





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 2

WELL RECORD

Quadrangle Logan  
Permit No. Boo-900

Oil or Gas Well Gas  
(KIND)

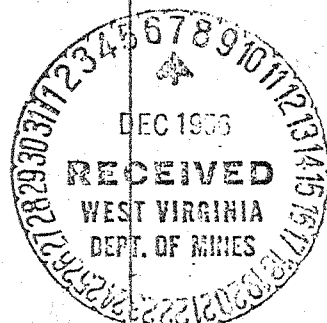
Company OWENS, LIBBEY-OWENS GAS DEPARTMENT  
Address P. O. BOX 4158, Charleston 4, W. Va.  
Farm Omer Hager Acres 311.6  
Location (waters) \_\_\_\_\_  
Well No. 2 (Serial No. 1016) Elev. 1151.18  
District Washington County Boone  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by Omer Hager, Manila, W. Va.  
Key Hager, Chapmanville, W. Va. Eliza Linville  
Address \_\_\_\_\_  
Drilling commenced 8-25-56 (4724 Wash. Ave. S.E., Chas.)  
Drilling completed 11-19-56  
Date Shot 9-21 & 11-29 From 1350 To 1369  
3289 4345  
With 200# and 10,100# Detonite

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10 3/4	427'7"	427'7"	Size of
8 5/8	1021'10"	1021'10"	
6 7/8	1470'8"	1470'8"	Depth set
5 3/16			
2			Perf. top
Liners Used			Perf. bottom
			Perf. top
			Perf. bottom

Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume (Maxton 317 MCF Shale 65 MCF) 382 Cu. Ft.  
Rock Pressure 440 lbs. 120 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water 105, 427, 695, feet 735, 1022 feet  
Salt water \_\_\_\_\_ feet \_\_\_\_\_ feet

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
COAL WAS ENCOUNTERED AT 128 FEET 36 INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand & Grav.	Yellow	Soft	0	14			
Slate	Grey	Soft	14	31			
Slate	Light	Soft	31	85			
Sand	Light	Med.	85	110			Water at 105', 4 B.P.H.
Slate	Dark	Soft	110	128			
Coal	Dark	Soft	128	131			
Slate	Dark	Soft	131	141			
Sand	Light	Hard	141	149			
Slate	Light	Soft	149	169			
Sand	-	Soft	169	189			
Slate	Light	Soft	189	218			
Sand	Light	Med.	218	240			
Slate	Dark	Soft	240	345			
Sand	Light	Med.	345	358			
Slate	Dark	Soft	358	389			
Sand	Light	Soft	389	401			
Lime	Dark	Soft	401	411			
Slate	Dark	Soft	411	418			
Slate	Light	Soft	418	433			Water test at 427', 1 B.P.H. Ran 10-3/4" casing on shoe at 427 ft. SLM 427 = Sand LM 427
Sand	Light	Med.	433	484			
Slate	Dark	Soft	484	489			
Lime	Light	Med.	489	504			
Sand	Light	Hard	504	525			
Sand	Grey	Med.	525	557			
Sand	Light	Med.	557	612			
Slate	Light	Soft	612	614			
Sand	Light	Med.	614	697			Water 695', 4 B.P.H. Water, hole filling.
Water Sand	Light	Med.	697	735			
Sand	Light	Med.	735	748			
Slate	Light	Soft	748	750			
Sand	White	Hard	750	785			
Slate	Dark	Soft	785	838			
Sand	Grey	Med.	838	888			
Sand	White	Hard	888	912			



Formation	Color	Hard or Soft	Top <sup>2</sup>	Bottom	Oil, Gas or Water	Depth Found	Remarks
Settling Sand	White	Med.	912	945			
Slate	Dark	Soft	945	974			
Sand	Light	Hard	974	979			
Sand	Grey	Hard	979	1009	Oil show at	1002 ft.	
Slate	Light	Soft	1009	1011			
Gritty Lime	Grey	Hard	1011	1016			
Sand	Light	Hard	1016	1019			
Slate	Light	Soft	1019	1028	Water level	500' at 1022'	
					Ran 8-5/8" casing on shoe at 1022 ft.		
					set in red mud.		
					SLM 1022 = Sand LM 1024		
Red Rock	Red	Soft	1028	1067			
Sl. & Shls.	Dark	Med.	1067	1073			
Red Rock	Red	Soft	1073	1108			
Slate	Light	Soft	1108	1134			
Shells	Dark	Hard	1134	1145			
Red Rock	Red	Soft	1145	1171			
Sl. & Shls.	Light	Soft	1171	1191	9-17-56 Cleaning out R.	R. cavings	
					from 1176 to 1191 ft.		
Lime	Dark	Med.	1191	1211			
Sand	Grey	Hard	1211	1225	Using Linco	1218 ft.	
Slate	Dark	Soft	1225	1231			
Sand	Grey	Hard	1231	1246			
Lime	Grey	Hard	1246	1256			
Sl. & Shls.	Light	Soft	1256	1284			
Shells	Light	Hard	1284	1297			
Slate	Light	Soft	1297	1312			
Lime	Light	Med.	1312	1319			
Lime	Light	Hard	1319	1324			
Slate	Light	Soft	1324	1331			
Max. Sand	Light	Hard	1331	1349	Oil show at	1349 ft.	
" "	Grey	Hard	1349	1369	SIM 1366 = Sand LM 1366		
					Gas 1353'	=	458 cu. ft.
					Gas 1359		11 MCF
					Gas 1366		286 MCF
					9-21-56 Shot well with 200# Detonite		
					from 1350 to 1369 at 2:37 P.M.		
					Tamped with 50' Pea Gravel.		
					Time bomb set for 2:40 P.M.		
					Test before shot:		284 MCF
					9-22-56 Drilling out tamp. Gas broke		
					through 19 hours after shot (9:15 A.M.)		
					Test 1 hour after:		379 MCF
					9 Hrs. "		353 MCF
					(9 Hrs. = 28 hours after shot)		
					Well shut-in in 8-5/8" casing at 6:30PM		
					9-24-56 4 hours cleaning out 1365-1369		
					Tests: 1 P.M.		419 MCF
					11:30 P.M.		373 MCF
					9-25-56 Test 1374'		343 MCF
					Test 1389'		321 MCF
					Well open 20 hours, test		317 MCF
					Well open 24 hours "		317 MCF
					Test 1440', open 40 Hrs.		317 MCF
					Test 1456'		306 MCF
					" 1469'		277 MCF
					9-27-56 Ran 7" casing at 1469' on shoe		
					cemented in with 10 bags cement.		
					SLM 1469 = Sand LM 1471		
Big Lime	White	Hard	1469	1622			
Big Lime	Dark	Hard	1622	1636			
Big Lime	White	Hard	1636	1645			
Red Injun	Red	Soft	1645	1706			

Date December 6, 19 56

APPROVED OWENS, LIBBEY-OWENS GAS DEPARTMENT, Owner

By A. H. Smith (Title) Geologist



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 2A

WELL RECORD

Boo-900

Oil or Gas Well Gas  
(KIND)

OWENS LIBREY-OWENS GAS DEPARTMENT  
BOX 4158, CHARLESTON 4, W. Va.  
Owner Hager Acres 311.6  
Well No. - Serial No. 1016 Elev. 1151.18  
Washington County Boone  
is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
owned by \_\_\_\_\_  
Address \_\_\_\_\_  
From \_\_\_\_\_ To \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10			Size of
8 1/2			
6 1/2			Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

/10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
\_\_\_\_\_ Cu. Ft.  
Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
\_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Continued from previous page:							
Shells	Dark	Hard	1706	1711			
Grey Injun	Grey	Soft	1711	1768	Gas 1730'	=	548 cu. ft.
					SLM 1768 =	Sand LM 1772	
Sl. & Shls.	Light	Soft	1768	1783			
Weir Sand	Grey	Med.	1783	1844	Test 1795	=	346 cu. ft.
Slate	Light	Soft	1844	1850	Test 1850		300 "
Sl. & Shls.	Light	Soft	1850	2047	Test 2044		245 "
Lime Shell	Light	Med.	2047	2058	Test 2058		387 "
Sl. & Shls.	Light	Soft	2058	2147	Test 2105		245 "
Br. Shale	Brown	Soft	2147	2155			
Berea Sand	Dark	Hard	2155	2177	Test 2173		324 "
Berea Sand	Grey	Hard	2177	2182	Test 2182		458 "
Sl. & Shls.	Light	Soft	2182	2209	Test 2195		424 "
					Test 2209		387 "
					Test 2232		346 "
Sl. & Shls.	Light	Med.	2209	2232	SLM 2232 =	Sand LM 2232	
Lime Shell	Grey	Hard	2232	2244			
Sl. & Shls.	Light	Soft	2244	2249			
Shells	Light	Hard	2249	2257	Test 2257	=	324 cu. ft.
Shells	Grey	Hard	2257	2270	Test 2267		300 "
Slate	Light	Soft	2270	2287	Test 2287		245 "
Sl. & Shls.	Light	Soft	2287	2370			
Slate	Light	Soft	2370	2389			
Shells	Light	Hard	2389	2396			
Slate	Light	Soft	2396	2409			
Shells	Light	Hard	2409	2421	Test 2410	=	245 "
Lime	Light	Hard	2421	2431	Test 2421		274 "
Sl. & Shls.	Light	Soft	2431	2648	Test 2471		245 "
Lime	Light	Med.	2648	2656	Test 2656		300 "
Shells	Light	Hard	2656	2668			
Slate	Light	Soft	2668	2678			
Shells	Dark	Hard	2678	2683			
Slate	Light	Soft	2683	2688			
Sl. & Shls.	Light	Soft	2688	3260	Test 3260		274 "

Formation	Color	Hard or Soft	Top 2A	Bottom	Oil Gas or Water	Depth Found	Remarks
ate	Light	Soft	3260	3272			
me Shell	Light	Hard	3272	3280			
ate	Light	Soft	3280	3290	Test 3340		300 cu. ft.
Shale	Brown	Soft	3290	3340	SIM 3340 = Sand LM 3340		"
na. & Shls.	Dark	Soft	3340	3364			
me Shell	Grey	Hard	3364	3381			
Shale	Brown	Soft	3381	3414			
na. & Shls.	Brown	Med.	3414	3445			
na. & Shls.	Brown	Soft	3445	3460	Test 3506'		300 cu. ft.
na. & Shls.	Brown	Soft	3460	3511	Test 3538		346 " "
l. & Shls.	Light	Soft	3511	3582	Test 3625		300 " "
r. Shale	Brown	Soft	3582	3625			
na. & Shls.	Brown	Soft	3625	3668			
r. Shale	Brown	Soft	3668	3687			
late	White	Soft	3687	3718	Test 3734		346 " "
late	Light	Soft	3718	3744	Test 3842		387 " "
l. & Shls.	Light	Soft	3744	4029			
late	White	Soft	4029	4069	Gas 4103 to 4129 ft.		949 cu. ft.
late	Dark	Soft	4069	4181	Gas 4115		3.9 MCF
Br. Shale	Brown	Soft			Gas 4129		6 MCF
					Gas 4142		5.8 MCF
					Test 4164		
			4181	4191	Test 4215		4.9 MC. "
Slate	Light	-	4191	4215	SIM 4245 = Sand LM 4247		
Shale	Dark	Soft	4215	4245	Test 4263		4.4 MCF
Br. Shale	Brown	Soft	4245	4263	Test 4313		3.1 MCF
Corn. Lime	Light	Hard	4263	4313	Test 4345		
Corn. Lime	Grey	Hard	4313	4337			3.1 MCF
Oris. Sand	Dark	Hard	4337	4345	SIM 4345 = Sand LM 4345		
Lime - held	Dark	Hard					
Total Depth				4345			
				485			
				4245	4313		
				1151	1151		
				-3094	-3162		
					11-29-56 Shot well with 10,100# Detoni		
					from 3289 to 4345 ft.		
					Test before shot:		2.9 MCF
					" 15 Min. A.S. :		1054 MCF
					1 Hr. "		346 MCF
					5 Hrs. "		125 MCF
					10 " "		90 MCF
					15 " "		71 MCF
					17 " "		65.5 MCF
					Final Open Flow:		
					Max. Sand (tests 925 & 926)		317 MCF
					Br. Shale		65 MCF
					Total		382 MCF
					11-30-56		
					Well shut-in in 7" casing 17½ hours		
					after shot.		

Date December 6, 1956

APPROVED OWENS, LIBBEY-OWENS GAS DEPARTMENT

By A. H. Smith (Title) Geologist