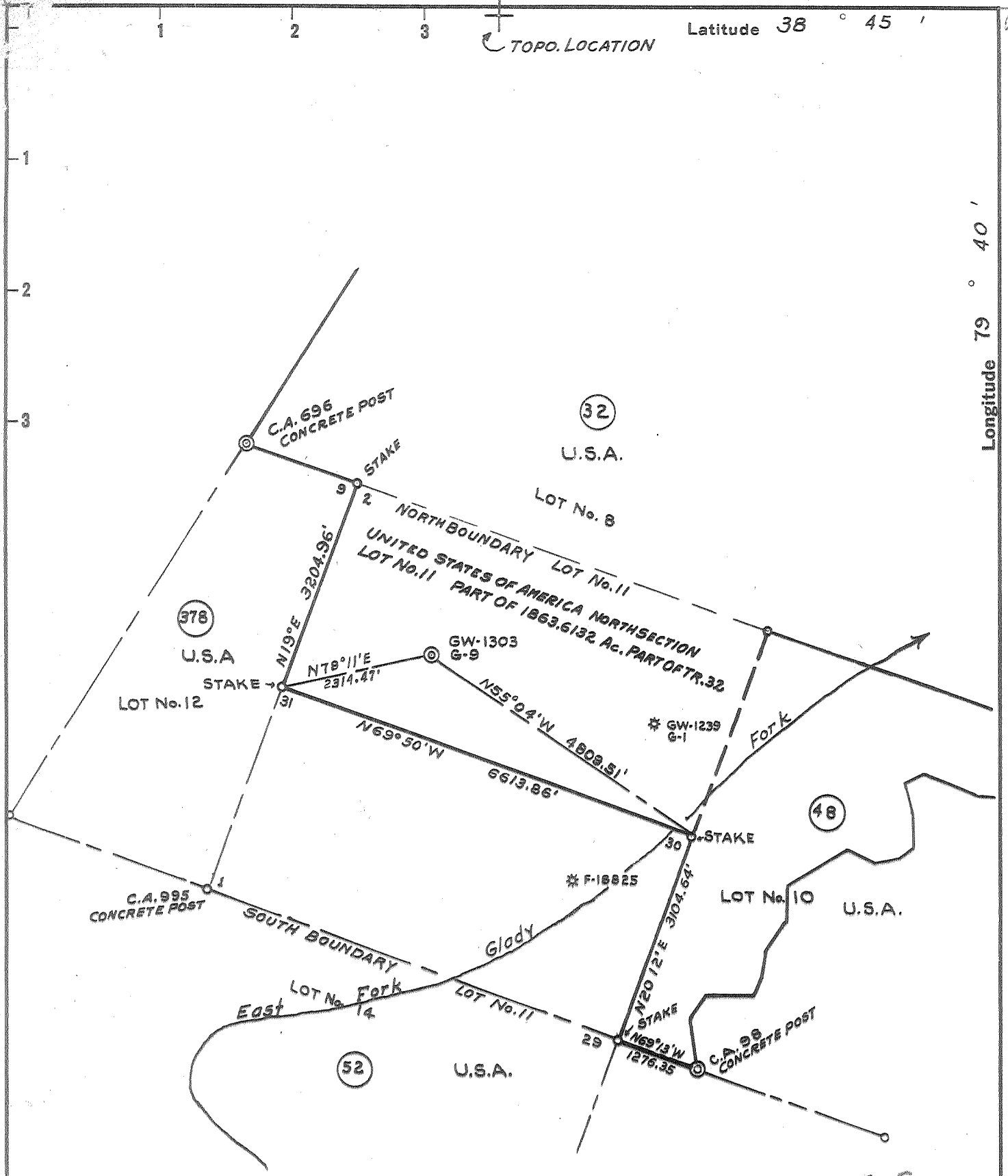


TOPO. LOCATION

Latitude 38 ° 45 '

Longitude 79 ° 40 '



0.05 S.
3.77 W.

3 NW (I-13)

New Location

Drill Deeper

Abandonment

Company COLUMBIAN CARBON COMPANY

Address BOX 873 CHARLESTON WEST VIRGINIA

Farm UNITED STATES OF AMERICA
NORTH SECTION LOT No. 11 PART OF 1863.6132 Ac.

Tract 32 Acres 7 Lease No. C-4436B
BLM-A-032819

Well (Farm) No. G-9 Serial No. GW-1303

Elevation (Spirit Level) 3486.08'

Quadrangle SPRUCE KNOB N.W. S-005 W-377

County RANDOLPH District DRY FORK

Engineer R. E. Anderson

Engineer's Registration No. 2074

File No. _____ Drawing No. W-10-59

Date MARCH 30 1959 Scale 1" = 2000'

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

WELL LOCATION MAP
 FILE NO. RAV-107

+ 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.

Samples (5940-6320) 19-F

6-6 261 Deep Well

E59



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

Quadrangle Spruce Knob SW

Permit No. Ran-107

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 600
Location (waters) East Fork of Glady Fork
Well No. G-9, GW-1303 Elev. 3486.08'
District Dry Fork County Randolph
The surface of tract is owned in fee by Director, Bureau of Land Mgmt. Address Washington 25, DC

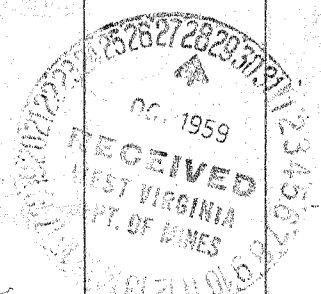
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16 3/8" 48#	32'9"	32'9"	Kind of Packer <u>Parmco Gas Anchor</u>
18 9-5/8" 36#	964'10"	964'10"	Size of <u>3-1/2"x7"x5-1/2"</u>
8 7" 23#	6415'2"	6415'2"	Depth set <u>6099'</u>
5 3/16"			
3 2 3/8" 4.7#	6403'9"	6403'9"	Perf. top _____ Perf. bottom _____
Liners Used			Perf. top _____ Perf. bottom _____
5-1/2" 15#	290'5"	290'5"	

Mineral rights are owned by same
Address _____
Drilling commenced 6-1-59
Drilling completed 8-20-59
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 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 Oriskany 353MCF--Chert 232MCF-- Total open flow 585MCF
ROCK PRESSURE AFTER TREATMENT 196 hours Oriskany 1395# -- Chert 1500#
Fresh Water _____ Feet _____ Salt Water 1445' Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	20			
Lime			20	60			
Broken Lime			60	290			
Lime			290	390			
Gritty Lime			390	590			
Shale			590	620			
Sand			620	660			
Sandy Shale			660	700			
Sand			700	725			
Shale			725	760			
Sand			760	800			
Shale			800	1070			
Sand and Shale			1070	2170	S. water	1445'	
Shale			2170	2380			
Sand and Shale			2380	2645			
Shale			2645	2846			
Sand and Shale			2846	2967			
Shale			2967	3550			
Shale, Sand and Lime			3550	3780			
Shale and Lime streaks			3780	4610			
Brown Shale			4610	5330			
Black Shale			5330	5780			
Onondaga Lime			5780	5989			
Chert			5989	6100			
Shale			6100	6149			
Oriskany Sand			6149	6341			



Formation	Color	Hard or Soft	Top ¹³	Bottom	Oil, Gas or Water	Depth Found	Remarks
Chert, Lime and Sand			6341	6400'DLM 6386'SLM			
Total depth				6400'DLM=6386'SLM			
Formations per sample analysis:							
Chert			5986	6114			
Chert and Shale			6114	6139			
Oriskany			6139	6341			
Chert, Lime and Sand			6341	6400'DLM=6386'SLM			
Cable tools			0	567			
Rotary Tools			567	T. D.			
<u>Casing Record</u>							
7-7-59 Ran 9-5/8" casing at 950'DLM. Cemented with 325 sacks. Pumped plug to 920'. Good returns.							
8-22-59 Ran 7" casing with 7" guide shoe to total depth-cemented with 375 sacks. Pressured to 1300# while pumping down.							
8-26-59 Perforated 7" casing thru Chert and Oriskany sections.							
8-28-59 Fractured Chert and Oriskany sections. Ran packer on drill pipe. Set packer at 5887'. Pumped in 1,500 gallons MCA. Broke down with 20 bbls. water and 3/4% Tergitol. After displacing acid - 4,000# maximum pressure. Started sand and water. Pressure broke to 3300#. Pumped in 30,000 gallons water with 26,000# sand. Put 125 perf balls in when 15,000 gallons water in. Pressure went to 4400# when perf balls seated-dropped to 3800#. When 26,500 gallons in ran 125 perf balls. Pressure went to 4500# when perf balls seated-dropped to 4200#-then went to 4800# - quit sand and started flush. Flushed with 48 barrels - pressure went to 5500#- quit pumping. In 5 minutes pressure dropped to 1400#. Opened well - flowed back fluid. Released packer and pulled packer and tubing.							
9-4-59 Ran tubing and set anchor packer between Chert and Oriskany Sand at 6099' - show of gas in tubing. All gas gauging 20/10 W. 2" = 189MCF.							

Date October 27, 19 59

APPROVED Columbian Carbon Co., Oper., Owner

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