

Company FACE BOYER CONSTRUCTION COMPANY  
 Address ROOM 305 NELSON BUILDING CHARLESTON, W. VA.  
 Farm QUARRIER  
 Tract \_\_\_\_\_ Acres 1093.13 Lease No. \_\_\_\_\_  
 Well (Farm) No. 8 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 897.22  
 Quadrangle PEYTONA-NC  
 County KANAWHA District LOUDEN  
 Engineer GEO. H. MILLER  
 Engineer's Registration No. 1892  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date MAY 6 1965 Scale 1" = 500'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 FILE NO. KAN-2042

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

No Samples 6-6 305 Deep Well



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Peytona

Permit No. KAN-2042

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company PACE BOWER CONSTRUCTION COMPANY  
Address 305 Nelson Bldg., Charleston, W. Va.  
Farm Russell G. Quarrier Heirs, 1093.13 Acres  
Location (waters) Four Mile Fork of Lens Creek  
Well No. 8 Elev. 895.22 G.L.  
District Louden County Kanawha Elev. 911.34 K.L.  
The surface of tract is owned in fee by Lucy S. Quarrier  
800 Orchard Street, Charleston, W. Va.  
Mineral rights are owned by \_\_\_\_\_

Drilling commenced 5/21/65  
Drilling completed 6/12/65  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

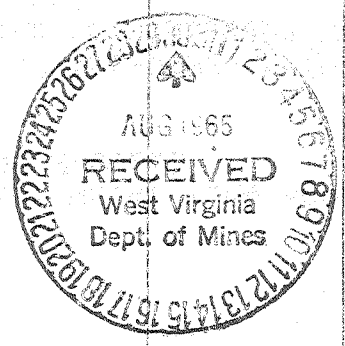
Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume 70 MCF Natural Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. hrs.  
Oil \_\_\_\_\_ lbs., 1st 24 hrs.  
WELL ACIDIZED 6/22/65-1500 gallons Mud  
Acid (Dowell)-400 MCF after Acidizing  
WELL FRACTURED 6/26/65 (Dowell) See Reverse Side or Attached Sheet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
<u>13-3/8-48#</u>	<u>33'11"</u>	<u>33'11"</u>	<u>Parmco Upside</u>
<u>9-5/8-32#-1418</u>	<u>1418 G.L.</u>	<u>1418 G.L.</u>	<u>Down Type "A"</u>
<u>7"-23#</u>	<u>5195</u>	<u>5195 G.L.</u>	<u>Depth set 5174</u>
<u>53/16</u>			<u>Notched Pack top 5225</u>
<u>2-7/8-6.4#</u>		<u>5174 G.L.</u>	<u>Notched Pack bottom 5232</u>
Liners Used			<u>Notched Perf. top</u>
			<u>Perf. bottom</u>

CASING CEMENTED	SIZE	No. Ft	Date
<u>13-3/8-5/21/65</u>	<u>(30 bags)</u>	<u>9-5/8-5/28/65</u>	
<u>(125 bags)</u>	<u>7"-5/7/65</u>	<u>(110 bags)</u>	
<u>COAL WAS ENCOUNTERED AT _____ FEET</u>	<u>_____ INCHES</u>		
<u>107- _____ FEET</u>	<u>_____ INCHES</u>	<u>_____ FEET</u>	<u>_____ INCHES</u>
<u>110 (Driller) _____ FEET</u>	<u>_____ INCHES</u>	<u>_____ FEET</u>	<u>_____ INCHES</u>

RESULT AFTER TREATMENT (Fractured) 1,400 MCF  
ROCK PRESSURE AFTER TREATMENT 2050#  
Fresh Water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand			0	17			
Siltstone			17	43	Water -	28'	
Shale			43	60			
Sandstone			60	95			
Shale			95	154			
Sandstone			154	170			
Shale			170	200			
Sand			200	210			
Shale			210	222			
Siltstone			222	241			
Sand			241	320			
Shale			320	348			
Siltstone			348	410			
Siltstone and Sandstone			410	443			
Sandstone			443	605			
Shale			605	615			
Sandstone			615	677			
Shale			677	694			
Siltstone			694	704			
Sandstone			704	852			
Siltstone and Sand			852	836			
Shale			836	895			
Siltstone			895	898			
Shale			898	914			
Siltstone			914	938			
Sand			938	992			
Shale			992	1030			



(Continued on Attached Sheet)

(over)

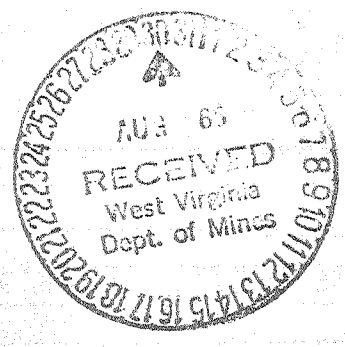
Formation	Top	Bottom	
Sand - <i>Marion</i>	1030	1069	
Siltstone and Shale	1069	1130	
Little Lime	1130	1206	
Big Lime	1206	1388	
Big Injun	1388	1416	
Siltstone and Shale	1416	1826	
Coffee Shale	1826	1835	
Berea	1835	1837	
Shale	1837	4430	
Marcellus	4430	4454	
Onondaga	4454	4550	
Oriskany	4550	4560	
Limestone and Dolomite	4560	5224-Sulphur Water Zone	5090-5130-Drilling Time
Newburg Sand	5224	5295-70 MCF Natural	
Dolomite <i>545</i>	5295	5383	
Limestone	5383	5426	
Keefer	5426	5475-Show of gas-5433-35	(Drilling Time
Shale - <i>Rose Hill</i>	5475	5503 and Baroid "Sniffer" Unit)	
Total Depth		5500-(Driller)	
		5503-(Logger)	

5224  
911  
4313

Chronological Sequence of Events:

- 5/21/65-Commenced Drilling
- 5/21/65-Ran 33'11" of 13-3/8"-48# and cemented with 30 bags.
- 5/27/65-Logged well: Gamma Log-0-1434 and Density Log-313-1434 (Lane Wells)
- 5/28/65-Ran 1418' of 9-5/8"-32# and cemented with 125 bags. (Dowell)
- 6/7/65-Ran 5195' of 7"-23# and cemented with 110 bags. (Dowell)
- 6/9/65-Ran Cement Bond Log - 4000-5130 (McCullough)
- 6/12/65-Completed Drilling - Total Depth-5500
- 6/13/65-Logged Well:
  - Gamma Log 1330-1980 and 4330-5503 (Schlumberger)
  - Density Log 1330-1980 and 4330-5503 (Schlumberger)
  - Induction Log 5211-5497 (Schlumberger)
  - Temperature 4001-5501 (Schlumberger)
- 6/14/65-Ran plug with 5' of Calceal on top at 5275
- 6/18/65-Fractured Notched at 5225 and 5232 (McCullough measurements)
  - 5229-36-Schlumberger Density Log
- 6/22/65-Acidized Newburg with 1500 gallons of Mud Acid (Dowell)
- 6/26/65-Fractured Newburg with:
  - 300 gallons Mud Acid (Spearhead)
  - 2000# 12-20 glass beads
  - 18,000# 20-40 sand
  - 521 barrels water

Average Liquid Injection Rate 9.5  
 Adjusted Injection Rate 10.0  
 Maximum Pressure 5700#  
 Average Pressure 5428#



Natural Open Flow - 70MCF  
 After Acidizing - 400 MCF  
 After Fracturing as follows:  
 6/30/65-Open 6 hours = 572 MCF  
 7/1/65- " 6 " = 626 MCF  
 7/2/65- " 6 " = 676 MCF  
 7/6/65- " 6 " = 745 MCF  
 7/7/65- " 5 " = 809 MCF  
 8/8/65- " 4 " = 1,400 MCF

(0 -1455 = Foam)  
 (1455-5050 = Air)  
 (5050-5211 = Mud)  
 (5211-5290 = Air)  
 (5290-5503 = Foam)

24 Hour Rock Pressure = 2050#