

Company **AMERICAN MUTUAL OIL CO.**  
 Address 1640 Court Place, Denver, Colorado.  
 Farm Sallie I. Estlack  
 Tract \_\_\_\_\_ Acres 98 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1087  
 Quadrangle Centerpoint - EC  
 County Doddridge District McClellan  
 Engineer W. Sheetz  
 Engineer's Registration No. 1227  
 No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Nov. 1961 Scale 1" = 30 poles

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

**WELL LOCATION MAP**  
 FILE NO. Dod - 678

+ 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.

60 117



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 12

Quadrangle Centerpoint

Permit No. DOD-678

WELL RECORD

Oil or Gas Well Dry

Company American Mutual Oil Co.  
Address 1640 Court Place, Denver, Colorado  
Farm Sallie I. Estlack Acres 98  
Location (waters) \_\_\_\_\_  
Well No. 1 Elev. 1087'  
District McClellan County Doddridge  
The surface of tract is owned in fee by Sallie I. Estlack  
Address Fairmont, West Virginia  
Mineral rights are owned by Same  
Address \_\_\_\_\_  
Drilling commenced December 26, 1961  
Drilling completed April 1, 1962  
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 3-10-62 Water frac.

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
18			
18			
10	430		Size of
8"	1077	1077	
7"	2312		Depth set
4 1/2"	2910	2910	
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

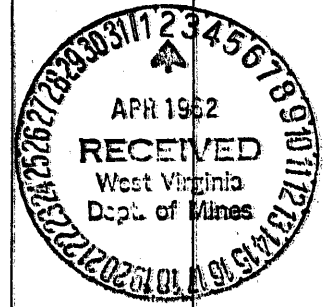
CASING CEMENTED 4 1/2 SIZE No. Ft. \_\_\_\_\_ Date  
125 sks. Hi Early Cement, 10 sks. Aquagel  
Halliburton  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT

ROCK PRESSURE AFTER TREATMENT

Fresh Water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Shale			830	834			
Shale			834	839			
Shale			839	846			
Shale			846	857			
Red Rock			857	870			
Red Rock			870	882			
Straw Sand			882	886			
Slate			886	891			
Shale			891	900			
Red Rock			900	920			
Red Rock			920	930			
Red Rock			930	941			
Red Rock			941	950			
Red Rock			950	959			
Red Rock			959	966			
Lime			966	976			
Lime			976	984			
Lime			984	990			
Lime			990	994			
Lime			994	1000			
Red Rock			1000	1020			
Red Rock			1020	1034			
Red Rock			1034	1040			
Brown Shale			1040	1055			
Red Rock			1055	1063			
Lime			1063	1067			
E-Lime			1067	1074			
L-Lime			1074	1080			
L-Lime			1080	1090			
L-Lime			1090	1098			



Formation	Color	Hard or Soft	Top / 2	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1098	1104			
Lime			1104	1115			
Lime			1115	1121			
Lime			1121	1130			
Lime			1130	1135			
<del>1135</del> Sand Lime			1135	1140			
Sand lime			1140	1147			
Sandy Lime			1147	1152			
Lime			1152	1158			
Grey Shale			1158	1164			
Grey Shale			1164	1172			
Grey Shale			1172	1180			
Grey Shale			1180	1189			
Grey Shale			1189	1194			
Lime Rock			1194-	1199			
Lime Rock			1199	1207			
Lime Rock			1207	1212			
Lime Rock			1212	1216			
Lime Rock			1216	1220			
Lime Rock			1220	1225			
Lime Rock			1225	1250			
Lime Rock			1250	1275			
Lime Rock			1275	1280			
Lime Rock			1280	1300			
Slate & Shells			1300	1360			
Slate & Shells			1360	1372			
Slate & Shells			1372	1385			
Slate & Shells			1385	1400			
Brown Slate			1460	1470			
hard lime slate & sand			1470	1480			
Hard lime and sand			1480	1492			
hard lime & sand			1492	1502			
Hard lime & sand			1502	1509			
Lime			1509	1517			
Slate			1517	1528			
Sand			1528	1570			
Slate & Shells			1570	1592			
Slate & Shale			1592	1600			
<del>1600</del> Sand Hard			1600	1612			
<del>1612</del> sand hard			1612	1626			
sand hard			1626	1645			
Lime Hard			1645	1650			
Black Shale			1650	1698			
Black Lime hard			1698	1710			
Black lime hard			1710	1718			
Black lime hard			1718	1727			
Shale			1727	1732			
Hard Lime			1732	1745			
Sand Hard			1745	1790			
Slate			1790	1800			
Sand & Lime			1800	1814			
Sand			1814	1830			
Sand			1830	1840			
Sand			1840	1848			
Sand			1848	1859			
Slate			1859	1872			
Red Rock			1872	1875			
Broken Sand			1875	1907			
Lime			1907	1912			
Black lime			1912	1923			
Black lime			1923	1935			
Black lime			1935	1969			
Black Shale			1969	1973			
50% black shale & 50% hard brown lime			1973	1982			

Date \_\_\_\_\_, 19\_\_\_\_

APPROVED \_\_\_\_\_, Owner

By \_\_\_\_\_ (Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 12A

Quadrangle \_\_\_\_\_

Permit No. DOD-678

WELL RECORD

Oil or Gas Well \_\_\_\_\_ (KIND)

Company American Mutual Oil Co.  
Address 1640 Court Place, Denver, Colorado  
Farm Sallie I. Estlack Acres 98  
Location (waters) \_\_\_\_\_  
Well No. 1 Elev. 1087'  
District McClellan County Doddridge  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling commenced \_\_\_\_\_  
Drilling completed \_\_\_\_\_  
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 \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer _____
16			
18			Size of _____
10			Depth set _____
8 1/4			
6 1/2			
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

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

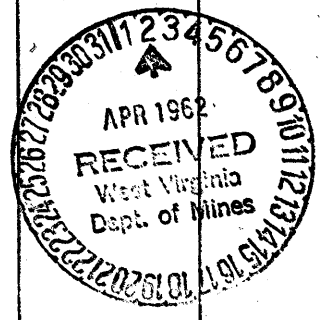
WELL FRACTURED \_\_\_\_\_

RESULT AFTER TREATMENT \_\_\_\_\_

ROCK PRESSURE AFTER TREATMENT \_\_\_\_\_

Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Tan lime			1982	1992			
Brown & Tan lime			1992	1997			
Brown & Tan lime			1997	2005			
Brown, Tan, & trace pure white lime			2005	2016			
Brown, Tan, & trace pure white lime			2016	2023			
Brown lime			2023	2039			
Limy white fine grained hard sand			2039	2049			
Limy white fine grained hard sand			2049	2057			
Limy white fine grained hard sand			2057	2064			
50% dark grey shale and 50% limy large grained sand			2064	2072			
White limy sand			2072	2077			
White limy sand			2077	2080			
Dark brown to black lime; 100% dull gold fluorescence. Slightly sandy			2080	2085			
Dark brown to black lime; 100% dull gold fluorescence. Slightly sandy			2085	2091			
Dark brown to black lime			2091	2095			
50% dark brown lime & 50% white very limy sand			2095	2103			
White very limy sand with trace dark brown lime			2103	2113			
White limy sand (flaky cuttings)			2113	2119			
White slightly limy sand			2119	2130			
White limy sand (flaky cuttings)			2130	2136			
50% white slightly limy sand and 50% black gritty shale			2136	2145			
Black gritty shale			2145	2157			
Black gritty shale			2157	2167			



Formation	Color	Hard or Soft	Top / 2 A	Bottom	Oil, Gas or Water	Depth Found	Remarks
Black gritty shale			2167	2173			
Black gritty shale			2173	2180			
Black gritty shale			2180	2187			
Black gritty shale			2187	2198			
Black gritty shale			2198	2205			
Black gritty shale			2205	2217			
Black gritty shale			2217	2225			
Black gritty shale			2225	2230			
Black gritty shale			2230	2236			
Black gritty shale			2236	2241			
Black gritty shale			2241	2249			
Black gritty shale			2249	2257			
50% black shale & 50% green shale			2257	2267			
Black shale			2267	2282			
50% black shale & 50% light grey, hard fine grained, shaly sand			2282	2289			
Light grey, shaly, limy sand.			2289	2295			
Light grey, shaly, limy sand			2295	2304			
50% light grey gritty shale, 50% white medium grained sand.			2304	2312			
grey gritty shale (trace grey sand)			2312	2320			
50% light grey gritty shale & 50% black shale.			2320	2329			
50% very hard shaly sand. 50% black shale.			2329	2337			
Very hard shaly sand			2337	2346			
50% light grey shaly sand. 50% grey gritty shale.			2346	2358			
Light grey gritty shale			2358	2366			
Light grey gritty shale			2366	2374			
Light grey gritty shale			2374	2378			
Light grey gritty shale			2378	2388			
Light grey gritty shale			2388	2397			
Dark grey gritty shale			2397	2401			
Grey very fine grained shaly sand			2401	2405			
Dark grey shale			2405	2412			
Dark grey shale			2412	2418			
Dark grey shale			2418	2427			
Dark grey shale			2427	2436			
Dark grey shale			2436	2442			
Dark grey shale			2442	2455			
Dark grey shale			2455	2464			
Dark grey shale			2464	2472			
Dark grey shale			2472	2482			
Dark grey shale			2482	2488			
Dark grey shale			2488	2498			
Dark grey shale (trace white limy sand)			2498	2506			
Dark grey shale			2506	2513			
Light grey shaly sand (20% dull flo)			2513	2518			
50% dark grey shale; 50% dark grey very shaly sand. (30% dull flo)			2518	2524			
Dark grey shale (trace pyrite)			2524	2531			
Dark grey shale (trace pyrite)			2531	2538			
Dark grey shale (trace pyrite)			2538	2548			
Dark grey shale (trace pyrite)			2548	2554			
Dark grey shale			2554	2561			
Dark grey shale			2561	2569			
Dark grey shale			2569	2574			
Dark grey shale			2574	2586			
Dark grey shale (trace shaly sand)			2586	2596			
90% grey shale; 10% shaly sand			2596	2607			
Grey shale; trace shaly sand			2607	2614			
90% grey shale; 10% shaly sand; trace gravel			2614	2626			
60% shale; 30% white sand; 10% gravel			2626	2631			

Date....., 19.....

APPROVED....., Owner

By..... (Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 12 B

Quadrangle \_\_\_\_\_

Permit No. DOD-678

WELL RECORD

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company American Mutual Oil Co.  
Address 1640 Court Place, Denver, Colorado  
Farm Sallie I. Estlack Acres 98  
Location (waters) \_\_\_\_\_  
Well No. 1 Elev. 1087'  
District McClellan County Doddridge  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling commenced \_\_\_\_\_  
Drilling completed \_\_\_\_\_  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbis., 1st 24 hrs.  
WELL ACIDIZED \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer _____
16			
13			
10			Size of _____
8 1/4			
6 3/4			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

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

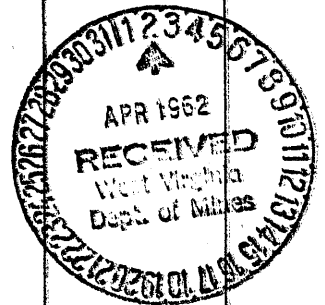
WELL FRACTURED \_\_\_\_\_

RESULT AFTER TREATMENT \_\_\_\_\_

ROCK PRESSURE AFTER TREATMENT \_\_\_\_\_

Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Grey Shale			2631	2641			
Grey Shale			2641	2650			
Grey Shale			2650	2661			
Grey Shale			2661	2669			
Grey Shale			2669	2680			
Grey Shale			2680	2688			
Grey Shale; trace white limy sand			2688	2696			
Grey Shale; trace white limy sand			2696	2708			
90% grey shale; 10% limy sand			2708	2715			
70% slightly limy sand; 30% shale			2715	2718			
70% slightly limy sand; 30% shale			2718	2723			
90% light grey sand; 10% shale.			2723	2730			
Grey shale; trace sand			2730	2739			
Grey shale			2739	2746			
Grey Shale			2746	2756			
50% grey shale; 50% shaly light grey sand; slight odon; spotty hot fluorescence			2756	2765			
90% dark grey shale; 10% sand			2765	2775			
60% dark grey shale; 40% sand; trace fluorescence.			2775	2783			
90% white sand; 10% black shale (trace gravel) 30% dull fluorescence			2783	2794			
90% very large grained clear white sand; 10% shale trace good fluorescence in smaller grains			2794	2804			
large grained, pure white to clear sand; trace of good fluorescence			2804	2812			
large grained, pure white to clear sand; trace of good fluorescence			2812	2816			



Formation	Color	Hard or Soft	Top 12B	Bottom	Oil, Gas or Water	Depth Found	Remarks
Dark grey shale; trace of sand			2816	2823			
Dark grey shale			2823	2831			
80% sand (various grain sizes, shapes and colors); 20% shale; 5% hot fluorescence.			2831-2841	2841			
Pure white to clear sand medium grains.			2841	2849			
50% shale; 50% large grained pure white to clear sand			2849	2857			
Dark grey shale			2857	2866			
2866-2880R dark grey shale; 20% light grey shaly sand.			2866	2875			
Dark grey shale			2875	2883			
Dark grey shale			2883	2892			
Dark grey shale			2892	2902			
Dark grey shale			2902	2918			
Dark grey shale			2918	2923			
Black gritty shale; trace shaly sand			2923	2933			
Dark grey shale			2933	2939			
70% grey shale; 30% light grey slightly shaly sand. trace fluorescence.			2939	2951			
grey gritty shale; trace of sand; trace of fluorescence.			2951	2962			
70% grey gritty shale. 30% very shaley sand.			2962	2970			
grey shale			2970	2980g			
grey shale			2980	2987			
grey shale			2987	2997			
grey shale			2997	3006			
grey shale			3006	3008			
FORMATION TOPS (CORRECTED TO GRN LOG)							
HORIZON			TOP+	BOTTOM		THICKNESS	
Little Lime			1921	1927		6	
Blue Monday			1942	1956		14	
Big Lime			1984	2036		52	
Big Injun			2036	2066		30	
Squaw			2073	2114		71	
Berea			2512	2524		12	
Gantz			2626	2632		6	
30'			2715	2736		21	
Stray			(A) 2770	2777		7	
			(B) 2782	2790		8	
Gordon			2796	2823		27	
4th			2843	2857		14	

Date....., 19.....

APPROVED....., Owner

By.....  
(Title)