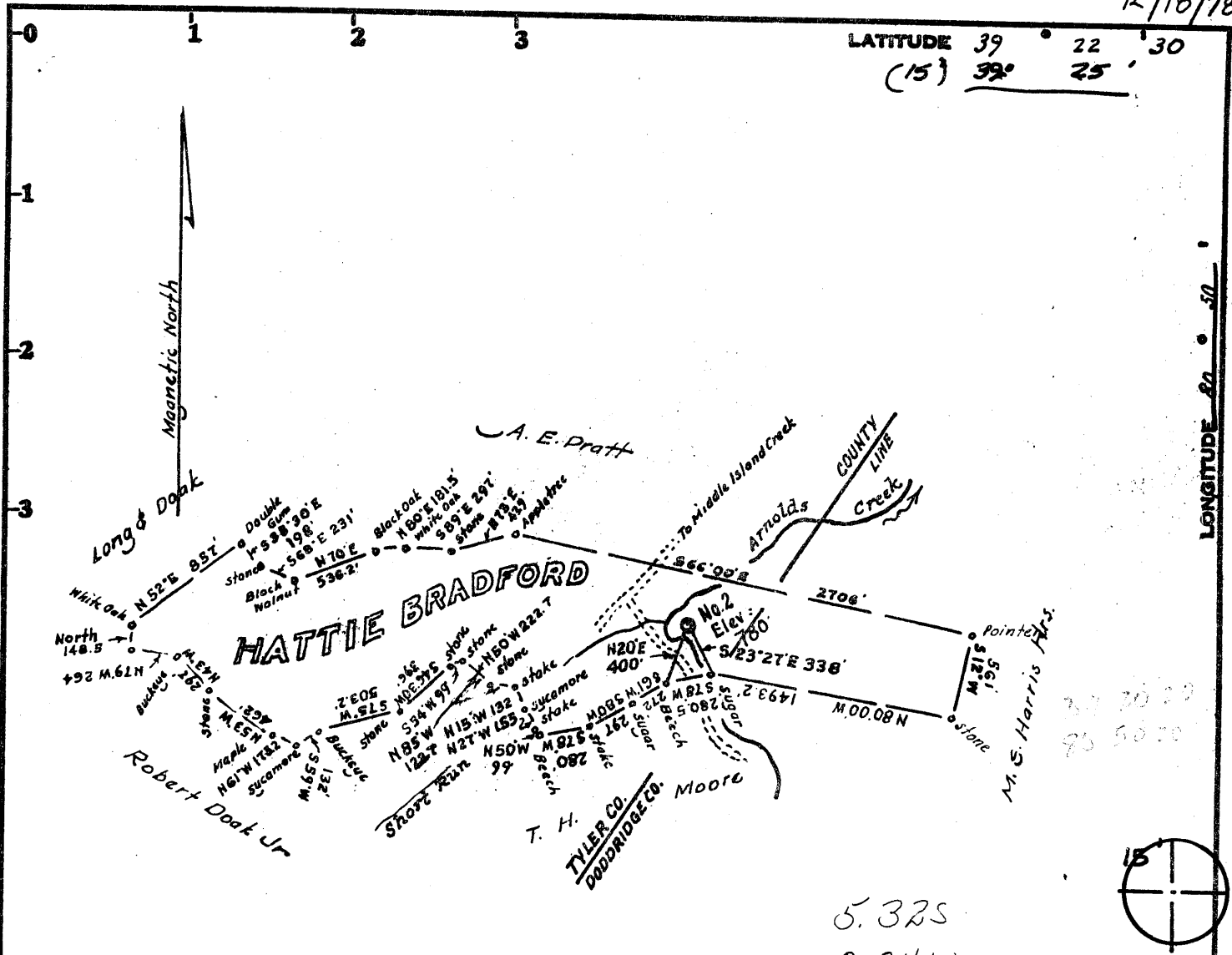


12/10/78

LATITUDE 39° 22' 30" (15) 39° 25'



**LEGEND**

- Roads
- County Line
- Lines plotted from deeds
- Surveyed Lines
- Well Locations

**OWNERSHIP**

No Coal  
 Surface and 1/2 oil & Gas is owned  
 by Paul McCutchan, of West Union, W. Va.

Plotted from calls found in deed  
 from Hattie Bradford, dated May 20, 1943  
 and recorded in the office of the Tyler  
 County Clerk in Deed Book 119  
 at page 230.

Minimum Error of Closure 1 in 200

Source of Elevation Elev. Well No. 1 = 950

- Fracture.....
- 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.

Signed: [Signature]  
 Squares: N S E W

Map No.

Company **INDUSTRIAL GAS ASSOCIATES**  
 Address P.O. Box 1610, Greenwich Connecticut  
 Farm Hattie Bradford, Paul McCutchan  
 Tract \_\_\_\_\_ Acres 110 Lease No. \_\_\_\_\_  
 Well (Farm) No. Two Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 780  
 Quadrangle West Union 7 1/2, 15' C  
 County Tyler District Centerville  
 Engineer [Signature]  
 Engineer's Registration No. 1227 LLS 200  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Dec. 4, 1978 Scale 1" = 1000'

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

**WELL LOCATION MAP**  
 FILE NO. 47-095 -0679

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 to 62,500, latitude and longitude lines being represented by border lines as shown.

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

JAN 4 1979

2500 Berea 6-4 WILBER 92 90

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

APR 26 1979

Oil and Gas Division

Oil & Gas Division  
DEPT. OF MINES

WELL RECORD

Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb.   
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Quadrangle West Union 7½

Permit No. 47-095-0679

Company Industrial Gas Associates  
Address P.O. Box 1610, Greenwich, Conn.  
Farm Bradford Acres 110  
Location (waters) Arnolds Creek  
Well No. 2 Elev. 950  
District Centerville County Tyler  
The surface of tract is owned in fee by \_\_\_\_\_  
Paul McCutchan  
Address West Union, W.V.  
Mineral rights are owned by Paul McCutchan  
Address West Union, W.V.  
Drilling Commenced 3/20/79  
Drilling Completed 3/25/79  
Initial open flow Show cu. ft. \_\_\_\_\_ bbls.  
Final production 500,000 cu. ft. per day 2 bbls.  
Well open 3 hrs. before test 800 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	240	240	115 Sks
7			
5 1/2			
4 1/2		2291	115 Sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Weir - Fraced with 316 BBLs water - 21,000# sand - 50,000 SCF N<sup>2</sup>

Injun - Fraced with 340 BBLs water - 21,000# sand - 50,000 SCF N<sup>2</sup>

Coal was encountered at None Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water 80 Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Injun & Weir Depth 1840 - 2227

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Soil	Brown	Soft	0	10		
Sand & Shale	Black	Soft	10	950		
Shale	Black	Soft	950	1048		
Cow Run	White	Hard	1048	1078		
Shale	Black	Soft	1078	1160		
Sand	White	Hard	1160	1250		
Shale	Black	Soft	1250	1300		
Sand	White	Hard	1300	1315		
Shale	Black	Soft	1315	1355		
Sand	White	Hard	1355	1422		
Shale	Black	Soft	1422	1518		
Sand	White	Soft	1518	1600		
Shale	Black	Soft	1600	1768		
Big Lime	White	Hard	1768	1840		
Injun	White	Hard	1840	1968		
Shale	Black	Soft	1968	2122		
Weir	Brown	Soft	2122	2227		
Shale			2227	2313		
T.D.				2313		

MAY 8 1979