



$\frac{7.5'}{38^\circ 30'} = 1.438$ $\frac{15'}{81^\circ 30'} = 2.160$
 $\frac{15'}{38^\circ 30'} = 2.160$ $\frac{7.5'}{81^\circ 30'} = 1.438$

2.3 W
 1.37

Company	Columbian Carbon Co.		
Address	Box 1240, Charleston, W.Va.		
Farm	Patrick & Carte		
Tract	Acres	73.84	Lease No. C-213
Well (Farm) No.	1	Serial No.	
Elevation (Spirit Level)	880		
Quadrangle	Charleston		
County	Kanawha	District	Elk
Engineer	James N. Sell		
Engineer's Registration No.	772		
File No.	Drawing No.		
Date	7-13-37	Scale	1"-40P

STATE OF WEST VIRGINIA
 Department of Mines
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 File No. KAN-429

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.

6-6-192

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

WELL RECORD

Permit No. Kan-429

Gas Well

Charleston Quad.

CASING & TUBING

Company	Columbian Carbon Co.	14"	43	43
Address	Box 1240, Charleston, W.Va.	10 $\frac{3}{4}$ "	421	Pulled
Farm	Patrick & Carte Acres 73.84	8 5/8"	1618'11"	1618'
Location	Aarons Fork of Little Sandy Cr.			11"
Well No.	1 (GW-401) Elev. 880.0 d.f.	6 5/8"	4963'5"	4963'5"
District	Elk County Kanawha	3 $\frac{1}{2}$ "	95'	95'
Surface Address	F.L. Patrick & E.F. Patrick, Big Chimney, W.Va.	2 3/8"	5123'2"	5123'2"
Mineral	F.L. Patrick et al			
	(For Names and Addresses contact Columbian Carbon)			
Drilling	Commenced 8-20-37			
	Completed 1-1-38			
Date Shot	1-2-38			
Volume	2,432,592 Cu.Ft.			
Rock Press.	740# 17 hrs.			

PACKER
Kind 2x6 5/8" O.W.S.
Conical Sleeve
Swabbing.
Depth 5015
CEMENT RECORD: See below.

Formation	Color	H ₂ O	TOP	Base	Result	Formation	Color	H ₂ O	TOP	Base	Result
Red Rock			0	47		Corniferous Lime			4926	5042	
Sand			47	105		Oriskany Sand			5042	5109	
Slate			105	130		Lime			5109	5110	Pay
Red Rock			130	150							5062'
Slate			150	180		TOTAL DEPTH				5110	5065
Red Rock			180	190							
Slate			190	300		CEMENT RECORD: 10-5-37- Cemented 8 5/8"					
Sand			300	340		casing. Ran 78 sacks Cement with 2%					
Shell			340	360		Aquagel. 4 sacks Aquagel ran ahead of					
Slate			360	370		cement. 7' spacer below top plug. Plug					
Sand			370	395		stopped 10' off bottom. Pipe failed to					
Slate & Shells			395	430		go back to bottom-up 1'. 12' cement					
Sand			430	458		left in pipe. (Guy Jones, Cementer,					
Slate			458	480		Halliburton Oil Well Cementing Co.)					
Sand			480	495							
Slate			495	565		12-9-37- Cemented 6 5/8" casing. Ran 30					
Sand			565	590		sacks Alpha cement. Ran 9' wood spacer on					
Slate			590	620		bottom. Pipe went back to bottom. Left					
Sand			620	640		25' cement in hole. (R.B.Morrison, Cementer					
Slate			640	665		Halliburton Oil Well Cementing Co.)					
Sand			665	715							
Slate			715	760							
Sand			760	804							
Slate & Shells			804	975							
1st Salt Sand			975	1005							
Slate			1005	1020							
2nd Salt Sand			1020	1030							
Slate			1030	1035	Water						
3rd Salt Sand			1035	1400	1175'						
Slate			1400	1403	HPW						
Sand			1403	1470							
Slate & Shells			1470	1490							
Maxon Sand			1490	1524							
Red Rock			1524	1527							
Lime	Black		1527	1542							
Slate			1542	1546							
Little Lime			1546	1576							
Pencil Cave			1576	1579							
Big Lime			1579	1760							
Big Injun Sand			1760	1812							
Slate & Shells			1812	3844							
Shale	Brown		3844	3880							
Slate & Shells			3880	4650							
Shale	Brown		4650	4810							
Slate	White		4810	4840							
Shale	Brown		4840	4926							

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

WELL RECORD

Permit No. Kan. 429 (CORRECTED)

Gas Well

Charleston Quad.

CASING & TUBING

Company Columbian Carbon Co.
 Address Box 1240, Charleston, W.Va.
 Farm Patrick & Carte Acres 73.84
 Location Aarons Fork of Little Sandy Cr.
 Well No. 1 (GW-401) Elev. 904.4 df
 District Elk County Kanawha
 Surface F.L. Patrick & E.F. Patrick
 Address Big Chimney, W.Va.
 Mineral F.L. Patrick et al

14"	43	43
10 $\frac{3}{4}$ "	421'1"	Pulled
8 5/8"	1681'11"	1681'11"
6 5/8"	4963'5"	4963'5"
3 $\frac{1}{2}$ "	95'	95'
2 3/8"	5123'2"	5123'2"

Drilling
 Commenced 8-20-37
 Completed 1-1-38
 Date Shot 1-2-38 Depth 5060-5090
 Volume 2,432,592 Cu.Ft.
 Rock Press. 740# 17 hrs.

PACKER
 Kind O.W.S. Conical Sleeve
 Swabbing
 Size 2 x 6 5/8"
 Depth 5015
 CASING: See note below.

Formation Color		Top	Base	Result	Formation Color		Top	Base	Result
Red Rock		0	47		Corniferous		4926	5042	
Sand		47	105		Criskany Sand		5042	5109	
Slate		105	130		Lime		5109	5110	Pay
Red Rock		130	150						5062
Slate		150	180						5065
Red Rock		180	190						Pay
Slate		190	300						5071
Sand		300	340						5072 $\frac{1}{2}$
Shell		340	360						
Slate		360	370		TOTAL DEPTH			5110	
Sand		370	395						
Slate & Shells		395	430						
Sand		430	458						
Slate		458	480						
Sand		480	495						
Slate		495	565						
Sand		565	590						
Slate		590	620						
Sand		620	640						
Slate		640	665						
Sand		665	715						
Slate		715	760						
Sand		760	804						
Slate & Shells		804	975						
1st Salt Sand		975	1005						
Slate		1005	1020						
2nd Salt Sand		1020	1030						
Slate		1030	1035						
3rd Salt Sand		1035	1400	Water					
Slate		1400	1403	1175					
Sand		1403	1470	HFW					
Slate & Shells		1470	1490						
Carbon Sand		1490	1524						
Red Rock		1524	1527						
Lime	Black	1527	1542						
Slate		1542	1546						
Little Lime		1546	1576						
Pencil Cave		1576	1587	SIM					
Big Lime		1587	1760	1587					
Big Injun Sand		1760	1812						
Slate and Shells		1812	3844						
Shale	Brown	3844	3880						
Slate & Shells		3880	4650						
Shale	Brown	4650	4810						
Slate	White	4810	4840						
Shale	Brown	4840	4926						