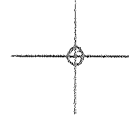


LATITUDE 37° 52' 30"



LONGITUDE 82° 17' 30"

7'5 OGIS topo location

7.5' loc	<u>0.80 S</u>	15' loc	<u>3.68 S</u>
	<u>0.75 W</u>	(calc.)	<u>3.02 W</u>

Company _____

Farm _____

Quad NAUGATUCK ^{±15'cc} 7 1/2'

County Mingo

District KERMIT

WELL LOCATION MAP

File No. 059-0120

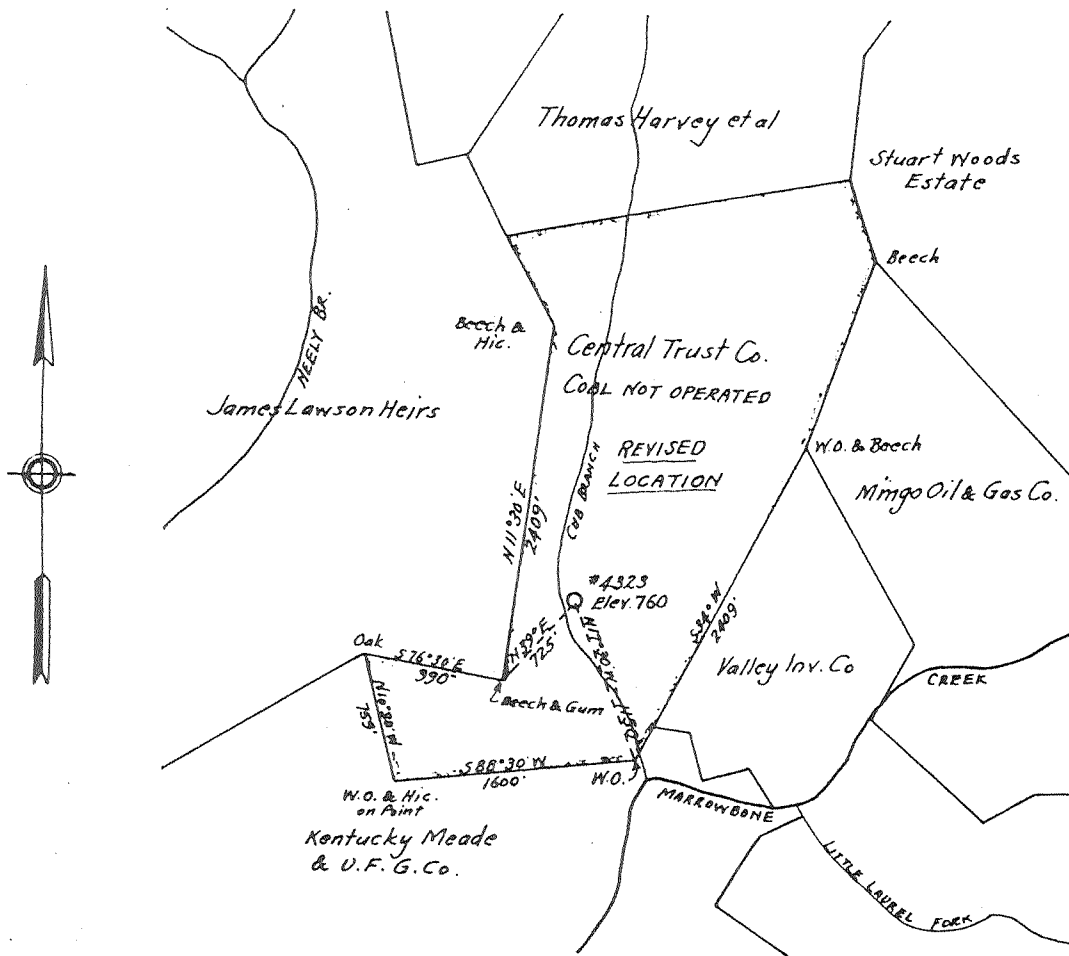
I, the undersigned hereby certify that this map is true and correct, and shows all the information required by Oil & Gas Law, Acts of 1929.

G.A. Cunningham

Acknowledged before me a _____ Notary Public _____ of Kanawha County, W. Va. this 10th day of February 1931

My Commission expires Nov. 25, 1940

Justine E. Deane
Notary Public



Central Trust Co.
Well No. 4323
Kermit ~~Warfield~~ District
Mingo County, W. Va.
Feb. 9, 1931

Mingo 20

UNITED FUEL GAS CO.
MAP SHOWING
PROPOSED WELL LOCATION
SCALE: - 4 INCHES = 1 MILE

Central Trust Company No. 4323 Well.

Kermit District, Mingo County, W. Va.

By United Fuel Gas Company.

Permit No. Min-20.

Elevation, 757' B.

116 M. cu. ft. gas; R. P., 480 lbs.

Located 3.73 mi. S. of 37° 55' and 2.94 mi. W. of 82° 15'—EC—Naugatuck Quadrangle.

On east side of Cub Branch of Marrowbone Creek, 1/4 mi. from mouth of Cub Branch.

3.1 mi. S. E. of Spaulding; 4.3 mi. N. W. of Eugene.

	Top.	Bottom.	Thickness.	Elevation (top).
Big Lime	1638	1842	204	- 881
Big Injun Sand	1842	1940	98	-1085
Berea Sand	2448	2515?	67	-1691
Corniferous Lime	3789	3828+	39+	-3032

Thickness, Devonian Shales, 1274? feet.

Total depth, 3828'.

Remarks: Completed June 7, 1931.

Shot at 2931-3532'.

Hole full water, 25' and 1110'.

Big Lime gas, 1738'.

Brown Shale gas, 3004-3443'.

On 6852 acres. (On 150-acre parcel).

Deep well

Naugatuck Q - EC

KERM IT

Warfield District, Mingo County, W. Va.

United Fuel Gas Co., Charleston, W. Va.

On 6852.4 acres, surface and mineral rights owned by Central Trust Co., Cincinnati, Ohio.

Drilled under permit Mingo-20, issued Feb. 24, 1931.

Elevation, 850' B.

13 1/2" casing, 15'; 10", 219'.

Coal was encountered at 40-45 and 64-70.

Completion reported to Dept. of Mines July 6, 1931.

Record to depth of 1187' only.

Fresh water at 25'; salt water at 1110'.

Completed 06/07/31

	Top.	Bottom.
Gravel	0	15
Sand	15	40
Coal	40	45
Sand	45	64
Coal	64	70
Slate	70	90
Sand	90	150
Slate	150	214
Sand	214	235
Slate	235	300
Sand	300	363
Slate	363	405
Lime	405	462
Sand	462	540
Slate	540	625
Sand	625	650
Broken lime	650	723
Slate	723	743
Lime	743	840
Slate	840	883
Lime	883	930
Slate	930	940
1st Salt Sand	940	1000
Slate break	1000	1005
2nd Salt Sand	1005	1187

Big Lime 1638 204'
 Big Iron 1842 08'
 Berea 2448 67'

Corniferous 3789 394
 TD 3828

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3.73 mi S of 37°55' and 2.94 mi W of 89°16'

UNITED FUEL GAS COMPANY
(INCORPORATED)

May 20 ✓

SERIAL WELL NO. **4323**

LEASE NO. **31896**

MAP SQUARE **24-25**

RECORD OF WELL No. **4323** on the
Central Trust Co. Farm of **6852.4** Acres
in **Warfield** District
Mingo County
Branchland Field, State of **W. Va.**

Rig Commenced **Furnished by Contractor**
Rig Completed **Ditto** 102
Drilling Commenced **March 21, 1931** 102
Drilling Completed **June 7, 1931** 102
Drilling to cost per foot
Contractor is: **J.W. Ramsey & Sons**
Address: **Box #53 Charleston, W. Va.**

Drillers' Names **C.E. Ramsey**
H.F. Ramsey
C.H. Thompson

CASING AND TUBING		
SIZE	USED IN DRILLING	LEFT IN WELL
10		
18 1/2	15	15
10	219	219
8 1-4	1383	156
6 5-8	1682	1682
5 8-16		
4 7-8		
4		
8	3828	3828
2		

SHUT IN	
Date	June 24, 1931
Tubing or	3 in 1 1/2 in
Size of Packer	3x6 5/8x16
Kind of Packer	Hook Wall
1st Perf. No.	3828 to 3807
2nd Perf. Set	3782 to 3759

TEST BEFORE SHOT
5 of Water in **1** 10ths
of Merc. in **1** 10ths
Volume **24,000** Cu.

TEST AFTER SHOT
6 of Water in **2** 10ths
of Merc. in **1** 10ths
Volume ~~24,000~~ **11,576** Cu.

Rock Pressure **480# 48 H**
Date Shot **June 11, 1931**
Size of Torpedo **7,000 Gg**
Oil Flowed.....bbls. 1st 24 h
Oil Pumped.....bbls. 1st 24 h

Well abandoned and
Plugged.....10

ELEV. 765.03 ENP. C. 11.52 D.C.K.

Elevation **850' B**

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Gravel	0	15	15	No Casing shoe or packer set on bottom of 18 1/2" or 10" casing. 8 1/2"x10"x13 Parmaco B.H. Packer Set at 1383'. 6 5/8"x8 1/2" x10" Parmaco B.H. Packer set at 1682. 156' of 8 1/2" casing and 8 1/2"x10"x13 Packer left in hole. Hole full water at 251'. Hole full water at 1110'. Gas in big Lime at 1738' gas in brown shale from 3004 to 3443 Total depth 3828'. 8 1/2" casing, 6 5/8" casing, all gas pays and total depth all SIM 3x6 5/8"x16" Oil well supply Hook Wall Packer set set at 2055'. Top of shot 2931 Bottom of shot 3532
and	15	40	25	
Coal	40	45	5	
and	45	64	19	
Coal	64	70	6	
Late	70	90	20	
and	90	150	60	
Late	150	214	64	
and	214	235	21	
Late	235	300	65	
and	300	363	63	
Late	363	405	42	
Lime	405	462	57	
and	462	540	78	
Late	540	625	85	
and	625	650	25	
Broken Lime	650	723	73	
Late	723	743	20	
Lime	743	840	97	
Late	840	883	43	
Lime	883	930	47	
Late	930	940	10	
st. Slat Sand	940	1000	60	
Late Braks	1000	1005	5	
and. Slat Sand	1005	1187	182	
Late	1187	1205	18	
Lime	1205	1310	105	

RECEIVED
JUL 6 1931
WORK IN PROGRESS
DEPARTMENT

UNITED FUEL GAS COMPANY
(INCORPORATED)

SERIAL WELL NO. 4323

LEASE NO. _____

MAP SQUARE _____

RECORD OF WELL No. Farm of in District County Field, State of	on the Acres District County	CASING AND TUBING			TEST BEFORE SHOT
		SIZE	USED IN DRILLING	LEFT IN WELLof Water in..... in 10thsof Merc. in..... in 10ths Volume.....Cu. f
Big Commenced	102	10			TEST AFTER SHOT
Big Completed	102	18		of Water in..... in 10thsof Merc. in..... in 10ths Volume.....Cu. f
Drilling Commenced	102	10			TEST AFTER SHOT
Drilling Completed	102	8 1-4		of Water in..... in 10thsof Merc. in..... in 10ths Volume.....Cu. f
Drilling to cost	per foot	0 5-8			Rock Pressure.....
Contractor is:		5 3-16			Date Shot.....
Address:		4 7-8			Size of Torpedo.....
Drillers' Names		4			Oil Flowed.....bbls. 1st 24 hr
		3			Oil Pumped.....bbls. 1st 24 hr
		2			Well abandoned and Plugged..... 18.....
		SHUT IN			
		Date.....			
	in Tubing or Casing			
		Size of Packer.....			
		Kind of Packer.....			
		1st Perf. Set.....from.....			
		2nd Perf. Set.....from.....			

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
late	1310	1372	62	
and	1372	1397	25	
late	1397	1402	5	
lime	1402	1478	76	
ed Rock	1478	1490	12	
axon Sand	1490	1535	45	
late	1535	1540	5	
ed Rock	1540	1558	18	
late	1558	1595	37	
ed Rock	1595	1610	15	
late	1610	1637	27	
encil oave	1637	1638	1	
ig Lime	1638	1842	204	
ig Injun	1842	1940	98	
late	1940	2410	470	
Brown Shale	2410	2448	38	
Sand	2448	2515	67	
Slate	2515	2522	7	
Shale	2522	2572	50	
Slate	2572	2594	22	
Broken Lime	2594	2830	236	
Slate	2830	2920	90	
Shale	2920	3443	523	
Slate	3443	3640	197	
Slate	3640	3675	35	
Shale	3675	3789	114	
Corniferours Lime	3789	3828	39	
TOTAL DEPTH			3828	

Mingo 20

[Handwritten Signature]

RECEIVED
JUL 6 1931
WORK IN PROGRESS
DEPARTMENT

01. 30

WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Section

PRELIMINARY DATA SHEET NO. 1

File No. Well No. 4323

United Fuel Gas Company, of Charleston, West Virginia

well on the Central Trust Co. Farm

containing 6852.4 acres. Location

Warfield District, in Mingo County, West Virginia.

The surface of the above tract is owned in fee by Central Trust Co.

of Cincinnati, Ohio address, and the mineral rights are owned by

Central Trust Co. of Cincinnati, Ohio

The oil and gas privileges are held under lease by the above named company, and this well is drilled under permit No. Mingo 20 issued by the West Virginia Department of Mines, Oil and Gas Section,

February 24, 19 31.

Elevation of surface at top of well, 850. ~~Spot~~ Barometric.

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

feet size. Wood conductor

15 feet 13-1/2" size, esg. 219 feet 10" sized esg.

feet size, esg. feet sized esg.

feet size, esg. feet sized esg.

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 40-45 feet; thickness 60 inches, and at 64-70

feet; thickness 72 inches; and at feet; thickness inches.

Liners were used as follows: (Give details)

.....

.....

.....

July 6, 1931 Date.

Approved United Fuel Gas Company, Owner.

By G. Cunningham (Title) Engineer

M. J. 20

United Fuel Gas.....Company
.....Charleston, W. Va.....Address
.....Well 4323.....

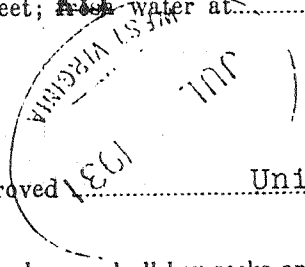
COMPLETION DATA SHEET
NO. 2
FORMATION RECORD

Name	Color	Character	Oil, Gas or Water	Top	Bottom	Thickness	Total Depth	Remarks
Gravel					15	15		
Sand				15	40	25		
Coal				40	45	5		
Sand				45	64	19		
Coal				64	70	6		
Slate				70	90	20		
Sand				90	150	60		
Slate				150	214	64		
Sand				214	235	21		
Slate				235	300	65		
Sand				300	363	63		
Slate				363	405	42		
Lime				405	462	57		
Sand				462	540	78		
Slate				540	625	85		
Sand				625	650	25		
Broken Lime				650	723	73		
Slate				723	743	20		
Lime				743	840	97		
Slate				840	883	43		
Lime				883	930	47		
Slate				930	940	10		
1st Salt Sand				940	1000	60		
Slate Brake				1000	1005	5		
2nd Salt Sand				1005	1187	182		

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

~~25'~~ Fresh water at.....25'.....feet; ~~1110'~~ salt water at.....1110'.....feet.

producing
Well was ~~not~~ hole.



July 6, 1931.....Approved.....United Fuel Gas Company.....
Date.....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.