



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: 941  
 Company: CNX Gas Company LLC  
 File Number: RU-0456  
 Operations Name: CBM BH104A W/PL  
 Operation Type: Coalbed/Pipeline  
 Drilling Report Type: Original

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

#### 1. Drilling Data

Date drilling commenced: 6/26/2007 Drilling Contractor: Noah Horn  
 Date drilling completed: 7/9/2007 Rig Type:  Rotary  Cable Tool  
 Driller's Total Depth (feet): 2,770  
 Log Total Depth (feet): 2,747 Coal Seam At Total Depth Pocahontas

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

Permitted State Plane X 973,906 Final Plat State Plane X: 973,906  
 Permitted State Plane Y: 288,017 Final Plat State Plane Y: 288,017

Plat Previously Submitted Or...

List of Attached Items:

Description	FileName
Plat	BH104A 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	BH104A Exhibit A.pdf

**Gas and Oil Shows**

List of Attached Items:

Description	FileName
Gas Show	BH104A 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	BH104A Deviation.pdf

**6. Casing and Tubing Program**

List of Attached Items:

Description	FileName
Casing	BH104A 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/occurrence.

TOC of 4 1/2" casing @340'

**8. Drillers Log**

Compiled By: Noah Horn

List of Attached Items:

Description	FileName
Drill Data	BH104A Drill Data.pdf

**9. Comments**

**10. Signature**

Permitee: CNX Gas Company LLC Date: 12/17/2007 (Company)

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

**INTERNAL USE ONLY**

Submit Date: 12/17/2007

Status: Inspr Approved

Date: 12/20/2007

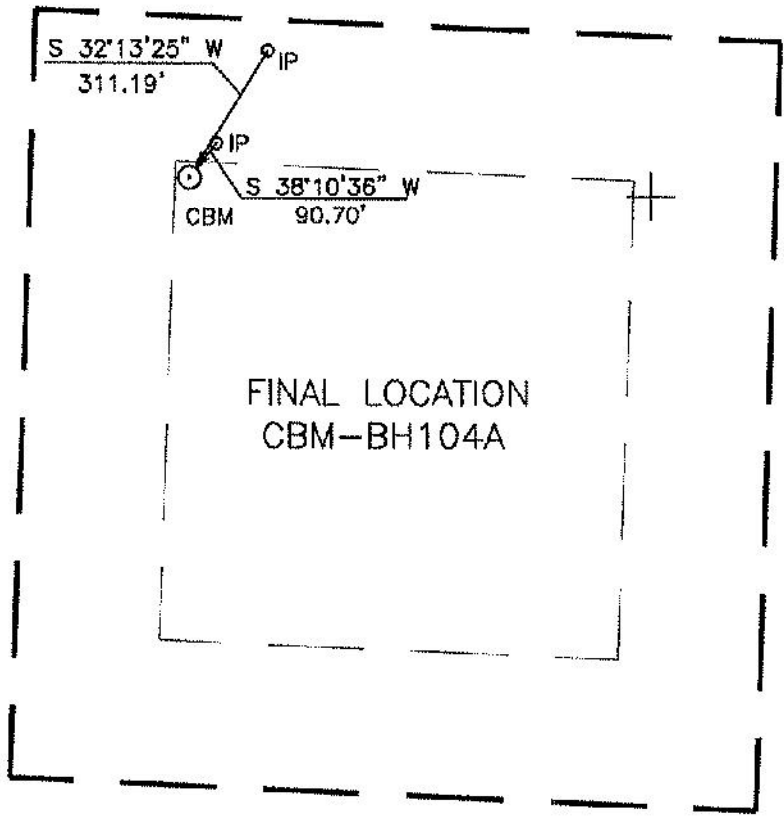
Final PDF Date: 12/28/2007

BEARING BASIS:  
VIRGINIA STATE PLANE - SOUTH ZONE - NAD'27

LATITUDE: 37° 05' 00"

5200'

4165'



FINAL LOCATION  
CBM-BH104A

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

BH104AFNL  
PGP30/171-602/75

COMPANY CNX GAS COMPANY, LLC. WELL NAME OR NUMBER CBM-BH104A  
 TRACT NUMBER TAZEWELL COAL & IRON QUADRANGLE BIG A MOUNTAIN  
 DISTRICT: NEW GARDEN

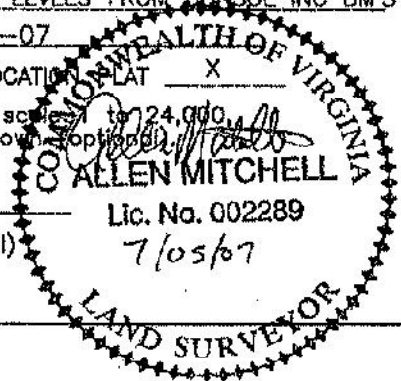
WELL COORDINATES (VIRGINIA STATE PLANE): STATE PLANE: N 288,017.31 E 973,905.90

ELEVATION: 2635.07' METHOD USED TO DETERMINE ELEVATION: BY TRIG. LEVELS FROM CONSOL INC BM'S  
 COUNTY RUSSELL Scale: 1" = 400' Date 07-05-07

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, scaled to 24,000, latitude and longitude lines being represented by border lines as shown on topographic maps.

Licensed Professional Engineer or Licensed Land Surveyor (Affix Seal)



## Exhibit A

Well Name: 07 CBM BH104A

SURFACE ELEV: 2635.07 EASTING: 973905.90 NORTHING: 288017.31

SEAM	DEPTH FROM (FT)	DEPTH TO (FT)	ELEVATION (TOSE)	THK. (FT)	REMARKS
COAL	103.00	103.80	2532.07	0.80	
	103.80	121.00	2531.27	17.20	
COAL	121.00	122.90	2514.07	1.90	
	122.90	210.80	2512.17	87.90	
IB1	210.80	214.00	2424.27	3.20	
	214.00	290.10	2421.07	76.10	
LB2	290.10	290.80	2344.97	0.70	
	290.80	366.40	2344.27	75.60	
KN1	366.40	367.00	2268.67	0.60	
	367.00	398.00	2268.07	31.00	
KN2	398.00	401.10	2237.07	3.10	
	401.10	533.70	2233.97	132.60	
AL1	533.70	533.80	2101.37	0.10	
	533.80	592.70	2101.27	58.90	
AL2	592.70	594.10	2042.37	1.40	
	594.10	702.10	2040.97	108.00	
RA2	702.10	704.90	1932.97	2.80	
	704.90	736.00	1930.17	31.10	
RA3	736.00	736.10	1899.07	0.10	
	736.10	915.10	1898.97	179.00	
JB1	915.10	916.40	1719.97	1.30	
	916.40	917.60	1718.67	1.20	
JB2	917.60	917.90	1717.47	0.30	
	917.90	918.50	1717.17	0.60	
JB3	918.50	920.00	1716.57	1.50	
	920.00	970.00	1715.07	50.00	
T2	970.00	970.80	1665.07	0.80	
	970.80	1051.80	1664.27	81.00	
*TI	1051.80	1052.00	1583.27	0.20	
	1052.00	1057.40	1583.07	5.40	
*COAL	1057.40	1059.50	1577.67	2.10	
	1059.50	1201.70	1575.57	142.20	
*US1	1201.70	1201.80	1433.37	0.10	
	1201.80	1202.10	1433.27	0.30	
*US1	1202.10	1202.40	1432.97	0.30	
	1202.40	1202.80	1432.67	0.40	
*LC1	1202.80	1203.20	1432.27	0.40	
	1203.20	1206.40	1431.87	3.20	
*LC2	1206.40	1206.60	1428.67	0.20	
	1206.60	1210.40	1428.47	3.80	
*LC4	1210.40	1213.80	1424.67	3.40	
	1213.80	1359.70	1421.27	145.90	
*GC1	1359.70	1359.90	1275.37	0.20	
	1359.90	1360.20	1275.17	0.30	
*GC1	1360.20	1361.90	1274.87	1.70	
	1361.90	1467.80	1273.17	105.90	
*SE1	1467.80	1468.20	1167.27	0.40	
	1468.20	1496.40	1166.87	28.20	

*SE2	1496.40	1497.40	1138.67	1.00
	1497.40	1544.80	1137.67	47.40
*LS1	1544.80	1545.60	1090.27	0.80
	1545.60	1546.20	1089.47	0.60
*LS2	1546.20	1546.90	1088.87	0.70
	1546.90	1609.80	1088.17	62.90
*LS3	1609.80	1614.70	1025.27	4.90
	1614.70	1659.10	1020.37	44.40
*UH1	1659.10	1660.80	975.97	1.70
	1660.80	1661.90	974.27	1.10
*UH2	1661.90	1662.80	973.17	0.90
	1662.80	1686.50	972.27	23.70
*UH3	1686.50	1687.60	948.57	1.10
	1687.60	1724.50	947.47	36.90
*MH1	1724.50	1726.10	910.57	1.60
	1726.10	1812.10	908.97	86.00
*MH2	1812.10	1812.20	822.97	0.10
	1812.20	1859.80	822.87	47.60
*P11	1859.80	1863.40	775.27	3.60
	1863.40	1886.90	771.67	23.50
*P10	1886.90	1888.30	748.17	1.40
	1888.30	1890.70	746.77	2.40
*COAL	1890.70	1890.90	744.37	0.20
	1890.90	1892.20	744.17	1.30
*LH1	1892.20	1893.80	742.87	1.60
	1893.80	1912.50	741.27	18.70
*LH3	1912.50	1914.20	722.57	1.70
	1914.20	1936.10	720.87	21.90
*P91	1936.10	1938.00	698.97	1.90
	1938.00	1997.80	697.07	59.80
*P81	1997.80	1997.90	637.27	0.10
	1997.90	1998.40	637.17	0.50
*P82	1998.40	1998.90	636.67	0.50
	1998.90	2002.50	636.17	3.60
*P71	2002.50	2002.90	632.57	0.40
	2002.90	2053.90	632.17	51.00
*COAL	2053.90	2054.90	581.17	1.00
	2054.90	2055.20	580.17	0.30
*COAL	2055.20	2056.70	579.87	1.50
	2056.70	2129.70	578.37	73.00
*COAL	2129.70	2131.80	505.37	2.10
	2131.80	2170.20	503.27	38.40
*COAL	2170.20	2170.80	464.87	0.60
	2170.80	2177.90	464.27	7.10
*COAL	2177.90	2178.10	457.17	0.20
	2178.10	2317.90	456.97	139.80
*COAL	2317.90	2318.20	317.17	0.30
	2318.20	2362.00	316.87	43.80
*COAL	2362.00	2362.20	273.07	0.20
	2362.20	2389.70	272.87	27.50
*P51	2389.70	2391.10	245.37	1.40
	2391.10	2420.30	243.97	29.20
*COAL	2420.30	2421.00	214.77	0.70
	2421.00	2462.10	214.07	41.10
*P31	2462.10	2464.30	172.97	2.20
	2464.30	2464.50	170.77	0.20
*P31	2464.50	2467.20	170.57	2.70
	2467.20	2488.80	167.87	21.60

*P32	2488.80	2489.80	146.27	1.00
	2489.80	2490.30	145.27	0.50
*P33	2490.30	2491.00	144.77	0.70
	2491.00	2533.60	144.07	42.60
*P34	2533.60	2534.10	101.47	0.50
	2534.10	2626.90	100.97	92.80
*P01	2626.90	2627.10	8.17	0.20
	2627.10	2770.00	7.97	142.90

COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO TOPOGRAPHY.  
 GAMMA-CALIPER LOG FROM 0 TO 485.00  
 GAMMA-DENSITY LOG FROM 485.00 TO TD.  
 NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION  
 FILE: D:\PROJECTS\VP\_JJK\GAS\BH104A.CMP  
 DATE: 08/27/07

Well: BH104A

**Oil & Gas Show**

Formation	Top	Bottom	Thickness	IPF (MCFD/BOPD)	Pressure	Hours Tested
Lee/Norton	1057	1938	881			
Pocahontas	2054	2490	436			
Total IPF				25.6		

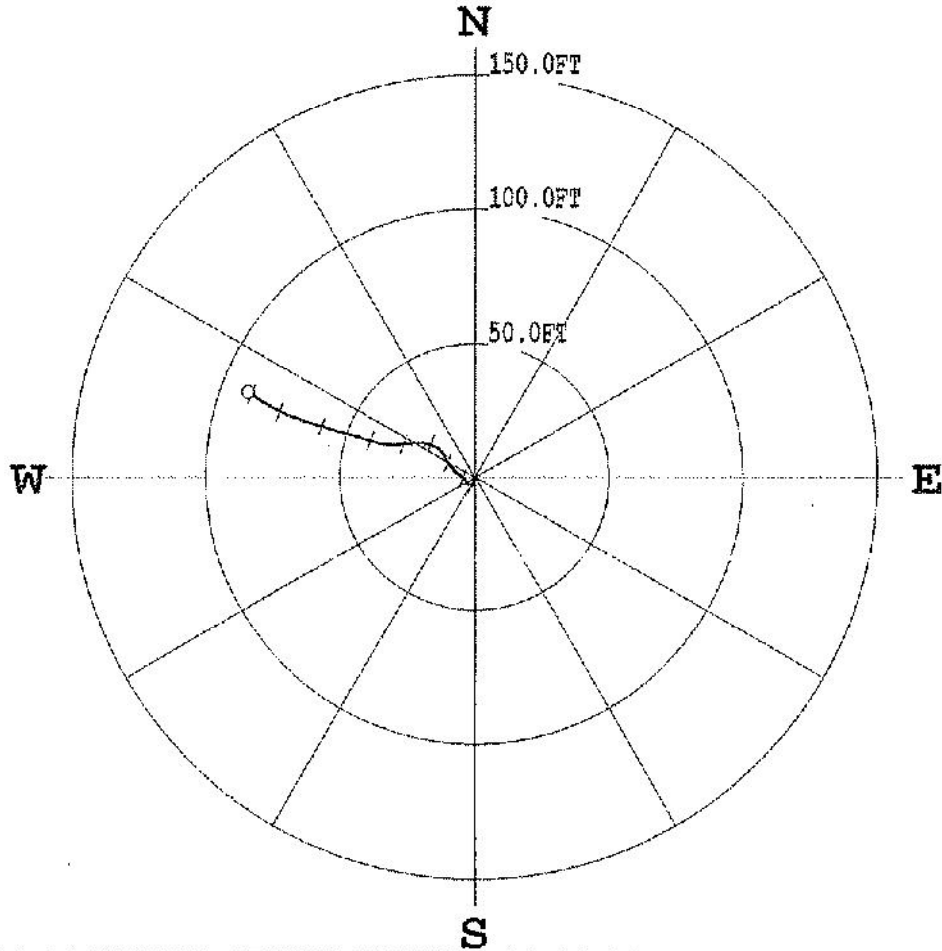


# PLAN VIEW COMPU-LOG DEVIATION

CLIENT: CONSOL ENERGY  
 LOCATION:  
 HOLE ID: 07-CNX-BH-104A  
 DATE OF LOG: 07/09/07  
 PROBE: 9136CH 1279

↑  
 ↑  
 ↑  
 MAG DECL: -7.1

SCALE: 50 FT/IN  
 TRUE DEPTH: 2744.22 I  
 AZIMUTH: 290.7  
 DISTANCE: 89.7 FT  
 + = 300 FT INCR  
 ○ = BOTTOM OF HOLE



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

CLIENT : CONSOL ENERGY                      HOLE ID. : 07-CNX-BH-104  
 FIELD OFFICE : O'DRISCOLL                    DATE OF LOG : 07/09/07  
 DATA FROM :                                    PROBE : 9136CH , 1279  
 MAG. DECL. : -7.100                            DEPTH UNITS : FEET  
 LOG: 07-CNX-BH-104A\_07-09-07\_10-54\_9136CH\_10\_0.00\_2746.60\_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
0.50	0.50	0.00	0.00	0.0	0.0	0.0	0.0
10.00	10.00	0.01	0.00	0.0	15.1	0.3	57.0
20.00	20.00	-0.01	0.03	0.0	99.6	0.3	225.9
30.00	30.00	0.01	0.01	0.0	37.8	0.5	168.1
40.00	40.00	-0.06	-0.01	0.1	192.1	0.4	202.8
50.00	50.00	-0.15	-0.04	0.2	194.2	0.5	185.1
60.00	60.00	-0.25	-0.04	0.3	188.7	0.6	179.3
70.00	70.00	-0.34	-0.02	0.3	183.8	0.8	181.9
80.00	80.00	-0.45	-0.08	0.5	190.1	0.8	227.5
90.00	90.00	-0.53	-0.17	0.6	197.5	1.0	229.7
100.00	100.00	-0.63	-0.28	0.7	203.8	0.8	231.2
110.00	109.99	-0.74	-0.40	0.8	208.0	0.7	221.6
120.00	119.99	-0.88	-0.49	1.0	209.0	0.9	192.1
130.00	129.99	-1.01	-0.51	1.1	205.8	0.8	179.3
140.00	139.99	-1.15	-0.51	1.3	204.1	0.5	165.1
150.00	149.99	-1.23	-0.49	1.3	201.6	0.6	171.0
160.00	159.99	-1.32	-0.48	1.4	199.8	0.7	174.0
170.00	169.99	-1.42	-0.48	1.5	198.8	0.5	198.2
180.00	179.99	-1.49	-0.50	1.6	198.5	0.3	186.8
190.00	189.99	-1.55	-0.54	1.6	199.1	0.5	183.3
200.00	199.99	-1.68	-0.56	1.8	198.6	1.1	223.2
210.00	209.99	-1.83	-0.70	2.0	200.9	0.9	213.6
220.00	219.98	-1.96	-0.81	2.1	202.4	0.8	218.3
230.00	229.98	-2.12	-0.85	2.3	201.9	1.1	196.0
240.00	239.98	-2.24	-0.88	2.4	201.5	0.7	175.6

180.00	179.99	-1.49	-0.50	1.6	196.5	0.3	186.8
190.00	189.99	-1.55	-0.54	1.6	199.1	0.5	183.3
200.00	199.99	-1.68	-0.56	1.8	198.6	1.1	223.2
210.00	209.99	-1.83	-0.70	2.0	200.9	0.9	213.6
220.00	219.98	-1.98	-0.81	2.1	202.4	0.8	218.3
230.00	229.98	-2.12	-0.85	2.3	201.9	1.1	196.0
240.00	239.98	-2.24	-0.88	2.4	201.5	0.7	176.6
250.00	249.98	-2.35	-0.93	2.5	201.7	0.6	194.7
260.00	259.98	-2.46	-0.98	2.6	201.7	0.8	207.0
270.00	269.98	-2.55	-1.05	2.8	202.3	0.9	244.1
280.00	279.98	-2.61	-1.16	2.9	204.0	0.8	251.0
290.00	289.98	-2.65	-1.30	3.0	206.0	0.9	271.6
300.00	299.98	-2.66	-1.46	3.0	208.7	0.9	269.9
310.00	309.97	-2.66	-1.67	3.1	212.0	1.4	271.0
320.00	319.97	-2.66	-1.86	3.2	215.1	1.0	273.4
330.00	329.97	-2.65	-2.04	3.3	217.6	1.0	254.2
340.00	339.97	-2.66	-2.18	3.4	219.3	0.7	276.1
350.00	349.97	-2.64	-2.32	3.5	221.3	0.7	269.6
360.00	359.97	-2.63	-2.44	3.6	222.8	0.8	273.8
370.00	369.97	-2.59	-2.53	3.6	224.4	0.6	290.4
380.00	379.97	-2.55	-2.59	3.6	225.4	0.4	300.8
390.00	389.97	-2.51	-2.63	3.6	226.4	0.5	322.2
400.00	399.97	-2.46	-2.69	3.6	227.6	0.4	324.9
410.00	409.97	-2.39	-2.75	3.6	229.1	0.5	319.9
420.00	419.96	-2.30	-2.83	3.6	230.9	0.7	319.5
430.00	429.96	-2.20	-2.89	3.6	232.7	0.9	325.3
440.00	439.96	-2.08	-2.99	3.6	235.1	0.8	326.6
450.00	449.96	-1.96	-3.06	3.7	237.6	1.0	318.6
460.00	459.96	-1.83	-3.17	3.7	240.1	1.0	326.8
470.00	469.96	-1.68	-3.27	3.7	242.8	0.8	331.9
480.00	479.96	-1.56	-3.33	3.7	244.8	1.3	325.2
490.00	489.96	-1.42	-3.43	3.7	247.5	0.9	330.1
500.00	499.96	-1.35	-3.48	3.7	248.9	0.8	340.0
510.00	509.95	-1.21	-3.52	3.7	251.0	1.0	69.2
520.00	519.95	-1.12	-3.43	3.6	252.0	1.3	337.7
530.00	529.95	-0.97	-3.52	3.6	254.6	1.0	299.7
540.00	539.95	-0.80	-3.53	3.6	257.2	1.0	29.9
550.00	549.95	-0.71	-3.63	3.7	259.0	1.0	315.9
560.00	559.94	-0.59	-3.77	3.8	261.1	0.9	298.7
570.00	569.94	-0.48	-3.92	4.0	263.0	1.1	300.9
580.00	579.94	-0.37	-4.07	4.1	264.7	1.1	299.2
590.00	589.94	-0.26	-4.23	4.2	266.5	1.2	314.3
599.00	599.94	-0.12	-4.41	4.4	268.5	1.4	317.6
610.00	609.93	-0.00	-4.58	4.6	270.0	1.1	320.7
620.00	619.93	0.10	-4.75	4.7	271.2	1.4	297.8
630.00	629.93	0.22	-4.92	4.9	272.6	1.2	291.7
640.00	639.93	0.33	-5.11	5.1	273.7	1.7	275.4
650.00	649.92	0.48	-5.34	5.4	275.1	1.7	308.0
660.00	659.92	0.66	-5.55	5.6	276.8	1.4	305.3
670.00	669.92	0.81	-5.74	5.8	278.0	1.3	301.5
680.00	679.91	0.99	-5.95	6.0	279.5	1.6	323.0
690.00	689.91	1.16	-6.19	6.3	280.7	1.8	309.9
700.00	699.90	1.39	-6.42	6.6	282.2	1.7	325.9
710.00	709.90	1.60	-6.63	6.8	283.6	1.7	315.1
720.00	719.89	1.79	-6.86	7.1	284.7	1.8	312.1
730.00	729.89	2.03	-7.07	7.4	286.0	1.9	334.4
740.00	739.88	2.18	-7.07	7.4	287.1	1.2	146.4
750.00	749.88	2.18	-7.22	7.5	286.8	1.8	318.5
760.00	759.87	2.41	-7.44	7.8	287.9	1.9	324.1
770.00	769.87	2.68	-7.64	8.1	289.4	1.8	323.2
780.00	779.86	2.95	-7.85	8.4	290.6	1.9	319.0
790.00	789.86	3.20	-8.06	8.7	291.7	1.8	323.0
800.00	799.85	3.46	-8.24	8.9	292.8	1.8	327.5
810.00	809.85	3.68	-8.46	9.2	293.5	1.8	319.8
820.00	819.84	3.90	-8.66	9.5	294.2	1.8	312.2
830.00	829.84	4.14	-8.85	9.8	295.1	1.7	310.7
840.00	839.83	4.36	-9.05	10.1	295.7	1.8	322.4
850.00	849.83	4.58	-9.26	10.3	296.3	1.7	325.1
860.00	859.82	4.80	-9.45	10.6	296.9	1.7	318.5
870.00	869.82	5.02	-9.66	10.9	297.5	1.7	337.4
880.00	879.81	5.09	-9.74	11.0	297.6	0.8	113.8
890.00	889.81	5.27	-9.88	11.2	298.1	2.1	336.7
900.00	899.80	5.60	-10.06	11.5	299.1	2.1	334.1
910.00	909.79	5.93	-10.20	11.8	300.2	2.0	349.9
920.00	919.79	6.20	-10.38	12.1	300.8	2.1	330.8
930.00	929.78	6.54	-10.53	12.4	301.9	2.3	346.3
940.00	939.77	6.87	-10.69	12.7	302.7	2.1	325.6
950.00	949.77	7.20	-10.82	13.0	303.7	2.0	339.5
960.00	959.76	7.53	-10.96	13.3	304.5	2.1	339.8
970.00	969.76	7.86	-11.09	13.6	305.3	2.0	342.3
980.00	979.75	8.00	-11.18	13.8	305.6	3.1	147.1
990.00	989.74	8.23	-11.32	14.0	306.0	2.0	337.1
1000.00	999.74	8.52	-11.49	14.3	306.6	2.0	334.2
1010.00	1009.73	8.82	-11.65	14.6	307.1	1.9	328.0
1020.00	1019.73	9.10	-11.81	14.9	307.6	1.9	322.4
1030.00	1029.72	9.39	-11.95	15.2	308.2	1.8	318.8
1040.00	1039.72	9.62	-12.17	15.5	308.3	1.9	307.1
1050.00	1049.71	9.85	-12.43	15.9	308.4	2.0	315.0
1060.00	1059.70	10.11	-12.67	16.2	308.6	1.8	318.2
1070.00	1069.70	10.35	-12.90	16.5	308.7	1.9	316.6
1080.00	1079.69	10.59	-13.16	16.9	308.8	2.1	309.8
1090.00	1089.69	10.81	-13.42	17.2	308.9	1.9	308.0
1100.00	1099.68	11.04	-13.68	17.6	308.9	2.0	316.2
1110.00	1109.67	11.27	-13.93	17.9	309.0	1.9	305.5
1120.00	1119.67	11.46	-14.13	18.2	309.0	1.9	316.6
1130.00	1129.66	11.59	-14.37	18.5	308.9	1.8	315.4

1050.00	1049.71	9.85	-12.43	15.9	308.4	2.0	315.0
1060.00	1059.70	10.11	-12.67	16.2	308.6	1.8	318.2
1070.00	1069.70	10.35	-12.90	16.5	308.7	1.9	316.6
1080.00	1079.69	10.59	-13.16	16.9	308.8	2.1	309.6
1090.00	1089.69	10.81	-13.42	17.2	308.9	1.9	306.0
1100.00	1099.68	11.04	-13.68	17.6	308.9	2.0	316.2
1110.00	1109.67	11.27	-13.93	17.9	309.0	1.9	305.5
1120.00	1119.67	11.46	-14.13	18.2	309.0	1.9	316.6
1130.00	1129.66	11.59	-14.37	18.5	308.9	1.8	315.4
1140.00	1139.66	11.61	-14.51	18.6	308.7	1.8	302.1
1150.00	1149.65	11.67	-14.69	18.8	308.5	1.5	296.1
1160.00	1159.65	11.83	-14.97	19.1	308.3	1.8	311.1
1170.00	1169.64	11.97	-15.28	19.4	308.1	1.6	281.3
1180.00	1179.64	12.11	-15.57	19.7	307.9	1.9	301.0
1190.00	1169.63	12.23	-15.90	20.1	307.6	2.0	295.4
1200.00	1199.62	12.35	-16.12	20.3	307.5	1.7	284.9
1210.00	1209.62	12.37	-16.35	20.5	307.1	2.0	280.0
1220.00	1219.61	12.46	-16.66	20.8	306.8	1.9	284.1
1230.00	1229.61	12.55	-16.99	21.1	306.4	2.2	281.5
1240.00	1239.60	12.66	-17.33	21.5	306.1	2.1	268.3
1250.00	1249.60	12.73	-17.65	21.8	305.8	1.9	293.7
1260.00	1259.59	12.76	-18.02	22.1	305.3	2.0	272.8
1270.00	1269.58	12.80	-18.36	22.4	304.9	2.0	269.1
1280.00	1279.58	12.84	-18.71	22.7	304.5	2.1	279.4
1290.00	1289.57	12.89	-19.07	23.0	304.1	2.1	278.8
1300.00	1299.56	12.94	-19.43	23.3	303.7	2.3	283.2
1310.00	1309.56	12.97	-19.79	23.7	303.2	2.2	277.6
1320.00	1319.55	13.02	-20.18	24.0	302.8	2.1	284.1
1330.00	1329.54	13.03	-20.55	24.3	302.4	2.1	269.5
1340.00	1339.53	13.05	-20.91	24.7	302.0	2.0	272.0
1350.00	1349.53	13.03	-21.27	24.9	301.5	2.1	270.4
1360.00	1359.52	13.04	-21.55	25.2	301.2	2.0	264.3
1370.00	1369.52	12.99	-21.82	25.4	300.8	2.1	267.6
1380.00	1379.51	12.95	-22.17	25.7	300.3	2.2	254.7
1390.00	1389.50	12.92	-22.52	26.0	299.8	2.1	252.9
1400.00	1399.50	12.89	-22.86	26.2	299.4	1.9	264.2
1410.00	1409.49	12.83	-23.20	26.5	298.9	2.1	260.5
1420.00	1419.49	12.80	-23.55	26.8	298.5	2.0	259.5
1430.00	1429.48	12.77	-23.89	27.1	298.1	2.0	255.7
1440.00	1439.47	12.72	-24.26	27.4	297.7	2.2	264.7
1450.00	1449.46	12.68	-24.64	27.7	297.2	2.3	263.9
1460.00	1459.46	12.69	-24.86	27.9	297.0	2.5	159.6
1470.00	1469.45	12.59	-25.08	28.1	296.7	2.1	283.9
1480.00	1479.44	12.57	-25.47	28.4	296.3	2.2	264.5
1490.00	1489.43	12.57	-25.86	28.6	295.9	2.1	271.9
1500.00	1499.43	12.56	-26.24	29.1	295.6	2.2	282.3
1510.00	1509.42	12.54	-26.55	29.4	295.3	2.3	240.5
1520.00	1519.41	12.48	-26.87	29.6	294.9	2.5	274.6
1530.00	1529.40	12.48	-27.26	30.0	294.6	2.3	278.9
1540.00	1539.39	12.48	-27.70	30.4	294.3	2.4	275.5
1550.00	1549.38	12.46	-28.10	30.7	293.9	2.2	269.5
1560.00	1559.37	12.46	-28.50	31.1	293.6	2.3	264.0
1570.00	1569.37	12.42	-28.89	31.4	293.3	2.3	269.6
1580.00	1579.36	12.40	-29.29	31.8	293.0	2.3	269.5
1590.00	1589.35	12.40	-29.68	32.2	292.7	2.3	271.6
1600.00	1599.34	12.41	-30.08	32.5	292.4	2.3	275.0
1610.00	1609.33	12.48	-30.47	32.9	292.3	2.3	272.5
1620.00	1619.33	12.43	-30.85	33.3	291.9	1.9	282.2
1630.00	1629.32	12.45	-31.25	33.6	291.7	2.3	264.6
1640.00	1639.31	12.45	-31.64	34.0	291.5	2.3	280.1
1650.00	1649.30	12.49	-32.04	34.4	291.3	2.2	274.4
1660.00	1659.30	12.52	-32.36	34.7	291.2	2.2	271.4
1670.00	1669.29	12.51	-32.68	35.0	290.9	2.4	278.2
1680.00	1679.28	12.54	-33.07	35.4	290.8	2.3	276.9
1690.00	1689.27	12.63	-33.46	35.6	290.7	2.1	277.8
1700.00	1699.26	12.64	-33.86	36.1	290.6	2.5	276.3
1710.00	1709.25	12.70	-34.29	36.6	290.3	2.6	283.7
1720.00	1719.24	12.75	-34.80	37.1	290.1	3.1	290.8
1730.00	1729.22	12.73	-35.03	37.3	290.0	2.9	86.4
1740.00	1739.21	12.85	-35.42	37.7	289.9	2.9	282.3
1750.00	1749.20	12.97	-35.92	38.2	289.9	2.8	285.6
1760.00	1759.19	13.10	-36.41	38.7	289.8	2.8	290.1
1770.00	1769.17	13.21	-36.92	39.2	289.7	3.1	284.9
1780.00	1779.16	13.37	-37.43	39.7	289.7	3.2	297.1
1790.00	1789.14	13.51	-37.97	40.3	289.6	3.1	283.3
1800.00	1799.13	13.66	-38.50	40.9	289.5	3.4	287.8
1810.00	1809.11	13.87	-39.08	41.5	289.5	3.7	288.5
1820.00	1819.09	14.06	-39.63	42.0	289.5	3.2	289.1
1830.00	1829.07	14.18	-40.17	42.6	289.4	3.4	286.9
1840.00	1839.06	14.38	-40.71	43.2	289.5	3.1	285.2
1850.00	1849.04	14.57	-41.23	43.7	289.5	3.2	290.0
1860.00	1859.03	14.74	-41.75	44.3	289.5	3.0	285.6
1870.00	1869.01	14.88	-42.27	44.8	289.4	3.2	284.5
1880.00	1879.00	15.04	-42.81	45.4	289.4	3.2	289.4
1890.00	1888.98	15.22	-43.33	45.9	289.4	3.2	301.8
1900.00	1898.96	15.38	-43.87	46.5	289.3	3.3	283.3
1910.00	1908.95	15.53	-44.43	47.1	289.3	3.2	294.5
1920.00	1918.93	15.73	-44.96	47.6	289.2	3.1	303.8
1930.00	1928.92	15.83	-45.49	48.2	289.2	3.5	267.7
1940.00	1938.90	16.05	-46.01	48.7	289.2	3.5	258.7
1950.00	1948.88	16.13	-46.56	49.3	289.1	3.4	278.2
1960.00	1958.86	16.32	-47.13	49.9	289.1	3.4	293.1
1970.00	1968.85	16.45	-47.71	50.5	289.0	3.7	286.0
1980.00	1978.83	16.59	-48.33	51.1	288.9	3.6	283.3
1990.00	1988.80	16.78	-49.01	51.8	288.9	4.5	275.3
2000.00	1998.77	16.98	-49.76	52.6	288.8	4.3	284.4
2010.00	2008.74	17.21	-50.45	53.3	288.8	4.2	289.5

1920.00	1918.83	15.70	-44.95	47.5	289.2	3.1	267.7
1930.00	1928.92	15.83	-45.49	48.2	289.2	3.5	267.7
1940.00	1938.90	16.05	-46.01	48.7	289.2	3.5	256.7
1950.00	1948.86	16.13	-46.56	49.3	289.1	3.4	278.2
1960.00	1958.86	16.32	-47.13	49.9	289.1	3.4	293.1
1970.00	1968.85	16.45	-47.71	50.5	289.0	3.7	286.0
1980.00	1978.83	16.59	-48.33	51.1	288.9	3.6	283.5
1990.00	1988.80	16.78	-49.01	51.8	288.9	4.5	275.3
2000.00	1998.77	16.98	-49.76	52.6	288.9	4.3	284.4
2010.00	2008.74	17.21	-50.45	53.3	288.8	4.2	289.5
2020.00	2018.72	17.42	-51.14	54.0	288.8	4.2	286.9
2030.00	2028.69	17.64	-51.84	54.8	288.8	4.2	287.3
2040.00	2038.66	17.85	-52.54	55.5	288.8	4.2	287.8
2050.00	2048.64	18.01	-53.25	56.2	288.7	4.3	284.2
2060.00	2058.61	18.21	-53.96	57.0	288.7	4.2	283.8
2070.00	2068.58	18.42	-54.65	57.7	288.6	4.1	286.7
2080.00	2078.56	18.63	-55.31	58.4	288.6	3.9	294.2
2090.00	2088.54	18.79	-55.95	59.0	288.6	3.8	299.7
2100.00	2098.51	18.99	-56.59	59.7	288.6	3.9	287.2
2110.00	2108.49	19.18	-57.23	60.4	288.5	3.8	290.1
2120.00	2118.47	19.36	-57.85	61.0	288.5	3.6	284.8
2130.00	2128.45	19.55	-58.46	61.6	288.5	3.6	285.0
2140.00	2138.43	19.71	-59.06	62.3	288.5	3.5	289.3
2150.00	2148.41	19.92	-59.64	62.9	288.5	3.5	288.3
2160.00	2158.39	20.07	-60.21	63.5	288.4	3.4	290.2
2170.00	2168.38	20.33	-60.72	64.0	288.5	3.3	271.0
2180.00	2178.36	20.43	-61.26	64.6	288.4	3.4	287.1
2190.00	2188.35	20.61	-61.80	65.1	288.4	3.1	285.4
2200.00	2198.33	20.78	-62.33	65.7	288.4	3.2	288.1
2210.00	2208.31	20.96	-62.85	66.3	288.4	3.2	293.9
2220.00	2218.30	21.13	-63.36	66.8	288.4	3.1	288.8
2230.00	2228.29	21.32	-63.87	67.3	288.5	3.3	291.5
2240.00	2238.27	21.49	-64.38	67.9	288.5	3.1	287.9
2250.00	2248.26	21.68	-64.88	68.4	288.5	3.1	289.2
2260.00	2258.24	21.87	-65.38	68.9	288.5	3.1	292.2
2270.00	2268.23	22.04	-65.88	69.5	288.5	3.0	291.9
2280.00	2278.21	22.23	-66.39	70.0	288.5	3.1	290.0
2290.00	2288.20	22.41	-66.89	70.5	288.5	3.1	290.2
2300.00	2298.18	22.60	-67.41	71.1	288.5	3.2	287.8
2310.00	2308.17	22.80	-67.92	71.6	288.6	3.3	288.6
2320.00	2318.15	22.98	-68.44	72.2	288.6	3.1	295.2
2330.00	2328.14	23.19	-68.94	72.7	288.6	3.1	297.7
2340.00	2338.12	23.38	-69.45	73.3	288.6	3.1	286.3
2350.00	2348.11	23.62	-69.93	73.8	288.7	3.1	300.4
2360.00	2358.09	23.83	-70.41	74.3	288.7	2.9	306.9
2370.00	2368.08	23.92	-70.75	74.7	288.7	3.8	246.5
2380.00	2378.06	24.12	-71.06	75.0	288.8	3.4	310.5
2390.00	2388.04	24.38	-71.56	75.6	288.8	3.2	309.8
2400.00	2398.03	24.55	-72.10	76.2	288.8	3.3	293.9
2410.00	2408.01	24.82	-72.58	76.7	288.9	3.1	296.3
2420.00	2418.00	24.85	-72.64	76.8	288.9	3.5	125.3
2430.00	2427.98	24.99	-72.78	77.0	289.0	3.4	294.6
2440.00	2437.97	25.23	-73.28	77.5	289.0	3.1	304.7
2450.00	2447.95	25.48	-73.74	78.0	289.1	3.0	296.0
2460.00	2457.94	25.70	-74.20	78.5	289.1	2.8	299.2
2470.00	2467.93	25.94	-74.63	79.0	289.2	2.9	302.3
2480.00	2477.92	26.18	-75.04	79.5	289.2	2.8	316.6
2490.00	2487.90	26.41	-75.45	79.9	289.3	2.8	298.7
2500.00	2497.89	26.66	-75.88	80.4	289.4	2.8	309.3
2510.00	2507.88	26.89	-76.29	80.9	289.4	2.8	306.7
2520.00	2517.87	27.14	-76.70	81.4	289.5	2.8	299.1
2530.00	2527.86	27.38	-77.11	81.8	289.5	2.5	302.9
2540.00	2537.85	27.63	-77.51	82.3	289.6	2.8	303.5
2550.00	2547.83	27.92	-77.92	82.8	289.7	2.7	317.7
2560.00	2557.82	28.17	-78.26	83.2	289.6	2.7	75.3
2570.00	2567.81	28.02	-78.26	83.1	289.7	2.2	23.8
2580.00	2577.80	28.22	-78.50	83.4	289.8	3.1	307.0
2590.00	2587.79	28.41	-78.93	83.9	289.8	2.5	286.6
2600.00	2597.78	28.68	-79.29	84.3	289.9	2.6	300.8
2610.00	2607.77	28.90	-79.55	84.6	290.0	2.8	287.3
2620.00	2617.76	28.91	-79.80	84.9	289.9	2.7	291.8
2630.00	2627.74	29.04	-80.03	85.1	289.9	2.6	292.7
2640.00	2637.73	29.31	-80.41	85.6	290.0	2.6	306.7
2650.00	2647.72	29.54	-80.80	86.0	290.1	2.9	311.1
2660.00	2657.71	29.76	-81.19	86.5	290.1	2.5	306.3
2670.00	2667.70	30.05	-81.56	86.9	290.2	3.0	306.6
2680.00	2677.69	30.38	-81.96	87.4	290.3	2.9	293.7
2690.00	2687.68	30.63	-82.36	87.9	290.4	2.8	290.5
2700.00	2697.66	30.90	-82.73	88.3	290.5	2.6	301.1
2710.00	2707.65	31.18	-83.09	88.7	290.6	2.8	303.4
2720.00	2717.64	31.47	-83.45	89.2	290.7	2.7	330.1
2730.00	2727.63	31.78	-83.79	89.6	290.8	2.6	315.3
2740.00	2737.62	31.94	-84.08	89.9	290.8	2.4	152.6
2746.60	2744.22	31.88	-85.95	89.7	290.7	2.8	142.8





1870	1900	30	SAND
1900	1960	60	SAND/SHALE/COAL
1960	1990	30	SAND
1990	2020	30	SAND/SHALE/COAL
2020	2080	60	SAND/SHALE
2080	2140	60	SAND
2140	2170	30	SAND/SHALE/COAL
2170	2200	30	SAND
2200			
2200	2350	150	SAND
2350	2380	30	SAND/COAL
2380	2410	30	SAND/SANDY SHALE/SAND
2410	2464	54	SAND
2464	2467	3	COAL P-3
2467	2500	33	SAND
2500	2530	30	SAND/SANDY SHALE
2530	2560	30	SAND/COAL/SAND
2560	2620	60	SAND
2620	2650	30	SAND/COAL
2650			
2650	2710	60	SAND/SHALE/COAL
2710	2740	30	SAND/SHALE
2740	2770	30	SAND/SHALE/SOME RED SHALE

2770' - TOTAL DEPTH  
26' - 13 3/8" CASING  
489.50' - 7" CASING  
2554.40' - 4 1/2" CASING