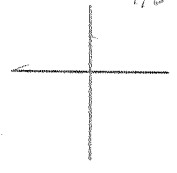


38°15'

LATITUDE 38°15'00"

7.5' from OGIS map



LONGITUDE 81°37'30"

81°35'

7.5 OGIS topo location (from plat)

7.5' loc	<u>0.575</u>	15' loc	<u>0.57</u>
	<u>1.61W</u>	(calc.)	<u>3.88W</u>

Company _____

Farm _____

Quad Racine 7.5 / Peytona 15'

County Kanawha

District Loudon

WELL LOCATION MAP

File No. 039 - 43

Kanawha

DEEPWELL

Black Band Coal & Coke Co. No. 4067 Well.

Loudon District, Kanawha County, W. Va.
 By United Fuel Gas Co.
 Kan-C on map. ← 43
 Elevation, 968.2' L.
 467 M. cu. ft. gas; R. P., 1250 lbs.
 Located 0.91 mi. S. of 38° 15' and 3.94 mi. W. of 81° 35'—NC—Peytona
 Quadrangle.
 On west side of Davis Creek.
 1.85 mi. S. W. of Marmet; 3.0 mi. N. W. of Hernshaw.

	Top.	Bottom.	Thickness.	Elevation (top)
Big Lime -----	1319	1515	196	— 351
Big Injun Sand -----	1515	1542	27	— 547
Berea Sand -----	1962	1969	7	— 994
Corniferous Lime -----	4530	4610±	80	—3562
Oriskany Sand -----	4610±	4630±	20±	—3642

Thickness, Devonian Shales, 2561 feet. Total depth, 4635'.
 Remarks: Completed Sept. 25, 1930.
 Water, 45' (hole full), 240', 575', and 790'. Gas, 1370-72'; 1460-63'
 (15 M.), 4250' (13 M.), and 4265' (16 M.).
 Oriskany gas, 4610-14' and 4622-30'.
 Samples from 4530 to 4635'.
 On 12.008 acres.

UNITED FUEL GAS COMPANY

OUTSIDE LOCATIONS

Kan. 43
(Kan. c)

Location by Kanawha Field _____

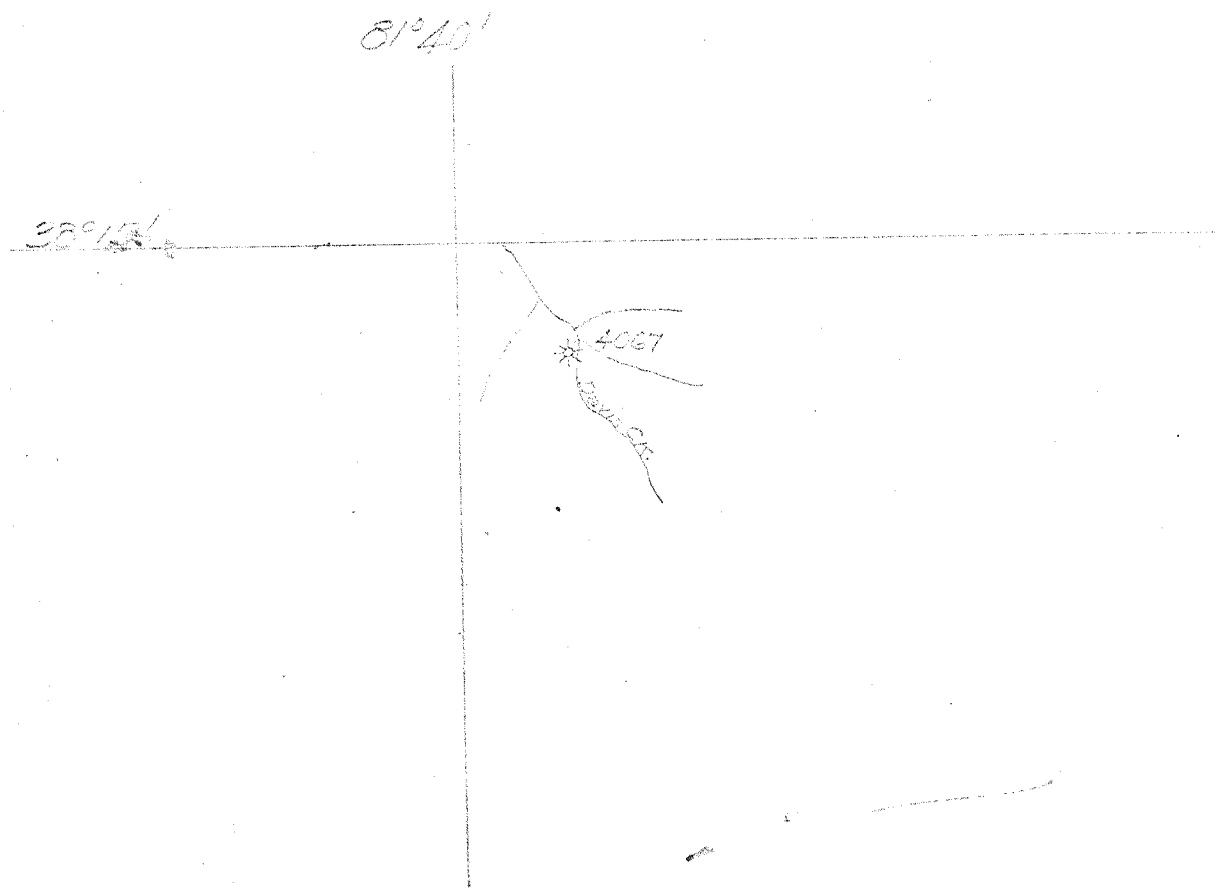
Location by United Fuel Gas Co., Well No. 4067

Black Band Coal Co. Farm, on waters of Davis CK

Map Square _____

Laudon District, Kanawha County, West Virginia

Scale 1/62,500 Made _____, 192_____



Elevations 9603

No. _____



Location: 0.91 S. 38° 15'
3.94 W. 81° 35'

1167 W

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 5

Quadrangle Peytonia 2 SW

Permit No. Kan-43-Redrilled C in Vol. 19.347 **WELL RECORD**

Oil or Gas Well gas
(KIND)

Company Columbian Carbon Company
Address P. O. Box 873, Charleston 23, W. Va.
Farm Waller C. Hardy, Jr., et al Acres 9707.19

Location (waters) Davis Creek

Well No. 2 - GW-1352 Elev. 928'G

District Loudon County Kanawha

The surface of tract is owned in fee by Conservation Dep't

State Capitol Bldg. Address Chas. 5, W. Va.

Mineral rights are owned by Waller C. Hardy, Jr. et al

P. O. Box 350 Address Parkersburg, W. Va.

Drilling commenced (redrilling) 11-6-61

Drilling completed (redrilling) 12-19-61

Date Shot not shot From _____ To _____

With _____

Open Flow /10ths Water in _____ Inch

/10ths Merc. in _____ Inch

Volume show _____ Cu. Ft.

Rock Pressure _____ lbs. _____ hrs.

Oil _____ bbls., 1st 24 hrs.

WELL ACIDIZED see reverse side

WELL FRACTURED see reverse side

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			
13 1/2" 42#	148'	148'	Kind of Packer <u>Wall and Anchor</u>
10			Size of <u>2"</u>
8 1/2" 24#	928'	470'	Depth set <u>1486'</u>
above left in hole when plugged			
4-1/2" 9.5#	1598' 11"	1598' 11"	
x ran with Hookwall Packer			Perf. top _____
2 3/8" 4.6#	1560' 8"	1560' 8"	Perf. bottom _____
Liners Used with 2" cage and packer			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
see re verse side

COAL WAS ENCOUNTERED AT 42 FEET 36 INCHES
____ FEET _____ INCHES FEET _____ INCHES
____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT F. O. F. 517M (Big Injun 324M-- Big Lime 193M)

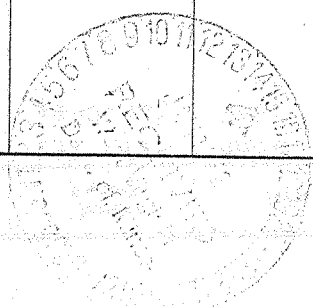
ROCK PRESSURE AFTER TREATMENT 11 days Tubing (Big Injun) 384#; B. H. (Big Lime) 128#

Fresh Water _____ Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
The following is log of well drilled by United Fuel Gas Company known as their #4067, Black Band Coal Co. #9. It was completed 9-25-30 at a total depth of 4,635' and plugged 9-10-54. The land on which the well is located is now under lease to Columbian Carbon Company. We re-opened the well and redrilled to 1748'-fractured the Big Injun and acidized the Big Lime							
Surface			0	30			
Sand			30	42			
Coal			42	45	F. water	150'	hole full
Slate and Shells			45	365	F. water	215'	5 blrs/hr.
Sand			365	540	F. water	240'	gole full
Slate			540	570			
Sand			570	728	S. water	575'	
Slate			728	750	S. water	650'	
Sand			750	855			
Slate and Shells			855	910			
Sand			910	930			
Slate			930	933			
Shells			933	943			
Slate			943	948			
Sand			948	1093	Gas	1081'	show
Slate			1093	1140	S. water	1115'	2 blrs/hr.
Sand			1140	1223			
Slate and Shells			1223	1273			
Little Lime			1273	1290			
Pencil Cave			1290	1297			
Lime Shell			1297	1317			
Slate			1317	1319			

(over)

6-6-305



Formation	Color	Hard or Soft	Top ⁵	Bottom	Oil, Gas or Water	Depth Found	Remarks
Big Lime			1319	1515	Gas	1370-72'	show
Big Injun			1515	1542	Gas	1460-62'	13M
Slate and Shells			1542	1948			
Coffee Slate			1948	1962			
Sand Shell			1962	1969			
Slate			1969	1973			
Lime Shell			1973	1982			
Slate			1982	2000			
Lime			2000	2017			
Slate			2017	2073			
Lime Shells			2073	2081			
Slate			2081	2246			
Lime Shells			2246	2253			
Slate			2253	2290			
Lime Shells			2290	2303			
Slate			2303	2530			
Slate, very soft			2530	2960			
Black Lime			2960	2990			
White Slate			2990	3160			
Lime Shells			3160	3165			
Brown Shale			3165	3280			
Lime Shells			3280	3305			
Slate and Shells			3305	3410			
Brown Shale			3410	3620			
Slate			3620	3725			
Black Lime			3725	3745			
Slate and Shells			3745	3850			
Broken Lime			3850	3900			
Slate and Shells			3900	4007			
Broken Lime			4007	4147			
Brown Shale			4147	4220			
Slate Cave			4220	4230			
Slate			4230	4238	Gas	4250'	12M
Brown Shale			4238	4355	Gas	4265'	14M
Lime Shell			4355	4360			
Brown Shale			4360	4526			
Black Shale			4526	4530			
Fossiliferous Lime			4530	4620	Gas	4610-14'	14M blew dn. to 12M
Oriskany Sand			4620	4635	Gas	4622-30'	80/10 W. 2"= 377M
Total depth-----				4635'			
Plugged and abandoned by United Fuel 9-10-54							
Re-opened and redrilled by Columbian to				1748'			
CASING RECORD							
<u>11-30-61</u>	Ran 4-1/2" O. D. 9.5# J-55 casing with shoe on bottom - Hookwall Packer 1'8" above shoe at approximately 1,600'. Float collar top of 1st joint- 3 centralizers on 1st, 4th and 7th joints and R/L Nipple 415'5" off bottom. Mixed 200 barrels mud 9.2# - circulated with 2 sacks Gelflake - killed gas. Cemented with 30 sacks.						
See Fracturing and Acidizing Record on attached sheet.							

Date January 10, 1962

APPROVED Columbian Carbon Company, Owner

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

Kan-43-D

GW-1352, Waller C. Hardy, Jr., et al #2

12-4-61 Perforated Big Injun 1517-22' with 20 shots and 1527-32' with 24 shots.

12-5-61 - Waterfraced the Big Injun

Before fracturing - show of gas. Waterfraced Big Injun with 22,500# 20-40 sand, 100 gallons Tergitol, 500 gallons 10% MCA, 250# WAC-8, fluid loss additive. Used 23,600 gallons in treatment. Broke down at 2,000#. Maximum average frac pressure 1800#. Finished up at 1900#. Average injection rate 26-1/2 bbls/min. Started sand at 1/4#/gal - went to 2# max. Opened well - flowed 200 bbls. in first 2 hours - no gas.

12-6-61 Ran tubing to swab off.

12-18-61 Pulled tubing

12-18-61 Perforated Big Lime 1451-71' with 2 shots per foot. Well opened 10 hours before perforating. Made quite a bit of sand. Big Injun gas gauging 103/10 W. 2"=427MCF.

12-19-61 -- Ran 2" tubing with Anchor Packer set between Big Lime and Big Injun.

ACIDIZED BIG LIME 12-19-61

Before acidizing had show of gas in Big Lime. Acidized Big Lime with 2,000 gallons acid. Maximum pressure 1900#. Average pressure 1800#. Flushed with 15 barrels.

12-20-61 Reset packer - Blew B. H. and tubing separately one hour.

Big Lime (dry)	31/10 W. 2"	235 M
Big Injun (wet)	40/10 W. 2"	267M
		<u>502 M</u>

12-21-61 - Final open flow 517 MCF

Tubing (Big Injun)	59/10 W. 2"	324 M
B. H. (Big Lime)	21/10 W. 2"	193 M
		<u>517 M</u>

1-5-62 - 11 day rock pressure Tubing (Big Injun)	384 #
B. H. (Big Lime)	128 #



Ken 43

OIL OR GAS WELL

United Fuel Gas Company

COMPLETION DATA SHEET

Charleston, W. Va. Address

No. 2

Well No. 4067

FARM Black Band Coal & Coke Co. FORMATION RECORD

Name	Color	Character	Oil, Gas or Water	Top	Bottom	Thickness	Total Depth	Remarks
Gravel				0	30			
Sand				30	42			
Coal			hole full water	42	45			
Slate, shelly			45'	45	365			
Sand			Water 240'	365	540			
Slate				540	570			
Sand			Water 575'	570	728			
Slate				728	750			
Sand			Water 790'	750	855			
Slate, Shelly				855	910			
Sand				910	930			
Slate				930	933			
Sand				933	943			
Slate				943	948			
Sand				948	1093			
Slate				1093	1140			
Sand				1140	1223			
Slate, shelly				1223	1273			
Little Lime (Glenray)				1273	1290			
Pencil Cave (Lillydale Shale)				1390	1297			
Lime Shell				1297	1317			
Slate				1317	1319			
Big Lime			Gas 1370' &	1319	1515			
Sand, big Injun (SLM)			1372', not	1515	1542			
Slate, shelly			tested;	1542	1948			
Coffee slate (Sunbury)			Gas 1460-63'	1948	1962			
Sand shell, Berea			5/10W in 3/4"	1962	1969			
Slate			14,877 cu.ft.	1969	1973			
Lime shell				1973	1982			
Slate				1982	2000			
Lime shell				2000	2017			
Slate				2017	2073			
Lime shell				2073	2081			
Slate				2081	2246			
Lime shell				2246	2253			
Slate				2253	2290			
Lime shell				2290	2303			
Slate				2303	2530			
Slate, very soft				2530	2960			
Lime, black				2960	2990			
Slate, white				2990	3160			
Lime, shell				3160	3165			
Shale, brown				3165	3280			
Lime, shell				3280	3305			
Slate, shelly				3305	3410			
Shale, brown				3410	3620			

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

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

producing
Well was hole.
dry

Date Approved 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.

COPIED FROM MORGANTOWN RECORDS

Deep well

Kam 43

OIL OR GAS WELL

COMPLETION DATA SHEET
No. 2
FORMATION RECORD

Company

Address

WELL No.

FARM

Name	Color	Character	Oil, Gas or Water	Top	Bottom	Thickness	Total Depth	Remarks
Slate				3620	3725			
Lime, black				3725	3745			
Slate, shelly				3745	3850			
Lime, brown				3850	3900			
Slate				3900	4007			
Lime, brown				4007	4147			
Shale, brown				4147	4220			
Slate, cave				4220	4238			
Shale, brown				4238	4355			Gas 4250'
Lime shell				4355	4360			4/10 W. in 3/4"
Shale, brown				4360	4520			13,297 cu. ft.
Slate				4526	4530			gas 4265'
Lime, corniferous				4530	4635		4635	6/10 W. in 3/4"
								16,308 cu. ft.
								Gas 4610-4614'
								6/10 W. in 3/4"
								16,308 cu. ft.
								Gas 4622-4630'
								7/10 W in 2"
								126,240 cu. ft.
								Gas in Oriskany Sand

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

Salt
Fresh water at _____ 45' and 240' 575' 790' _____ feet; fresh water at _____ feet.

producing
Well was _____ hole.
dry

September 25, 1930

Date

Approved

Operator

NOTE: All bottom formations must be noted as indicated above and all horizons 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.