

New Location
 Drill Deeper
 Abandonment

Company HEAVY DUTY OIL CO.
 Address 304 COURT ST. WEST UNION, W. VA.
 Farm A. D. DUTY
 Tract _____ Acres 74 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 864'
 Quadrangle WEST UNION 50
 County DODDRIDGE District CENTRAL
 Engineer JOHN W. HAMILTON
 Engineer's Registration No. 2274
 File No. _____ Drawing No. _____
 Date NOV. 11, 1960 Scale 1" = 20 POLES

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

WELL LOCATION MAP
 FILE NO. DoD-500

+ 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.

(089)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

- Rotary
- Spudder
- Cable Tools
- Storage

Quadrangle West Union

Permit No. Dod. 500 Re-drill

WELL RECORD

Oil or Gas Well GAS
(KIND)

Company Charles L Hickman et al
 Address Box 207 Middleborne, W. Va.
 Farm A D Duty Acres 73
 Location (waters) _____
 Well No. 1 Elev. _____
 District Central County Doddridge
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by _____
 Address _____
 Drilling commenced February 27, 1964
 Drilling completed March 16, 1964
 Date Shot _____ From _____ To _____
 With _____
 Open Flow _____ /10ths Water in _____ Inch
 _____ /10ths Merc. in _____ Inch
 Volume 170,000 After frac Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 WELL ACIDIZED _____
 WELL FRACTURED Yes Log enclosed

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10			Size of
8 1/4	<u>589'</u>		
8 <u>5 1/2</u>	<u>1916'</u>	<u>1916'</u>	Depth set
5 3/16	1750'	1750'	
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED 5 1/2 SIZE No. Ft. _____ Date _____
20 lbs cement, 5 lbs "Mil"
 COAL WAS ENCOUNTERED AT Hall's Point FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT 170,000
 ROCK PRESSURE AFTER TREATMENT _____
 Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Well fraced from 1808 to 1822 and 1876 to 1884 and 1886 to 1894							
Copy of Nuclear Log is enclosed for your information.							
Total depth 1926.							





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

Quadrangle West Union

Permit No. DOD-500

WELL RECORD

Oil or Gas Well Dry Hole
(KIND)

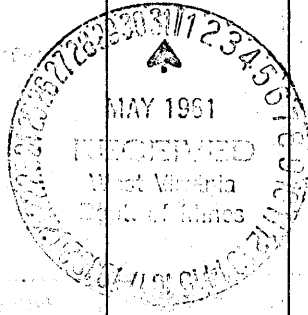
Company <u>Heavy Duty Oil Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address <u>304 Court St., West Union, W. Va.</u>	Size			Kind of Packer
Farm <u>A. D. Duty</u> Acres <u>74</u>	16			Size of
Location (waters) <u>Long Run</u>	13			Depth set
Well No. <u>1</u> Elev. <u>864</u>	10	<u>35'</u>		Perf. top
District <u>Central</u> County <u>Doddridge</u>	8 1/4	<u>700'</u>		Perf. bottom
The surface of tract is owned in fee by _____	6 5/8	<u>1330'</u>		Perf. top
Mineral rights are owned by <u>A. D. Duty et al</u>	3			Perf. bottom
Address <u>Wolf Summit, W. Va.</u>	2			
Drilling commenced <u>March 20, 1961</u>	Liners Used			
Drilling completed <u>May 27, 1961</u>				
Date Shot <u>None</u> From _____ To _____				
With _____				
Open Flow _____ /10ths Water in _____ Inch				
_____ /10ths Merc. in _____ Inch				
Volume <u>None</u> Cu. Ft. _____				
Rock Pressure <u>None</u> lbs. _____ hrs. _____				
Oil _____ bbls., 1st 24 hrs. _____				
WELL ACIDIZED <u>None</u>				
WELL FRACTURED <u>None</u>				
CASING CEMENTED <u>None</u> SIZE _____ No. Ft. _____ Date _____				
COAL WAS ENCOUNTERED AT <u>None</u> 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
Slate			0	75			
Sand			75	100			
Slate			100	150			
Sand			150	185			
Red Rock			185	220			
Slate			220	260			
Red Rock			260	275			
Lime			275	290			
Red Rock			290	330			
Sand			330	390	Water	370	
Slate			390	460			
Lime shells			460	490			
Slate			490	498			
Lime			498	512			
Slate			512	590			
Lime shells			590	615			
Sand			615	630			
Slate			630	640			
Red Rock			640	750			
Slate			750	815			
Red Rock			815	845			
Slate	Blue		845	885			
Slate	Black		885	945			
Sand			945	980			
Slate			980	1020			
Sand			1020	1040			
Slate	Blue		1040	1115			
Sand			1115	1140			



Formation	Color	Hard or Soft	Top ²	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate			1140	1295			
Sand			1295	1330	Water	1325	
Slate-Lime Shells			1330	1450			
Sand			1450	1500			
Slate			1500	1640			
Sand (Maxton)		Hard	1640	1700	None		
Slate			1700	1738			
Slate (Pencil Cave)			1738	1740			
Lime			1740	1806			
Sand (Big Injun)			1806	1894	Gas	1816	Very Light
Slate			1894	1950	"	1849	" "
					"	1887	" "
Total Depth				1950			

Date May 27, 19 61

APPROVED HEAVY DUTY OIL COMPANY, Owner

By Edward J. [Signature]
(Title)