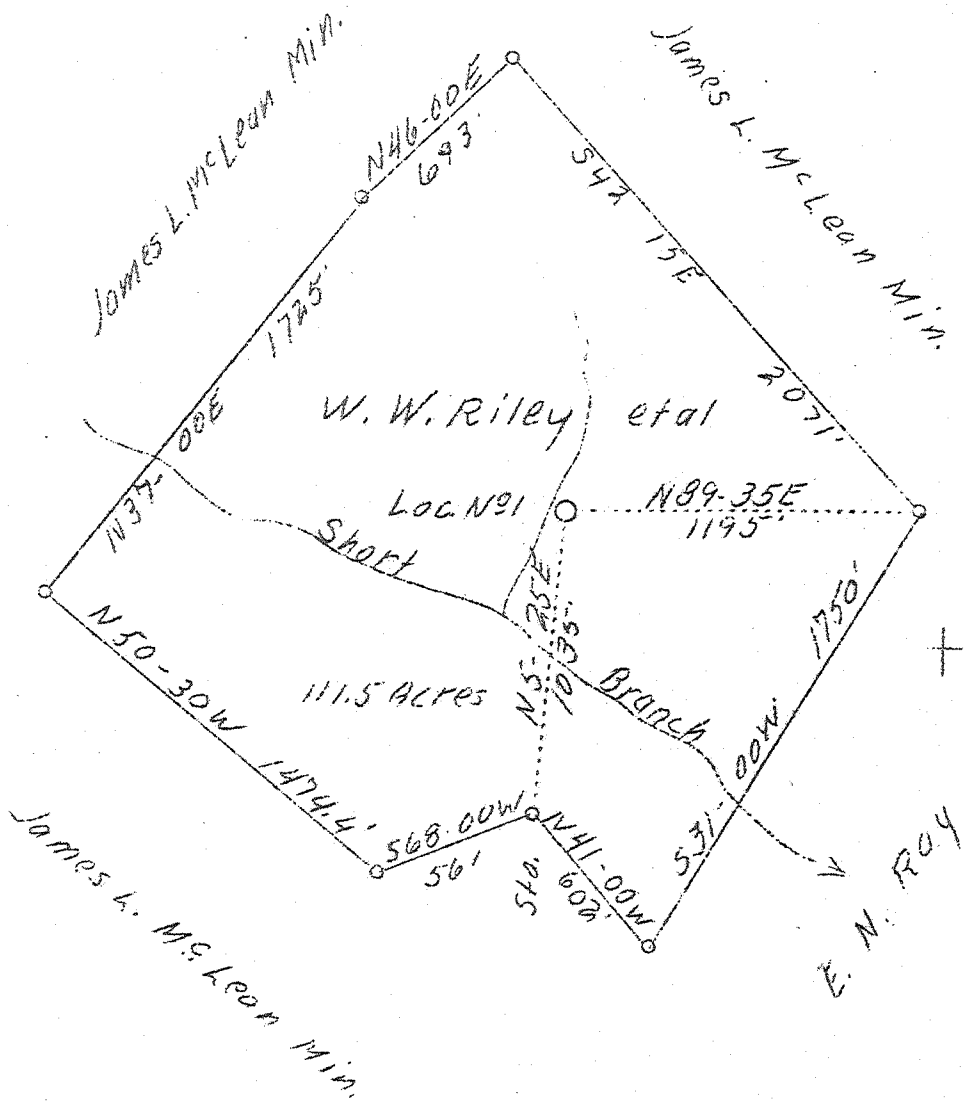


LATITUDE 38° 40'

LONGITUDE 81° 25'



Permit issued: 7-24-39

W - 1.28
S - 5.35

New location

Company United Carbon Co.,
 Address Charleston, W. Va.
 Farm W. W. Riley, et al
 Acres 111.5
 Lease No. 3496
 Well (Farm) No. 1
 Serial No. 803
 Elevation (SL) 780
 Quadrangle C Kenna
 County Jackson
 District Washington
 Engineer C. B. Wilson
 Eng. Reg. No. 494
 Date July 12, 1939
 Scale 1" = 660'

STATE OF WEST VIRGINIA
 Department of Mines
 OIL & GAS DIVISION
 Charleston

WELL LOCATION MAP

File No. 146-51

x Denotes location of well on U. S. 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.

Deep well 146-6 192

WEST VIRGINIA DEPARTMENT OF MINES

OIL & GAS DIVISION

WELL RECORD

Permit No. Jac-51
Kenna Quad.

Gas Well
CASING & TUBING

Company	United Carbon Co.	13	236	236
Address	901 Union Bg., Charleston, W. Va.	10-3/4	786	786
Farm	W. W. Riley ACRE 111.5	8-5/8	1959	1959
Location	Short Branch, Middle Fork	6-5/8	4981	4981
Well No.	1 ELEV. 788	2-3/8	5103	5103
District	Washington - Jackson County			
Surface	E. F. Row, Sissonville, W. Va.			
Mineral	W.W.Riley, Jr. et al, Pt. Pleasant, W.Va.			
Commenced	Aug. 2, 1939	CASING CEMENTED:		
Completed	Dec. 2, 1939	8-5/8	640'	9/ 5/39
Shot	Not shot	6-5/8	236	10/17/39
Open Flow	150/10ths Merc. in 6-5/8" O.D.			
Volume	16,699,000 c.f.			
Rock Pressure	1330 lbs. 48 hrs.			
Fresh Water	-			
Salt Water	1400			

Formation	Top	Base	Result	Formation	Top	Base
Soil	0	16		Slate	4800	4910
Rock red	16	150		Shale <i>Marcellus</i> blk	4910	4966
Slate&Shells	150	300		Line Corniferous -463	4966	5082
Sand	300	335		Sand Oriskany	5082	5108
Rock red	335	370		Total Depth		5108
Slate&Shells	370	415				(ATS)
Rock red	415	500				
Slate & Shells	500	575				
Rock red	575	640				
Slate&Shells	640	725				
Sand	725	830				
Slate&Shells	830	870				
Sand	870	890				
Slate&Shells	890	915				
Sand	915	945				
Slate blk	945	965				
Sand	965	980				
Slate	980	1010				
Sand	1010	1090				
Slate	1090	1095				
Sand	1095	1162				
Slate	1162	1295				
Sand	1295	1310				
Slate	1310	1315				
Lime broken	1315	1360				
Sand Salt	1360	1645	HF7 1400			
Slate	1645	1647				
Lime Black	1647	1670				
Sand Maxon	1670	1705				
Lime Little	1705	1720				
Pencil Cave	1720	1725				
Lime Big	1725	1875				
Sand Injun	1875	1925				
Slate	1925	1995				
Lime Blue	1995	2075				
Slate	2075	2335				
Shells Berea	2335	2500	Gas 2340 show			
Slate & Shells	2500	3555				
Shale brn -44	3555	3580				
Slate & Shells	3580	3675				
Lime, White h	3675	3750				
Slate & Shells	3750	4000				
Shale brn	4000	4160				
Slate&Shells	4160	4640				
Shale brn	4640	4880				