

MINIMUM ERROR OF CLOSURE 1/500

SOURCE OF ELEVATION _____

New Location Drill Deeper Abandonment Junction of roads 0.6 mile ± east of location ~ Elev. 867

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

ISSUED JAN. 9, 1967

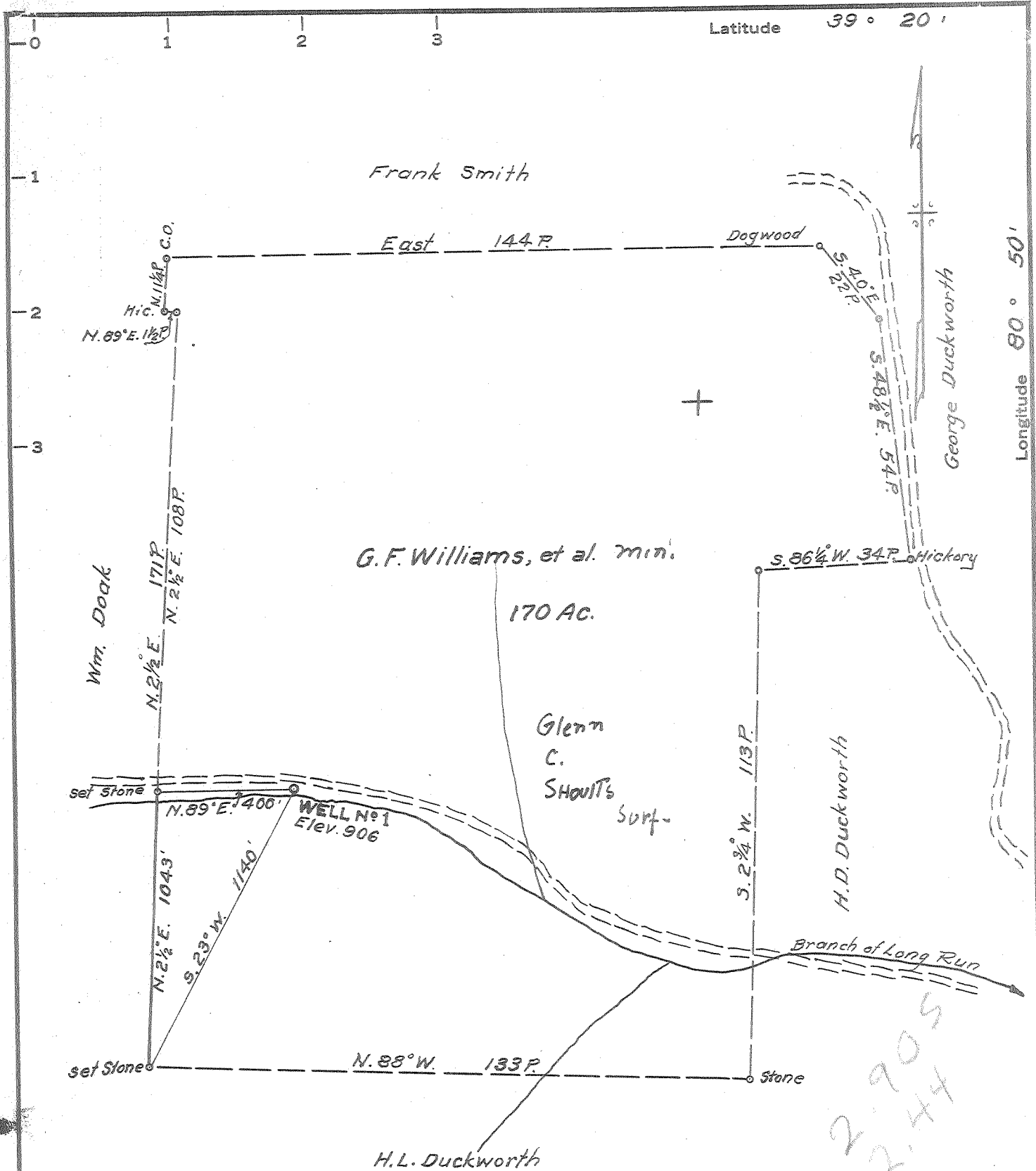
Company Rudder Oil & Gas Co.
 Address Box 2118, Parkersburg, W. Va.
 Farm G.F. Williams, et al. (min.) Glenn C. Shoult's Surf.
 Tract 1 Acres 170 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 906
 Quadrangle West Union SC
 County Doddridge District Central
 Engineer Parker E. Peters
 Engineer's Registration No. 485
 File No. _____ Drawing No. _____
 Date May 6, 1964 Scale 1" = 30 P.

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

WELL LOCATION MAP
 FILE NO. Doc-1129 P

+ 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.



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6-6-29



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 4

Rotary
Spudder
Cable Tools
Storage

Quadrangle West Union

Permit No. DOD - 1129

WELL RECORD

Oil or Gas Well BOTH
(KIND)

Company Rudder Oil & Gas Company
Address Box 2118, Parkersburg, W. Va.
Farm Glenn C. Shoults Acres 170

Location (waters) Long Run
Well No. 1 Elev. 906

District Central County Doddridge

The surface of tract is owned in fee by Glenn C. Shoults

Address Ravenswood, W. Va.

Mineral rights are owned by Glenn C. Shoults, et al

Address Ravenswood, W. Va.

Drilling commenced May 21, 1964

Drilling completed June 26, 1964

Date Shot From To

With

Open Flow /10ths Water in Inch

/10ths Merc. in Inch

Volume show Cu. Ft.

Rock Pressure lbs. hrs.

Oil show bbls., 1st 24 hrs.

WELL ACIDIZED No

WELL FRACTURED Halliburton 7/2/64 23,140 gal water & 22,000 # frac sand

RESULT AFTER TREATMENT 250,000 cubic feet gas, 5 bbls oil

ROCK PRESSURE AFTER TREATMENT 250

Fresh Water 30' Feet

Salt Water 1380' Feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13	40	40	
10	525	0	Size of
	1113	0	
			Depth set
		1985	
3			Perf. top 1884
2			Perf. bottom 1924
Liners Used			Perf. top 1940
			Perf. bottom 1941

CASING CEMENTED 4 1/2 SIZE 1985 No. Ft. 6/27/64 Date

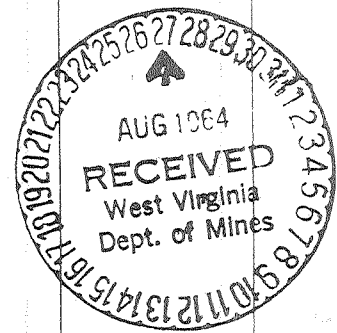
Lawson Cmtg. Co. = 6 gal, 70 Cem, 4 lime

COAL WAS ENCOUNTERED AT none FEET INCHES

FEET INCHES FEET INCHES

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Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
<u>DRILLER'S LOG</u>							
Top soil		soft	0	3			
Creek Bed		soft	3	10			
Slate		soft	10	20			
Rock	red	soft	20	50	water @	30'	4 bailers per hour
Sand		hard	50	65			
Slate		soft	65	120			
Rock	red	soft	120	130			
Sand		hard	130	160			
Slate		soft	160	165			
Rock	red	soft	165	230			
Sand		hard	230	240			
Rock		soft	240	300			
Slate		soft	300	320			
Rock	red	soft	320	330			
Sand		hard	330	335			
Rock	red	soft	335	355			
Lime		hard	355	365			
Rock	red	soft	365	375			
Sand		hard	375	390			
Rock	red	soft	390	425			
Slate		soft	425	445			
Sand		hard	445	495			
Slate		soft	495	510			
Rock	red	soft	510	520			



Formation	Color	Hard or Soft	Top 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate (shells)		soft	520	570			
Lime		hard	570	585			
Slate		soft	585	685			
Rock	red	soft	685	695			
Slate (shells)		soft	695	705			
Rock	red	soft	705	725			
Slate		soft	725	750			
Rock (slate) red		soft	750	785			
Lime	extra	hard	785	795			
Rock	red	soft	795	830			
Sand		hard	830	860			
Slate		soft	860	882			
Sand		hard	882	900			
Slate		soft	900	915			
Sand		hard	915	945			
Slate		soft	945	995			
Sand		hard	995	1030			
Slate		soft	1030	1045			
Sand		hard	1045	1090			
Slate		soft	1090	1108			
Sand		hard	1108	1114			
Slate		soft	1114	1165			
Sand		hard	1165	1200			
Slate		soft	1200	1295			
Sand		hard	1295	1363			
Slate		soft	1363	1370			
Sand		hard	1370	1412	water @	1380'	6 bailers per hour
Slate		soft	1412	1420			
Sand		soft	1420	1472			
Slate		soft	1472	1521	1794		
Sand		hard	1521	1572	906		
Slate		soft	1572	1658	668		
Sand		hard	1658	1670			
Slate		soft	1670	1713			
Sand (Max.)		hard	1713	1729			
Slate		soft	1729	1749			
Lime		hard	1749	1756			
Slate (shells)		soft	1756	1770			
Pencil Cave		soft	1770	1774			
Big Lime		hard	1774	1848			
Big Injun		hard	1848	1955	gas @	1850-55'	show
					oil @	1850-55'	show
					oil @	1895-1904'	
Slate		soft	1955	1985			

Date August 18, 1964

APPROVED Rudder Oil & Gas Company, Owner

By Neal Rudder
President (Title)

