

BENCH MARK
 U.S.G.S. B.M.E. 162 STANDARD DISC IN FACE OF
 ROCK LEDGE ABOUT 150' SOUTH WEST OF MOUTH
 OF SYLVIA BRANCH AND ON WEST SIDE OF STATE
 ROUTE NO. 80. ELEV. 783.847'
DEGREE OF ACCURACY
 ONE PART IN 200.

Fracture <input type="checkbox"/> Before 6/5/27 <input type="checkbox"/> New Location <input checked="" type="checkbox"/> Drill Deeper <input type="checkbox"/> Redrill <input type="checkbox"/> Abandonment <input type="checkbox"/>	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 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia. The accuracy of this survey is within the limits and as prescribed in paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations. PROVEN ELEVATION 1548.59'
--	--

Company UNITED FUEL GAS CO.
 Address CHARLESTON W.VA.
 Farm MINGO-WYOMING COAL LD. CO.
 Tract _____ Acres 2645.65 Lease No. 49340
 Well (Farm) No. 11 Serial No. 9416
 Elevation (Spirit Level) 1548.59'
 Quadrangle GILBERT
 County MINGO District STAFFORD
 Engineer Adrian E. Handman
 Engineer's Registration No. 2330
 File No. 46-11 Drawing No. _____
 Date FEB. 9, 1967 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. MIN-786
Corrected Topo. Loc.
 + 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.

3-6-271
 Deep Well
 ENCL.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
WELL RECORD

Rotary
Spudder
Cable Tools
Storage
Oil or Gas Well Gas
(KIND)

Quadrangle Gilbert
Permit No. MIN.-786

Company United Fuel Gas Company
Address P.O. Box 1273 Charleston, W. Va. 25325
Farm Mingo-Wyoming Coal Land Co. #11 Acres. 2,645.65
Location (waters) Trace Fork of Browning Fork
Well No. 9416 Elev. 1548.59'
District Stafford County Mingo K81556
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by Mingo-Wyoming Coal Land Co.
P.O. Box 540 Address Logan, W. Va. 25601

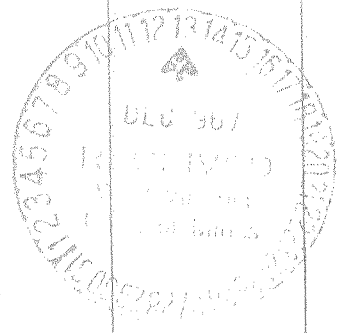
Drilling commenced 9-17-67
Drilling completed 10-5-67
Date Shot ~~XXXXXX~~ From _____ To _____
With _____
Open Flow 10 /10ths Water in _____ Inch
4 /10ths Merc. in _____ Inch
Volume 2,316 M Big Lime and Berea Cu. Ft.
Rock Pressure 730 lbs. 48 hrs.
Oil _____ bbls., 1st 24 hrs.

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8"		18'	
10			Size of
8 5/8"	2620' Cemented		Depth set
6 3/4"			
5 3/16"	3852' Cemented		
4 1/2"			Perf. top
3"			Perf. bottom
2"			Perf. top
Liners Used			Perf. bottom

WELL ACIDIZED (DETAILS) _____
WELL FRACTURED (DETAILS) _____
RESULT AFTER TREATMENT (Initial open Flow or bbls.) _____
ROCK PRESSURE AFTER TREATMENT _____ HOURS _____
Fresh Water 245 Feet _____ Salt Water _____ Feet _____
Producing Sand _____ Depth _____

Attach copy of cementing record.
CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
Amount of cement used (bags) _____
Name of Service Co. _____
COAL WAS ENCOUNTERED AT 8 FEET 48 INCHES
140 FEET 36 INCHES 250 FEET 48 INCHES
FEET _____ INCHES FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Clay & Shale			0	8	Plugged back to 3800'		
Coal			8	12			
Sand & Shale			12	140	Damp at 110'		
Coal			140	143			
Shale			143	250	Water 245'		
Coal			250	254			
Sandy Shale			254	665	Perforated from 3728-3730' with 8		- Berea
Sand & Shale			665	885	holes; 3733 1/2-3734' with 3 holes.		
Shale			885	1065			
Sand			1064	1165	Fractured Berea 10-16-67 with 411		
Sand & Shale			1165	1355	bbls. sand laden fluid, 26,000#		
Sand			1355	1679	10-20 sand and 500 gallons mud acid.		
Shale			1679	1710			
Sand			1710	1910	Perforated Big Lime from 3082-3086'		
Shale			1910	2025	with 4 holes; 3097-3099' with 2		
Shale & Sand			2025	2170	holes; 3103-3105' with 2 holes.		
Red Rock & Sand			2270	2250			
Sand			2250	2395	Acidized Big Lime 10-16-67 with		
Shale & Sand			2395	2430	5,000 gallons 28% acid and 180		
Shale			2430	2499	bbls. water.		
Maxon Sand			2499	2590			
Shale			2590	2645	Final open flow after fracture and		
Shale & Red Rock			2645	2730	acidized 10/10 Merc. 4" 2,316 M		
Shale			2730	2775	Big Lime and Berea.		
Big Lime			2775	3135			
Injun Sand			3135	3190	FINAL OPEN FLOW- 2,316 M Big Lime		
Weir Sand			3190	3355	48 Hr. R.P. 730#		& Berea
Shale			3355	3700			
Brown Shale			3700	3718	Shut in 11-1-67 in 4-1/2" casing.		



DEC 21 1967

Deep Well (Oriskany)

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Berea Sand			3718	3745			
Shale			3745	5730			
Corniferous	- Onondaga		5730	5763	LOGS RUN:		
Oriskany			5763	5830	Gamma Ray		
Total Depth			5830'		Compensated Density		
					Temperature		
			5830		5730	5766	
			3745		1556	1556	
			2085 ft.				
			Expt. footage		4174	4210	

Date December 11, 1967

APPROVED UNITED FUEL GAS COMPANY, Owner

By D. K. S.
 (Title) BY D. K. S.
 Supt., Civil Engineering Dept.