

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

**CERTIFICATE**

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.

Minimum degree of accuracy is one part in 200

Signed *W. Rainey* R.P.E. # 2024

COMPANY	DEVON CORPORATION		
ADDRESS	P.O. Box 1433 CHARLESTON W.VA. 25325		
FARM	IRENE M. VANDINE, ET AL.		
MAP	OV-20	ACRES 250 <sup>±</sup> of 310 <sup>±</sup>	LEASE NO WV-255
WELL (FARM) NO.	3	SERIAL NO.	760
ELEVATION (SPIRIT LEVEL)	999.80		
QUADRANGLE	KENNA SE SE Romance 712		
COUNTY	KANAWHA DISTRICT POCA		
POINT OF PROVEN ELEVATION	U.S.G.S. - B.M. at Sissonville High School		
	C-47 ELEV. 630.09 (1956)		
FILE NO.	DRAWING NO.		
DATE	FEBRUARY 6, 1969 SCALE 1" = 660'		

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON  
WELL LOCATION MAP

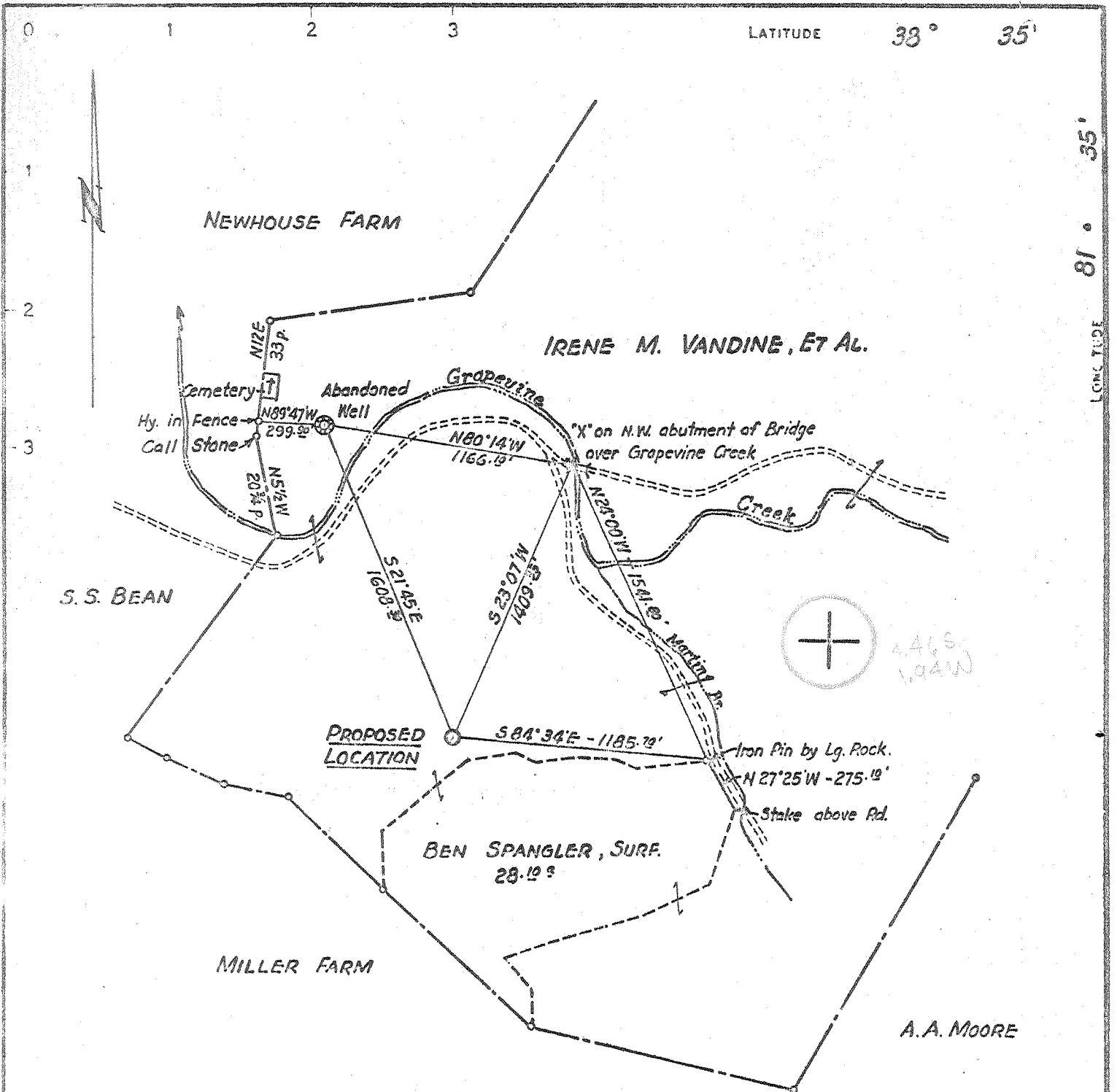
FILE NO. Kan-2354 PP

+ 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

-OWLD-  
-DEEPWELL- 6.6 Rocky Fork (312)

JUL 28 1980



**CERTIFICATE**

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Minimum degree of accuracy is one part in 200

Signed [Signature] R.P.E. # 2024

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- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY	COMMONWEALTH GAS CORPORATION		
ADDRESS	P.O. Box 1433 CHARLESTON W.VA. 25325		
FARM	IRENE M. VANDINE, ET AL.		
MAP	OV-20	ACRES 250 <sup>±</sup> of 318 <sup>±</sup>	LEASE NO WV-255
WELL (FARM) NO	3	SERIAL NO	780
ELEVATION (SPIRIT LEVEL)	999.89		
QUADRANGLE	KENNA S.E.	SC	
COUNTY	KANAWHA	DISTRICT	POCA
POINT OF PROVEN ELEVATION	U.S.G.S. - B.M. at Sissonville High School C-47 ELEV. 630.89 (1956)		
FILE NO	DRAWING NO		
DATE	FEBRUARY 6, 1969		
	SCALE 1" = 660'		

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON  
WELL LOCATION MAP

FILE NO. Kan-2354

+ 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

Deep Well (Newburg) 6-6 Rocky Fork 312

FEB 17 1969



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Kenna S.E.  
Permit No. Kan. 2354

WELL RECORD

Oil or Gas Well Gas  
(KIND)

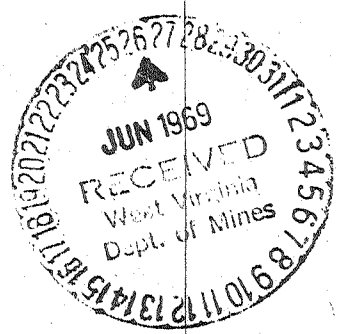
Company Commonwealth Gas Corporation  
Address P. O. Box 1433, Charleston, W. Va. 25325  
Farm Irene M. Vandine, et al Acres 250 of 318  
Location (waters) Grapevine Creek  
Well No. 3 (Serial No. 780) Elev. 999.80  
District Poca County Kanawha  
The surface of tract is owned in fee by Mrs. Irene M. Vandine et al  
1643 Clay Ave. Address Charleston, W. Va.  
Mineral rights are owned by Same & Mrs. Judith K. Thomas  
000 Highland Dr., St. Albans, & Brooks McCabe, Box  
Address Chas., W. Va.  
Drilling commenced February 13, 1969  
Drilling completed March 3, 1969  
Date Shot -- From -- To --  
With --  
Open Flow /10ths Water in Inch  
/10ths Merc. in Inch  
Volume 25,000,000 (natural) Cu. Ft.  
Rock Pressure 1840 lbs. 48 hrs.  
Dil. --- bbls., 1st 24 hrs.  
WELL ACIDIZED ---

Casing and Tubing	Used in Drilling	Left in Well	Packers
16. 3/8"	65'-1"	65'-1"	Kind of Packer
13. 9-5/8"	1993'	1993'	Size of
10. 7"	5845'-9"	5845'-9"	Depth set
8 1/4"			
3. 3/8"	5890'-8"	5890'-8"	Perf. top
2. 3/8"			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED --- SIZE --- No. Ft. --- Date ---  
60 sacks behind the 13-3/8', 438 sacks behind the 9-5/8', 100 sacks behind the 7"  
COAL WAS ENCOUNTERED AT --- FEET --- INCHES  
--- FEET --- INCHES --- FEET --- INCHES  
--- FEET --- INCHES --- FEET --- INCHES

WELL FRACTURED March 6, 1969 from 5898 to 5904 with 925 bbls. water and 2800# sand  
RESULT AFTER TREATMENT 86,000,000 Cu. Ft. 86,000 McF  
ROCK PRESSURE AFTER TREATMENT 1840# - 48 hrs.  
Fresh Water --- Feet Salt Water --- Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Red Rock			300	325			
Sand			325	345			
Red Rock			345	410			
Sandy Shale			410	425			
Red Rock			425	550			
Sand			550	720			
Shale			720	825			
Sand			825	940			
Shale			940	1020			
Sand			1020	1150			
Dark Shale			1150	1250			
Salt Sand			1250	1700			
Sandy Lime			1700	1770			
Big Lime			1770	1910			
Big Injun Sand			1910	1960			
Shale			1960	5000			
Corniferous Lime			5000	5105			
Oriskany Sand			5105	5146			
Gray Lime			5146	5896			
Newburg			5896	5910			
Limey Dolomite <u>McKenzie</u>			5910	5923	Gas	5898 - 5904	25,000,000 Cuft. (natural (est.))
			Total Depth	5923			
					Final Gauge		
						86,000,000 cu. ft. after frac.	



Rec. 3/04/87



IV-35  
(Rev 8-81)

Date March 2, 1987  
Operator's \_\_\_\_\_  
Well No. 780  
Farm Irene Vandine  
API No. 47 - 039 - 2354PP

State of West Virginia  
Department of Mines  
Oil and Gas Division

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas x / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas," Production x / Underground Storage \_\_\_ / Deep x / Shallow \_\_\_ /)

LOCATION: Elevation: 999.80' Watershed Grapevine Creek  
District: Poca County Kanawha Quadrangle Romance 7.5'

COMPANY Quinoco Petroleum, Inc.  
ADDRESS P.O. Box 1433, Charleston, WV 25325  
DESIGNATED AGENT Bill W. Backus  
ADDRESS P.O. Box 1433, Charleston, WV 25325  
SURFACE OWNER Irene Vandine  
ADDRESS 1643 Clay Avenue, Charleston, WV  
MINERAL RIGHTS OWNER same  
ADDRESS same  
OIL AND GAS INSPECTOR FOR THIS WORK Rodney G. Dillon ADDRESS P.O. Box 7, Williamstown, WV 26187  
PERMIT ISSUED July 2, 1980  
~~WORKOVER~~ ~~DRILLING~~ COMMENCED July 2, 1980  
~~WORKOVER~~ ~~DRILLING~~ COMPLETED July 21, 1980 ✓  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON \_\_\_\_\_

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	65'	65'	
9 5/8	1993'	1993'	
8 5/8			
7	5845'	3735'	
5 1/2			
4 1/2			
3			
2-3/8	5890'	4088.60'	
Liners used			

GEOLOGICAL TARGET FORMATION Newburg Depth 5896 feet  
Depth of completed well 5923 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh N/A feet; Salt N/A feet  
Coal seam depths: not available Is coal being mined in the area? \_\_\_\_\_

OPEN FLOW DATA

Producing formation Brown Shale Pay zone depth 4070 feet  
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow (80) Mcf/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests 72 hours

Static rock pressure 775 psig (surface measurement) after \_\_\_\_\_ hours shut in  
(If applicable due to multiple completion--)

Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ hours APR 20 1987

Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.  
 Freshwater Rig #15 and McCullough on location. 0-PSI on 7" casing. Rigged up McCullough and ran Gamma Ray Collar Log from 5052' and 1900'. Set 7" bridge plug at 4950'. Shut down while welder welded 7" nipple to top of 7" string. Ran 1 sack Cal-Seal on top of plug. Rigged up lubricator and perforated Brown Shale between 4070' and 4221' with 25 shots 3½ glass-jets. Went into hole with casing cutter and cut 7" casing at 2110'. Freshwater Rig #15, Halliburton, B. J. Hughes and Dale Henry Enterprises on location. Inflated packer with 2300# water and loaded hole with 75% foam. Pumped foam until pressure stabilized and ran 12,000# 80/100 sand and 27,000# 20/40 sand. Average pressure 3,000#; minimum pressure 2,900#; maximum pressure 3,100#. Average rate - 8 bbls. per minute; average nitrogen rate 12,000 SCF per minute. Total nitrogen used - 520,000 SCF; total fluid - 340 bbls; total sand laden fluid 270 bbls. ISIP 1,100#. After 5 minutes - pressure 1,100#.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
See Attached Form OG-10			

(Attach separate sheets as necessary)

QUINOCO PETROLEUM, INC.  
Well Operator

By: Brewer Backus

Date: MARCH 2, 1987

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."  
 7023