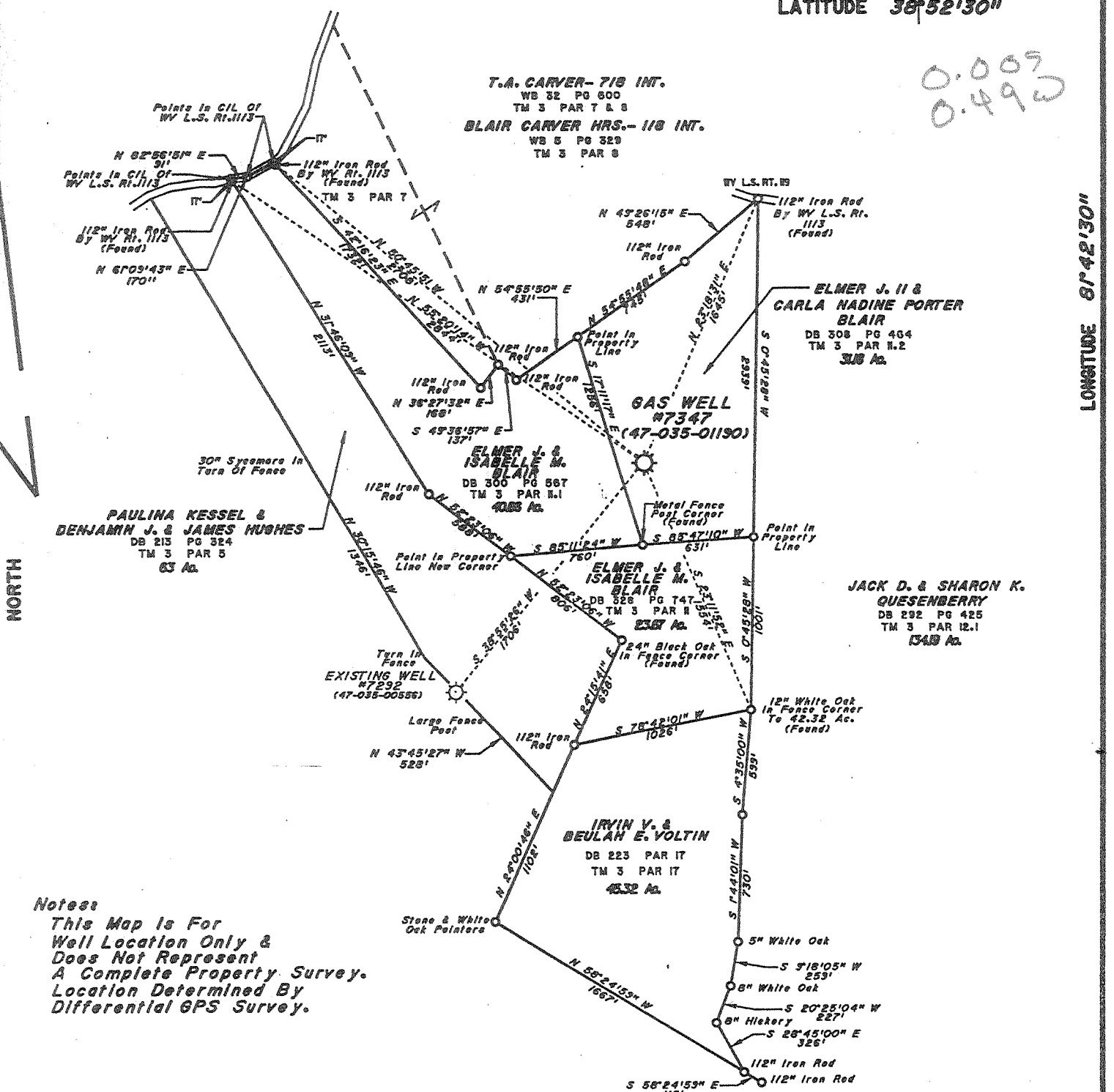


LATITUDE 38°52'30"

LONGITUDE 81°42'30"

0.009  
0.492



**Notes**  
 This Map is For Well Location Only & Does Not Represent A Complete Property Survey. Location Determined By Differential GPS Survey.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2")

FILE NO. \_\_\_\_\_  
 DRAWING NO. 7347  
 SCALE 1" = 300'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION EXISTING WELL (GROUND)

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.  
 (SIGNED) [Signature]  
 R.P.E. 9936 L.L.S. 798



PLACE SEAL HERE

**STATE OF WEST VIRGINIA**  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 SECTION OF OIL & GAS



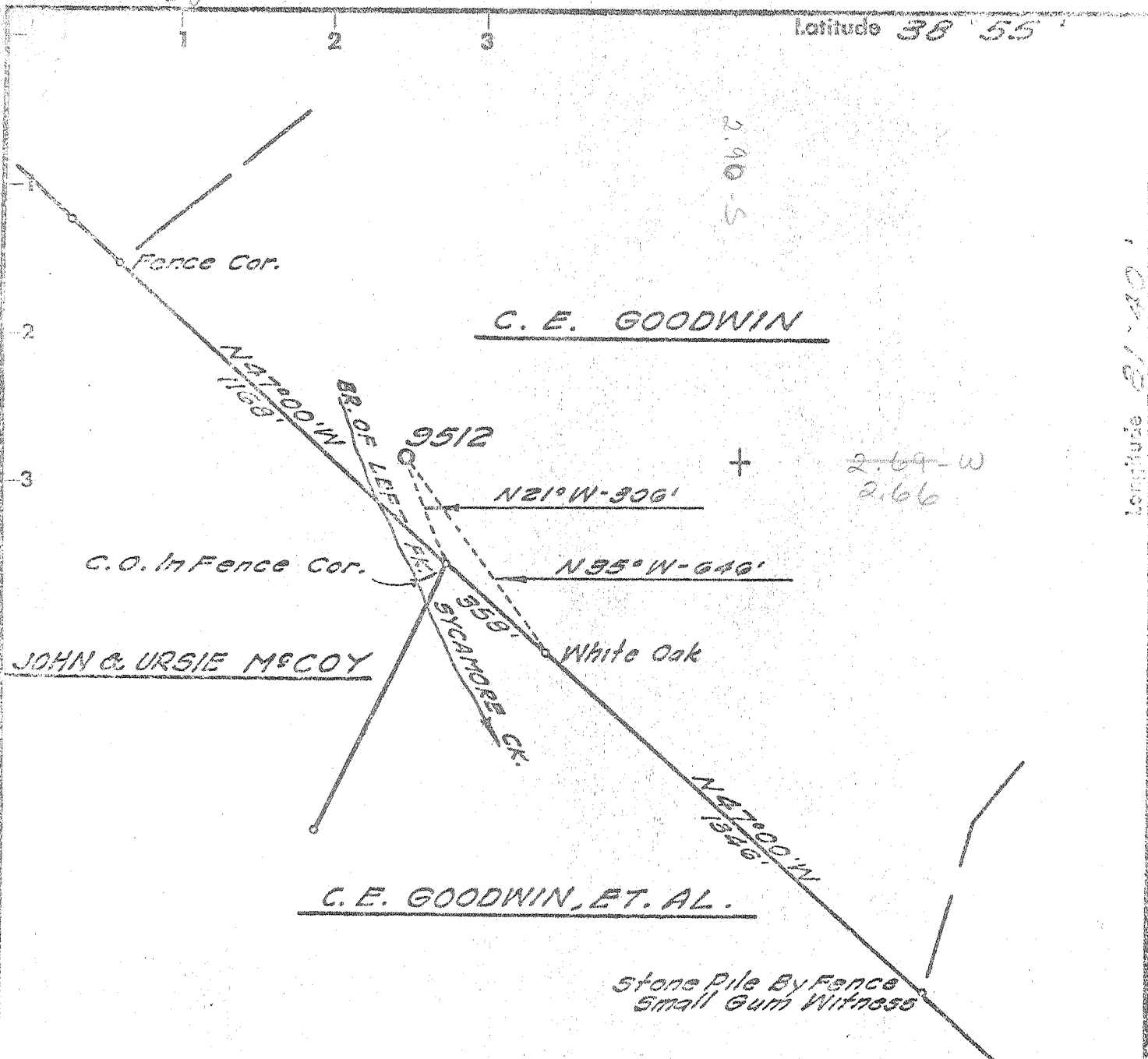
DATE September 30, 1998  
 OPERATOR'S WELL NO. 7347  
 API WELL NO. 47 035 011907

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS," ) PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 755.10' WATER SHED Left Fork Of Sycamore Creek  
 DISTRICT Ripley COUNTY Jackson  
 QUADRANGLE Ripley & Sandyville COORDINATES LAT: 38°52'30" LONG: 81°43'01"  
 SURFACE OWNER Elmer J. II & Carla Blair ACREAGE 31.18  
 OIL & GAS ROYALTY OWNER C. E. Goodwin, Et Al. LEASE ACREAGE 263  
 COAL OWNER C. E. Goodwin, Et Al. LEASE NO. 51675

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Storage Recondition  
Existing Well drilled in 1970 TO 5645 Plugged back to 4920  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION Oriskany ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L. COTY  
 ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

COUNTY NAME JACKSON  
 PERMIT 1190

DEEP WELL



BENCH MARK DESCRIPTION

U.S.G.S. Standard Disk Stamped T-103-1956 About 2.4 Miles NE Along U.S. Rt. 21 From The Intersection Of U.S. Rt. No. 33 and Post Office At Ripley, In The Top Of The NE End Of The S.E. Concrete Headwall Of A 4' Box Culvert. Elev. 638.63'

ACCURACY - One Part In 200

- Fracture Before 6/5/29
- ~~Refracture~~
- Drill Deeper
- Redrill
- 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 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.

Company UNITED FUEL GAS CO.  
 Address CHARLESTON, W. VA.  
 Farm C. E. GOODWIN, ET. AL.  
 Tract Acres 265 (Worger) Lease No. 02921 ET. AL.  
 Well (Farm) No. \_\_\_\_\_ Serial No. 9512  
 Elevation (Spirit Level) 755.13'  
 Quadrangle RIPLEY W  
 County JACKSON District RIPLEY  
 Engineer C. J. ...  
 Engineer's Registration No. 2330  
 File No. 56-95 Drawing No. \_\_\_\_\_  
 Date DEC. 15, '69 Scale 1" = 400'

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

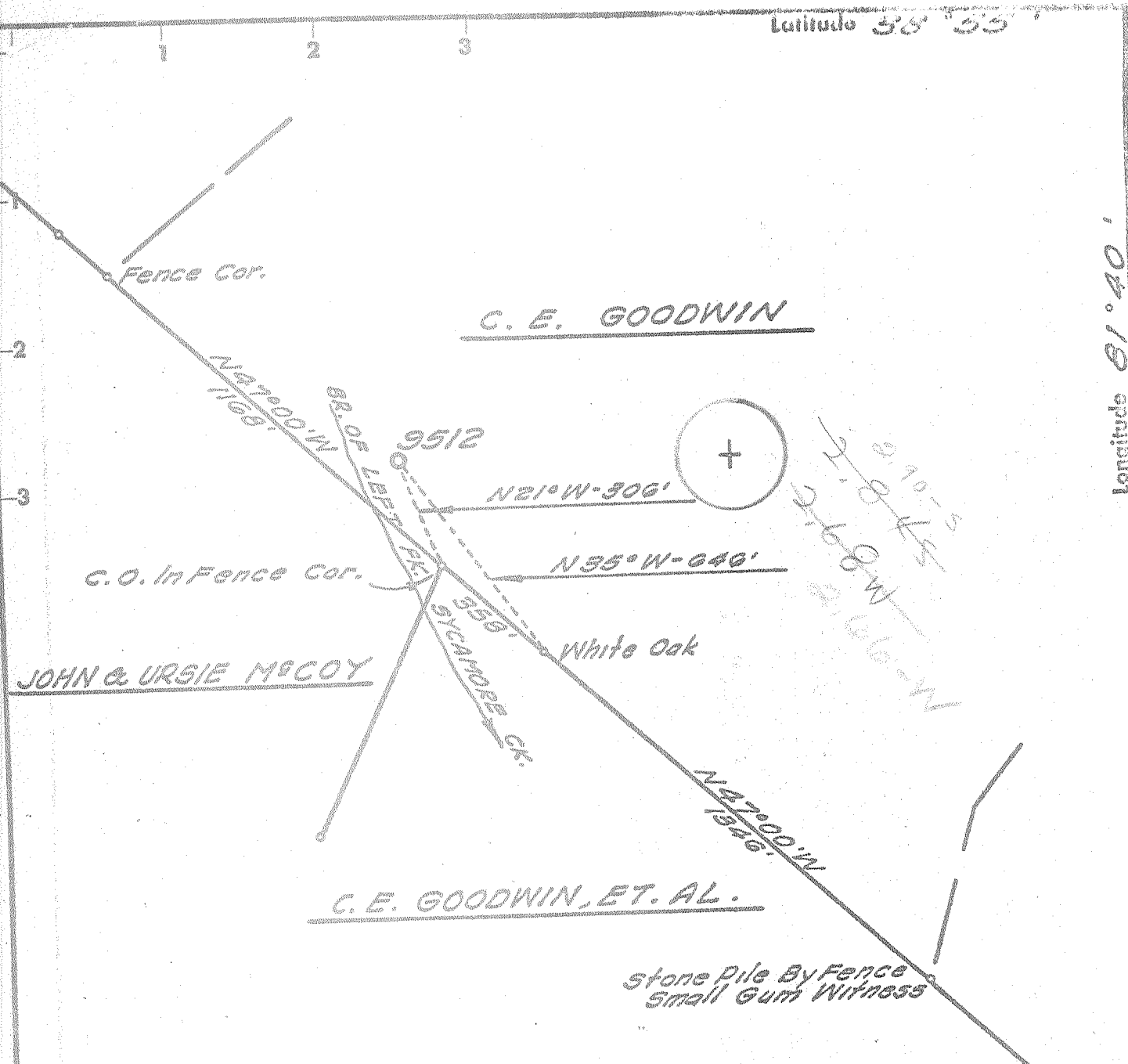
WELL LOCATION MAP  
 FILE NO. JAC-1190-PP

+ 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.

Latitude 38° 33'

Longitude 81° 40'



BENCH MARK DESCRIPTION

U.S.G.S. Standard Disk Stamped T-103-1956 About 2.4 Miles NE Along U.S. Rt. 21 From The Intersection Of U.S. Rt. No. 33 and Post Office At Ripley, In The Top Of The NE End Of The S.E. Concrete Headwall Of A 4' Box Culvert. Elev. 638.63'

ACCURACY - One Part In 200

- Fracture
- Before 6/5/29
- New Location
- Drill Deeper
- Redrill
- 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 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.

Company UNITED FUEL GAS CO.  
 Address CHARLESTON, W. VA.  
 Farm C. E. GOODWIN, ET. AL.  
 Tract \_\_\_\_\_ Acres 263 <sup>(Merger)</sup> Lease No. 02921 ET. AL.  
 Well (Farm) No. \_\_\_\_\_ Serial No. 9512  
 Elevation (Spirit Level) 755.13'  
 Quadrangle RIPLEY SW  
 County JACKSON District RIPLEY  
 Engineer Chas. Ed. Harman  
 Engineer's Registration No. 2330  
 File No. 56-95 Drawing No. \_\_\_\_\_  
 Date DEC. 15, '69 Scale 1" = 400'

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

WELL LOCATION MAP  
 FILE NO. JAC-1190

+ 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.

4-73



**RECEIVED**

MAR 4 - 1970

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

- Rotary
- Spudder
- Cable Tools
- Storage

OIL AND GAS DIVISION

Oil or Gas Well Gas  
(KIND)

Quadrangle Ripley

**WELL RECORD**

Permit No. JAC-1190

Company <u>United Fuel Gas Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address <u>P. O. Box 1273, Charleston, W. Va.</u>	Size			Kind of Packer
Farm <u>C. E. Goodwin, Et Al</u> Acres <u>263</u>	<u>16</u>			
Location (waters) <u>Left Fork of Sycamore</u>	<u>13</u>	<u>183'</u>	<u>183'</u>	
Well No. <u>9512</u> Elev. <u>755.13'</u>	<u>10x 9-5/8</u>	<u>2045'</u>	<u>2045'</u>	Size of
District <u>Ripley</u> County <u>Jackson</u>	<u>8x 7</u>	<u>5590'</u>	<u>5590'</u>	Depth set
The surface of tract is owned in fee by	<u>6x</u>			
Address	<u>5 3/16</u>			
Mineral rights are owned by	<u>4 1/2</u>			
Address	<u>3</u>			Perf. top
Drilling commenced <u>January 11, 1970</u>	<u>2-3/8</u>	<u>5600'</u>	<u>5600'</u>	Perf. bottom
Drilling completed <u>January 29, 1970</u>	Liners Used			Perf. top
Date Shot <u>Not Shot</u> From To				Perf. bottom
With				

Open Flow /10ths Water in Inch

/10ths Merc. in Inch

Volume Show of Gas Cu. Ft.

Rock Pressure lbs hrs.

Oil bbls., 1st 24 hrs.

WELL ACIDIZED (DETAILS)

WELL FRACTURED (DETAILS) Mud Acid 1,000 Gals. Fill Up 8,000 Gals. Treating 18,000 Gals.,  
13,000# 20/40 sand, Overflush 8,000 Gals. Well logged by Birdwell

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 3,400 MMCF 3,400 MMCF

ROCK PRESSURE AFTER TREATMENT 2210 HOURS

Fresh Water Feet Salt Water 1310 Feet

Producing Sand Newburg 5609-11 Depth 5645

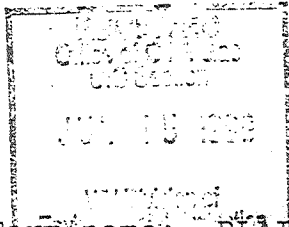
Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface & Red Rock		0	130				
Sand		130	160				
Red Rock		160	260				
Sand		260	340				
Shale		340	380				
Red Rock		380	500				
Sand		500	740				
Red Rock		740	860				
Salt Sand		860	1310	Salt Water			
Sand & Shale		1310	1450				
Sand		1450	1600				
Sand & Shale		1600	1700				
Lime		1700	1758				
Big Lime		1758	1923				
Injun Sand		1923	1990				
Shale		1990	2370				
Berea Sand		2370	2380				
Shale		2380	4734				
Corn. Lime		4734	4850				
Oriskany		4850	4875				
Lime & Dol.	<u>HELD &amp; SALINA</u>	4875	5608				
Newburg		5608	5616				
Lime & Dol.	<u>McKenzie</u>	5616	5645				
					Gas 4853' Est. 5,000 M		
					Show gas 5609-5611'		
					Test Before Fracturing: Show of Gas		
					Final Open Flow: 3,400 MMCF (Side		
					Static Test)		
					Casing Points		
					13-3/8"	185'	Cemented 175 Sk
					9-5/8"	2051'	Cemented 675 Sk
					7"	5561'	Cemented 150 Sk
					Logs Run:	Gamma, Gamma Ray, Density	
						Induction.	
					Permit No.	JAC-1190	
					Shut In 7'	Casing 2-1-70	

545

WR-35

05-Nov-98

API # 47- 35-01190 F



State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Reviewed MB

Well Operator's Report of Well Work

Farm name: BHAIR, ELMER II & CARLA Operator Well No.: RIPLEY 7347

LOCATION: Elevation: 755.00 Quadrangle: RIPLEY

District: RIPLEY County: JACKSON  
Latitude: 0 Feet South of 38 Deg. 52Min. 30 Sec.  
Longitude 2600 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: COLUMBIA GAS TRANSMISSION  
P. O. BOX 1273  
CHARLESTON, WV 25325-1273

Agent: RICHARD L. COTY

Inspector: HOMER DOUGHERTY  
Permit Issued: 11/05/98  
Well work Commenced: 06-11-99  
Well work Completed: 07-02-99  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary \_\_\_\_\_ Cable X \_\_\_\_\_ Rig  
Total Depth (feet) 4950'  
Fresh water depths (ft) \_\_\_\_\_  
Not Reported  
Salt water depths (ft) \_\_\_\_\_  
1310'  
Is coal being mined in area (Y/N)? No  
Coal Depths (ft): Not Reported

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8", 48 lb		179'	175 sx
9-5/8", 32 lb		2045'	675 sx
7", 23 lb		5590'	150 sx
2-3/8", 4.6 lb		4932'	

OPEN FLOW DATA \* Storage well - Rates and pressures variable

Producing formation Oriskany Pay zone depth (ft) 4842'-4852  
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow N/A MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests N/A Hours  
Static rock Pressure N/A psig (surface pressure) after N/A Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: COLUMBIA GAS TRANSMISSION CORP.

By: Paul Amick Paul Amick  
Date: 07/09/99

JUL 26 1999

JAC 1190 F

Pulled 4932' of 2-3/8" tubing, cleaned out to 4897', reperf'd Oriskany 4842' - 4852' with 6 SPF, installed new API 5m wellhead, reran 4932' of 2-3/8" tubing, and pumped an N2-Assist Deltafrac using 500 gallons of 28% HCL, 538 bbls of water, 150 MSCF N2, and 17,800 lbs of 20/40 sand at 1 - 4 PPG.