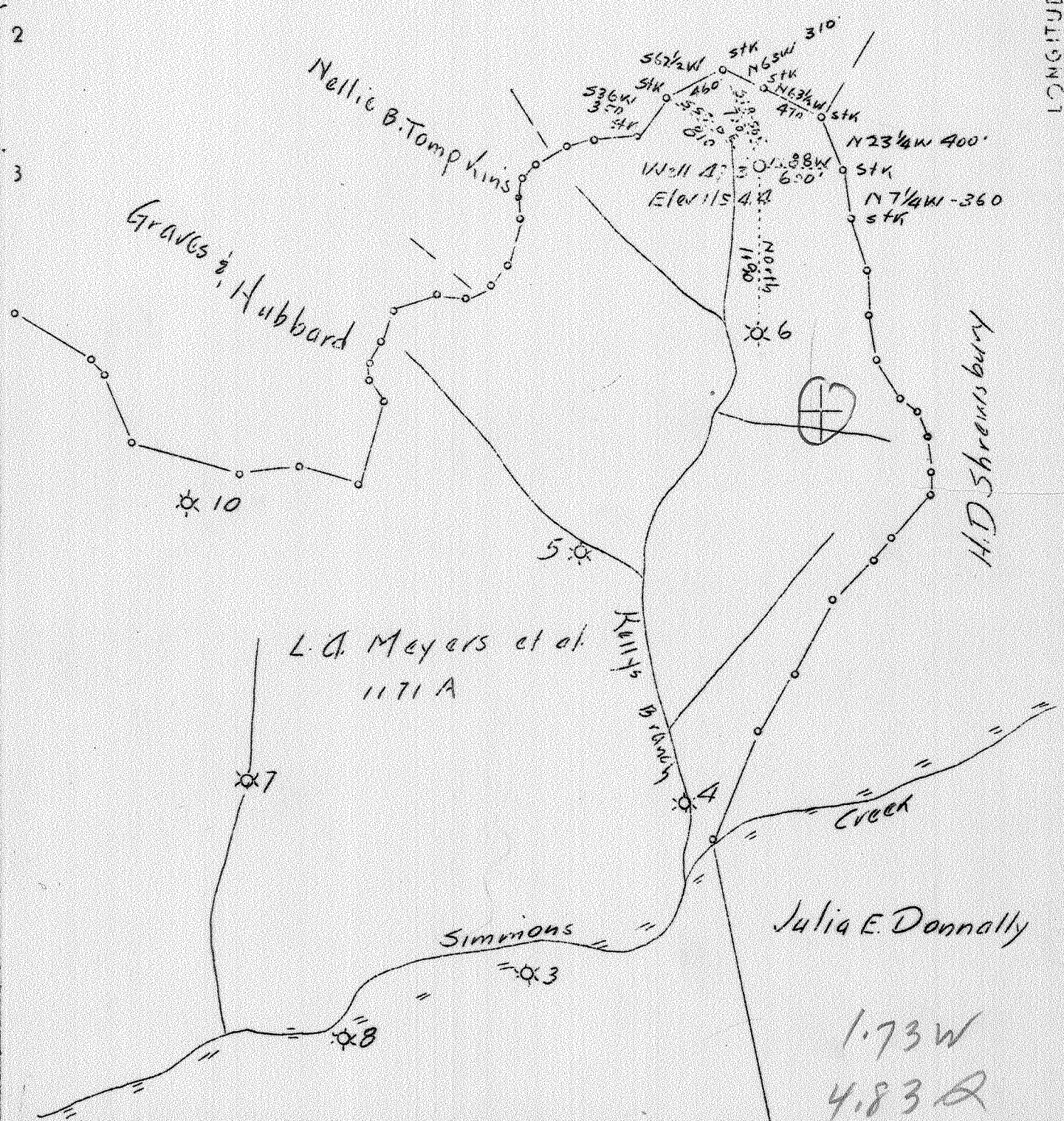


LATITUDE 38° 20'

LONGITUDE 81° 30'

United Fuel Gas Co. Fee



Company	The Owers, Libbey-Owers Gas Dept
Address	Box 1375, Charleston, W. Va.
Farm	L. A. Meyers
Tract	One Acres 1171 <sup>Q</sup> Lease No. 370
Well (farm) No.	11 Serial No. 473
Quadrangle	Charleston <b>SE</b>
County	Kanawha
District	Malden
Engineer	T. S. Flournoy
Engineer's Registration No.	269
File No.	Drawing No.
Date	4-5-37 Scale 1" = 1000'

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

WELL LOCATION MAP  
 File No. KAN-361

+ 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.

6-6 214 deep well

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

WELL RECORD

Permit No. Kan-361

Gas Well

Charleston Quad.

CASING & TUBING

Company	The Owens, Libbey-Owens Gas Dept.	10	618 $\frac{1}{2}$	618 $\frac{1}{2}$
Address	P.O. Box 1375, Charleston, W. Va.	8 $\frac{1}{4}$	1534	1534
Farm	L.A. Meyers Acres 1171	6 5/8	4962	4962
Location	Simmons Creek	2	5035	5035
Well No.	473 $\text{\textcircled{1}}$			
District	Malden			
Surface Address	L.A. Meyers, c/o Meyers Land Co. Newport News, Va.			
Coal	Belle Alkali Co., Belle, W. Va.			
Drilling	Commenced May 3, 1937 Completed Aug. 19, 1937			
Date Shot	Aug. 13, 1937			
Volume	696,000 Cu. Ft.			
Rock Press.	916# 32 hrs.			

Formation Color					Formation Color					
	Color	Hor	Top	Base	Color	Hor	Top	Base	Result	
Clay	Dark	S	0	9	Slate&Shells	Gray	H	1791	1818	Blew
Coal	Black	S	9	11	Shells	Gray	H	1818	1855	down
Sand	White	H	11	29	Slate&Shells	Gray	S	1855	1955	to
Coal	Black	S	29	31	Shells	Dark	H	1955	1988	224,000
Sand	White	H	31	52	Slate&Shells	Dark	S	1988	2203	in 20
Slate	Dark	S	52	62	Shells	Gray	H	2203	2240	days.
Sand	White	H	62	147	Lime	Gray	H	2240	2278	Water
Slate	Dark	H	147	184	Slate&Shells	Light	S	2278	3142	1245-
Sand	White	S	184	249	Shells	Light	H	3142	3180	1253
Coal	Black	S	249	252	Slate&Shells	Gray	S	3180	3227	Hole
Slate	Black	S	252	263	Shale	Dark	S	3227	3247	Full.
Sand	White	H	263	282	Slate&Shells	White	S	3247	3276	Show
Slate&Shells	Dark	S	282	302	Lime Shells	Gray	H	3276	3347	Gas
Sand	Gray	H	302	407	Slate&Shells	Dark	S	3347	3377	1669
Slate	Dark	S	407	460	Lime Shells	Dark	H	3377	3559	
Sand	Gray	H	460	517	Slate&Shells	Dark	M	3559	3753	Gas
Slate	Dark	S	517	540	Shells	Dark	H	3753	3769	1715'
Sand	Dark	H	540	575	Slate&Shells	Dark	S	3769	3847	33,000
Sand	White	H	575	584	Slate	Dark	S	3847	3888	
Coal	Black	S	584	588	Slate&Shells	Dark	S	3888	3931	Gas
Slate	White	S	588	599	Shale	Brown	S	3931	3981	1975-
Sand	White	H	599	648	Lime	Brown	H	3981	4007	1985'
Slate&Shells	Dark	S	648	688	Slate & Shells	Dark	S	4007	4048	9,000.
Lime Shells	Dark	S	688	725	Slate&Shells	White	S	4048	4092	
Slate&Shells	Dark	S	725	736	Slate	White	S	4092	4183	
Sand	Dark	H	736	764	Slate&Shells	White	S	4183	4354	
Sand	Gray	H	764	795	Slate	White	S	4354	4490	
Sand	Light	H	795	866	Slate	Dark	S	4490	4576	
Sand	Dark	H	866	924	Slate&Shells	Dark	S	4576	4630	
Sand	White	H	924	966	Shale	Dark	S	4630	4668	
Slate	Dark	S	966	972	Slate&Shells	Dark	S	4668	4699	Gas
Sand	Light	H	972	1154	Shale	Brown	S	4699	4795	4702'
Slate	Dark	S	1154	1160	Slate	Black	S	4795	4888	7,000
Sand	White	H	1160	1242	Shale	Brown	S	4888	4942	
Salt Sand	White	H	1242	1325	Corniferous	Gray	H	4942	5025	Gas
Red Rock	S	S	1325	1330	Oriskany Sand	White	H	5025	5040	5026-
Sand	Light	S	1330	1360	TOTAL DEPTH			5040	5040	5036'
Lime	Gray	H	1360	1423						261,00
Sand	White	H	1423	1457						
Lime	Black	H	1457	1499						
Blate	Dark	S	1499	1503						
Lime Shell	White	H	1503	1514						
Slate	Dark	S	1514	1518						
Lime	Dark	H	1518	1527						
Big Lime	White	H	1527	1697						
Injun Sand	Red	S	1697	1756						
Lime Shell	Dark	H	1756	1791						

4942 5025  
1154 1154  
3788 3871



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 9

Quadrangle Charleston

Permit No. Kan-361-Rev

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company OWENS, LIBREY-OWENS GAS DEPARTMENT  
Address P. O. Box 4168, Charleston, W. Va.  
Farm L. A. Meyers Acres 1171  
Location (waters) \_\_\_\_\_  
Well No. 11 (Serial No. 473) Elev. 1154'  
District Malden County Kanawha  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by D. W. Stubblefield  
1622 Ridgeview Drive, Address Charleston, W. Va.  
& O.L.O. Gas Dept.  
REPAIRS commenced May 10, 1963  
Drilling completed July 17, 1963  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED \_\_\_\_\_  
WELL FRACTURED 7-1-63 Dowell fraced Big Injun Sand -- see remarks.

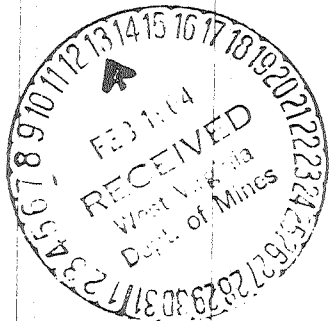
Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer _____
16			Size of _____
13			Depth set _____
10			Perf. top _____
8 1/4			Perf. bottom _____
6 3/4	4962	2883'5"	Perf. top _____
<del>5-3/4</del> 4-1/2"	1750'7"	1750'7"	Perf. bottom _____
3			Perf. top _____
2 -3/8"	5039'11"	Pulled	Perf. bottom _____
Liners Used			

CASING CEMENTED 4-1/2 SIZE 201 No. Ft. 6-25-63 Date

COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT Big Injun Sand 626 MCF  
ROCK PRESSURE AFTER TREATMENT 285# in 7 Days  
Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
As completed 8-19-37:					5-13-63		
					Dowell pumped in 60 bbls. gel and 30 bags Class A cement through 2-3/8" tubing.		
					5-14-63		
					Pulled 5039'11" of 2-3/8" tubing.		
					5-20-63		
					Well opened 120 hours, gas tested 6.8 M		
					6-3-63		
					Ripped 6-5/8" casing at 2079 ft.		
					6-11-63		
					Pulled 2078'7" of 6-5/8" casing, leaving 2883'5" in hole.		
					6-12-63		
					Set bridge		2079 - 2043
					SIM 2043 ft.		
					6-17-63		
					Test		10.6 M
					6-18-63		
					Birdwell ran temperature and gamma-ray logs.		
					6-20-63		
					Clay 2040 to 1938 ft.		
					6-21-63		
					Rock	1938 to 1918 ft.	
					Cement	1918 to 1908 (3 bags)	
					Rock	1908 to 1846	



Formation	Color	Hard or Soft	Top 9	Bottom	Oil, Gas or Water	Depth Found	Remarks
					6-22-63 Rock	1846 to 1759 ft.	
					Cement (3 bags)	1759 to 1749	
					6-25-63 SIM 1751 ft.		
					Installed 4-1/2" casing at 1750 ft. on a shoe.		
					Dowell cemented in the 4-1/2" casing from 1751 to 1550 ft. with 41 sacks cement.		
					6-28-63		
					Birdwell perforated the 4-1/2" casing 1714 to 1718 with 3-5/8" selecto jets. Perforated 13 holes in the 4-1/2" cag.		
					7-1-63		
					Dowell fraced the Big Injun Sand with 30,000 lbs. 20-40 sand, 500 gal. HCL acid and 526 bbls. of water.		
					7-9-63 2 P.M.		626 M
					7-17-63 4 P.M.	626 M	Mist of oil.

Date February 7, 1964

APPROVED OWENS, LIBBEY-OWENS GAS DEPARTMENT, Owner

By *A. H. Smith*  
A. H. Smith, Mgr. (Title) Land, Engrg. & Geo