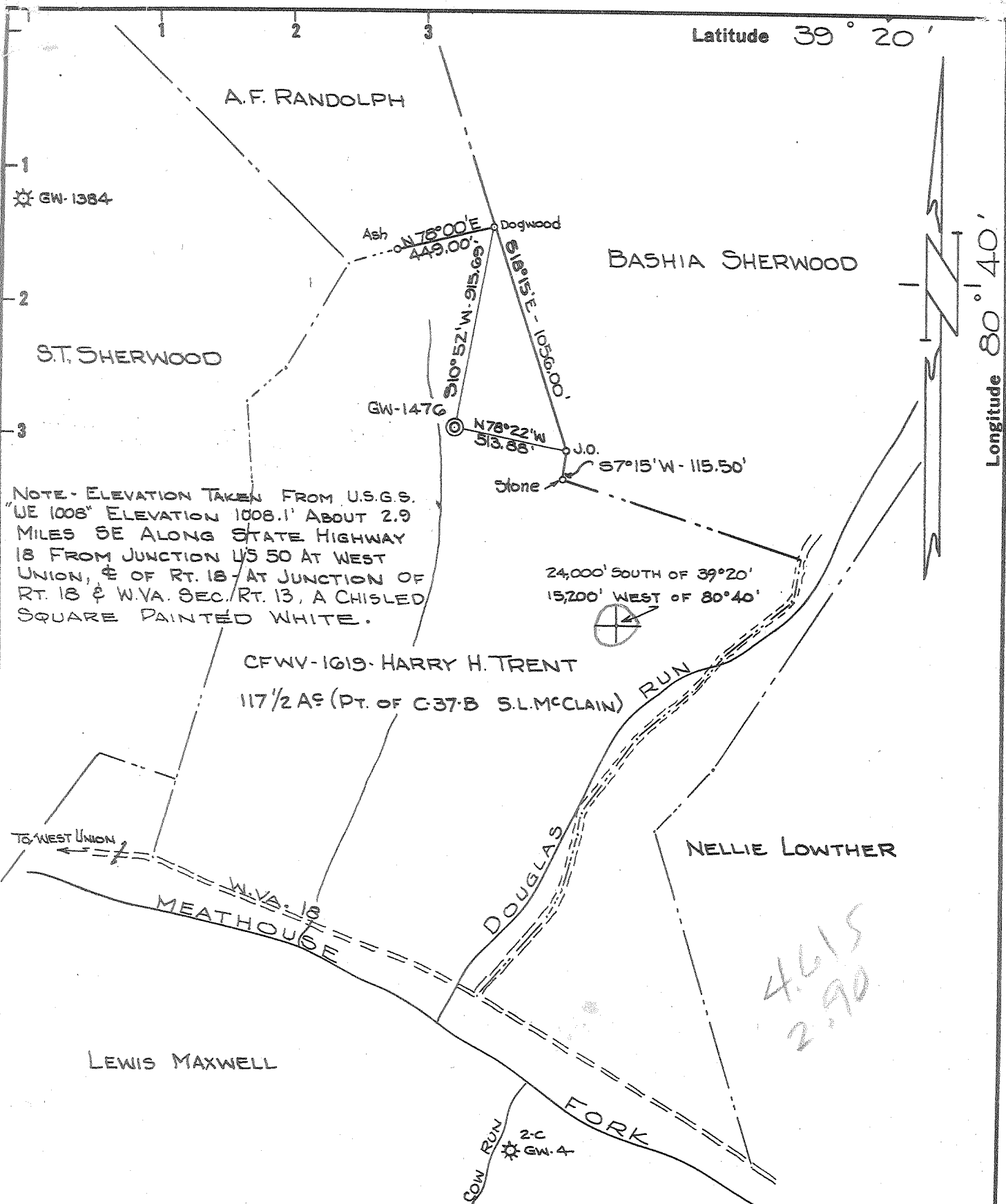


PV

Latitude 39° 20'

Longitude 80° 40'



NOTE - ELEVATION TAKEN FROM U.S.G.S. "UE 1008" ELEVATION 1008.1' ABOUT 2.9 MILES SE ALONG STATE HIGHWAY 18 FROM JUNCTION US 50 AT WEST UNION, & OF RT. 18 AT JUNCTION OF RT. 18 & W.VA. SEC. RT. 13, A CHISELED SQUARE PAINTED WHITE.

24,000' SOUTH OF 39° 20'  
15,200' WEST OF 80° 40'

4.615  
2.90

THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS PRESCRIBED BY THE OIL AND GAS DIVISION OF THE DEPARTMENT OF MINES.

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 CITIES SERVICE OIL COMPANY  
 Address Box 873, CHARLESTON, W.VA.  
 Farm HARRY H. TRENT, ET AL  
PART OF C-37-B, S.L. McCLAIN - 1632  
 Tract Acres 117 1/2 Lease No. CFWV 1619  
 Well (Farm) No. 1 Serial No. GW-1476  
 Elevation (Spirit Level) 1043.90'  
 Quadrangle CENTERPOINT - 9 <sup>SW</sup> 5461 W-288  
 County DODDRIDGE District NEW MILTON  
 Engineer Wendell S. Moore  
 Engineer's Registration No. 2113  
 File No. \_\_\_\_\_ Drawing No. W-27-63  
 Date 30 SEPT. 63 Scale 1" = 600'

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

WELL LOCATION MAP  
FILE NO. DOD-1080

+ Denotes location of well on United States Topographic Maps, scale 1 to 62500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

All Samples 0' - 1905'

6-6-99



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

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Centerpoint 9 SW

Permit No. Dod-1080

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company Cities Service Oil Company  
Address P. O. Box 873, Charleston 23, W. Va.  
Farm H. H. Trent, et al Acres 117-1/2  
Location (waters) Meathouse Fork  
Well No. 1 - GW-1476 Elev. 1043.90'  
District New Milton County Doddridge  
The surface of tract is owned in fee by H. H. Trent, et al  
Star Route Address West Union, W. Va.  
Mineral rights are owned by same  
(for further add. contact C. S. Oil Co) Address \_\_\_\_\_  
Drilling commenced 2-4-64  
Drilling completed 3-4-64  
Date Shot not shot From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_  
Open Flow /10ths Water in \_\_\_\_\_ Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume show \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED not acidized  
WELL FRACTURED see reverse side

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			<u>Parmco Anchor</u>
13			Size of <u>4-1/2x6-1/2'</u>
10 <u>3/4" 32#</u>	<u>64'</u>	<u>64'</u>	Depth set <u>1723'</u>
8 <u>7" 23#</u>	<u>1011'</u>	<u>pulled</u>	Perf. top _____
4 <u>1/2" 9.5#</u>	<u>1920'</u>	<u>1920'</u>	Perf. bottom _____
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
see reverse side

COAL WAS ENCOUNTERED AT none FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT 8/10 M. 2" = 440 MCF - Big Injun  
ROCK PRESSURE AFTER TREATMENT 48 hours 140#  
Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0'	8			
Clay			8	15			
Red Rock			15	23			
Gravel			23	27			
Sand			27	75			
Lime			75	102			
Red Rock			102	110			
Lime			110	160			
Red Rock			160	198			
Lime			198	207			
Sand			207	245			
Broken Lime			245	260			
Sand			260	280			
Slate and Shells			280	350			
Hard Lime			350	400			
Slate and Shells			400	550			
Red Rock			550	600			
Slate and Shells			600	700			
Red Rock			700	730			
Slate and Shells			730	780			
Red Rock			780	790			
Slate and Shells			790	975			
Sand			975	1070			
Slate and Shells			1070	1095			
ne			1095	1140			
and Shells			1140	1170			
			1170	1320			



Formation	Color	Hard or Soft	Top 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate and Shells			1320	1395			
Lime			1395	1465			
Sand			1465	1495			
Slate and Shells			1495	1570			
Lime			1570	1600			
Red Rock			1600	1636			
Slate and Shells			1636	1661			
Lime			1661	1690			
Slate			1690	1696			
Blue Monday Sand			1696	1710			
Big Lime			1710	1768			
Big Injun			1768	1865			
Slate			1865	1905			
Total depth-----				1905'	DLM=1910' Schlumberger Meas.		
Plugged back to-----				1895'			
Schlumberger Meas:					Gas per Temperature Log		
Big Injun			1768	1865'	1783' small show		
					1834-36' show		
					1854' show		
					1869' show		
Casing record							
2-14-64	Ran 7" casing with shoe at 1,000'. Set in 20' red mud. Pulled.						
3-5-64	Ran 4-1/2" at total depth with shoe on bottom, 4-1/2x6-1/2" Parmco Anchor Packer set at 1723', R/L nipple at 1,521'. Top float insert 1877'-3 centralizers. Cemented with 32 sacks Hi Early cement. Plug to 1852'						
Ran Schlumberger Logs: Formation, Density, Temperature and Induction.							
Perforated: 1781-85', 1832-36', 1854', 1862-66'							
Fractured the Big Injun 3-11-64							
Before fracturing show of gas. Pumped in 500 gallons mud acid, 1500 gallons 15% acid-displaced acid with 30 bbls. water at 1100#. Broke down at 2,600#. For treatment used 22,680 gallons of water, 25,000# 20-40 sand. Flushed with 30 bbls. water. Total fluid used 25,400 gallons. Maximum treating pressure 2,600# - minimum treating pressure 2,400#. Injection rate 33.5 bbls/min. Maximum sand concentration 1-3/4#/gallon - minimum sand concentration 1/4#/gallon. Used 142,000 SCF Nitrogen. Flowing back.							
Final open flow 3-18-64 8/10 M. 2" = 440 MCF							

Date March 20, 1964

APPROVED Cities Service Oil Company

By W. S. Moore, Division Sup't  
(Title)