



Company COLUMBIAN CARBON CO.
 Address BOX 1240 - CHARLESTON - W. VA.
 Farm THE PUTNAM CO.
 Tract _____ Acres 1190 Lease No. C-1556
 Well (Farm) No. 5, 6, 7 & 8 Serial No. _____
 Elevation (Spirit Level) 5- 924.1 7- 824.5
 6- 996.5 8- 710.8
 Quadrangle KENNA (8)
 County JACKSON District 5-6- RIPLEY
7-8- WASH.
 Engineer [Signature]
 Engineers Registration No. 772
 File No. _____ Drawing No. _____
 Date MAY 1, 1941 Scale 1" = 1320'

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

WELL LOCATION MAP
 FILE NO. JAC-144-147 INCL. _____
 WELLS 5-8 INC

+ 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.

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Jac-145		Gas Well
Company	Columbian Carbon Co.	Casing & Tubing
Address	Box 1240, Charleston, W. Va.	16 38' 3" 38' 3"
Farm	The Putnam Co. Acres 1190	10 3/8 1080' 6" 592' 8"
Location	Left Fork, Poca River	8 5/8 2200' 4" 2200' 4"
Well No	6 (GW-490) Elev. 1002.7 DF	7 5235' 6" 5235' 6"
District	Ripley Jackson County	2 3/8 5369' 2" 5369' 2"
Surface	J.M. White, R. #1 Kenna, W. Va.	3 1/2 93' 11" 93' 11"
Mineral	The Putnam Co., et al (Columbian Carbon Co.-addresses)	No Packer
Commenced	5-28-41	
Completed	8-24-41	Cement Record below:
Shot	8-25-41 Depth 5290-7370	
Volume	1,220 MCF	
Rock Pressure	860 lbs 6 days	
Salt Water	100' 1 blr. pr hr; 1340' 1 Blr. pr. hr.; 1665' 2 blrs. pr hr; 1671' Hole Full	

Surface	0	10	Slate	1545	1560
Sand	10	18	Lime	1560	1605
Red Rock	18	70	✓ Salt Sand	1605	1902
Slate	70	80	Slate	1902	1909
Sand	80	138	Sand	1909	1945
Slate	138	170	Slate	1945	1950
Red Rock	170	195	Sand	1950	1964
Slate	195	200	Slate	1964	1968
Red Rock	200	210	--- Big Lime	1968	2122
Sand	210	220	--- Big Injun	2122	2182
Red Rock	220	255	Slate	2182	2184
Slate	255	290	Shells	2184	2190
Red Rock	290	320	Slate	2190	2194
Slate	320	375	Lime Shells	2194	2204
Red Rock	375	383	Slate & Shell	2204	2573
Slate	383	395	--- Brown Shale	2573	2585
Sand	395	420	--- Berea Sand	2585	2592
Slate	420	470	Slate & Shell	2592	4100
Red Rock	470	515	Brown Shale	4100	4130
Slate	515	560	White Slate	4130	4265
Sand	560	582	Brown Shale	4265	4420
Slate	582	620	White Slate	4420	4880
✓ Coal	620	622	Brown Shale	4880	5120
White Slate	622	635	White Slate	5120	5150
Sand	635	670	--- Black Shale	5150	5181 SLM - MARCELLUS
Red Rock	670	727	--- Corniferous	5181 SLM	5292 SLM
Lime	727	737	✓ Oriskany Sand	5292 SLM	5330
White Slate	737	755	Lime Break	5330	5350
Red Rock	755	768	✓ Oriskany	5350	5372
Lime	768	780	--- Lime	5372	5387 SLM
Slate	780	810			
Red Rock	810	840	TOTAL DEPTH	5387 SLM	
Lime	840	865			
Slate	865	878	PAYS: 5293-5308; 5315-23; 5331-33		
Red Rock	878	915	5345-46; 5356-59; 5372-76		
Slate	915	946			
Lime	946	950	CEMENT RECORD:		
Slate	950	980	6-10-41-Mudded 10 3/4"		
Sand	980	1100	casing.		
Slate	1100	1116	6-30-41-Cemented 8 5/8"		
Sand	1116	1146	casing. Ran 2 sacks Aquagol mixed		
White Slate	1146	1195	with 129 sacks Alpha cement. Ran		
Sand	1195	1270	plug following cement. 159' cement		
Black Slate	1270	1312	in pipe.		
Sand	1312	1348	8-11-41-Cemented 7"		
Slate	1348	1456	casing. Ran 10 sacks Alpha cement in		
Sand	1456	1470	dump bailer. 60' cement in hole		
Slate	1470	1535			
Lime	1535	1542			
✓ Coal	1542	1545			