

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

9-25-37

Company Cities Service Oil & Gas.  
 Address P.O. Box 873 CHARLESTON, W.VA. 25323  
 Farm RED JACKET COAL CORPORATION  
 Tract \_\_\_\_\_ Acres 4982.72 Lease No. C 3864  
 Well (Farm) No. 1 Serial No. GW 1165  
 Elevation (Spirit Level) 914.2'  
 Quadrangle MATEWAN 5 S300 W302  
 County MINGO District MAGNOLIA 5  
 Engineer R. B. Anderson  
 Engineer's Registration No. 2074  
 File No. \_\_\_\_\_ Drawing No. W-4-51  
 Date FEB. 27, 1951 Scale 1" = 1000'

169  
 STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**

462,076 FILE NO. MIN-244-DD  
 MATEWAN 7.5 C

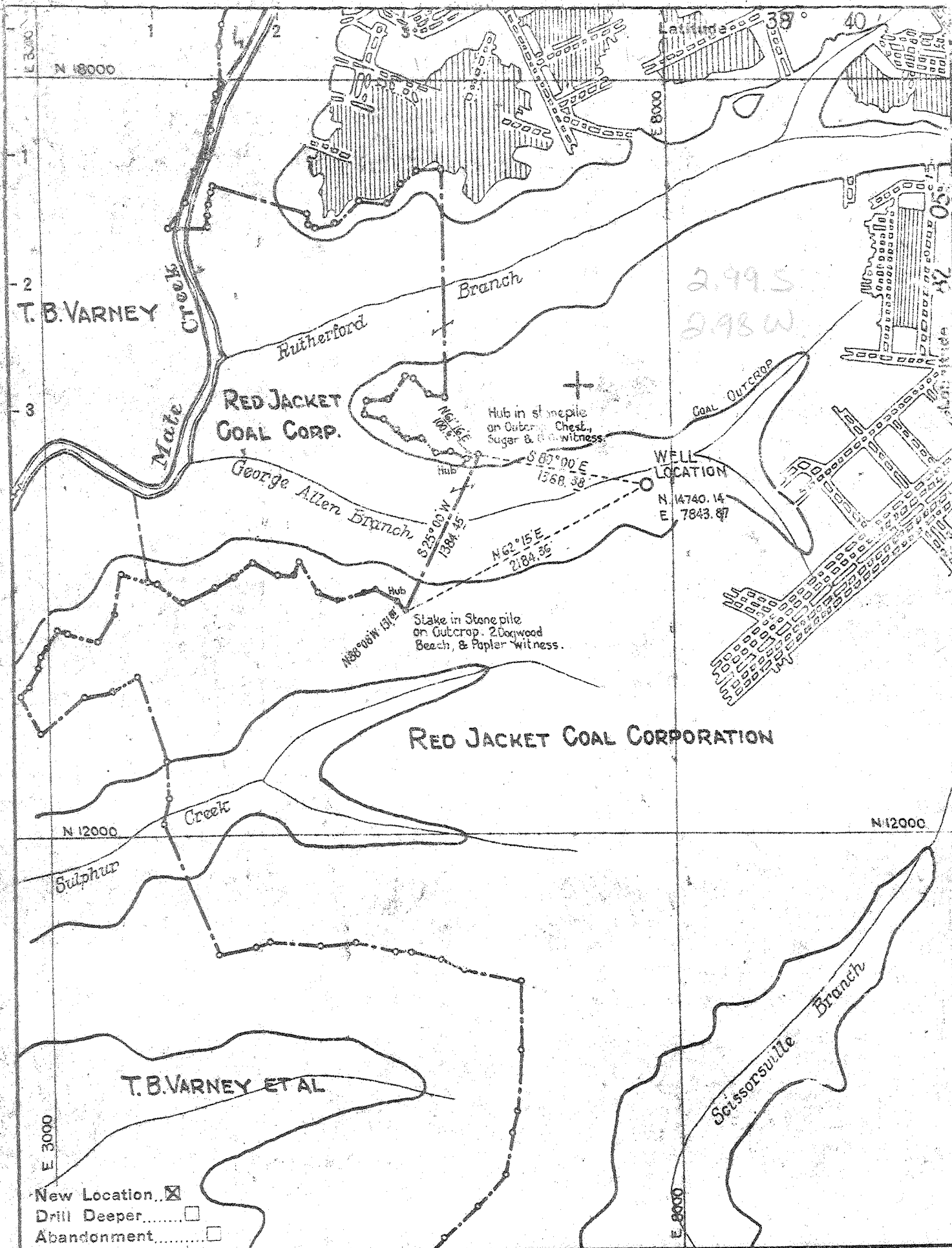
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

SEP 28 1957  
 47-059-

"IMPERIAL" TRACING CLOTH  
 K. & F. CO., N. Y.

4810' Dev. Shale  
 OWRD Deep Well 6-6 magnolia (265)



Company	COLUMBIAN CARBON COMPANY		
Address	P.O. Box 873 CHARLESTON, W.VA.		
Farm	RED JACKET COAL CORPORATION		
Tract	Acres	Lease No.	
	4982.72	C 3864	
Well (Farm) No.	1	Serial No.	GW 1165
Elevation (Spirit Level)	914.2'		
Quadrangle	MATEWAN 5	S 300	W 302
County	MINGO	District	MAGNOLIA
Engineer	R. B. Anderson		
Engineer's Registration No.	2074		
File No.	Drawing No. W-4-51		
Date	FEB. 27, 1951	Scale	1" = 1000'

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

**WELL LOCATION MAP**  
 FILE NO. MIN-244

+ 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 map.

6-6-265

WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. MIN-244  
Matewan Quad.

Gas

Company	Columbian Carbon Co.	CASING & TUBING
Address	Box 873, Charleston 23, W. Va.	
Farm	Red Jacket Coal Corp. Acres 4982.72	13 3/8 30'8" 30'8"
Location	Geo. Allen Branch	10 3/4 665'2" Pulled
Well No.	1-GW-1165 Elev. 914.2'G	8 1/2 1854'3" Pulled
District	Magnolia County - Mingo	7" 2187'6" 2187'6"
Surface	Red Jacket Coal Corp.	3 1/2" 2329'1" 2329'1"
Mineral	Same	with 3" cage
Commenced	4/12/51	
Completed	7/14/51	
Not Shot	Acidized 7/24/51 with 2000 gal. acid	Rubber Larkin Up-
Open Flow	65/10ths Merc. in 7" 20#	side down Packer.
Volume	13,047,000	Size 3" x 10" x 7"
R.P.	780 lbs. 48 hrs.	Depth Set 2238'
Fresh Water	725'	

Gravel & Sand	0	10
Mt. Sand	10	45
Slate	45	79
Sand	79	190
Slate	190	318
Sand	318	430
Slate	430	448
Sand	448	487
Slate	487	539
Sand	539	637
552'DLM-558'SLM		
Lime	637	676
Sand	676	881
Slate	881	913
Slate & Shells	913	926
Sand	926	1070
Slate	1070	1075
Sand	1075	1250
Slate	1250	1255
Sand	1255	1377
Slate	1377	1383
Sand	1383	1536
Red Rock	1536	1539
Slate	1539	1544
Sand	1544	1626
Red Rock	1626	1632
Lime	1632	1652
Sand	1652	1676
Red Rock	1676	1738
Lime	1738	1805
Slate & Shells	1805	1840
Lime Shells	1840	1848
Maxon Sand	1848	1940
Lime	1940	1948
1835'DLM-1843'SLM		
Slate & Shells	1943	1990
Black Lime	1990	2035

Slate	2035	2041
Lime Shells	2041	2052
Slate & Shells	2052	2098
Big Lime	2098	2340
2183'DLM-2184'SLM		
2220'DLM-2223'SLM		
TOTAL DEPTH	2340DLM	2340SLM
F. Water	725'	1 BPH
Gas	1310	Show
Pays:		
Gas	2220'	Show
Gas	2323'	2/10 W 2" 60MCF
Gas	2334-36	2/10 M.7"
	23#	2,226MCF

CASING RECORD:  
 5/3/51 - 10 3/4" casing. Ran at 664' SLM. Ran Aquajel. Circulation & returns. Col. Car. Co. Crew.  
 6/20/51 - 8 5/8" casing. Ran 20 sacks of Aquajel. Circulation & returns. Col. Car. Co. Crew.  
 7/5/51 7" casing. Ran 17 sacks of Aquajel. Circulation & returns. Columbian Carbon Co. Crew.

2098  
514  
184

**RECEIVED**  
SEP 09 1987



1) Date: August 14, 19 87  
 2) Operator's Well No. Red Jacket Coal A-1, GW-1165  
 3) API Well No. 47 059 0244-DD  
 State County Permit

STATE OF WEST VIRGINIA  
 DIVISION OF OIL & GAS DEPARTMENT OF ENERGY, OIL AND GAS DIVISION  
 DEPARTMENT OF ENERGY APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil  / Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  /)
- 5) LOCATION: Elevation: 914.2 Watershed: George Allen Branch  
 District: Magnolia 5 County: Mingo 059 Quadrangle: Matewan 462
- 6) WELL OPERATOR Cities Service 169 CODE: 9800 7) DESIGNATED AGENT Paul D. Phillips  
 Address P. O. Box 873 Address P. O. Box 873  
 Charleston, WV 25323 Charleston, WV 25323
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Arthur St. Clair Name N/A  
 Address Box 1300 Address  
 Mt. Gay, WV 25637
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate  /  
 Plug off old formation  / Perforate new formation  /  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Devonian Shale 401  
 12) Estimated depth of completed well, 4810 feet  
 13) Approximate tratra depths: Fresh, 725 feet; salt, None feet.  
 14) Approximate coal seam depths: None Is coal being mined in the area? Yes  / No  /

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling		
Conductor	13-3/8		48		X	31	31	Kinds Rubber Larkin
Fresh water	10-3/4		32		X	665	Pulled	Upside Down
Coal	8-5/8		24		X	1854	Pulled	20 sx Aquagel Sizes 3X10X7
Intermediate	7		23		X	2188	2188	17 sx Aquagel
Production								Depths set 2238
Tubing								
Liners								Perforations:
*	4-1/2	K-55	11.6	X		4810	4810	315 cuft OR by op. 38 CSR 18-11.1
*	2-3/8	J-55	4.6	X		4810	4810	

\*Additional tubulars

OFFICE USE ONLY  
 DRILLING PERMIT

47-059-0244-DD

September 25

87

Permit number \_\_\_\_\_

Date

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This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to Note 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires September 25, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPOP	NEF	Other
				230			
				22077			

NOTE: Keep one copy of this permit posted at the drilling location.

Director, Division of Oil and Gas

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

10792



DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Devonian Shale 4614-4453 Frac'd w/42,000# 20/50 sd, 690 MSCF N2, TL&T 117, 45 BPM Foam  
 Devonian Shale 4199-3905 Frac'd w/ 73,000# 20/50 sd, 890 MSCF N2, TL&T 169, 80 BPM Foam  
 Devonian Shale 3432-3150 Frac'd w/ 75,000# 20/50 sd, 970 MSCF N2, TL&T 202, 80 BPM Foam  
 Sunbury Shale & Berea 2997-3070 Frac'd w/ 70,000# 20/40 sd, 500 MSCF N2, TL&T 272, 20 BPM Foam

**RECEIVED**  
 FEB 29 1988

DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Big Lime			2098	2444	
Sunbury Shale			2444	3020	
Berea			3020	3070	
Devonian Shale			3070	4674	
<u>Onondaga</u>			4674	<u>4728 TD</u>	

new TD 4728  
 old TD 2340  
 new log 2388

(Attach separate sheets as necessary)

Cities Service Oil and Gas Corporation  
 Well Operator

By: Paul P. Phillips Operations Manager

Date: February 26, 1988

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including ... encountered in the drilling of a well."

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