	28.32	3.02	26.5	6.1	2.1	208.9
1690.00	1689.50	28.52	3.13	28.7	6.3	2.3	2.2
1700.00	1699.49	28.93	3.16	29.1	6.3	2.2	10.5
1710.00	1709.48	29.29	3.20	29.5	6.2	2.0	359.1
1720.00	1719.46	29.52	3.27	29.7	6.3	1.8	96.7
1730.00	1729.47	29.63	3.27	30.0	\$.3	2.1	1.9
1740.00	1739.47	30.10	3.22	30.3	6.1	2.1	22.5
	1749.46						
1750.00		30.37	3.31	30.6	6.2	2.0	4.9
1760.00	1.759.45	30.74	3.31	30.9	6.1	.2.1	7.1
1770.00	1769.45	31.10	3.30	31.3	6.1	2.1	13.0
1780.00	1779.44	31.43	3.34	31.6	6.1	1.8	0.8
1790.00	1789.43	31.78	3.34	32.0	6.0	2.1	0.8
1800.00	1799.43	32.13	3.27	32.3	5.8	2.1	268.1
1810.00	1809.42	32.25	3.41	32.4	6.0	1.7	350.4
1820.00	1819.41	32.61	3.41	32.8	6.0	2.2	351.2
1830.00	1629.41	32.99	3.46	33.2	6.0	2.1	6.6
1840.00	1839.40	33.35	3.55	33.5	6.1	2.2	20.5
1050.00	1849.39	33.73					
1860.00			3.54	33.9	6.0	2.3	346.3
	1859.38	34.13	3.62	34.3	6.1	2.2	6.0
1870.00	1869.38	34.52	3.68	34.7	6.1	2.3	1.0
1860.00	1879.37	34.93	3.72	35.1	6.1	2.4	7.1
1690.00	1889.36	35.31	3.79	35.5	6.1	2.2	9.9
1900.00	1899.35	35.71	3.87	35.9	6.2	2.3	357.0
1910.00	1909.34	35.82	3.97	36.0	6.3		77.7
1920.00	1919.34	36.01				2.3	
			3.94	36.2	6.2	2.6	11.2
1930.00	1929.33	36.42	4.05	36.6	6.3	2.4	21.6
1940.00	1939.32	36.80	4.15	37.0	6.4	2.2	21.1
1950.00	1949.31	37.19	4.22	37.4	6.5	2.3	346.8
1960.00	1959.30	37.59	4.31	37.8	6.5	2.3	17.4
1970.00	1969.29	37.99	4.41	38.2	6.6	2.4	9.2
1980.00	1979.29	38.36	4.51	38.6	6.7		
1990.00	1989.28	38.70				2.1	22.3
			4.65	39.0	6.9	2.7	342.1
2000.00	1999.27	39.18	4.66	39.5	6.8	2.9	9.4
2010.00	2009.25	39.63	4.78	39.9	6.9	2.5	12.1
2020.00	2019.24	40.07	4.88	40.4	6.9	2.5	14.2
2030.00	2029.24	40.48	4.98	40.8	7.0	2.4	354.0
2040.00	2039.23	40.87	5.08	41.2	7.1	2.2	22.8
2050.00	2049.22	41.17	5.25	41.5	7.3	2.1	23.2
2060.00	2059.21	41.56	5.22	41.9	7.2		
2070.00	2069.20	41.96				2.6	17.0
			5.30	42.3	7.2	2.4	11.0
2080.00	2079.19	42.36	5.41	42.7	7.3	2.3	339.4
2090.00	2089.19	42.73	5.52	43.1	7.4	2.3	13.3
2100.00	2099.18	42.78	5.52	43.1	7.4	2.7	67.7
2110.00	2109.17	42.85	5.53	43.2	7.4	2.2	5.3
2120.00	2119.16	43.20	5.56	43.6	7.3	1.9	5.6
2130.00	2129.16	43.49	5.65	43.9	7.4	1.9	4.9
2140.00	2139.15	43.86	5.69	44.2	7.4	2.3	
2150.00	2149.15	44.22	5.72				4.1
2160.00				44.6	7.4	2.0	11.0
	2159.14	44.55	5.75	44.9	7.3	2.0	13.3
2170.00	2169.14	44.87	5.76	45.2	7.3	1.8	4.0
2180.00	2179.13	45.17	5.77	45.5	7.3	1.7	354.4
2190.00	2189.13	45.47	5.80	45.8	7.3	1.9	7.5
2200.00	2199.12	45.81	5.79	46.2	7.2	2.1	354.2
2210.00	2209.11	46.14	5.81	46.5	7.2	1.6	3.4
2220.00	2219.11	46.42	5.82	46.8	7.1	1.7	
2230.00	2229.11	46.57	5.68				351.8
2240.00				46.9	7.0	1.7	161.6
	2239.10	46.65	5.75	47.0	7.0	1.3	13.7
2250.00	2249.10	46.87	5.74	47.2	7.0	1.2	346.5
2260.00	2259.10	47.06	5.68	47.4	6.9	1.1	339.9
2270.00	2269.10	47.23	5.65	47.6	6.8	1.0	0.8
2280.00	2279.10	47.37	5.55	47.7	6.7	1.6	247.8
2290.00	2289.09	47.41	5.59	47.7	6.7	1.0	6.6
2300.00	2299.09	47.57	5.53	47.9	6.6	1.3	341.9
2310.00	2309.09	47.78					
2320.00			5.42	48.1	6.5	1.5	293.9
	2319.08	47.88	5.42	48.2	6.5	1.1	259.5
2330.00	2329.08	48.07	5.29	48.4	6.3	1.4	334.4
2340.00	2339.08	48.19	5.22	46.5	6.2	1.3	347.3
2350.00	2349.08	48.33	5.17	48.6	6.1	1.3	335.6
2360.00	2359.07	48.55	5.08	48.8	6.0	1.3	346.8
2363.00	2362.07	48.63	5.07	48.9	6.0	2.1	4.7
				- · · •	. · ·	or to	4 , 1

Well: **AX116A**

Casing & Tubing Program

	Casing	Casing	Hole	Cement	Ceme	nted	Date	Packers or
		Interval	Size	used in cu/ft	to Surface		Cemented	Bridge Plugs
					Yes	No		
Conductor	13 3/8"	16	15"			Χ	11/7/09	
Surface	7"	550.81	8 7/8"	156	Χ		11/9/09	Basket@253
Water Protection	4 1/2"	2122.05	6 1/2"	329.4	Χ		11/11/09	
Coal Protection	4 1/2"	2122.05	6 1/2"	329.4	Χ		11/11/09	
Other Casing & Tubing								
Other Casing & Tubing			•					
Liners			•					

COMPANY CNX GAS CO LLC

HOLE AX-116-A

RIG#: 141

LOCATION: PAGE DR

DATE STARTED: 11/7/2009

DATE COMPLETED: 11/11/2009

ELECTRIC LOGGED: YES

GROUTED: YES

1002

DEPTH	THICKNESS			STRATA
FROM	TO	F	. [DESCRIPTION, VOIDS ETC.
	0	16	16	OVERBURDEN
	16	30.6	14.6	SAND
	30.6	60.6	30	SAND
	60.6	90.6	30	SAND/SHALE/COAL
	90.6	120.6	30	SAND/SHALE
	120.6	150.6	30	SAND/SHALE
	150.6	180.6	30	SAND/SHALE/COAL
	180.6	210.6	30	SAND/SHALE/COAL
	210.6	240.6	30	SAND/SHALE/COAL
	240.6	270.6	30	SAND/SHALE/COAL
	270.6	300.6	30	SAND/SHALE/COAL
	300.6	330.6	30	SAND/SHALE/COAL
	330.6	360.6	30	SAND/SHALE/COAL
	360.6	390.6	30	SAND/SHALE/COAL
	390.6	420.6	30	SAND/SHALE/COAL
	420.6	450.6	30	SAND/SHALE
	450.6	480.6	30	SAND/SHALE/COAL
	480.6	510.6	30	SAND/SHALE/COAL
	510.6	540.6	30	SAND/SHALE/COAL
	540.6	570.6	30	SAND/SHALE
	570.6	582	11.4	SAND
	582	612	30	SANDY SHALE
	612	642	30	SAND/SANDY SHALE
	642	672	30	SANDY SHALE
	672	702	30	SAND/SANDY SHALE
	702	732	30	SANDY SHALE/COAL/SANDY SHALE
	732	762	30	SANDY SHALE/SAND
	762	792	30	SANDY SHALE/COAL/SANDY SHALE
	792	822	30	SANDY SHALE/SAND
	822	852	30	SAND/SANDY SHALE
	852	882	30 -	SANDY SHALE/SAND
	882	912	30	SANDY SHALE/SAND
	912	942		SANDY SHALE/COAL/SAND
	942	972		SANDY SHALE/SAND
	972	1002	30 3	SANDY SHALE/COAL/SANDY SHALE
	1002	1022	20	CANIDY CLIAL FIGAND

1032

30 SANDY SHALE/SAND

1032	1069 37	SANDY SHALE
1069	1099 30	SANDY SHALE/SAND
1099	1129 30	SANDY SHALE
1129	1159 30	SANDY SHALE/COAL/SANDY SHALE
1159	1189 30	SANDY SHALE/SAND
1189	1219 30	SANDY SHALE
1219	1249 30	SANDY SHALE
1249	1279 30	SANDY SHALE/SAND
1279	1309 30	SANDY SHALE
1309	1339 30	SANDY SHALE/COAL/SANDY SHALE
1339	1369 30	SANDY SHALE
1369	1399 36	SANDY SHALE/SAND
1399	1429 30	SAND/SANDY SHALE
1429	1459 30	SANDY SHALE
1459	1489 30	SANDY SHALE/COAL/SANDY SHALE
1489	1519 30	SANDY SHALE/SAND
1519	1549 30	SANDY SHALE/COAL/SANDY SHALE
1549.1	1579.1 30	SAND/SHALE/COAL
1579.1	1609.1 30	SAND/SHALE/COAL
1609.1	1639.1 30	SAND/SHALE
1639.1	1669.1 30	SAND/SHALE
1669.1	1699.1 30	SAND/SHALE
1699.1	1729.1 30	SAND/SHALE/COAL
1729.1	1759.1 30	SAND/SHALE/COAL
1759.1	1789.1 30	SAND/SHALE
1789.1	1819.1 30	SAND/SHALE
1819.1	1849.1 30	SAND/SHALE/COAL
1849.1	1879.1 30	SAND/SHALE/COAL
1879.1	1909.1 30	SAND/SHALE
1909.1	1939.1 30	SAND/SHALE/COAL
1939.1	1969.1 30	SAND/SHALE
1969.1	1999.1 30	SAND/SHALE/COAL
1999.1	2029.1 30	SAND/SHALE/COAL
2029.1	2052.1 23	SAND/SHALE
2052.1	2054.1	COAL/POCA-3
2054.1	2059.1	SAND/SHALE
2059.1	2089.1 30	SAND/SHALE
2089.1	2119.1 30	SAND/SHALE/COAL
2119.1	2149.1 30	SAND/SHALE
2149.1	2179.1 30	SAND/SHALE
2179.1	2209.1 30	SAND/SHALE/COAL
2209.1	2239.1 30	SAND/SHALE
2239.1	2269.1 30	SAND/SHALE
2269.1	2299.1 30	SAND/SHALE
2299.1	2329.1 30	SAND/SHALE
2329.1	2359.1 30	SAND

2359.1' TOTAL DEPTH 16' OF 13 3/8" CASING 550.81' OF 7" CASING 2122.05' OF 4 1/2" CASING