

Commonwealth of Virginia Department of Mines, Minerals, and Energy Division of Gas and Oil

P.O. Box 1416; Abingdon, VA 24212

Telephone: (276) 676-5423

Tracking Number:	705
Company:	CNX Gas Company LLC
File Number:	BU-3414
Operations Name:	CBM E22 W/PL

Operation Type:Coalbed/PipelineDrilling Report Type:Original

### DRILLING REPORT (DGO-GO-14)

DRILLING REPORT (DGO-GO-14)								
1. Drilling Data								
Date drilling commenced: 6/20/2007			Drilling Contractor: Noah Horn					
Date drilling completed: 6/26/2007			Rig Type	: ☑ Rotary ☐ Cable Tool				
Driller's Total Depth (feet):	1,960	_	3 7. — 7 —					
Log Total Depth (feet):	1,941	Coal Seam At Total Depth PARDEE						
2. Final Location Plat (as rec	uired by 4 VAC2	5-150	-360.C.)					
Permitted State Plane X 984,971 Final Plat State Plane X: 984,974								
Permitted State Plane Y: 359	9,248	Fir	Final Plat State Plane Y: 359,245					
☐ Plat Previously Submitted	☐ Plat Previously Submitted Or							
List of Attached Items:								
Description FileName								
Pla	t			E22 Plat.pdf				
3. Geological Data								
Fresh Water At:								
Denth	(in feet)		Rate	Unit of Measure				
Борин	1,440		Damp	GPM				
	20		2-3	GPM				
Salt Water At:								
Denth	(in feet)		Rate	Unit of Measure				

Form DGO-GO-14-E Rev. 1/2007

#### Coal Seams

List of Attached Items:

Description	FileName
Exhibit A	E22 Exhibit A.pdf

#### Gas and Oil Shows

List of Attached Items:

Description	FileName		
Gas Show	E22 Gas Show.xls		

#### **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? ☐ Yes ✓ No

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

List of Attached Items:

Description	FileName
Deviation	E22 Deviation.pdf

#### 6. Casing and Tubing Program

List of Attached Items:

Description	FileName
Casing	E22 Casing.xls

# 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.

7" casing cemented on the backside to surface

#### 8. Drillers Log

Compiled By: Noah Horn

List of Attached Items:

Description	FileName
Drill Data	E22 Drill Data.pdf

#### 9. Comments

amount of 7" casing on spreadsheet doesn't match Drill Data or inspection report; please verify and resubmit [ljs 10/11/07]

CNX verified 7" casing [ljs 10/11/07]

10.	Signatu	re
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Permitee: CNX Gas Company LLC Date: 10/11/2007 (Company)

Signed By: Leslie K. Arrington Title: Manager (Signature)

# INTERNAL USE ONLY

Submit Date: 10/11/2007

Status: Inspr Approved Date: 10/11/2007

Final PDF Date: 10/11/2007

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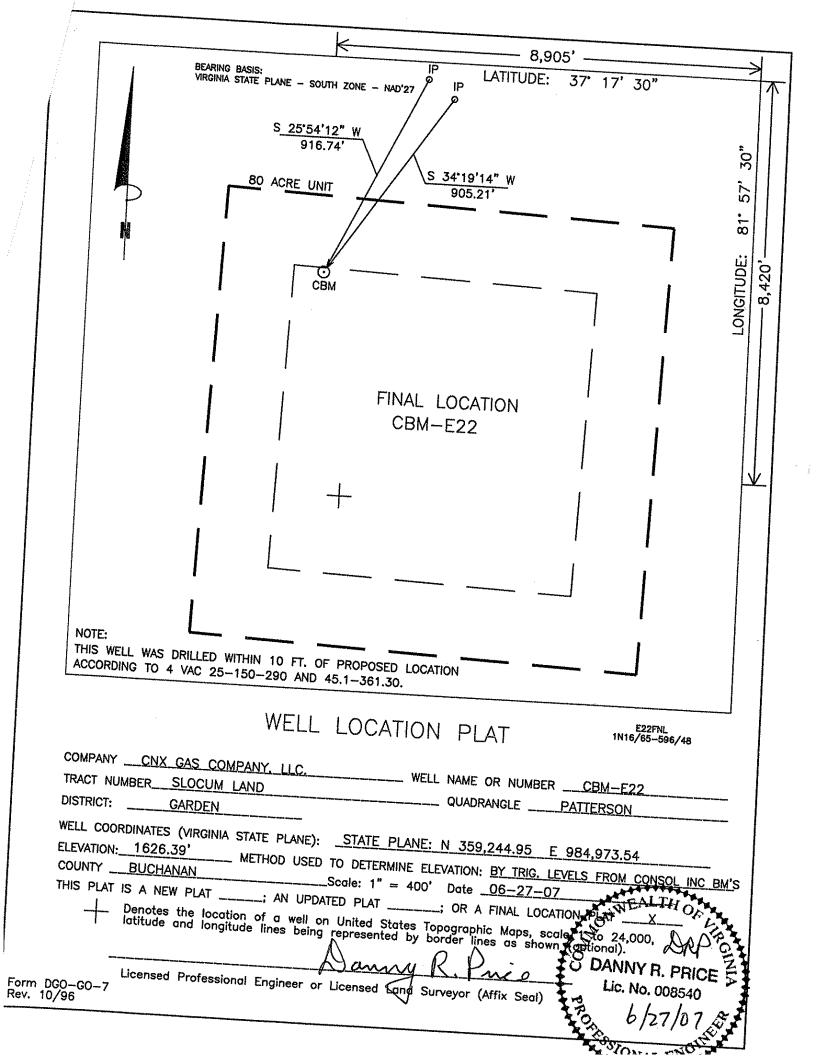


Exhibit A

Well Name: 07 CBM E22

SURFACE ELEV: 1626.39 EASTING: 984973.54 NORTHING: 359244.95

SEAM	DEPTH FROM (FT)	DEPTH TO (FT)	ELEVATION (TOSE)	THK. (FT)	REMARKS
KN1	38.90	40.90	1587.49	2.00	
	40.90	50.90	1585.49	10.00	
KN2	50.90	53.90	1575.49	3.00	
	53.90	147.90	1572.49	94.00	
AL1	147.90	149.00	1478.49	1.10	
		264.10	1477.39	115.10	
RA2	264.10	265.80	1362.29	1.70	
	265.80	386.60	1360.59	120.80	
JB1	386.60	387.90	1239.79	1.30	
	387.90	413.40	1238.49	25.50	
JB3	413.40	415.10 446.80	1212.99	1.70	
	415.10	446.80	1211.29	31.70	
T2	446.80	447.80	1179.59	1.00	
	447.80	476.10	1178.59	28.30	
Tl		476.20	1150.29	0.10	
		742.30		266.10	
GC2	742.30	742.90	884.09	0.60	
	742.90	827.60	883.49		
*SE2	827.60	828.90	798.79	1.30	
.1. **** 1	828.90	942.10 942.90	797.49	113.20	
*UH1	942.10	942.90 986.80	684.29	0.80	
41111A	942.90	986.80	683.49	43.90	
*UH2		987.80 1024.10	639.59	1.00	
*MH1			638.59	36.30	
MUT			602.29	1.40	
*MH1	1025.50 1025.60	1025.60 1025.80	600.89 600.79	0.10 0.20	
1-1111	1025.80	1133.90	600.59	108.10	
*P11	1133.90	1138.10	492.49	4.20	
	1138.10	1176.90	488.29	38.80	
*P10	1176.90	1177.20	449.49	0.30	
110	1177.20		449.19	0.30	
*P10	1177.50		448.89	0.50	
220	1178.00		448.39	72.90	
*P91	1250.90	1251.10	375.49	0.20	
	1251.10	1252.80	375.29	1.70	
*P91	1252.80	1253.30	373.59	0.50	
	1253.30	1253.90	373.09	0.60	
*P92	1253.90	1255.10	372.49	1.20	
	1255.10	1493.10	371.29	238.00	
*P52	1493.10	1497.10	133.29	4.00	
	1497.10	1631.70	129.29	134.60	
*P3	1631.70	1635.49	-5.31	3.79	
	1635.49	1717.70	-9.10	82.21	
*P01	1717.70	1717.80	-91.31	0.10	
	1717.80	1774.00	-91.41	56.20	
*SJ3	1774.00	1775.80	-147.61	1.80	

COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO MIDWAY BRANCH.

GAMMA-CALIPER LOG FROM 0 TO 310.00 GAMMA-DENSITY LOG FROM 310.00 TO TD.

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION FILE: H:\JIMHAZ~1\PROJECTS\GAS\E22.CMP

DATE: 07/10/07

Well: E22

# Oil & Gas Show

Formation	Тор	Bottom	Thickness	IPF	Pressure	Hours
				(MCFD/BOPD)		Tested
Lee/Norton	827	1255	428			
Pocahontas	1493	1776	283			
Total IPF				Not Taken		

# PLAN VIEW COMPU-LOG DEVIATION

JENT: CNX GAS

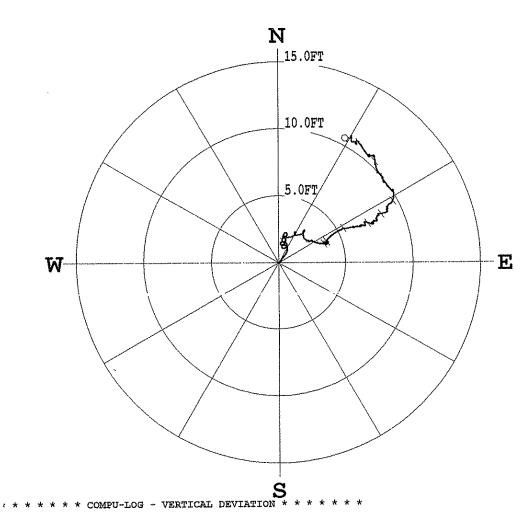
CATION: -

)LE ID: 07-CNX-E-22 \text{\text{TE OF LOG: 06/26/07}} \text{\text{\text{OBE: 9136CH}} 1244 MAG DECL: -7.1

SCALE: 5 FT/IN

TRUE DEPTH: 1940.93 FT

AZIMUTH: 28.3
DISTANCE: 10.5 FT
+ = 150 FT INCR
= BOTTOM OF HOLE



CLIENT : CNX GAS HOLE ID. : 07-CNX-E-22

FIELD OFFICE : 0'DRISCOLL DATE OF LOG : 06/26/07

DATA FROM : - PROBE : 9136CH , 1244

MAG. DECL. : -7.100 DEPTH UNITS : FEET

LOG: 07-CNX-E-22 06-26-07 04-02 9136CH .10 0.00 1941.30 DEVI.log

	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		0.08		0.06	0.1	38.9	1.9	78.7
	20.00	19.99		0.27		0.23	0.4	40.0	1.9	36.0
	30.00	29.99		0.53		0.44	0.7	39.3	1.9	40.3
	40.00	39.98		0.82		0.61	1.0	36.9	1.9	16.1
	50.00	49.98		1.14		0.62	1.3	28.6	1.9	343.5
	60.00	59.97		1.32		0.38	1.4	15.9	1.9	265.0
	70.00	69.97		1.11		0.27	1.1	13.6	1.7	126.6
	80.00	79.96		1.13		0.55	1.3	26.0	1.8	52.7
	90.00	89.95		1.43		0.57	1.5	21.8	2.3	317.4
	100.00	99.95		1.53		0.26	1.6	9.8	1.8	255.0
	110.00	109.94		1.32		0.16	1.3	7.1	1.7	117.9
	120.00	119.94		1.40		0.44	1.5	17.4	1.9	51.9
	130.00	129.93		1.74		0.54	1.8	17.3	2.4	353.3
	140.00	139.93		1.77		0.29	1.8	9.4	1.7	214.4
	150,00	149.92		1.53		0.35	1.6	13.0	1.7	91.1
	160.00	159.92		1.79		0.53	1.9	16.4	2.1	359.7
	170.00	169.91		1.94		0.33	2.0	9.6	1.6	203.8
	180.00	179.91		1.93		0.56	2.0	16.3	2.4	41.4
	190.00	189.90		2.22		0.58	2.3	14.7	0.9	
	200.00	199.90		2.13		0.40	2.2	10.7	1.3	208.0
	210.00	209.89		1.90		0.54	2,0	15.8	2.4	
	220.00	219.88		1.92		1.00	2.2	27.5	2.4	59.B
1										

1040.00 1050.00 1050.00 1050.00 1050.00 1070.00 1090.00 1110.00 1110.00 1110.00 1110.00 1110.00 1110.00 1110.00 1110.00 1110.00 110.00 1100.
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0.9 1.0 1.0 2 2 3.3 1.7 8.8 9 3.9 7.3 3.4 8.7 6.1 0.0 0.8 1.0 2.2 9.3 1.7 8.8 9.0 9.7 1.0 0.8 1.0 0.7 0.6 1.1 0.9 0.7 0.6 1.1 0.9 1.0 0.4 1.2 1.2 1.5 4.4 9.3 1.1 0.5 1.1 0.5 1.1 1.2 1.3 1.0 1.3 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

1900.00 1910.00 1920.00 1930.00 1940.00 1941.30	1899.64 1909.64 1919.64 1929.63 1939.63 1940.93	9.33 9.27 9.18 9.05 9.23 9.27	5.43 5.46 5.34 5.13 5.10 4.98 4.98	10.9 10.8 10.7 10.5 10.4 10.5	30.0 30.3 29.9 29.2 29.4 28.4 28.3	0.4 0.9 1.3 1.3 1.7	347.8 183.7 283.2 248.7 289.0 3.7 4.1
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Well: E22

# Casing & Tubing Program

	Casing	Casing	Hole	Cement	Cemer	nted	Date	Packers or
		Interval	Size	used in cu/ft	to Surf	face	Cemented	Bridge Plugs
					Yes	No		Kind/Size/Set
Conductor	13 3/8"	14.6	15"			Χ	6/20/2007	
Surface	7"	310'	8 7/8"	72	Х		6/21/2007	bskt @ 88'
Water Protection	4 1/2"	1756'	6 1/2"	256.2	Х		6/26/2007	
Coal Protection	4 1/2"	1756'	6 1/2"	256.2	Х		6/26/2007	
Other Casing & Tubing								
Other Casing & Tubing								
Liners						•		

# DRILL DATA HOLE-NOAH HORN WELL DRILLING, INC

COMPANY:

CNX

HOLE #: E-22

LOCATION:

DISMAL RIVER

DRILL RIG #: 17

**DATE STARTED: 06/20/07** 

DATED COMPLETED: 06-26-07

**ELECTRIC LOGGED:YES** 

GROUTED:YES

DEPTH	THICKNESS		STRATA REMARKS
FROM	то	FT	DESCRIPTION, VOIDS ETC
0	2	2	OVERBURDEN
2	14	12	SANDY SHALE/SAND STONE
14	30	16	SANDY SHALE/SHALE
30	60	30	SHALE/COAL/SANDY SHALE
60	90	30	SHALE/SANDY SHALE
90	120	30	SANDY SHALE/SAND STONE
120	150	30	SANDY SHALE
150	180	30	SANDY SHALE/SHALE
180	210	30	SANDY SHALE
210	240	30	SAND STONE/SANDY SHALE
240	270	30	SANDY SHALE/COAL/SHALE
270	330	60	SANDY SHALE
330	360	30	SAND/SANDY SHALE
360	480	120	SANDY SHALE/COAL/SANDY
SHALE			
480	510	30	SANDY SHALE
510	540	30	SANDY SHALE/SAND
540	570	30	SAND/SANDY SHALE
570			
570	600	30	SAND STONE
600	660	60	SAND STONE/SANDY SHALE
660	690	30	SANDY SHALE
690	720	30	SHALE
720	750	30	SHALE/SANDY SHALE
750	810	60	SAND STONE/SANDY SHALE
810	840	30	SAND STONE/COAL/SANDY
SHALE			
840	870	30	SANDY SHALE/SHALE
870	930	60	SANDY SHALE
930	990	60	SAND STONE
990	1020	30	SANDY SHALE/COAL/SAND
STONE			
1020	1050	30	SANDY SHALE/SHALE
1050	1080	30	SHALE
1080	1110	30	SHALE
1110	1140	30	SHALE/COAL/SANDY SHALE
1140	1170	30	SAND STONE/SANDY SHALE
1170	1200	30	SANDY SHALE/SAND STONE
1200			
1200	1230	30	SAND/SANDY SHALE
1230	1260	30	SANDY SHALE/COAL/SANDY
SHALE			

1260	1290	30	SANDY SHALE
1290	1320	30	SANDY SHALE/COAL/SHALE
1320	1350	30	SHALE
1350	1380	30	SHALE/SAND
1380	1410	30	SANDY SHALE
1410	1470	60	SAND STONE
1470	1500	30	SAND/COAL/SANDY SHALE
1500	1530	30	SANDY SHALE/COAL/SANDY
SHALE			
1530	1560	30	SANDY SHALE
1560	1590	30	SAND/SANDY SHALE
1590	1624	34	SANDY SHALE
1624	1628	4	COAL P-3
1628	1650	22	SANDY SHALE
1650	1680	30	SANDY SHALE
1680	1710	30	SANDY SHALE/COAL/SANDY
SHALE			
1710	1740	30	SANDY SHALE
1740			
1740	1770	30	SANDY SHALE
1770	1830	60	SANDY SHALE/SHALE
1830	1860	30	SAND STONE/SANDY SHALE
1860	1890	30	SHALE
1890	1920	30	SANDY SHALE/SHALE
1920	1960	40	SANDY SHALE/SHALE/RED
SHALE			

1960' – TOTAL DEPTH 14' – 13 3/8" CASING 310.80' – 7" CASING 1755.59' – 4 ½" CASING