

LEWIS MAXWELL
C-32-A 2654A

Company	COLUMBIAN CARBON COMPANY
Address	BOX 873 CHARLESTON W.Va
Farm	LEWIS MAXWELL
Tract	Acres 2654 Lease No. C-32-A
Well (Farm) No.	64-A Serial No. GW-1279
Elevation (Spirit Level)	10311' SE
Quadrangle	WEST UNION-T 3562 N-200
County	DODDRIDGE District West UNION
Engineer	<i>[Signature]</i>
Engineer's Registration No.	2074
File No.	Drawing No. W-21-57
Date	Oct 7, 1957 Scale 1"=320'

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

WELL LOCATION MAP
FILE NO. DOD-238

+ 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.

6-0-133 ✓

Fract 1950
Failure



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 2

Quadrangle West Union 7 SW

Permit No. DOD-238

WELL RECORD

Oil or Gas Well Gas *show*

Company Columbian Carbon Company
Address Box 873, Charleston 23, W. Va.
Farm Lewis Maxwell Acres 2,654
Location (waters) Cabin Run
Well No. 64-A GW-1279 Elev. 1031.11'
District West Union County Doddridge
The surface of tract is owned in fee by Everette W. Maxwell
R.F.D. Address West Union, W. Va.
Mineral rights are owned by Mrs. Grace Gaylord, etal
(For further addresses contact Columbian Carbon Co)
Address _____

Drilling commenced 11-22-57
Drilling completed 1-15-58
Date Shot not shot From _____ To _____
With _____

Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ 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			Kind of Packer
16			<u>none</u>
13 3/8"	<u>12'</u>	<u>12'</u>	Size of
10 3/4" 40.5#	<u>456'4"</u>	<u>Pulled</u>	Depth set
8 5/8" 24#	<u>1346'7"</u>	<u>Pulled</u>	
5 3/4" 23#	<u>1774'3"</u>	<u>1774'3"</u>	
5 3/16"			
3			Perf. top
2			Perf. bottom
Liners Used			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 _____

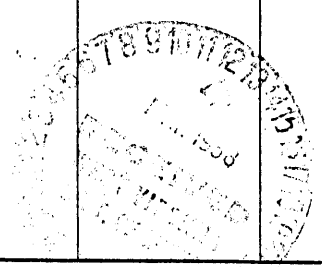
RESULT AFTER TREATMENT 4/10 W 1" - 21,060 CF

ROCK PRESSURE AFTER TREATMENT 19 hours 135#.

Fresh Water 188' 200' Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	10			
Dark Sand			10	40			
Red Rock			40	70			
Brown Sand			70	109			
Slate			109	127			
Red Rock			127	145			
Blue Slate			145	160			
Red Rock			160	230	Fresh water	188'	2-13" bailers/hr
Gray Sand			230	287	" "	200'	Hole full
Dark Lime			287	322			
Red Rock			322	340			
Dark Lime			340	364			
Blue Slate			364	375			
Black Lime			375	385			
Black Slate			385	392			
Dark Lime	<u>454'SLM - 452'DLM</u>		392	512			
Red Rock			512	527			
Gray Lime			527	551			
Red Rock			551	562			
Gritty Lime			562	684			
Gray Sand			684	713			
Black Slate			713	741			
Red Rock			741	758			
Blue Slate			758	772			
Blue Lime			772	804			
Blue Slate			804	849			
Sand			849	869			
Lime			869	910			
Black Slate			910	940			
Dark Lime			940	957			

(over)



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
White Sand			957	964			
Black Slate			964	985			
Lime			985	1055			
Black Slate			1055	1072			
Gray Sand			1072	1167			
Black Lime			1167	1188			
Sand			1188	1234			
Lime			1234	1266			
Slate			1266	1330			
Gritty Lime			1330	1350			
White Sand			1350	1371			
Black Slate			1371	1435			
Gray Sand			1435	1460			
Black Slate			1460	1660			
Gritty Lime			1660	1740			
Black Pencil Slate			1740	1748			
Big Lime			1748	1865			
Injun Sand			1865	1890	Gas	1890'	Small Show
Slate			1890	1935			
TOTAL DEPTH			-----				
				1935'	DLM		
CASING RECORD							
12-14-57 - Ran 456'4" of 10 3/4" 40.5# casing, on shoe with red mud at 452' SLM.							
12-31-57 - Ran 1346'7" of 8 5/8" casing at 1386' DLM on shoe. Ran 17 sacks aquagel.							
1-8-58 - Ran 1774'3" of 7" 23# casing set at 1760' DLM on shoe.							
FRACTURING RECORD							
Filled back from 1935' to 1900' with 2 bags cement. ✓							
1-18-58 Ran 3" tubing and set packer at 1830'. ✓							
1-20-58 Fractured with 4,000 gallons gelled kerosene - 1260 gallons breakdown and 10 gallons Hyflo, 4,000# sand. Breakdown 2150# maximum - final 2,000# - 3 minute injection rate 325 gpm. Frac - maximum pressure 2400# - final 2200#. 18 minutes - 295 gpm start - average 325 gpm. Flushed with 1470 gallons crude oil and kerosene. Maximum pressure 2300# - final 2200# - 4 minutes 367 gpm. 30 minutes after shutting down 1500#. Shut in.							
1-21-58 - Opened well - flowed back 15 barrels oil - quit flowing. S. I. to rig up.							
1-22-58 - 40 barrels oil back total - swabbed to bottom twice - still coming back. No gas. Shut in 14 hours 10# pressure.							
1-23-58 - Released packer - pulled tubing - 6' of sand in hole. No gas. Bailing oil and sand.							
1-30-58 - Drilled 5' more of pocket - total depth 1902' - gas 5/10 W 1" 23,560 cu. ft.							
(2-7-58 - Ran steel line measurement 1907' total depth.							
2-10-58 - Reran tubing. Set Baker open hole packer at 1836'. Filled back to 1895'. Gas 5/10 W 1" 23,560 cu. ft. - 16 hour pressure 265#. ✓							
2-11-58 - Pumped in 2 barrels oil and 500 gallons mud acid. Displaced in 3 stages - 150 gallons at 1400# pressure. After five minutes 150 gallons at 1400# - after 5 minutes 200 gallons at 1500#. Broke down with plain water. Maximum pressure 2800#. Pumped in 8,000 gallons plain water with 10 gallons breaker and tergitol with 3600# sand. Started sand at 1/3#/gallon increased to 1#/gallon. Pumping pressure 2100# - increased to 2500# maximum at end of frac material. Injection rate 444 gpm. Flushed with 30 barrels water. Pressure started and averaged 2100# - injection rate 315 gpm.							
Final open flow 4/10 W 1" - 21,060 cubic feet. 19 hour pressure 135#. ✓							

Date 3-7, 19 58

APPROVED Columbian Carbon Company, Owner

By R. B. Anderson, General Manager.
(Title)