

ACCURACY: 1p/200p

Source of Elevation Mt. Union Church (1142')

- New Location
- Drill Deeper
- Abandonment
- Fracture
- Redrill

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

*Chet Waterman*

Company	WOLF RUN OIL & GAS COMPANY		
Address	HUNTINGTON, W. VA.		
Farm	W. C. CZIGGANS		
Tract	Acres	109 1/2	Lease No.
Well (Farm) No.	2	Serial No.	
Elevation (Spirit Level)	1186.7'		
Quadrangle	HOLBROOK <i>EC</i>		
County	DODDRIDGE	District	SOUTHWEST
Engineer	CHET WATERMAN		
Engineer's Registration No.	3788		
File No.	68003-15	Drawing No.	
Date	2/6/68	Scale	1" = 30p

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

**WELL LOCATION MAP**  
FILE NO. DOD - 1503

+ 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.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Well Name Helbreek  
Well No. Dodd 1503

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company Wolf Run Oil and Gas Co.  
Address Box 5-Huntington, W.Va.  
Operator W.C. Cigana Acres 109 1/2  
Location (waters) Straight Fork  
Well No. -2- Elev. 1186.7'  
District Southwest County Doddridge  
The surface of tract is owned in fee by Alta Spurgeon and H. Spurgeon  
Address Auburn, W.Va.  
Mineral rights are owned by Alta Spurgeon and H. Spurgeon  
Address Oxford, W.Va.  
Drilling commenced 4-29-68  
Drilling completed 5-31-68  
Date Shot From To

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 5/8"	20'	20'	
10 3/4"	435'	-0-	Size of
8 5/8"	1067'	-0-	
6 1/2"			Depth set
5 3/16"			
4 1/2"	2101'	2101'	
3"			Perf. top
2"			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow 70/10ths Water in 1 Inch  
/10ths Merc. in Inch  
Volume 88,190 Cu. Ft.  
Back Pressure 500 lbs. 24 hrs.

Attach copy of cementing record.  
CASING CEMENTED 4 1/2" SIZE 2101 No. Ft. 5-31-68 Date  
Amount of cement used (bags) 65 Bags  
Name of Service Co. Lawson Oil and Gas Well Cem. Co.

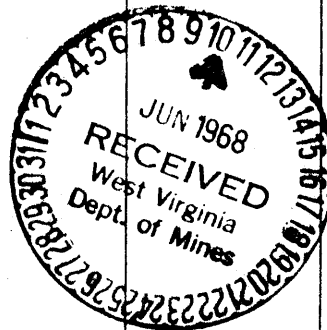
WELL ACIDIZED (DETAILS)

COAL WAS ENCOUNTERED AT None FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

WELL FRACTURED (DETAILS) 28000 lbs. 20/40 Sand-25 gals. Merfle-500 gals. regular water acid-100 lbs Fr-16 Gelling Agent-680 bbls. water

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 2,176,000 MCF  
BACK PRESSURE AFTER TREATMENT 730 HOURS 18  
Fresh Water None Feet Salt Water Feet  
Producing Sand Injur Depth 2032-2053

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Top Soil			-0-	15			
Sand			15	65			
Red Rock			65	80			
Sand			80	100			
Red Rock			100	155			
Lime			155	165			
Red Rock			165	225			
Lime-Gritty			225	240			
Sand			240	250			
Slate			250	264			
Sand			264	275			
Red Rock			275	300			
Lime-Gritty			300	305			
Sand			305	320			
Lime			320	335			
Red Rock			335	370			
Lime-Gritty			370	400			
Slate Shells			400	419			
Sand			419	432			
Slate			432	445			
Red Rock			445	480			
Lime			480	485			
Red Rock			485	495			
Lime			495	505			
Slate			505	530			
Lime			530	545			
Slate and Shells			545	610			
Lime-Gritty			610	650			
Red Rock			650	665			



Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime-Gritty			665	755			
Sand			755	785			
Slate			785	790			
Lime			790	830			
Slate and Shells			830	870			
Red Rock			870	875			
Lime			875	885			
Red Rock			885	900			
Lime-Gritty-Hard			900	906			
Sand			906	930			
Lime-Gritty			930	950			
Slate			950	1005			
Sand			1005	1015			
Slate-Shells Dark			1015	1068			
Lime			1068	1147			
Sand			1147	1182			
Slate and Shells			1182	1204			
Sand			1204	1245			
Slate			1245	1255			
Lime-Gritty			1255	1270			
Sand-Soft and Sharp			1270	1281			
Sand Broken			1281	1290			
Sand			1290	1365			
Slate-Black			1365	1385			
Lime-Gritty Hard			1385	1400			
Sand			1400	1435			
Slate and Shells			1435	1470			
Sand			1470	1490	Gas	1475	
Slate and Shells-Black			1490	1540			
Sand			1540	1610			
Sand-Broken			1610	1645			
Slate and Shells			1645	1670			
Lime-Gritty			1670	1700			
Slate and Shells			1700	1720			
Sand			1720	1745			
Slate-Black			1745	1780			
Red Lime-Soft			1780	1800			
Lime			1800	1805			
Slate-Soft			1805	1820			
Lime-Gritty			1820	1840			
Red Lime-Soft			1840	1855			
Slate and Shells			1855	1865			
Lime			1865	1893			
Slate			1893	1900			
Lime-Gritty			1900	1906			
Slate			1906	1910			
Lime-Hard			1910	1968	Oil	1918-24	
Sand			1968	1989			
Lime			1989	2008			
Sand			2008	2022			
Lime			2022	2032			
Sand Big Injun (part)			2032	2053	Gas	2035-47	70/10 in 1"
Slate Break			2053	2054			
Lime			2054	2067			
Slate and Shells			2067	2101			
		Total Depth		2101			

Date 6-7, 1969

APPROVED Wolf Run Oil and Gas Co. Owner

By Robert Olson  
(Title) Agent