

New Location
 Drill Deeper
 Abandonment

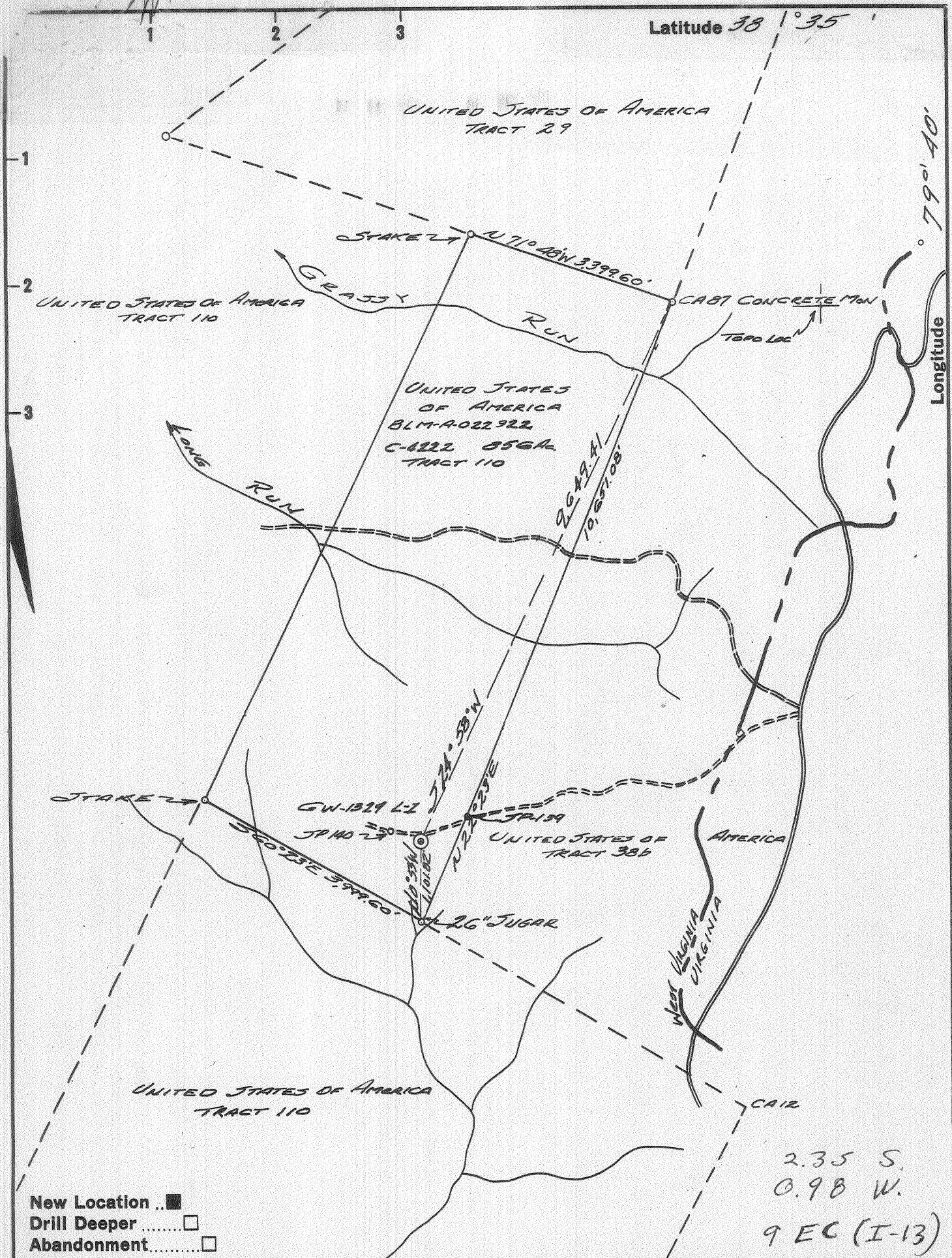
Company COLUMBIAN CARBON CO.
 Address Box 873 CHARLESTON, W. VA
 Farm UNITED STATES OF AMERICA
 Tract 110 Acres 856 Lease No. W-4222
 Well (Farm) No. -1 Serial No. GW-1329
 Elevation (Spirit Level) 3790.49'
 Quadrangle SPRUCE KING 3225 N.098
 County ROCKWELL District GREEN BANK
 Engineer _____
 Engineer's Registration No. 2074
 File No. _____ Drawing No. W-14-60
 Date Sept 60 Scale 1"=2000'

BLOCK F **75-00018-P**
 STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WEST VIRGINIA
WELL LOCATION MAP
 FILE NO. _____

+ 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.

NOV 27 2009

1st Well - GW-1329 W-695



New Location
 Drill Deeper
 Abandonment

2.35 S.
 0.98 W.
 9 EC (I-13)

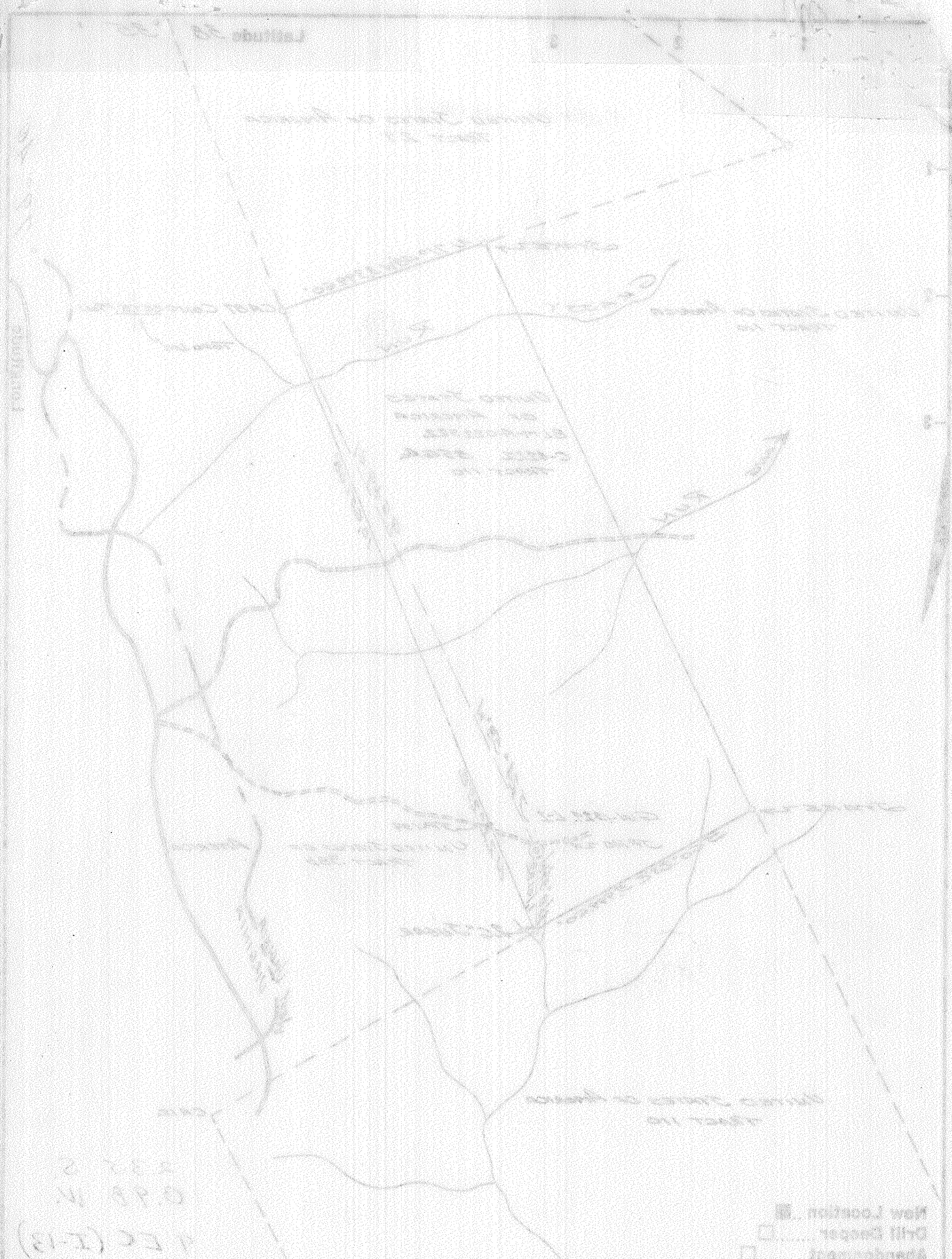
Company COLUMBIAN CARBON CO.
 Address Box 873 CHARLESTON, W. VA
 Farm UNITED STATES OF AMERICA
 Tract 110 Acres 856 Lease No. BLM-A-022922
 Well (Farm) No. L-1 Serial No. GW-1329
 Elevation (Spirit Level) 3780.49'
 Quadrangle SPRUCE KNOB 5W
 County POCALONTAS District GREEN BANK
 Engineer R. B. Anderson
 Engineer's Registration No. 2074
 File No. _____ Drawing No. W-14-60
 Date 26 Oct 60 Scale 1" = 2000'

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

WELL LOCATION MAP
 FILE NO. POCA-18

+ 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 110-6900' 1-1 322 30-Tor Very Deep Well Wildcat



Wm. Perry G-R picks:

- U. Oriskany 5428
- U. Helderberg 5574
- Big Mt. Sh. 5846-68
- Repeated Helderberg 6280
- Big Mt. Shale 6564-88
- Williamsport 7833-38
- Top R. Hill - base Keefer 8040
- Tusc. 8518
- Juniata 8705
- Oswego 9406
- Martinsburg 9558

STATE OF PENNSYLVANIA
 DEPARTMENT OF GEOLOGY
 OFFICE OF OIL AND GAS
 CHARLES W. HAYES, Director

Company: Continental Oil Co.
 Address: 1000 Market St. Phila. Pa.
 Farm: None
 Tract No.: None
 Well (Farm) No.: None
 Elevation (Spirit Level): None
 Guaranty: None
 County: None
 Engineer: W. H. Perry
 Engineer's Registration No.: None
 File No.: None
 Date: None

Top

1-1 55



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 18

Quadrangle Spruce Knob SW

Permit No. POCA-18

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Columbian Carbon Company, Oper.
Address Box 873, Charleston 23, W. Va.
Farm United States of America Acres 856
Location (waters) Long Run
Well No. GW-1329, L-1 Elev. 3780.49' G
District Green Bank County Pocahontas
The surface of tract is owned in fee by Director Bureau of Land Management
Interior Bldg. Address Washington, D. C.
Mineral rights are owned by same
Address _____

Drilling commenced January 17, 1961
Drilling completed June 16, 1961
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			
<u>2 1/8" 94#</u>	<u>95'3"</u>	<u>95'3"</u>	Kind of Packer <u>none</u>
<u>1 3/8" 48#</u>	<u>1606'</u>	<u>1606'</u>	Size of _____
<u>9-5/8" 40#</u>	<u>5754'10"</u>	<u>5754'10"</u>	Depth set _____
<u>8 1/4" 28#</u>	<u>9162'8"</u>	<u>1394'5"</u>	Perf. top _____
<u>5 3/16"</u>			Perf. bottom _____
<u>3"</u>			Perf. top _____
<u>2 3/8" 4.7#</u>	<u>5650'1"</u>	<u>5650'1"</u>	Perf. bottom _____
Liners Used <u>with 2" cage</u>			Perf. top _____
			Perf. bottom _____

CASING CEMENTED	SIZE	No. Ft.	Date
<u>see reverse side</u>			
COAL WAS ENCOUNTERED AT <u>none</u>		FEET	INCHES
	FEET	INCHES	FEET
	FEET	INCHES	FEET

RESULT AFTER TREATMENT 43/10 M. 2" = 1,020 MCF-making some salt water when blowing to
ROCK PRESSURE AFTER TREATMENT 18 days 1575# atmosphere
Fresh Water 138' 830-900' Feet Salt Water 2367' 8371' Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface Stone			0	138	F. water	138'	
Sandstone-gray			138	143	Chemung		
Lime			143	180			
Sand			180	360			
Sandy Lime			360	399			
Sand			399	605	F. Water	830-900'	
Sand and Lime			605	2360	S. Water	2367'	
Sand			2360	2440			
Shale and Shells			2440	4355			
Sandy Lime			4355	4625			
Shale			4625	5437			
Shale and Lime			5437	5465			
Sand		-1685	5465	5590			
Sandy Lime			5590	6066			
Chert and Lime			6066	6193			
Sand - Oriskany repeated (Gwynn, 1964 p. 304)			6193	6503			
Lime and Sand			6503	6525			
Sand and Chert			6525	6975			
Siltstone			6975	7080			
Sand and Dolomite			7080	7152			
Sand - Newburg?		-3372	7152	7185			
Sand, Shale & Siltstone			7185	7244			
Dolomite and Sand			7244	7434			
Siltstone			7434	7556			
Shale			7556	7603			
Sand ?			7603	7635			
Lime and Shale			7635	7672			

E1. 3780

Formation	Color	Hard or Soft	Top 18	Bottom	Oil, Gas or Water	Depth Found	Remarks
Siltstone			7672	7743			
Dark Shale and Sand			7743	7786			
Siltstone			7786	7931			
Sand		-4151	7931	7960			
Siltstone			7960	8118			
Green Shale			8118	8125			
Shale and Siltstone			8125	8274			
Green Shale and Sand			8274	8298			
Green Shale and Red Sand			8298	8350			
Red Shale			8350	8405	S. Water	8,371'	1/2 gal/min.
Red Sand			8405	8416	Gas	8,490'	35/10 W. 1"=62M
Sand and Siltstone		-4636	8416	8561			
Sand			8561	8693			
Sandy Shale		-4913	8693	8769			
Shale, Red and Green			8769	8980			
Siltstone & Shale, Red & Green			8980	9052			
Sand and Siltstone			9052	9100			
Red Shale and Siltstone			9100	9412			
Sand, White and Grey	Oswego		9412	9439			
Siltstone and Sand			9439	9459			
Sand		5679	9459	9695			
Siltstone, Grey			9695	9737			
Sand			9737	9759			
Sandy Shale			9759	9837			
Siltstone			9837	9881			
Sand and Siltstone			9881	10074			
Siltstone, Sandy			10074	10546			
Shale and Shells			10546	10805			
Total depth-----				10805'	Rotary Measurement =		
					10823' Schlumberger Measurement.		
Plugged back to-----				5,600'			
FRACTURED THE ORISKANY 6-24-61							
Pumped in 1,000 gallons MCA and displaced acid with B. H. open until top of acid was 5440'. Put 1,000# pressure on tubing. Staged MCA at 1500#. Broke down at 4200#-broke to 3500#. Started sand 1/2#/gallon-increased to 3/4#- 1# - 1-1/4#. After 3,000 gallons ran 25 balls- 6,000 gallons 25 balls. Pressure 3400-3700#-ran last 25 balls. Pressure went to 4500# at end of treatment. Used 45,000 gallons water, 30,000# 20-40 sand, 75 perf balls, 5 - 55 gallon drums TMN. 10 minutes after shut down 1150#.							
CASING RECORD							
1-21-61	Ran 20" drive pipe. Cemented with 125 sacks. Circulation and returns.						
2-15-61	Ran 13-3/8" casing at 1600' with Baker Guide Shoe on bottom. Cemented with 300 sacks-last 100 sacks mixed with 1-1/2 sacks Calcium Chloride.						
3-13-61	Ran 9-5/8" casing with Whirler Guide Shoe on bottom-5 centralizers on bottom, middle and top of Sand, one 60' above sand-one 120' above sand. Cemented with 300 sacks.						
5-8-61	Ran 7" with Baker Whirler Guide Shoe on bottom - 7 centralizers on 2, 5, 8, 11, 14, 17 and 20th joints. Cemented with 150 sacks.						

8693
3780
4913
10823
3780
7043

Date August 16, 1961

APPROVED Columbian Carbon Company, Oper, Owner

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

WR-38
DATE: November 11, 2009

API # 47-075-00018

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: USA Operator Well No.: L-1

LOCATION: Elevation: _____ Quadrangle: Spruce Knob SW
District: Greenbank County: Pocahontas
Latitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec.
Longitude: _____ Feet West of _____ Deg. _____ Min. _____ Sec.

Well Type: OIL _____ GAS X

Company: Chesapeake Appalachia, LLC Coal Operator US Forest Service/Mon Nat'l Forest
PO Box 18496 or Owner 200 Sycamore Street
Oklahoma City OK 73154 Elkins, WV 26241

Agent: Tal Oden Coal Operator US Dept of the Interior BLM
or Owner 626 E. Wisconsin Ave., Suite 200
Milwaukee, WI 53202

Permit Issued Date: 08/14/2009

RECEIVED
Office of Oil & Gas

AFFIDAVIT

NOV 18 2009

STATE OF WEST VIRGINIA,
County of Upshur ss:

WV Department of
Environmental Protection

Alvin Sorcan and Phillip Pulliam being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and _____ Oil and Gas Inspector representing the Director, say that said work was commenced on the 14th day of October, 2009, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gel	5580'	surface	None	5748' 9 5/8"
Cement	5580'	5239'		
Cement	3828'	3680'		1606' 13 3/4"
Cement	1658'	1390'		
Cement	400'	0'		104' 20"

Description of monument: Underground 6" X 6" aluminum plate with API and that the work of plugging and filling said well was completed on the 26th day of October, 2009.

And further deponents saith not
Alvin Sorcan
Phillip Pulliam

DEC 04 2009

Sworn and subscribe before me this 11th day of November, 2009

My commission expires: June 12, 2016
Denise H. Pulliam
Notary Public

Oil and Gas Inspector: [Signature]

