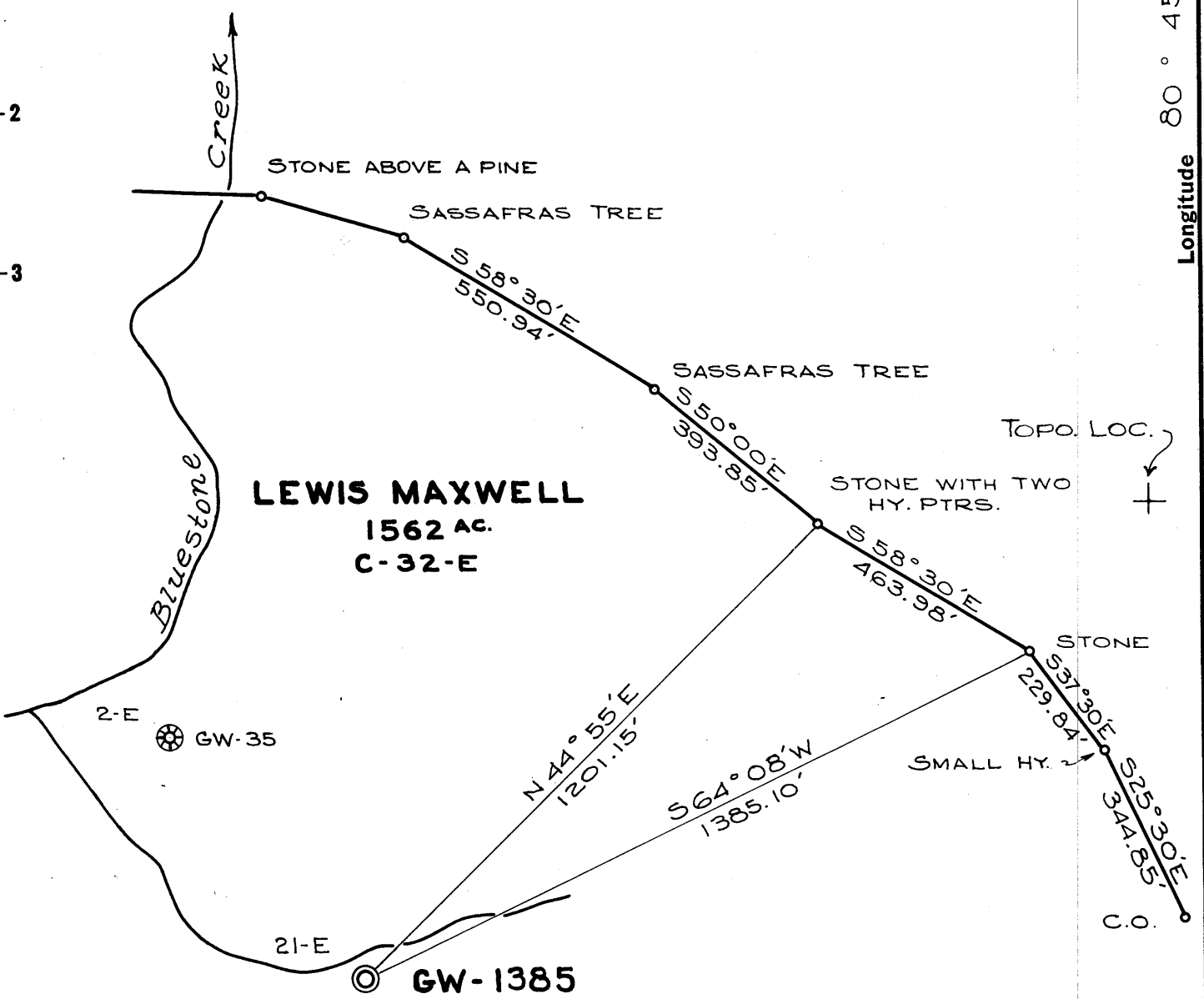


M

1 2 3

Latitude 39° 20'

Longitude 80° 45'



458-2
464-5
0.33 W.

30-A

New Location
 Drill Deeper
 Abandonment

Company COLUMBIAN CARBON CO.
 Address BOX 873 CHARLESTON, W.VA.
 Farm LEWIS MAXWELL
 Tract _____ Acres 1562 Lease No. C-32-E
 Well (Farm) No. 21-E Serial No. GW 1385
 Elevation (Spirit Level) 865.47'
 Quadrangle WEST UNION ^{SE} S464 W032
 County DODDRIDGE District WEST UNION
 Engineer [Signature]
 Engineer's Registration No. 2074
 File No. _____ Drawing No. W-25-62
 Date JUNE 26, 1962 Scale 1" = 300'

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

WELL LOCATION MAP
 FILE NO. Doc-829

+ 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.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 13

Quadrangle West Union S. W.

Permit No. Dod-829

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Columbian Carbon Company
Address P. O. Box 873, Charleston 23, W. Va.
Farm Lewis Maxwell Acres 1562
Location (waters) Bluestone Creek
Well No. 21-E, GW-1385 Elev. 865.47'
District West Union County Doddridge
The surface of tract is owned in fee by Leeman Maxwell III
Address West Union, W. Va.
Mineral rights are owned by Mrs. Grace Gaylord, etal
420 Kemmerer Rd. State College, Pa
(for further add. contact C. C. G.)
Drilling commenced 7-9-62
Drilling completed 8-8-62
Date Shot not shot From _____ To _____
With _____
Open Flow 7 /10ths Water in 2 Inch
/10ths Merc. in _____ Inch
Volume 112,000 Cu. Ft.
Rock Pressure 600 lbs. 17 hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED not acidized

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			<u>none</u>
13			Size of
10 3/4" 22.88#	18'	18'	
8 1/4"			Depth set
7" 23#	793'2"	793'2"	
5 3/16" 14#	1602'5"	1602'5"	Perf. top
3			Perf. bottom
2 3/8" 4#	1673'4"	1673'4"	Perf. top
Liners Used	w/ 2" cage		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

WELL FRACTURED see reverse side

RESULT AFTER TREATMENT 35/10 M. 5-1/2" 14# = 5,750,000 cu. ft.
ROCK PRESSURE AFTER TREATMENT 24 hours 600# -- 72 hours 640#
Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Top Soil			0	20			
Sand			20	59			
Slate			59	61			
Sand			61	65			
Lime			65	70			
Sand			70	100			
Lime			100	145			
Slate and Shells			145	170			
Lime			170	200			
Slate and Shells			200	235			
Sand			235	250			
Slate			250	263			
Red Rock			263	268			
Slate and Shells			268	300			
Red Rock			300	305			
Slate and Shells			305	340			
Gritty Lime			340	350			
Sand			350	360			
Slate and Shells			360	420			
Lime			420	450			
Slate and Shells			450	520			
Lime			520	540			
Red Rock			540	550			
Slate and Shells			550	570			
Lime			570	590			
Sand			590	605			
Slate and Shells			605	718			

(over)



Formation	Color	Hard or Soft	Top 13	Bottom	Oil, Gas or Water	Depth Found	Remarks
Little Dunkard			718	737			
Slate			737	748			
Big Dunkard			748	818			
Slate and Shells			818	872			
Sand			872	905			
Slate			905	910			
Sand			910	950			
Gritty Lime			950	1020			
Slate and Shells			1020	1035			
First Salt Sand			1035	1110			
Slate			1110	1141			
Slate and Shells			1141	1170			
Lime			1170	1208			
Slate and Shells			1208	1265			
Lime			1265	1270			
Second Salt Sand			1270	1340	Gas 1300-04' 4/10 W. 2" = 84MCF		
Slate and Shells			1340	1430	Gas 1310-14' incr. to 30/10 W. 2" =		
Lime			1430	1438	231M-blew down to 84M		
Maxon Sand			1438	1472			
Slate and Shells			1472	1485			
Lime Shells			1485	1504			
Little Lime			1504	1540			
Big Lime			1540	1615	1591'DLM=1590'SLM		
Big Injun			1615	1690	Gas 1633-37' 4/10 W 2" = 84M		
Slate			1690	1701	Gas 1655' incr. to 10/10 W. 2"=133M blew down to 7/10 W. 2" = 112M		
Total depth-----				1701'			
Filled back to-----				1685'			
 <u>FRACED THE BIG INJUN 8-10-62</u>							
Before fracturing gas gauged 7/10 W. 2" = 112MCF. 17 hour rock pressure 600#. Ran 2,000 gal. 15% acid-displaced with 2,000 gallons water. Pumped in 29,400 gallons water, 110 gallons Tergitol (TMN and T-08). Flushed with 2,100 gallons water. Broke down at 1900#-final pressure 1800#. Used 40,000# sand, maximum pressure 1900#. Flushed with 1500 gallons. Pumping time 17 minutes-average 41.6 bbls/min. 2 HT pumps-opened well-flowed and died. Ran bailer-well flowing.							
Final open flow = 35/10 M. 5-1/2" 14# = 5,750 MCF.							
 <u>CASING RECORD</u>							
7-10-62	Ran 10-3/4" drive pipe at 18'DLM.						
7-20-62	Ran 7" casing with shoe at 789'DLM-set in 20' red mud.						
8-1-62	Ran 5-1/2" casing with shoe 1591'DLM=1590'SLM with R/L nipple at 1327'5" - 2 centralizers on 1st and 3rd joints-cemented with 15sacks.						

Date August 17, 1962

APPROVED Columbian Carbon Company, Owner

By W. S. Moore, Mgr. of Prod.
(Title)