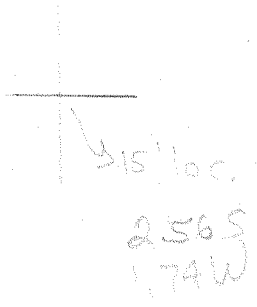


LATITUDE

38° 30'

81° 30'

LONGITUDE



7.5 OGIS topo location

7.5' loc 256S
174W

15' loc 256S
(calc.) 174W

Company Columbia Carbon Co.

Farm Copen Harce Heise 3 (GW-348)

Quad Big Chimney 7.5' / Charleston 15' (3)

County Kanawha

District ELK

WELL LOCATION MAP

File No. 039-202

Kanawha

GAS

DEEP

6-6 Elk - Poca (Sissonville) (192)

DEEP WELL

W. F. Copenhaver Heirs No. 3 (GW-342) Well.

Elk District, Kanawha County, W. Va.

By Columbian Carbon Co.

Permit No. Kan-202.

Elevation, 938.7' L.

5,980 M. cu. ft. gas; R. P., 1670 lbs.

Located 1.55 mi. S. of 38° 30' and 1.71 mi. W. of 81° 30'—NE—Charleston Quadrangle. 2.55

On west side of Aarons Fork of Little Sandy Creek.

3.2 mi. N. W. of Copenhaver; 3.6 mi. N. E. of Mink.

	Top.	Bottom.	Thickness.	Elevation (top)
Big Lime -----	1614	1773	159	— 675
Big Injun Sand -----	1773	1797	24	— 834
Berea Sand -----	2200	2201	1	—1261
Corniferous Lime -----	4963	5076	113	—4024
Oriskany Sand -----	5076	5101	25+	—4137

Thickness, Devonian Shales, 2782± feet.

Total depth, 5101'.

Remarks: Completed May 7, 1936.

Shot at 5084½-5101'.

Salt water, 1095' and 1135' (hole full). Gas, 1670'.

Oriskany gas, 5086-92'.

On 400 acres.

Kan-202

Elk District, Kanawha County, W. Va.

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

On 400 acres, on Lick Branch of Little Sandy Creek; surface owned by Copenhaver Heirs, $\frac{1}{2}$ F. S. Copenhaver, Big Chimney, W. Va., and Grant Copenhaver, 108 Arlington Ave., Charleston, W. Va., Agents; and coal rights by Alexander M. Bruen Hrs., $\frac{1}{2}$ Alexander J. Bruen, 19 E. 83rd St., New York, N. Y.

Drilled under permit Kan-202, issued Nov. 21, 1935.

Elevation, 975' B.

13" casing, 41' 9"; 10", 413' 6"; 8-5/8" O.D., 1632'.

No coal was encountered.

Preliminary report to Dept. of Mines Feb. 17, 1936. (Rec. to 1565').

Salt water at 1095'; hole full salt water, 1135'.

	Top.	Bottom.	Thickness.
Red rock	0	- 28	28
Slate, blue	28	- 35	7
Sand	35	- 80	45
Slate	80	- 110	30
Red rock	110	- 140	30
Slate, blue	140	- 170	30
Slate	170	- 190	20
Sand	190	- 210	20
Slate	210	- 290	80
Sand	290	- 310	20
Slate	310	- 320	10
Sand	320	- 345	25
Slate	345	- 370	25
Sand	370	- 385	15
Slate	385	- 455	70
Sand	455	- 560	105
Slate	560	- 720	160
Sand	720	- 740	20
Slate	740	- 770	30
Sand	770	- 825	55
Slate	825	- 995	170
Sand	995	- 1015	20
Red rock	1015	- 1020	5
Salt Sand	1020	- 1560	540
Lime	1560	- 1565	5

(INCOMPLETE)

DEEP

COPY

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

File No. KAN-202

Well No. 3 (GW-342)

COLUMBIAN CARBON Company of Charleston, W. Va.

completed on the Copenhaver Heirs' Farm

containing 400 acres. Location Lick Branch of Little Sandy

Elk District, in Kanawha County, West Virginia

The surface of the above tract is owned in fee by Copenhaver Hrs. c/o Grant Copenhaver) Ag Big Chimney, W. Va. F. S. Copenhaver) Ag of 108 Arlington Ave., Charleston, W. Va. address, and the mineral rights are owned by Alexander M. Bruen Hrs., c/o Alexander J. Bruen of 19 E. 83rd St., New York City

The oil and gas privileges are held under lease by the above named company, and this well is drilled under permit No. KAN-202 issued by the West Virginia Department of Mines, Oil and Gas Division Nov. 21 1935

Elevation of surface at top of well, 938.7 Spirit

The number of feet of the different sized casings used in the well.

feet size. Wood conductor.

41'9" feet 13" size, csg. 5019'7" feet 6-5/8" sized csg.

413'6" feet 10" size, csg. 5131' feet 3" Tubing sized csg.

1856'11" feet 8 1/2" size, csg. feet sized csg.

Spang "Special Gas Anchor" packer of 3 x 6-5/8 x 5' size, set at 5072'

packer of size, set at

Tubing in casing perforated at 5092-5101' feet to feet.

in casing perforated at feet to feet.

Coal was encountered at feet, thick ness inches, and at

feet; thickness inches; and at feet; thickness inches.

Liners were used as follows: (Give details)

May 26, 1936

Date.

Approved COLUMBIAN CARBON COMPANY, Owner.

By [Signature] Asst. Supt.



Columbian Carbon Company
Box 1240
Charleston, W. Va. Address

COMPLETION DATA SHEET
No. 2

WELL NO. 3 (GW-342) FARM Copenhaver Hrs.

FORMATION RECORD

Name	Color	Character	Oil, Gas or Water	Top	Bottom	Thickness	Total Depth	Remarks
Red Rock	Blue			0	28	28		
Slate		28	35	7				
Sand		35	80	45				
Slate		80	110	30				
Red Rock		110	140	30				
Slate		140	190	50				
Sand		190	210	20				
Slate		210	290	80				
Sand		290	310	20				
Slate		310	320	10				
Sand		320	345	25				
Slate		345	370	25				
Sand		370	385	15				
Slate		385	455	70				
Sand		455	560	105				
Slate		560	600	40				
Sand		600	690	90				
Slate		690	720	30				
Sand		720	740	20				
Slate		740	770	30				
Sand	770	825	55					
Slate	825	995	170					
Sand	995	1015	20					
Red Rock				1015	1019	4		
Sand			Water	1095'	1019	1335	316	1/2 blr.pr/hr
Slate			HFW	1135'	1335	1355	20	
Sand					1355	1571	216	
Little Lime					1571	1601	30	
Slate					1601	1603	2	
Lime					1603	1614	11	
Big Lime			Gas	1670'	1614	1773	159	
Big Injun					1773	1797	24	
Slate & Shells					1797	2186	389	
Shale	Brown				2186	2200	14	
Shells & Slate					2200	3400	1200	
Dark Shale & Shells					3400	3505	105	
Lime Shells					3505	3525	20	
Slate & Shells, White					3525	4558	1033	
Shale	Brown				4558	4630	72	
Slate	White				4630	4640	10	
Shale	Brown				4640	4870	230	
Slate	White				4870	4895	25	
Shale	Brown				4895	4963	68	
Coniferous			Gas Pay		4963	5076	113	
Criskany			5086-92'		5076	5101	25	
							5101'	

shot
Well was ~~not~~ shot at 5084 1/2 to 5101 feet; well was shot at _____ feet.

Salt
Fresh water at _____ feet; salt
fresh water at _____ feet.

producing
Well was _____ hole.
day

May 26, 1936
Date

Approved COLUMBIAN CARBON COMPANY
Owner

NOTE: All bottom formations must be noted as indicated above and all key-rocks and oil and gas sands must be recorded under their proper geological names in the district as well as any local names commonly used in the district for such strata.



WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

File No. KAN-202

Well No. 3 (GW-342)

COLUMBIAN CARBON Company of Charleston, West Va.

drilling on the Copenhaver Heirs' Farm

containing 400 acres. Location Lick Branch of Little Sandy

Elk District, in Kanawha County, West Virginia

The surface of the above tract is owned ~~in fee~~ by Copenhaver Heirs, c/o Grant Copenhaver (Age F. S. Copenhaver)

- Big Chimney, W. Va.

of - 108 Arlington Ave., Charleston, W. Va. address, and the ~~mineral~~ coal rights are owned by

Alexander M. Bruen Hrs.,

c/o Alexander J. Bruen of 19 E. 83rd St., New York City

The oil and gas privileges are held under lease by the above named company, and this well is drilled under permit

No. KAN-202 issued by the West Virginia Department of Mines, Oil and Gas Division

Nov. 21 1935

Elevation of surface at top of well, 975 ~~975~~ Barometric.

The number of feet of the different sized casings used in the well.

_____ feet _____ size. Wood conductor.

41'9" feet 13" size, csg. _____ feet _____ sized csg.

413'6" feet 10" size, csg. _____ feet _____ sized csg.

1632' feet 8-5/8" O.D. size, csg. _____ feet _____ sized csg.

_____ packer of _____ size, set at _____

_____ packer of _____ size, set at _____

_____, in casing perforated at _____ feet to _____ feet.

_____, in casing perforated at _____ feet to _____ feet.

Coal was encountered at _____ feet, thick ness _____ inches, and at _____

feet; thickness _____ inches; and at _____ feet; thickness _____ inches.

No coal was encountered in this well.

Liners were used as follows: (Give details) _____

February 17, 1936

Date.

Approved COLUMBIAN CARBON COMPANY, Owner.

By Robert C. Lafferty

(TITLE) R. C. Lafferty
District Geologist



DEEP

OIL OR GAS WELL Drilling Well

COLUMBIAN CARBON.....Company
Box 1240
Charleston, W. Va......Address

COMPLETION DATA SHEET
NO. 2
FORMATION RECORD

WELL NO. 3 (GW-342) FARM Copenhaver Hrs.

Name	Color	Character	Oil, Gas or Water	Top	Bottom	Thickness	Total Depth	Remarks
ed Rock	Blue			0	28	28		
late				28	35	7		
and	Blue			35	80	45		
late				80	110	30		
ed Rock				110	140	30		
late				140	170	30		
late				170	190	20		
and				190	210	20		
late				210	290	80		
and				290	310	20		
late				310	320	10		
and				320	345	25		
late				345	370	25		
and				370	385	15		
late				385	455	70		
and				455	560	105		
late				560	720	160		
and				720	740	20		
late			740	770	30			
and			770	825	55			
late			825	995	170			
and			995	1015	20			
ed Rock			1015	1020	5			
salt Sand			1020	1560	540			
line			1560	1565	5			

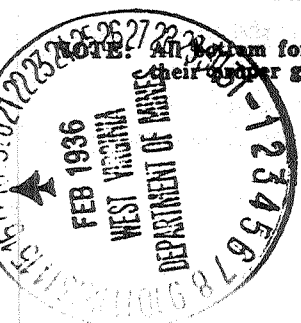
shot
 Well was not shot at.....feet; well was shot at.....feet.

Salt
 water at..... 1095' / HFV 1135.....feet; fresh water at.....feet.

producing
 Well was hole.
 dry

February 17, 1936
 Date

Approved..... COLUMBIAN CARBON COMPANY.....
 Owner



NOTE: All bottom formations must be noted as indicated above and all key-rocks and oil and gas sands must be recorded under their proper geological names in the district as well as any local names commonly used in the district for such strata.