



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Horton 9 SW

Permit No. Ran 94

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Columbian Carbon Company, Operator
Address Box 873, Charleston 23, W. Va.
Farm United States of America Acres 1730.90
Location (waters) East Fork of Glady Fork
Well No. G-3 - GW-1264 Elev. 2980.30'G
District Dry Fork County Randolph
The surface of tract is owned in fee by Director, Bureau of Land Management
Interior Building Address Washington 25, D. C.
Mineral rights are owned by Same
Address _____

Drilling commenced 5-22-57
Drilling completed 8-9-57
Date Shot not shot From _____ To _____
With _____
Open Flow 10ths Water in _____ Inch
34ths Merc. in 5 1/2" 15.5# Inch
Volume 5,602,000 Cu. Ft.
Rock Pressure 2050 lbs. 48 hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED not acidized
WELL FRACTURED See reverse side.

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16" 65#	32'4"	32'4"	Kind of Packer
18 3/8" 48#	52'6"	52'6"	None
10 3/4" 40.5#	759'1"	759'1"	Size of
8 3/4"			
6 5/8"			Depth set
5 3/4" 15.5#	5482'3"	5482'3"	
3"			Perf. top
2 3/8" 4.6#	5257'6"	5257'6"	Perf. bottom
Liners Used (Cage set at 5188')			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
See reverse side.

COAL WAS ENCOUNTERED AT none FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES
_____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT 5,602,000 cubic feet
ROCK PRESSURE AFTER TREATMENT 2050# - 48 hours
Fresh Water 95' Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	7			
Gravel			7	15			
Slate			15	22			
Dark Lime			22	48			
White Lime			48	130	Fresh water	95'	Hole full
Lime			130	165			
Slate			165	179			
Lime			179	200			
Slate & Shells			200	240			
Lime			240	300			
Slate & Shells			300	350			
Lime Shells			350	400			
Slate & Shells			400	418			
Dark Lime			418	450			
Slate			450	500			
Lime			500	584			
Slate			584	600			
Lime			600	692			
Slate			692	720			
Lime			720	840	759'DLM - 760'SLM		
Slate & Shells			840	890			
Lime			890	930			
Slate & Shells			930	980			
Lime			980	1012			
Broken Lime			1012	1090			
Lime			1090	1115			
Slate & Shells			1115	1240			
Lime			1240	1269			
Slate & Shells			1269	1296			
Shale & Lime			1296	1426			

(over)

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1426	1495			
Lime Shells			1495	1635			
Slate & Lime			1635	1735			
Lime			1735	1755			
Shale & Lime			1755	1830			
Shale & Lime Streaks			1830	1875			
Shale			1875	1882			
Lime & Shale			1882	1907			
Shale & Lime Streaks			1907	1985			
Shale & Lime			1985	2180			
Shale & Lime			2180	2290			
Lime			2290	2385			
Shale & Lime			2385	2465			
Shale			2465	2700			
Lime			2700	2730			
Shale			2730	3420			
Shale & Lime			3420	3700			
Shale			3700	3760			
Shale & Lime			3760	3964			
Dark Shale			3964	4150			
Dark Shale & Lime			4150	4472			
Shale & Lime			4472	4550			
Dark Brown Shale			4550	4606			
Dark Shale & Lime			4606	4610			
Lime			4610	4612			
Lime and Shale			4612	4625			
Shale & Lime			4625	4707			
Shale & Lime			4707	4710			
Brown Break			4710				
Onondaga Lime			4710	4750			
Chert			4750	4953			
Sand			4953	5232	Gas	5030-5040'	46/10 W 3" -643M
Lime & Shale			5232	5430	Gas	5115'	50/10 W 3" -671M
Dark Brown Shale			5430	5443			
Shale & Lime Streaks			5443	5453			
TOTAL DEPTH			5453'DLM - 5439' Landing Flange				
<u>CASING RECORD</u>							
5-24-57 - Ran 32'4" of 16" Drive Pipe set at 32' DLM.							
5-29-57 - Ran 52'6" of 13 3/8" O. D. Casing set at 52'DLM.							
6-14-57 - Ran 759'1" of 10 3/4" O. D. Casing with shoe at 751'DLM. Cemented on 6-24-57 with 300 sacks of cement.							
8- 9-57 - Ran 5482'3" of 5 1/2" O. D. 15.5# casing set in Landing Flange at 5439'. Ran 5 - 5" centralizers. Cemented with 380 sacks of cement. Pumped top plug to 5357.							
<u>FRACTURING RECORD 8-31-57.</u>							
Before fracturing gas gauged 582MCF. Used 10 pumps and 2 blenders. Pumped in 10 bbls. kerosene and 1,000 gal. MCA, 90 bbls. kerosene. Pumped 300 bbls. gelled kerosene. Pressure started at 2500# - dropped to 2250#. Started pumping in rubber perforation balls when 50 bbls. gelled kerosene in. Pressure raised gradually to 2700# - Pumped in 139 balls. Gel time - 8 minutes. Injection rate 37 1/2 bbl. per minute. Pumped 150 bbls. kerosene flush. Pressure started at 2700#. Rose gradually to 2900# at end. Time 4 minutes - Injection rate 37 1/2 barrels per minute. Used 15,600# of Sand. Pressure 15 minutes after quitting 1400#.							
Final open flow 34/10 Mercury 5 1/2" - 5,602 MCF. 48 hour pressure 2050#.							

4710
 2980

 -1730

4953
 2980

 -1973

3232
 2980

 2252

Date 9-18, 19 57

APPROVED Columbian Carbon Company Operator
 Owner
 By R. P. Anderson, General Manager
 (Title)