



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: 231  
 Company: CNX Gas Company LLC  
 File Number: BU-3154  
 Operations Name: CBM P23 W/PL  
 Operation Type: Coalbed/Pipeline  
 Drilling Report Type: Original

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

#### 1. Drilling Data

Date drilling commenced: 10/12/2006 Drilling Contractor: Noah Horn  
 Date drilling completed: 10/19/2006 Rig Type:  Rotary  Cable Tool  
 Driller's Total Depth (feet): 2,495  
 Log Total Depth (feet): 2,508 Coal Seam At Total Depth Pocahontas

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

Permitted State Plane X 986,197 Final Plat State Plane X: 986,191  
 Permitted State Plane Y: 338,546 Final Plat State Plane Y: 338,553

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
Plat	P23 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	P23 Exhibit A.pdf

**Gas and Oil Shows**

List of Attached Items:

Description	FileName
Gas Show	P23 Gas Show.doc

**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	P23 Deviation.pdf

**6. Casing and Tubing Program**

List of Attached Items:

Description	FileName
Casing	P23 Casing.doc

**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.

Possible Mine Voids: LB1 426' - 428'; RA2 854' - 855'; KN2 646' - 648'; RA3 906' - 909'

**8. Drillers Log**

Compiled By: Noah Horn

List of Attached Items:

Description	FileName
Drill Data	P23 Drill Data.pdf

**9. Comments**

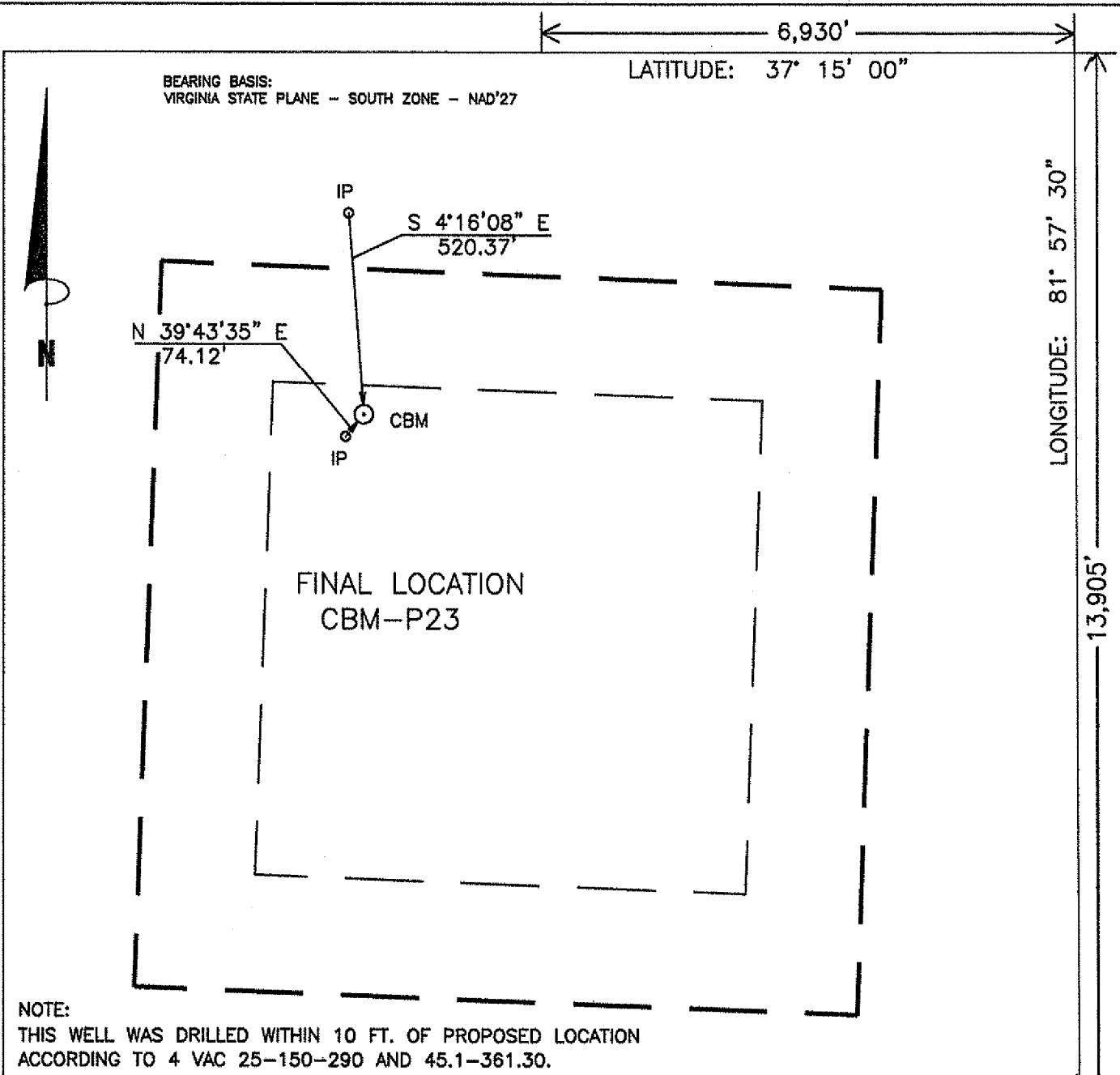
According to the inspector's reports the driller used two baskets on the 13 3/8" @ 297 and 339'. He used two baskets on the 9 5/8" @ 528 and 572. He used two on the 7" @ 663 and 752'. The operator corrected the basket information.

**10. Signature**

Permitee: CNX Gas Company LLC Date: 3/27/2007 (Company)

Signed By: Leslie K Arrington Title: Manager Environmental Permtting (Signature)

INTERNAL USE ONLY	
Submit Date: <u>3/27/2007</u>	
Status: <u>Inspr Approved</u>	Date: <u>3/28/2007</u>
Final PDF Date: <u>4/3/2007</u>	



## WELL LOCATION PLAT

P23FNL  
1N14/20-556/13

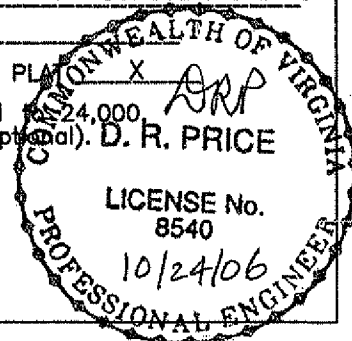
COMPANY CNX GAS COMPANY, LLC. WELL NAME OR NUMBER CBM-P23  
 TRACT NUMBER \_\_\_\_\_ QUADRANGLE KEEN MOUNTAIN  
 DISTRICT: GARDEN

WELL COORDINATES (VIRGINIA STATE PLANE): STATE PLANE: N 338,552.88 E 986,191.46  
 ELEVATION: 2329.55' METHOD USED TO DETERMINE ELEVATION: BY TRIG. LEVELS FROM CONSOL INC BM'S  
 COUNTY BUCHANAN Scale: 1" = 400' Date 10-24-06

THIS PLAT IS A NEW PLAT \_\_\_\_\_; AN UPDATED PLAT \_\_\_\_\_; OR A FINAL LOCATION PLAT \_\_\_\_\_

⊕ Denotes the location of a well on United States Topographic Maps, scale 1" = 24,000' latitude and longitude lines being represented by border lines as shown (optional). **D. R. PRICE**

*D.R. Price*  
 \_\_\_\_\_  
 Licensed Professional Engineer or Licensed Land Surveyor (Affix Seal)



## Exhibit A

Well Name: CBM-P23

SURFACE ELEV: 2329.55 EASTING: 986191.46 NORTHING: 338552.88

SEAM	DEPTH FROM (FT)	DEPTH TO (FT)	ELEVATION (TOSE)	THK. (FT)	REMARKS
	1.00	59.00	2328.55	58.00	
NR2	59.00	59.20	2270.55	0.20	
	59.20	100.00	2270.35	40.80	
HG1	100.00	101.60	2229.55	1.60	
	101.60	223.10	2227.95	121.50	
COAL	223.10	223.80	2106.45	0.70	
	223.80	251.10	2105.75	27.30	
SD2	251.10	252.10	2078.45	1.00	
	252.10	281.20	2077.45	29.10	
SD3	281.20	282.00	2048.35	0.80	
	282.00	300.00	2047.55	18.00	
COAL	300.00	300.30	2029.55	0.30	
	300.30	426.50	2029.25	126.20	
LB1	426.50	428.30	1903.05	1.80	BROKEN
	428.30	457.30	1901.25	29.00	
COAL	457.30	458.20	1872.25	0.90	
	458.20	496.00	1871.35	37.80	
COAL	496.00	496.90	1833.55	0.90	
	496.90	555.30	1832.65	58.40	
COAL	555.30	555.90	1774.25	0.60	
	555.90	646.00	1773.65	90.10	
KN2	646.00	646.70	1683.55	0.70	BROKEN
	646.70	783.20	1682.85	136.50	
COAL	783.20	783.80	1546.35	0.60	
	783.80	853.90	1545.75	70.10	
RA2	853.90	855.40	1475.65	1.50	MINED OUT
	855.40	906.40	1474.15	51.00	
RA3	906.40	909.50	1423.15	3.10	BROKEN
	909.50	916.40	1420.05	6.90	
COAL	916.40	918.80	1413.15	2.40	
	918.80	991.90	1410.75	73.10	
JB1	991.90	993.00	1337.65	1.10	
	993.00	1044.80	1336.55	51.80	
JB3	1044.80	1047.70	1284.75	2.90	
	1047.70	1061.00	1281.85	13.30	
COAL	1061.00	1061.30	1268.55	0.30	
	1061.30	1061.80	1268.25	0.50	
T2	1061.80	1062.90	1267.75	1.10	
	1062.90	1064.00	1266.65	1.10	
COAL	1064.00	1064.10	1265.55	0.10	
	1064.10	1070.10	1265.45	6.00	
TI	1070.10	1070.30	1259.45	0.20	
	1070.30	1095.70	1259.25	25.40	
COAL	1095.70	1096.00	1233.85	0.30	
	1096.00	1220.20	1233.55	124.20	
*US1	1220.20	1220.60	1109.35	0.40	
	1220.60	1221.00	1108.95	0.40	
*US1	1221.00	1221.30	1108.55	0.30	
	1221.30	1389.10	1108.25	167.80	
*GC2	1389.10	1389.80	940.45	0.70	
	1389.80	1390.00	939.75	0.20	
*GC2	1390.00	1391.00	939.55	1.00	
	1391.00	1476.20	938.55	85.20	
*SE2	1476.20	1477.80	853.35	1.60	

	1477.80	1505.80	851.75	28.00
*LS1	1505.80	1506.60	823.75	0.80
	1506.60	1578.10	822.95	71.50
*UH1	1578.10	1579.00	751.45	0.90
	1579.00	1632.40	750.55	53.40
*UH2	1632.40	1633.40	697.15	1.00
	1633.40	1664.30	696.15	30.90
*COAL	1664.30	1665.00	665.25	0.70
	1665.00	1758.30	664.55	93.30
*P11	1758.30	1760.70	571.25	2.40
	1760.70	1787.90	568.85	27.20
*P10	1787.90	1788.90	541.65	1.00
	1788.90	1829.10	540.65	40.20
*COAL	1829.10	1829.30	500.45	0.20
	1829.30	1850.00	500.25	20.70
*LH3	1850.00	1852.00	479.55	2.00
	1852.00	1901.00	477.55	49.00
*P91	1901.00	1902.10	428.55	1.10
	1902.10	1919.60	427.45	17.50
*COAL	1919.60	1920.20	409.95	0.60
	1920.20	1921.00	409.35	0.80
*P92	1921.00	1921.60	408.55	0.60
	1921.60	1922.00	407.95	0.40
*COAL	1922.00	1922.50	407.55	0.50
	1922.50	1951.70	407.05	29.20
*P93	1951.70	1952.20	377.85	0.50
	1952.20	1977.80	377.35	25.60
*P81	1977.80	1978.10	351.75	0.30
	1978.10	2182.90	351.45	204.80
*P51	2182.90	2184.00	146.65	1.10
	2184.00	2190.80	145.55	6.80
*COAL	2190.80	2191.00	138.75	0.20
	2191.00	2253.20	138.55	62.20
*P42	2253.20	2253.50	76.35	0.30
	2253.50	2324.00	76.05	70.50
*P3	2324.00	2328.40	5.55	4.40
	2328.40	2418.20	1.15	89.80
*COAL	2418.20	2418.30	-88.65	0.10
	2418.30	2426.60	-88.75	8.30
*COAL	2426.60	2426.80	-97.05	0.20
	2426.80	2507.76	-97.25	80.96

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION  
 COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO TOPOGRAPHY.  
 GAMMA-CALIPER LOG FROM 0 TO 938.20  
 GAMMA-DENSITY LOG FROM 938.20 TO TD.

FILE: C:\VP\APPS\P23.CMP  
 DATE: 11/01/06

## Oil & Gas Show

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
Lee/Norton	1390	1902	512			
Pocahontas	2183	2328	145	No Show		

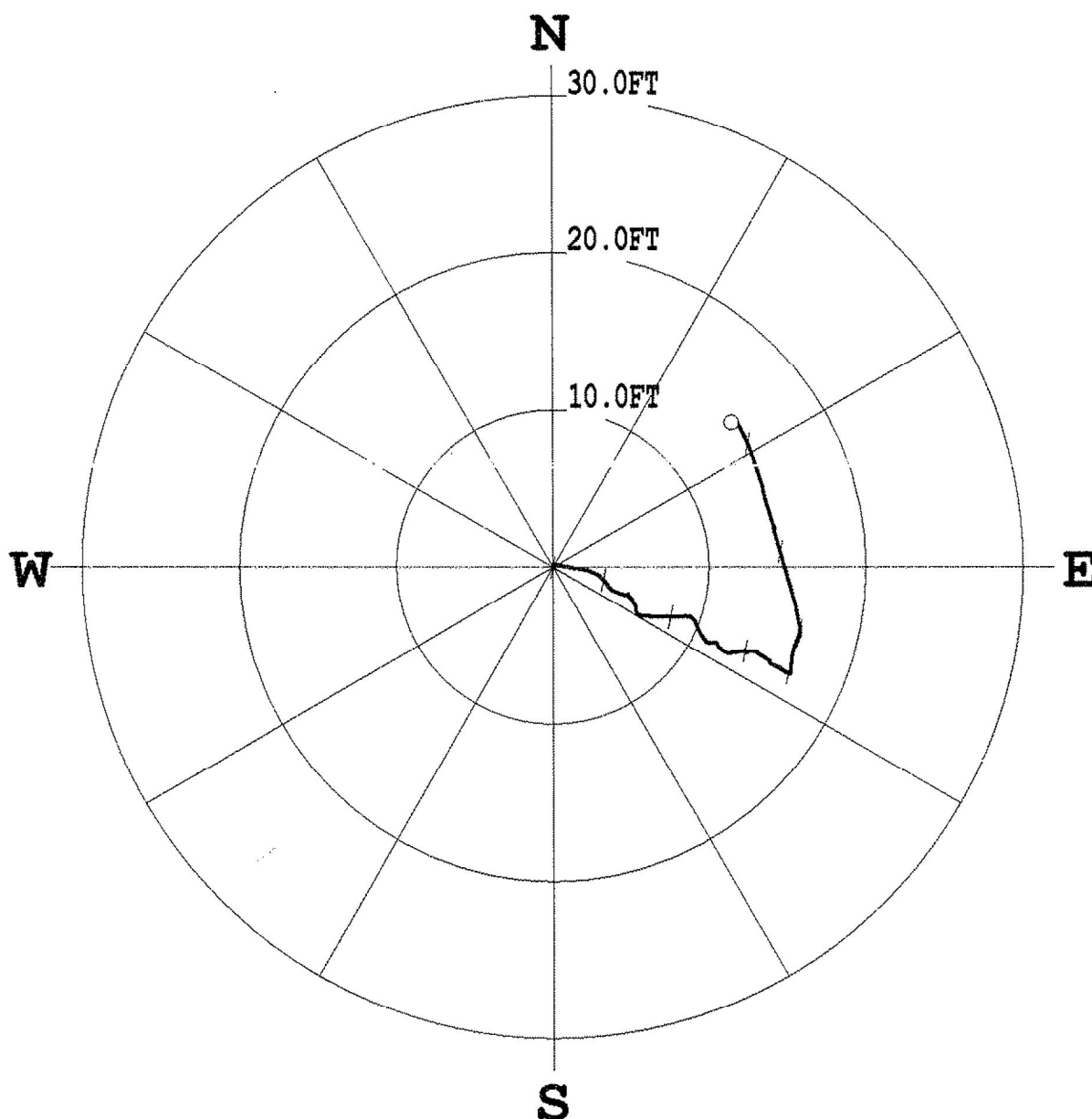
# PLAN VIEW COMPU-LOG DEVIATION

CLIENT: CONSOL ENERGY  
 LOCATION: -  
 HOLE ID: 06-CNX-P-23  
 DATE OF LOG: 10/19/06  
 PROBE: 9136CH 1244



MAG DECL: -7.1

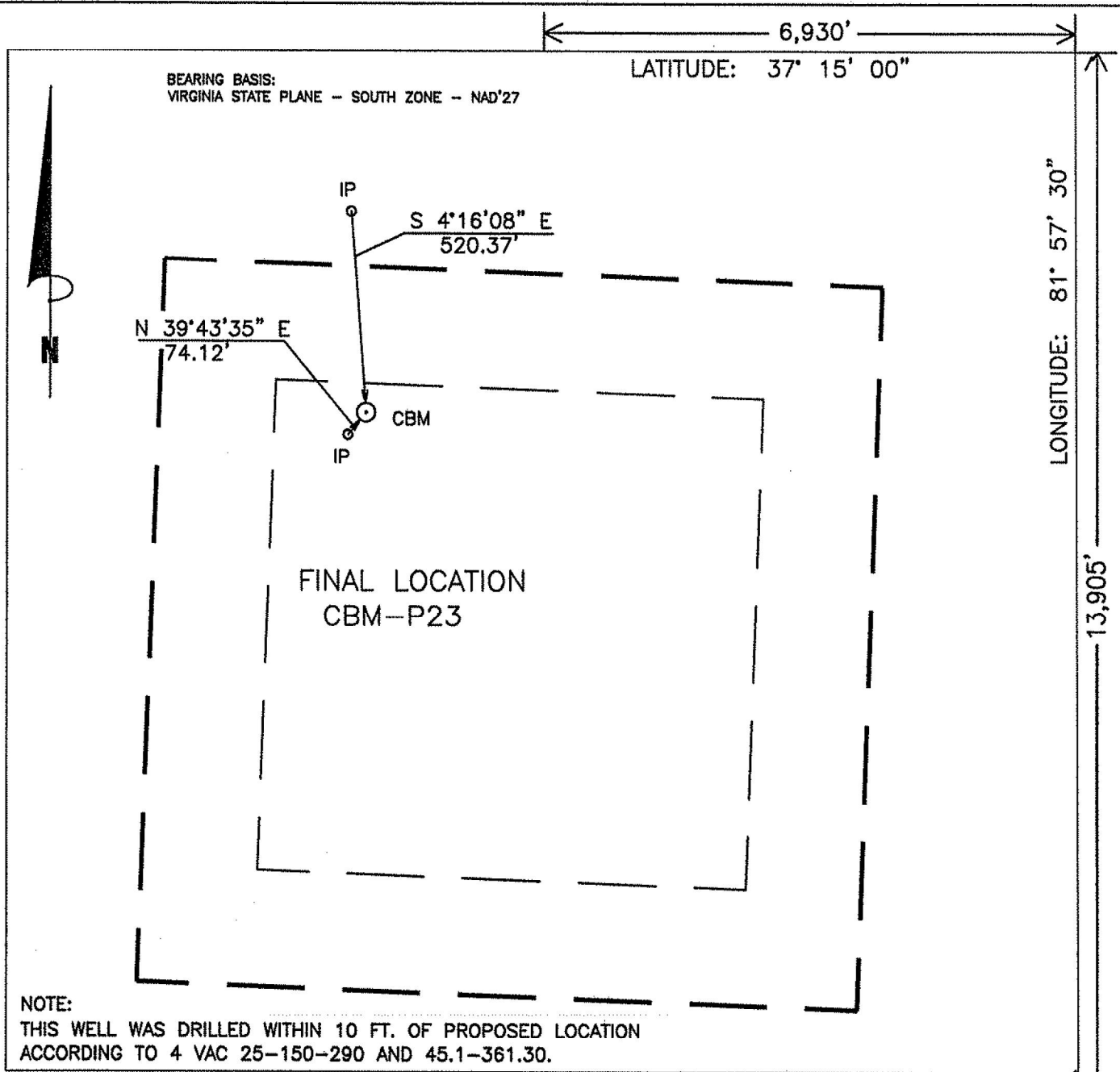
SCALE: 10 FT/IN  
 TRUE DEPTH: 2502.42 FT  
 AZIMUTH: 51.1  
 DISTANCE: 14.6 FT  
 + = 300 FT INCR  
 ○ = BOTTOM OF HOLE



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

CLIENT	: CONSOL ENERGY	HOLE ID.	: 06-CNX-P-23
FIELD OFFICE	: O'DRISCOLL	DATE OF LOG	: 10/19/06
DATA FROM	: -	PROBE	: 9136CH , 1244
MAG. DECL.	: -7.100	DEPTH UNITS	: FEET
LOG: 06-CNX-P-23 10-19-06 13-51 9136CH .10 -0.10 2502.80 DEVI.log			





## WELL LOCATION PLAT

P23FNL  
1N14/20-556/13

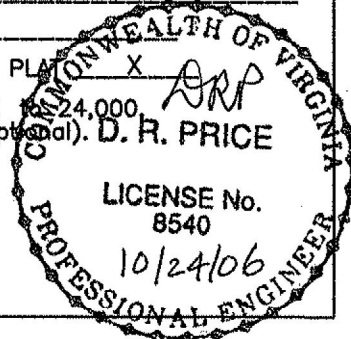
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*D.R. Price*  
 \_\_\_\_\_  
 Licensed Professional Engineer or Licensed Land Surveyor (Affix Seal)





**DRILL DATA HOLE-NOAH HORN WELL DRILLING, INC**

**COMPANY: CNX**

**HOLE #: P-23**

**LOCATION:**

**DRILL RIG #: 19**

**DATE STARTED: 10-12-06**

**DATED COMPLETED: 10-19-06**

**ELECTRIC LOGGED: YES**

**GROUTED: YES**

DEPTH		THICKNESS	STRATA	REMARKS
FROM	TO	FT	DESCRIPTION, VOIDS ETC	
0	33.30	33.30	OVERBURDEN	
33.30	35	1.70	SAND/SANDY SHALE	
35	65	30	SANDY SHALE/SAND	
65	95	30	SAND/COAL/SANDY SHALE	
95	125	30	SANDY SHALE/SAND	
125	160	35	SAND	
160	190	30	SAND/SANDY SHALE/SAND	
190	220	30	SAND/SANDY SHALE	
220	250	30	SAND/SANDY SHALE/SAND	
250	280	30	SAND/COAL/SANDY SHALE/SAND	
280	310	30	SAND/SANDY SHALE/SAND	
310	340	30	SAND	
340	370	30	SAND/SANDY SHALE BROKE UP	
370	400	30	SANDY SHALE/SAND	
400	430	30	SAND/SANDY SHALE/SAND	
430	435	5	SANDY SHALE	
435	460	25	SANDY SHALE/SAND	
460	490	30	SAND/SANDY SHALE/SAND	
490	520	30	SANDY SHALE/SAND	
520	550	30	SANDY SHALE	
550	580	30	SANDY SHALE/SAND	
580	610	30	SANDY SHALE/SAND/SANDY SHALE	
610	640	30	SANDY SHALE BROKE UP	
640	670	30	COAL/SANDY SHALE	
670	700	30	SAND/SANDY SHALE	
700	730	30	SANDY SHALE/SAND/SANDY SHALE	
730	750	20	SAND	
750	780	30	SAND/COAL	
780	840	60	SAND/SANDY SHALE/SAND	
840	870	30	SAND/COAL/SANDY SHALE/SAND	
870	900	30	SAND/SANDY SHALE	
900	930	30	SANDY SHALE/COAL/SAND	
930	945	15	SAND	
945	965	20	SANDY SHALE	
965	995	30	SANDY SHALE/COAL/SANDY SHALE	
995	1025	30	SANDY SHALE/SAND/COAL	
1025	1085	60	SAND/COAL/SANDY SHALE	
1085	1115	30	SANDY SHALE/SAND	
1115	1145	30	SAND/SANDY SHALE	
1145	1175	30	SANDY SHALE/SAND	
1175	1205	30	SAND/SANDY SHALE	
1205	1235	30	SANDY SHALE/SAND	

1235	1265	30	SAND/SANDY SHALE
1265	1295	30	SANDY SHALE/SAND/SANDY SHALE
1295	1325	30	SAND/SANDY SHALE
1325	1355	30	SANDY SHALE
1355	1385	30	SANDY SHALE/SAND/SANDY SHALE
1385	1415	30	SANDY SHALE /COAL /SAND/ SANDY SHALE
1415	1445	30	SANDY SHALE
1445	1475	30	SANDY SHALE/SAND/COAL
1475	1505	30	SANDY SHALE/SAND
1505	1535	30	SAND/SANDY SHALE/SAND
1535	1565	30	SAND/SANDY SHALE
1565	1595	30	SANDY SHALE/COAL/SAND
1595	1625	30	SAND/SANDY SHALE
1625	1655	30	SANDY SHALE/COAL/SANDY SHALE
1655	1685	30	SANDY SHALE/COAL/SAND
1685	1715	30	SANDY SHALE
1715	1745	30	SANDY SHALE/SAND
1745	1775	30	SAND/COAL/SAND
1775	1805	30	SAND/SANDY SHALE/COAL/SAND
1805	1835	30	SAND/COAL/SAND
1835	1865	30	SAND/COAL/SANDY SHALE
1865	1895	30	SANDY SHALE/COAL
1895	1925	30	SANDY SHALE/COAL/SAND
1925	1955	30	SAND/COAL/SAND
1955	1985	30	SAND/SANDY SHALE
1985	2015	30	SANDY SHALE/COAL/SANDY SHALE
2015	2045	30	SANDY SHALE
2045	2135	90	SAND
2135	2165	30	SAND/COAL/SANDY SHALE
2165	2195	30	SAND/COAL/SAND
2195	2225	30	SANDY SHALE
2225	2255	30	SAND/COAL/SANDY SHALE
2255	2285	30	SANDY SHALE
2285	2315	30	SANDY SHALE/SAND/SANDY SHALE
2315	2322	7	SANDY SHALE
2322	2326	4	P-3 SEAM
2326	2345	19	SANDY SHALE/SAND
2345	2375	30	SANDY SHALE
2375	2405	30	SANDY SHALE
2405	2495	90	SAND/SANDY SHALE/SAND

2495.00 FT. TOTAL DEPTH  
33.30 FT. OF 18" CASING  
441.04 FT. OF 13 3/8" CASING  
704.80 FT. OF 9 5/8" CASING  
929.10 FT. OF 7" CASING  
2440.00 FT. OF 4 1/2" CASING RUN