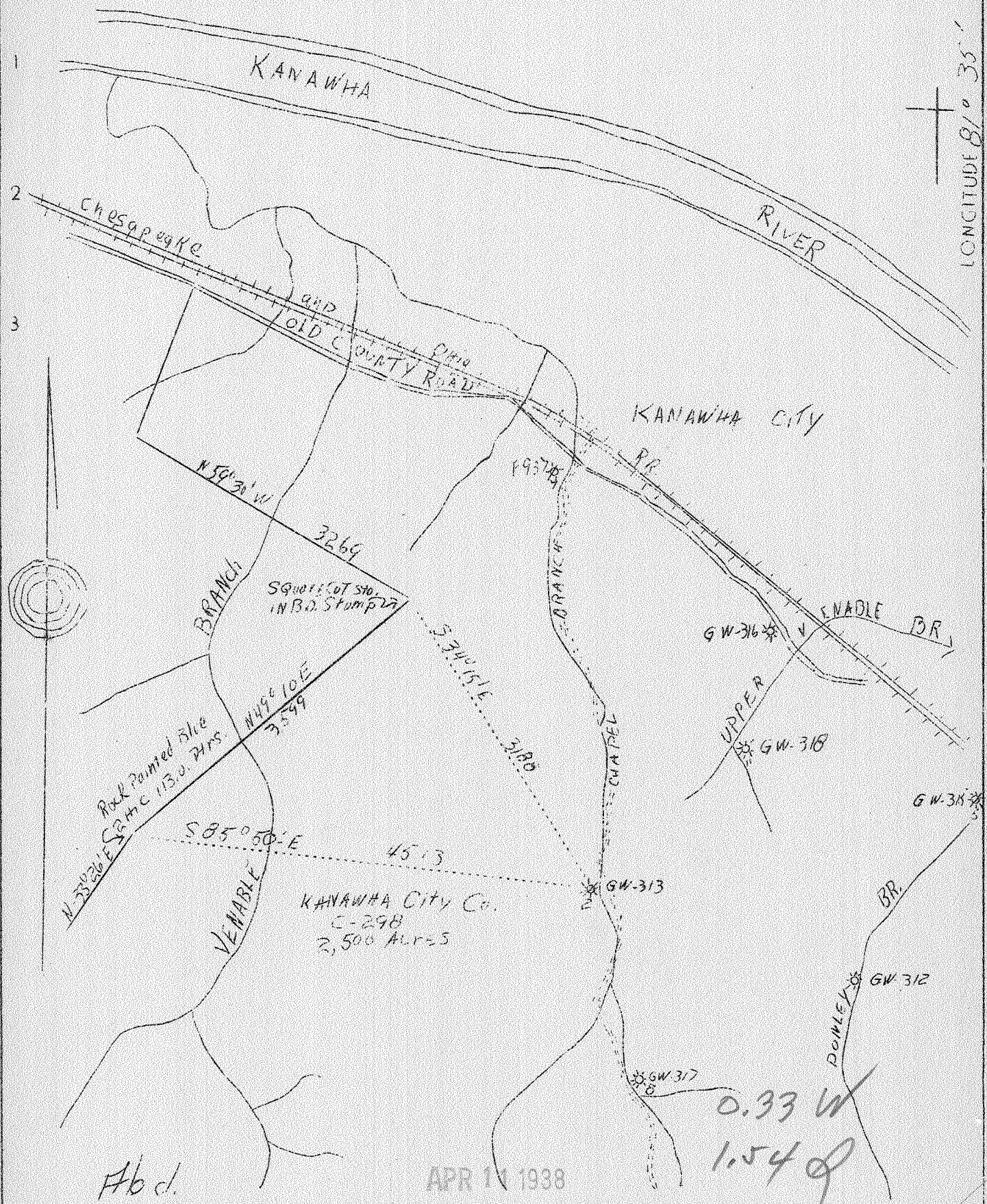


LATITUDE 38° 20'

LONGITUDE 81° 35'



Company	Columbian Carbon Co.
Address	Box 1240, Charleston, W.Va.
Farm	Kanawha City Co.
Tract	Acres 2500 Lease No. C-298
Well (Farm) No.	2 Serial No. GW-313
Elevation (Spirit Level)	742'
Quadrangle	Charleston (SC)
County	Kanawha District Loudon
Engineer	C.A. Branham
Engineer's Registration No.	683
File No.	Drawing No.
Date	3-31-38 Scale 1"-1320'

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

WELL LOCATION MAP
 File No. Kan-238-A

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.

GW 313

228A

Loudon District, Kanawha County, W. Va.

By Columbian Carbon Co., Box 1240, Charleston, W. Va.

On 2500 acres, on Chapel Branch.

Elevation, 742.28' L.

Surface owned by Andrew O'B. Hogue, Mahan, W. Va., and minerals by

Andrew O'B. Hogue and Kanawha City Co., Charleston, W. Va.

Drilling completed Aug. 14, 1915.

Volume, 750,000 cu. ft.

Oil at 404, 406, and 530'.

Fresh water at 880 and 925'.

Coal was encountered at 985-988'.

Gas. well. Abandonment reported to Dept. of Mines Mar. 30, 1938.

Record to RCT from Mrs. Griffith April 14, 1938.

	Top.	Bottom.
Gravel	0	36
Sand	36	55
Slate	55	120
Lime	120	130
Slate	130	240
Sand	240	270
Slate	270	305
Lime	305	325
Slate	325	335
Lime shells	335	400
Slate	400	404
Sand	404	480
Slate	480	484
Sand	484	510
Slate	510	530
Sand	530	645
Slate	645	647
Sand	647	680
Slate, dark	680	688
Sand	688	800
Slate	800	808
Lime, gritty	808	875
Sand	875	914
Slate	914	915
Sand	915	960
Slate	960	962
Sand	962	985
Coal	985	988
Lime	988	993
Slate	993	1005
Sand	1005	1090
Slate	1090	1095
Red rock	1095	1108
Lime	1108	1125
Maxton Sand	1125	1170
Slate	1170	1175
Lime	1175	1210
Slate	1210	1218
Lime	1218	1220
Pencil Cave	1230	1240
Big Lime (gas, 1305' and 1325')	1240	1300 1380
Gritty lime	1380	1408
Big Injun Sand (gas, 1420')	1408	1443
Sandy shale	1443	1455
Slate shell (to bottom)(total depth)	1455	1488

WEST VIRGINIA DEPARTMENT OF MINES
OIL AND GAS DIVISION

611

WELL RECORD

Permit No. KAN-238-A Oil or Gas Well GAS
(Kind)

Company.....	<u>Columbian Carbon Co.</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address.....	<u>Box 1240, Charleston, W. Va.</u>	Size			
Farm.....	<u>Kanawha City Co. Acres 2500</u>	16.....			Kind of Packer.....
Location (waters).....	<u>Chapel Branch</u>	13.....			
Well No.....	<u>2 Elev. 712.28</u>	10.....			Size of.....
District.....	<u>Loudon County Kanawha</u>	8 1/4.....			Depth set.....
The surface of tract is owned in fee by.....	<u>Andrew O'B. Hogue Mahan, W. Va. Address.....</u>	6 5/8.....			Perf. top.....
Mineral rights are owned by.....	<u>Andrew O'B. Hogue & Kanawha City Co. Address Charleston, W. Va.</u>	5 3/16.....			Perf. bottom.....
Drilling commenced.....	<u>7</u>	3.....			Perf. top.....
Drilling completed.....	<u>8-11-15</u>	2.....			Perf. bottom.....
Date shot.....	Depth of shot.....	Liners Used.....			Perf. top.....
Open Flow /10ths Water in.....	Inch				Perf. bottom.....
/10ths Merc. in.....	Inch				
Volume.....	<u>750,000</u> Cu. Ft.	CASING CEMENTED.....	SIZE.....	No. FT.....	Date.....
Rock Pressure.....	lbs..... hrs.				
Oil.....	<u>104, 106, 530</u> bbls., 1st 24 hrs.	COAL WAS ENCOUNTERED AT.....	<u>985</u> FEET.....	<u>36</u> INCHES	
Fresh water.....	<u>380, 925</u> feet..... feet		FEET.....	INCHES.....	FEET..... INCHES
Salt water.....	feet..... feet		FEET.....	INCHES.....	FEET..... INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth Found	Remarks
Gravel			0	36			
Sand			36	55			
Slate			55	120			
Line			120	130			
Slate			130	240			
Sand			240	270			
Slate			270	305			
Line			305	325			
Slate			325	335			
Line Shells			335	400			
Slate			400	404			
Sand			404	480			
Slate			480	484			
Sand			484	510			
Slate			510	530			
Sand			530	645			
Slate			645	647			
Sand			647	680			
Slate, Dark			680	688			
Sand			688	800			
Slate			800	808			
Line, Gritty			808	875			
Sand			875	914			
Slate			914	915			
Sand			915	960			
Slate			960	962			
Sand			962	985			
Coal			985	988			
Line			988	993			
Slate			993	1005			
Sand			1005	1090			
Slate			1090	1095			
Red Rock			1095	1108			
Line			1108	1125			
Marton Sand			1125	1170			
Slate			1170	1175			
Line			1175	1210			
Slate			1210	1218			
Line			1218	1220			

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Pencil Cave			1230	1240			
Big Lime			1240	1380	Gas	1305	
Gritty Lime			1380	1408	Gas	1325	
Big Injun Sand			1408	1443			
Sandy Shale			1443	1455	Gas	1420	
Slate Shell			1455	1488			
TOTAL DEPTH				1488			

Date..... March 30, 1938

APPROVED..... COLUMBIAN CARBON CO. , Owner

By..... [Signature] (Title)