

W. F. Copenhaver Heirs No. 4 (GW-343) Well.

Elk District, Kanawha County, W. Va. By Columbian Carbon Co.
Permit No. Kan-201 and 201-D.
Elevation, 665.6' L. (D. F.)
9,979 M. cu. ft. gas; R. P., 1610 lbs.
Located 3.5 mi. S. of 38° 30' and 1.87 mi. W. of 81° 30'—NE—Charleston Quadrangle.
On west side of Lick Branch of Little Sandy Creek, 0.6 mi. N. W. of mouth of branch.
1.38 mi. N. W. of Copenhaver; 2.3 mi. N. E. of Mink.

•	Top.	Bottom.	Thickness.	Elevation (top)
Big Lime Big Injun Sand Berea Sand Corniferous Lime	1940	1494 1528 1941 4809	152 34 1 107	- 676 - 828 -1274 -4036
Oriskany Sand	4809 4853	4842 4863	33) 10)	-4143

Thickness, Devonian Shales, 2761± feet. Total depth, 4871'. Remarks: Completed to 4843' March 16, 1936. Deepened June 28, 1937. Shot at 4811-43', and 4843-62'. Water, 60'+ and 825' (hole full). Salt water, 1506'. Gas show, 393', 788', and 1403'. Oriskany gas, 4814-16' and 4826-35'. 2,017 M. cu. ft. gas; R. P., 800 lbs., on deepening. On 151 acres.

WVGS Summaried Records of Deep Wells Vol. XVI, 1944 P. 306

OIL AND GAS DIVISION

Permit No. Kan. 201-D

WELL RECORD.

FINAL

Gas Well

CASING & TUBING

Quad. not given Charleston

Columbian Carbon Co. Company Address

Box 1240, Charleston, W. Va. Copenhaver Heirs Acres 151

Farm Lick Branch of Little Sandy Location 4- G.W.-343 Well No. Elev. 665.6 DF

Elk District County Kanawha Coal Alexander M. Bruen Hrs. Address

c/o 19 E.83rd St., New York City Surface Copenhaver Heirs, c/o Grant Copenhaver Address 108 Arlington, Charleston, W. Va. &

F.S. Copenhaver, Big Chimney, W. Va. Agents type.

Drilling Commenced(Deeper) 6-19-37

6-28-37 Completed Date Shot Depth 6-28-37

4843-4863 Volume 1,853,928 B.S; 2,017,008 A.S. (Cu.Ft.)

800# Rock Press. l hrs. 2-3/8 OD

4871

Liners used

31 8.7# 91 (30' Blank-61' Perf)

PACKERS

Kind of Packer 0.W.S. Conical sleeve swabbing

Size of 2x6-5/8 5'0" Depth set

Formation Color 5 Top Buse Formation Color 50 TOP Result Base DRILLED DESPER Lime 4843 4853 Oriskany Sand 4853 4863 Lime 4863 TOTAL DEPTH 4871 SLM

Kan-201

OIL OR GAS WELL GAS WELL

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

COMPLETION DATA SHEET No. 2

WELL No. 4 (GW-343)

FARM Copenhaver Heirs

FORMATION RECORD

Name	Color	Character	Oil, Gas or Water	Тор	Bottom	Thickness	Total Depțh	Remarks
Slate & Shells				3131	3165	34		
Sand Shells				-3165	3420	255		
late & Shells				3420	3620	200		
rown Shale late &	Marie de la companya del companya de la companya de la companya del companya de la companya del la companya del la companya de la companya del la companya de la companya de la companya del la compan	,		3620	3722	102	Statement of the statem	
Shells Shale	Brown			3722 3423	4323 4358	601		
Slate & Shells			Cave 4376-80	4358	4405	୍ୱ 35 47	illus company and a second	
Shale Blate	Brown White		20/0-00	4405 4590	4590 4628	185 38		
Shale Corniferou	Brown			4628 4702	4702 4809	74		
riskany Lime			Gas = 16'	4809 4842	4842 4843	33 1		
			Gas -35 1				4843	
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			A CONTRACTOR CANADA			•		
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shot Well was not shot at	
Salt Fresh water at	salt
producing Well was hole. dry	COLUMBIAN CARBON COMPANY
March 26, 1936	Approved By Robert C. CARRON GOOLOGISE

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 strats.

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

lile No. Kan-201			We	II No. 4(GW-343
Columbian Carbon	Company	of Cha	rleston, W. Va.	-
completed	on th	e Copenhave	r Heirs'	Farm
ontaining 400 acres. Loc	cation	Lick Branch	of Little Sandy	The second secon
Elk and minerals The surface of the above tract is owned in f	District, in-	Kanawha	F. S. Copenh	west Virginia
Big Chimney, W. Va. 108 Arlington Avenue, Charle	eston, W. Va	addre a	coal ss, and the xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	nts are owned by
Alexander M. Bruen Hrs., c/o Alexander J. Bruen	of-	19 E. 83d	Street, New Yor	k City
The oil and gas privileges are held under	r lease by the ak	ove named comp	any, and this well is dri	lled under permit
			artment of Mines, Oil a	
November 21,			roment or mines, on a	and Gas Division
Elevation of surface at top of well,				Spirit RECONDENTAL
ne number of feet of the different sized casin	gs used in the w	ell.		
700 0 0 18			size.	
32° 10" feet 12-1/2"	size, csg	47531 3"	feet6-5/8"	sized csg.
242° 10" feet 10"	size, csg		feet	sized csg.
1374'7" feet 8-1/4"	size, csg		feet	sized csg.
pack	er of		size, set at	
	er of		size, set at	
, in casing perfo	rated at		feet to	feet.
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al was encountered at	feet, thick ne	SS con term	inches, and at	
et; thicknessinches; a	nd at	feet;	thickness	inches.
Liners were used as follows: (Give detail	s)			
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March 26, 1936	The A			
•	Date.	C1 19 10 10	.	
	Approved		Carbon Company Laffertv. Distri	-

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

ile No.KA	<u>N=201</u>					Well No. 4	<u>}W=</u>
	Columbia	n Carbon	Company		narleston,	W. Va.	
	complete	đ	on the	Coper	nhaver Heir	:8!	arm
taining_	400	acres. Locat	tion Lick	Branch of	Little Sar	ndy	
	<u> Flk</u>		District, in	Kanawl	na (County, West Virg	inia
Big 108	Chimney, W Arlington	. Va. Avenue, Cha	rleston, 1	WoVa a addres	s, and the con	Copenhaver Copenhaver	Ъу
c/o	Alexander	ruen Hrs., J. Bruen	of	19 E. 831	ed St., Ner	W York City	
The oil	and gas privilege	s are held under l	ease by the abo	ve named compa	ny, and this well	is drilled under per	mit
KAN	-201	ise	sued by the West	: Virginia Depa	rtment of Mines,	Oil and Gas Divis	sion
Nov						·	
Elevation	n of surface at to	op of well,	665.6			Spirit ————Becomet	ela.
•							y pe.
number	of feet of the diffe	erent sized casings	used in the well				
······································			feet			size. Wood conduc	tor.
<u>821 :</u>	10 ⁿ feet	12-1/2"	size, csg	1753 ! 3 ⁿ	feet6 <u></u> .	5/8 # sized	cag.
2421	10 ⁿ feet	10 ⁿ	-size, csg.		feet	sized	ceg.
3741	711 feet	8-1/4"	size. cap		feet	sized	8 m
7							
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	CHARLES CONTRACTOR CON	, in casing perfora	ted at		feet to		eet.
		, in casing perfora	ted at		fact to	· · · · · · · · · · · · · · · · · · ·	eet.
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i was enc	ountered at	400	_feet, thick ness		——inches, and	.at	
; thicknes		inches; and	86		hickness———	inches.	
Liners w	ere used as follow	ws: (Give details)					
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			**************************************			<u> </u>	
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	% OV 3	786				· · · · · · · · · · · · · · · · · · ·	-
5078	erch 25, 19	936	Date.				
FST WAGEN	901,051455		Approved_	BOLINBIAN NO STATE	CARBON CO	OMPANY, Own	er.
			Ву	Many	(virus)Distr	lct Geologia	īŧ
	55/				المصر مستقل مصنع بقد وزوي و		

OIL OR GAS WELL GAS WELL

COLUMBIAN CARBON COMPANY Company
Box 1240
Charleston, W. Ya. Address

COMPLETION DATA SHEET No. 2

WELL No. 4 (GW-343)

FARM Copenhaver Heirs

FORMATION RECORD

Name	Color	Character	Oil, Gas or Water	Тор	Bottom	Thickness	Total Depta	Remarks
Surface				0	36	36		
Sandy								
Shale			Water 60	36	70	34		
Sand	-			70	130	60		
Sandy						NATION STATE OF THE PROPERTY O		
Slate			• .	130	212	88		
Sand				212	240	28		
Slate &								
Shells				240	345	105		
Sand			Gas 393'	345	400	55		
Slate &								
Shells				400	440	40		
Sand				440	566	126		
Slate &		4						1
Shells				566	660	94		v 1s
Lime								
Shells				660	690	30		
Slate &								
Shells				. 690	787	97		
lst Salt						,		
Sand			HFW 8251	787	1001	214		*
Slate			Gas 7881	1001	1008	7		Small show
2nd Salt								Company of the Compan
Sand				1008	1052	44		
ord Salt								
Sand				1052	1300	248		•
Little								\$4.7
Lime	Calcaria de la Calcaria			1300	1323	23		
Pencil								
Cave				1323	1328	5		
Little				20 0 0 0 0				
Lime				1328	1340	12		
Pencil				4000	1030	16		1.8
Cave				1340	1342			
3ig Lime			Gas 1403		1026	2		
3ig Injun				1342 1494	1494	152	ı	Show
sendy			Salt Water		1528	34		•
Slate			2000		7560	40		
Slate &	and part in			1528	1568	40		
Lime c								
Shells				3500	3054			
				1568	1654	86		
Mate &	· · · · · · · · · · · · · · · · · · ·							•
Shells				1654	2925	1271		
ilme					V*	-		
Shells				2925	3131	206	1	

Well was nexes at 4811 to 4843	
Fresh water at 60! and (HFW 825! (Salt Water	salt Leet; leek water at 1506 feet.
producing Well was hole.	
March 26, 1936	Approved By Robert C. RANGE Geologist

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

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

e NoKAN = ZUI		A	Vell No.4 (GW=34
Columbian (Carbon Company of	Charleston, W.	Va.
The state of the s	on the —		4
	acres. Location Lick Bra		
	•	•	-
and min		(F. S.	ty, West Virginia Copenhaver)A
	tract is owned in the by Copenhauer	Hairs, c/olGrant	Copenhaver)
-108 Arlington	Avenue Charleston W.	Va address, and the americal ri	ghts are owned by
Alexander M. Br c/o Alexander J	uen Hrs., Bruen of 19 E	83rd St. New Yo	rk City
		•	· · · · · · · · · · · · · · · · · · ·
	es are held under lease by the above nar		
KAN-201	issued by the West Virg	inia Department of Mines, Oil	and Gas Division
Nov. 21	198	5	
Elevation of surface at	top of well, 661.0		Spirit
4			
number of feet of the di	ferent sized casings used in the well.		4.740
	fest	size.	Wood conductor.
37 1 10" feet	12-1/2 ⁿ size, csg.	feet	sized cag.
2421 feet	size, csg	foot	mirad cor
	8=1/4 ^m size, csg.	- -	·
	packer of	size, set at	1
	packer of	size, set at	
	-, in casing perforated at	feet to	
	-, in casing perforated at	feet to	
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was encountered at-	feet, thick ness	inches, and at	-
; thickness—	inches; and at	feet; thickness	inches.
Liners were used as follo	ows: (Give details)		
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			mate entre elementation de la complete de material de la complete
January 30, 19			
	Date.	* * * * * * *	. 22
156789101	Approved C	OLUMBIAN CARBON CON	IPANY, Owner.
5" 望"谷	Ву	mus District	Geologist

Kan-201

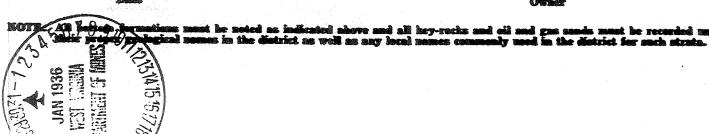
Columbian Carbon Company
Box 1240
Charleston, W. Va. Address

COMPLETION DATA SHEET
No. 2
FORMATION RECORD

Well No. 1 (GW=343)

Name	Color	Character	Oil, Gas or Water	Тор	Bottom	Thickness	Total Depth	Remorks .
ud .				0	36	36		
and				36	240	204		
Late			Gas Show	240	345	105		
and			393 °	345	400	55	•	
Late & Sh	plls			400	440	40		
ınd				440	566	126		
late & Sh	ells			566	660	94		
me Shell				660	690	30		
ate Shel	ls	•	Gas Show	690	787	97		
t. Salt	Sand	•		787	1001	214		
.ate				1001				
d. Salt	Sen d				1008	7		
				1008	1052	44		
	Sand			1052	1234	182		
me & San				1234	1300	66		
ttle Lim	3			1300	1323	23		e de la companya de l
ncil Cav	•			1323	1328	5		179, 4 - 1
g Lime	. Harris grand and selection	•		1328	1340	12		
				A .				er er er er e
						: -	. 8	
					1950年(1964年)。 1	-		
y								

Well was not shot st		
Colt. Presh water at 60!	salt	
producing Well was hole. dry		
January 30, 1936	COLUMBIAN CARBON COMPAN	Y





STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

DIVISION OF OIL & GAS AFFIDAVIT OF PLUGGING AND FILLING WELL DEPARTMENT OF ENERGY FIDAVIT OF PLUGGING ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE

COAL OPERAT ADD Ed Lucas LEASE OR PRO Box 51, Blue Cr	RESS OR OR OWNER PRESS OPERTY OWNER eek, WV 25026	October	NAME OF WELL OF	ston, WV 2	25323
COAL OPERAT ADD Ed Lucas LEASE OR PRO Box 51, Blue Cr	OR OR OWNER	October	COMPLETE ADD		··· • • • • • • • • • • • • • • • • • •
Ed Lucas LEASE OF PRO Box 51, Blue Cr	OR OR OWNER		. 1		
Ed Lucas LEASE OR PRO Box 51, Blue Cr	RESS		Barma a Aaron x	CATION	19 86
Ed Lucas LEASE OF PRO Box 51, Blue Cr	OPERTY OWNER		WELL AND LO		
Box 51, Blue Cr	OPERTY OWNER				
Box 51, Blue Cr		Kanawha	1		County
ADD		Well No	<u>Copenhaver He</u>	irs "A" #4	
	PESS	Copenha	ver Heirs "A" L	ease	Farm
The state of the s	ervising PluggingCarlo	oc Hively	Pinch Ridge R	oad. Elkvi	ew. WV 25071
STATE INSPECTOR SUP.	ERVISING PLUGGINGQaltQ	isalvely.	**************************************		
	AFFID	AVIT			
STATE OF WEST VIR	RGINIA, } ss:				
County of Kanawha					
Lee Arn	nold	and	Joe Moles		
being first duly sworn	according to law depose	and say th	at they are experie		
plugging and filling oil	and gas wells and were empiricipated in the work of plu	ployed by	Poole Well Se	ervice	aid work
well operator, and part	13th day of October	Remis and	10 86 and that	the well were	nlugged
was commenced on the and filled in the follow			is, and that	ille well was	pruggeu
AND OR ZONE RECORD	FILLING MATERIAL		PLUGB USED	CA	SING
FORMATION			SIZE & KIND	CSG PULLED	CSG LEFT IN
	elled hole w/6% gel			POLLED	Legi III
TD To Surface GG 51' to 4551'	erted note Mino Ret		36 sxs reg. cm		
15'-2153'		To all and a second	30 sxs reg. cm	t. w/10% sa	1t
64' to 1364'			31 sxs reg. cm	t. w/10% sa	1t
	C F /011 C			1173'	3580'
	6-5/8" Casing		1 /	11 .	
	6-5/8" Casing		65 sxs reg. cm	t. w/10% sa	1t
91' to 953'	6-5/8" Casing		75 sxs reg. cm	t. w/10% sa t. w/10% sa	lt 1t
91' to 953' 7' to 621' 86' to 336'	6-5/8" Casing		75 sxs reg. cm 40 sxs reg. cm	t w/10% sa t w/10% sa t w/10% sa	alt alt
91' to 953' 7' to 621' 36' to 336'			75 sxs reg. cm	t w/10% sa t w/10% sa t w/10% sa	alt alt alt
191' to 953' 77' to 621' 36' to 336' 56' to 0'	12-1/4" Casing		75 sxs reg. cm 40 sxs reg. cm	t w/10% sa t w/10% sa t w/10% sa	alt alt
191' to 953' 77' to 621' 36' to 336' 56' to 0'			75 sxs reg. cm 40 sxs reg. cm	t w/10% sa t w/10% sa t w/10% sa	alt alt alt
91' to 953' 77' to 621' 36' to 336' 56' to 0'			75 sxs reg. cm 40 sxs reg. cm	t w/10% sa t w/10% sa t w/10% sa	alt alt alt
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91' to 953' 7' to 621' 36' to 336'			75 sxs reg. cm 40 sxs reg. cm	t. w/10% sa t. w/10% sa t. w/10% sa t. w/10% sa	alt alt alt
91' to 953' 7' to 621' 36' to 336'			75 sxs reg. cm 40 sxs reg. cm 95 sxs reg. cm	t. w/10% sa t. w/10% sa t. w/10% sa t. w/10% sa	alt alt alt 32'
91' to 953' 7' to 621' 36' to 336' 56' to 0'			75 sxs reg. cm 40 sxs reg. cm 95 sxs reg. cm	t. w/10% satt w/10% sa	alt alt alt 32'
91' to 953' 77' to 621' 86' to 336' 66' to 0'			75 sxs reg. cm 40 sxs reg. cm 95 sxs reg. cm DESCRIPT 7" pipe w/stai w/CSOGC, Copen	t. w/10% satt w/10% sa	alt alt alt 32' ENT 1 plate inscr #4, GW-343,
91' to 953' 7' to 621' 66' to 336' 66' to 0' COAL SEAMS			75 sxs reg. cm 40 sxs reg. cm 95 sxs reg. cm DESCRIPT 7" pipe w/stai	t. w/10% satt w/10% sa	alt alt alt 32' ENT 1 plate inscr #4, GW-343,