

MINIMUM ERROR OF CLOSURE 1/500

SOURCE OF ELEVATION Junction of roads at mouth of Mudlick Run ~ Elev. 789

New Location    
 Drill Deeper    
 Abandonment

"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."

Company Rudder Oil & Gas Co.  
 Address Box 2118, Parkersburg, W. Va.  
 Farm C.K. McCullough (surf) Bessie M. Moore (O.G. & M.)  
 Tract 1 Acres 42 3/4 Lease No. \_\_\_\_\_  
 Well (Farm) No. 1 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 779  
 Quadrangle West Union - SC  
 County Doddridge District Central  
 Engineer Parker E. Peters  
 Engineer's Registration No. 485  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Nov. 9, 1963 Scale 1" = 20 P.

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

WELL LOCATION MAP  
 FILE NO. DOD-1071

+ 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 3

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle West Union  
Permit No. DOD - 1071

WELL RECORD

Oil or Gas Well Oil & Gas  
(KIND)

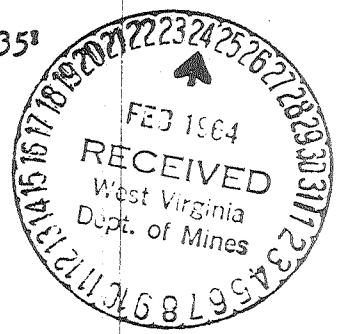
Company Rudder Oil & Gas Company  
Address Box 2118, Parkersburg, W. Va.  
Farm C.K. McCullough Acres 42  
Location (waters) Long Run  
Well No. \_\_\_\_\_ Elev. 779  
District Central County Doddridge  
The surface of tract is owned in fee by C.K. McCullough  
Address Greenwood, W. Va.  
Mineral rights are owned by B. Moore Et Al  
Address Parkersburg, W. Va.  
Drilling commenced December 2, 1963  
Drilling completed December 31, 1963  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow 26 /10ths Water in one Inch  
\_\_\_\_\_/10ths Merc. in \_\_\_\_\_ Inch  
Volume 53,000 Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil show bbls., 1st 24 hrs.  
WELL ACIDIZED No

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13	15	15	
10	327	327	Size of
8 1/2	926		
6 1/2			Depth set
<del>5 1/2</del> 5-1/2		1862	Perf. top <u>1751</u>
3			Perf. bottom <u>1792</u>
2			Perf. top _____
Liners Used			Perf. bottom _____

WELL FRACTURED HALLIBURTON, 1-7-64, 64,300 gal. water; 80,000# 20/40 frac sand  
RESULT AFTER TREATMENT 1,500 M - undetermined oil  
ROCK PRESSURE AFTER TREATMENT 550# 72 hrs.  
Fresh Water See driller's log Feet \_\_\_\_\_ Salt Water 1 bailer per hr. Feet 1211 - 1215

CASING CEMENTED 5-1/2 SIZE 1862 No. Ft. 1-3-64 Date  
LANSON CRT'G Co., 70 cem, 3 lime, 10 gal  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
<b>DRILLERS LOG</b>							
Surface		Soft	0	5			
Red rock		Soft	5	7			
Gravel		Soft	7	11			
Blue rock		Soft	11	16			
Red rock		Soft	16	45	F. Water	● 35'	
Slate	Blue	Soft	45	51			
Red rock		Soft	51	63			
Sand		Hard	63	69			
Red rock		Soft	69	108			
Slate		Soft	108	139			
Red rock		Soft	139	145			
Slate		Soft	145	160			
Red rock		Soft	160	164			
Slate		Soft	164	190			
Lime	Red	Hard	190	204	F. Water	● 191'	
Slate		Soft	204	210			
Lime & Sand		Hard	210	216			
Red rock		Soft	216	249	F. Water	● 218'	
Slate	Blue	Soft	249	259			
Red rock		Soft	259	261			
Sand		Hard	261	300	F. Water	● 267'	
Slate	Blue	Soft	300	370			
Sand		Hard	370	396			
Lime		Hard	396	420			
Slate	Blue	Soft	420	430			
Red rock		Soft	430	439			



Formation	Color	Hard or Soft	Top 3	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate & Shells		Soft	439	507			
Lime		Hard	507	512			
Slate & Shells		Soft	512	518			
Red rock		Soft	518	530			
Sand		Hard	530	539			
Red rock		Soft	539	563			
Sand		Hard	563	580			
Red rock		Soft	580	590			
Slate & Shells		Soft	590	606			
Red rock		Soft	606	640			
Lime		Hard	640	650			
Red rock		Soft	650	661			
Sand		Hard	661	672			
Slate		Soft	672	698			
Sand		Hard	698	710			
Slate & Shells		Soft	710	732			
Red rock		Soft	732	780			
Slate & Shells		Soft	780	806			
Pink rock		Soft	806	820			
Slate		Soft	820	847			
Sand & Lime		Hard	847	854			
Sand		Hard	854	874			
Pink rock		Soft	874	879			
Slate		Soft	879	904			
Pink rock		Soft	904	914			
Slate		Soft	914	924			
Slate & Shells		Hard	924	931			
Sand		Soft	931	1051			
Slate & Shells		Hard	1051	1092			
Sand		Soft	1092	1134			
Slate & Shells		Hard	1134	1280			
Sand		Soft	1280	1330	S. Water	1211-1215	1 bailer per/hr
Slate & Shells		Hard	1330	1350			
Sand		Soft	1350	1377			
Slate & Shells		Hard	1377	1410			
Sand		Soft	<del>1410</del> 1410	1435			
Slate		Hard	1435	1445			
Sand		Soft	1445	1460			
Slate		Hard	1460	1480			
Sand		Soft	1480	1495			
Slate		Hard	1495	1560	oil show @	1500	1650 779 871
Sand		Soft	1560	1585			
Slate		Hard	1585	1607			
Sand		Soft	1607	1609			
Slate		Hard	1609	1628			
Sand		Soft	1628	1630			
Slate		Hard	1630	1633			
Sand		Soft	1633	1650			
Slate		Hard	1650	1716	oil show @	1715	
Sand		Soft	1716	1728			
Mer Sand	White	Hard	1728	1746			
Sand		Hard	1746	1753			
Injun Sand		Hard	1753	1845	gas 43/10 WPM 1/2" @ 1755-1766 gas 26/10 WPM 1" @ 1800-1810		
Slate	Black	Soft	1845	1865			

Date February 21, 19 64

APPROVED Rudder Oil & Gas Company, Owner

By Neal Rudder  
(Title) President