

Company COLUMBIAN CARBON CO.

Address Box 873 CHARLESTON, W. VA.

Farm UNITED STATES OF AMERICA

Tract 38-B . Acres 2505 Lease No. C-4426

Well (Farm) No. F-1 Serial No. GW-1223

Elevation (Spirit Level) 3590.86' *Thorwold 75'*

Quadrangle SPRUCE KNOB B 3050 W-430 *quad*

County POCAHONTAS District GREEN BANK

Engineer _____

Engineer's Registration No. 2074

File No. _____ Drawing No. W-15-55

Date AUG. 5, 1965 Scale 1" = 2000'

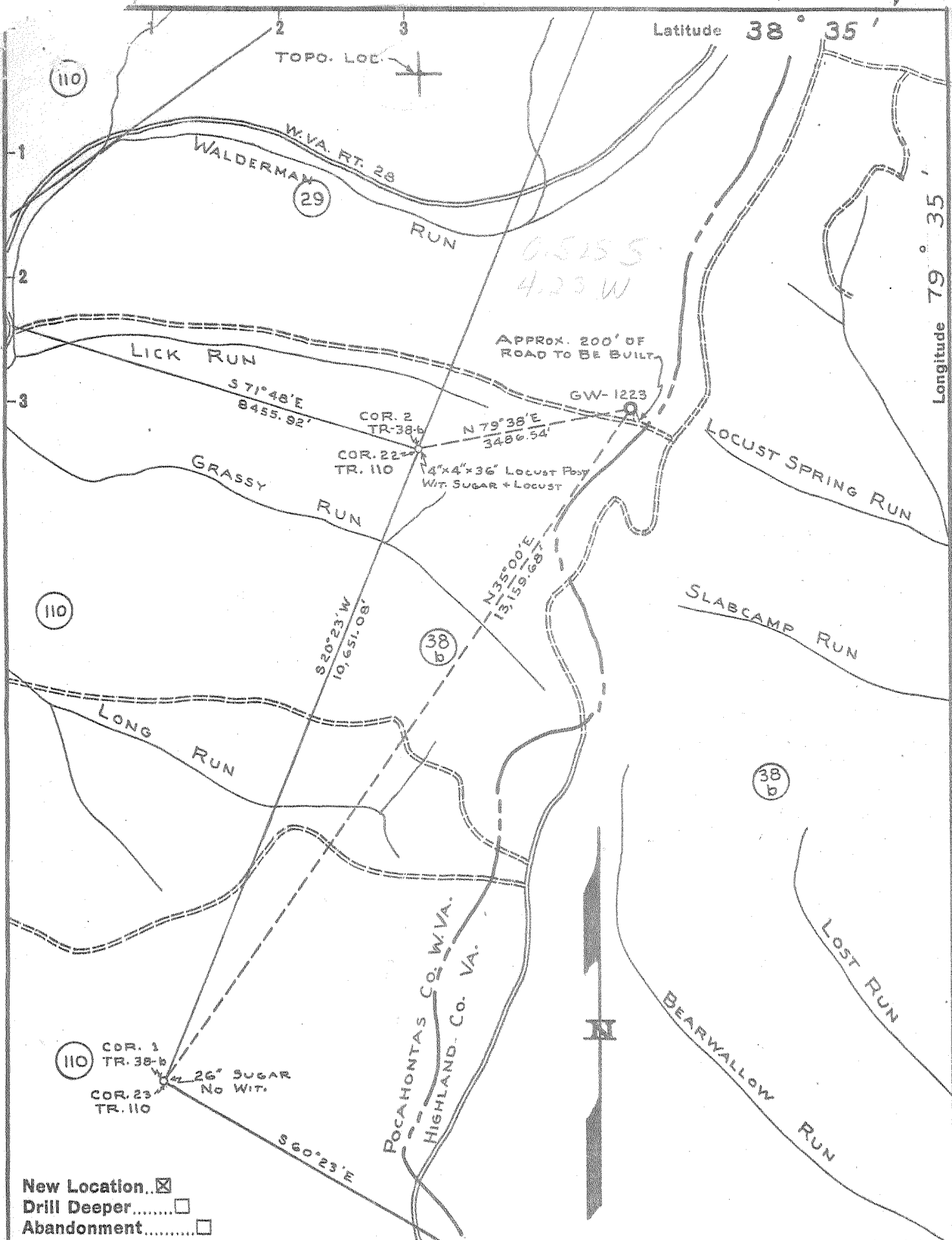
STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. POCA-5 P

+ 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.



New Location...
 Drill Deeper.....
 Abandonment.....

Company COLUMBIAN CARBON CO.
 Address Box 873 CHARLESTON, W. VA.
 Farm UNITED STATES OF AMERICA
 Tract 38-B Acres 2505 Lease No. C-4426
 Well (Farm) No. F-1 Serial No. GW-1223
 Elevation (Spirit Level) 3590.86'
 Quadrangle SPRUCE KNOB 8 S050 W-430
 County POCAHONTAS District GREEN BANK
 Engineer _____
 Engineer's Registration No. 2074
 File No. _____ Drawing No. W-15-55
 Date AUG. 5, 1965 Scale 1" = 2000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
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 CHARLESTON

WELL LOCATION MAP
 FILE NO. POCA-5

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5-0 0 Deepwell



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 7

*gas show
crisky*

WELL RECORD

Quadrangle Spruce Knob 8 SW

Permit No. Poca-5

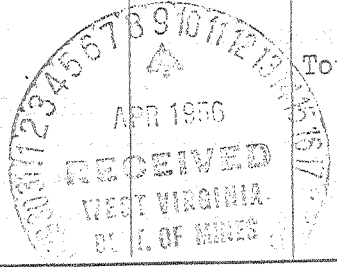
Oil or Gas Well dry
(KIND)

Company Columbian Carbon Company, Oper.
 Address Box 873, Charleston 23, W. Va.
 Farm United States of America Acres 2505
 Location (waters) Lick Run
 Well No. F-1, GM-1223 Elev 3590.86' G
 District Green Bank County Pocahontas
 The surface of tract is owned in fee by Bureau of Land Mgmt.
Interior Bldg. Address Washington 25, D.C.
 Mineral rights are owned by same
 Address _____
 Drilling commenced 9-22-55
 Drilling completed 4-5-56
 Date Shot not shot From _____ To _____
 With _____
 Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
 Volume dry Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water 90' feet _____ feet
 Salt water 2466-81' 2707-57' feet 5718-23' feet
5777-80' feet

| Casing and Tubing | Used in Drilling | Left in Well | Packers |
|-------------------|------------------|--------------|------------------------------|
| Size | | | |
| 16 | | | Kind of Packer <u>M.B.H.</u> |
| 18 3/8" | 43' | 43' | |
| 10 3/4" 40# | 606' 7" | 606' 7" | Size of <u>10-3/4"</u> |
| 8 1/4" 24# | 2373' 1" | pulled | |
| 8 3/8" 23# | 5650' | 5650' | Depth set <u>603' DLM</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

| Formation | Color | Hard or Soft | Top | Bottom | Oil, Gas or Water | Depth Found | Remarks |
|--------------------------|-------|--------------|-------------|--------------|-------------------|-------------|----------------------------|
| Surface | | | 0 | 24 | | | |
| Gray Shale | | | 24 | 36 | | | |
| Slate | | | 36 | 40 | | | |
| Shale | | | 40 | 55 | | | |
| Sand | | | 55 | 74 | | | |
| Shale | | | 74 | 87 | | | |
| Sand | | | 87 | 130 | F. water | 90' | 5 blrs/2 hrs. ¹ |
| Slate | | | 130 | 150 | | | |
| Gritty Lime | | | 150 | 508 | | | |
| Shale | | | 508 | 665 | | | |
| Gritty Lime | | | 665 | 840 | | | |
| Sand | | | 840 | 914 | | | |
| Gritty Lime | | | 914 | 2800 | S. water | 2466-81' | |
| Grey Lime | | | 2800 | 3300 | S. water | 2707-57' | show |
| Shale | | | 3300 | 3365 | | | |
| Lime | | | 3365 | 3650 | | | |
| Brown Shale | | | 3650 | 3880 | | | |
| Lime & Grey Shale | | | 3880 | 4161 | gas | 4161' | 22/10 W. 1" 49M |
| Lime | | | 4161 | 4340 | | | |
| Grey Shale & Lime Shells | | | 4340 | 4462 | | | |
| Brown Shale | | | 4462 | 4570 | 5490 | 5595 | |
| Black Shale | | | 4570 | 4700 | 3591 | 3591 | |
| Brown Shale | | | 4700 | 5240 | 1889 | 2004 | |
| Black Shale | | | 5240 | 5400 | | | |
| Brown Shale | | | 5400 | 5480 | | | |
| Grey Lime | | | 5480 | 5555 | | | |
| Dark Shale | | | 5555 | 5595 | S. water | 5718-23' | 1 blr/hr/ |
| Oriskany Sand | | | 5595 DLM | 5800 approx. | Gas | 5723-25' | show |
| | | | 5607' SLM | | S. water | 5777-80' | 2 blr/1/2 hr. |
| | | | Total depth | ----- | | | |
| | | | | 5800' | | | |
| | | | | | see reverse side | | |



(Over)

5480 5607
3591 3591
1889 2004

| Formation | Color | Hard or Soft | Top 7 | Bottom | Oil, Gas or Water | Depth Found | Remarks |
|---------------|-------|--------------|-------|--------|-------------------|-------------|---|
| CASING RECORD | | | | | | | |
| 10-3/4" | | | | | | | ran with packer 603' DLM |
| 8-5/8" | | | | | | | casing ran with packer 2353' SLM - 32 sacks Aquagel - circulation and returns |
| 7" | | | | | | | ran at 5607' SLM - 50 sacks Aquagel. Cemented with 125 sacks cement. |

Date 4-6-56, 19

APPROVED Columbian Carbon Company, Owner

By W. S. Moore, Sup't of Prod.