

Minimum Error of Closure 1' in 200'  
 Source of Elevation U.S.G.S. Bronze Tablet, 88' South of Ref. mark  
at R.R. Spike in base of 20" Hickory Tree, El. 1226'.

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.

Signed: A.C. Hilbert

Map No. N17 Squares: N S17 E W8

Company PENNZOIL COMPANY  
 Address P.O. Box 1588, Parkersburg, W.Va.  
 Farm W.M. Stout  
 Tract \_\_\_\_\_ Acres 340 Lease No. 80790  
 Well (Farm) No. 16 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1120.35' ground  
 Quadrangle HOLBROOK - NE  
 County DODDRIDGE District NEW MILTON  
 Engineer A.C. Hilbert  
 Engineer's Registration No. 2534  
 File No. 1381 Drawing No. \_\_\_\_\_  
 Date July 7, 1964 Scale 1" = 800'

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

**WELL LOCATION MAP**

FILE NO. DOD-1154

+ 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 9

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle HOLBROOK

WELL RECORD

Permit No. DOD-1154

Oil or Gas Well Oil  
(KIND)

Company PENNZOIL COMPANY  
Address P. O. Box 1588, Parkersburg, W. Va.  
Farm W. M. Stout Acres 340  
Location (waters) Cane Run  
Well No. 16 Elev. 1120.35  
District New Milton County Doddridge  
The surface of tract is owned in fee by Sherman Stout  
Address Blandville, W. Va.  
Mineral rights are owned by Union National Bank, Tr.  
(Smith and Morris)  
Address Clarksburg, W. Va.  
Drilling commenced August 12, 1964  
Drilling completed August 22, 1964  
Date Shot From To  
With  
Open Flow /10ths Water in Inch  
/10ths Merc. in Inch  
Volume Show (drilled with Rotary) Cu. Ft.  
Rock Pressure lbs. hrs.  
Oil bbls., 1st 24 hrs.  
WELL ACIDIZED

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			Steel Shoe
10			Float Collar
8 5/8"	383.42'	383.42'	Guide Shoe
6 5/8"			Size of Packer
5 1/2"	2079.52'	2079.52'	5 1/2" OD
3			370' set
2			2065'
Liners Used			Perf. top
			Perf. bottom
			Perf. top
			Perf. bottom

CASING CEMENTED 8 5/8" SIZE 370 No. Ft. 8/14/64 Date  
5 1/2" 2065 8/21/64

COAL WAS ENCOUNTERED AT - FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

WELL FRACTURED 8/27/64 - Used: 500 Gal. Mud Acid, 1,275 Bbls. Water, 70,000 Lbs. 20/40 Sand, 30 Gal. Deterger, 45 Gal. Preflow-C, 450 Lbs. J-84, 250 Lbs. J-98, 10 - Peff. Balls & 1 Ball Injector

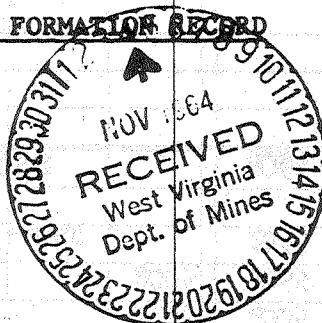
RESULT AFTER TREATMENT Gas - 300,000 Cu. Ft.  
Oil - 10 Bbls.

ROCK PRESSURE AFTER TREATMENT 500 Lbs.

Fresh Water Feet Salt Water Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks

SEE OTHER SIDE FOR FORMATION RECORD



(9)										
FORMATION RECORD										
KIND	TOP	BOTTOM	STEEL LINE MEAS.	TEST	KIND	TOP	BOTTOM	STEEL LINE MEAS.	TEST	
Sandy Shale	0	50	-		Oil & Gas	1965	1985		Show	
Sand	50	90			Oil	1995	2005		Show	
Shale	90	200			Shale	2005	2065			
Sand	200	210			5-1/2" Casing		2065	2065		
Shale	210	260								
Red Rock	260	370	370		TOTAL DEPTH		2065	2065		
Sand - (Water)	370	395								
Red Rock	395	445								
Shale	445	480								
Sand	480	495								
Shale	495	510								
Sand	510	530								
Shale	530	545								
Sand & Shale	545	590								
Shale	590	620								
Red Rock	620	645								
Sand & Shale	645	760								
Red Rock	760	850								
Sand & Shale	850	930								
Sand	930	940								
Red Rock	940	975								
Sand	975	1000								
Shale	1000	1055								
Sandy Shale	1055	1110								
Shale	1110	1140								
Sandy Shale	1140	1160								
Sand	1160	1190								
Shale	1190	1210								
Sand	1210	1260								
Shale	1260	1275								
Sandy Shale	1275	1310								
Sand	1310	1445								
Sandy Shale	1445	1615								
Red Rock	1615	1680								
Sandy Shale	1680	1815								
Little Line	1815	1835								
Blue Monday	1835	1860								
Big Line	1860	1925								
Big Injun	1925	2005								

(OVER)

Date November 2, 19 64

APPROVED

PENNZOIL COMPANY

Owner

*George W. Gilsman*  
 George W. Gilsman, (Title) Manager  
 Land-Lease Records Department