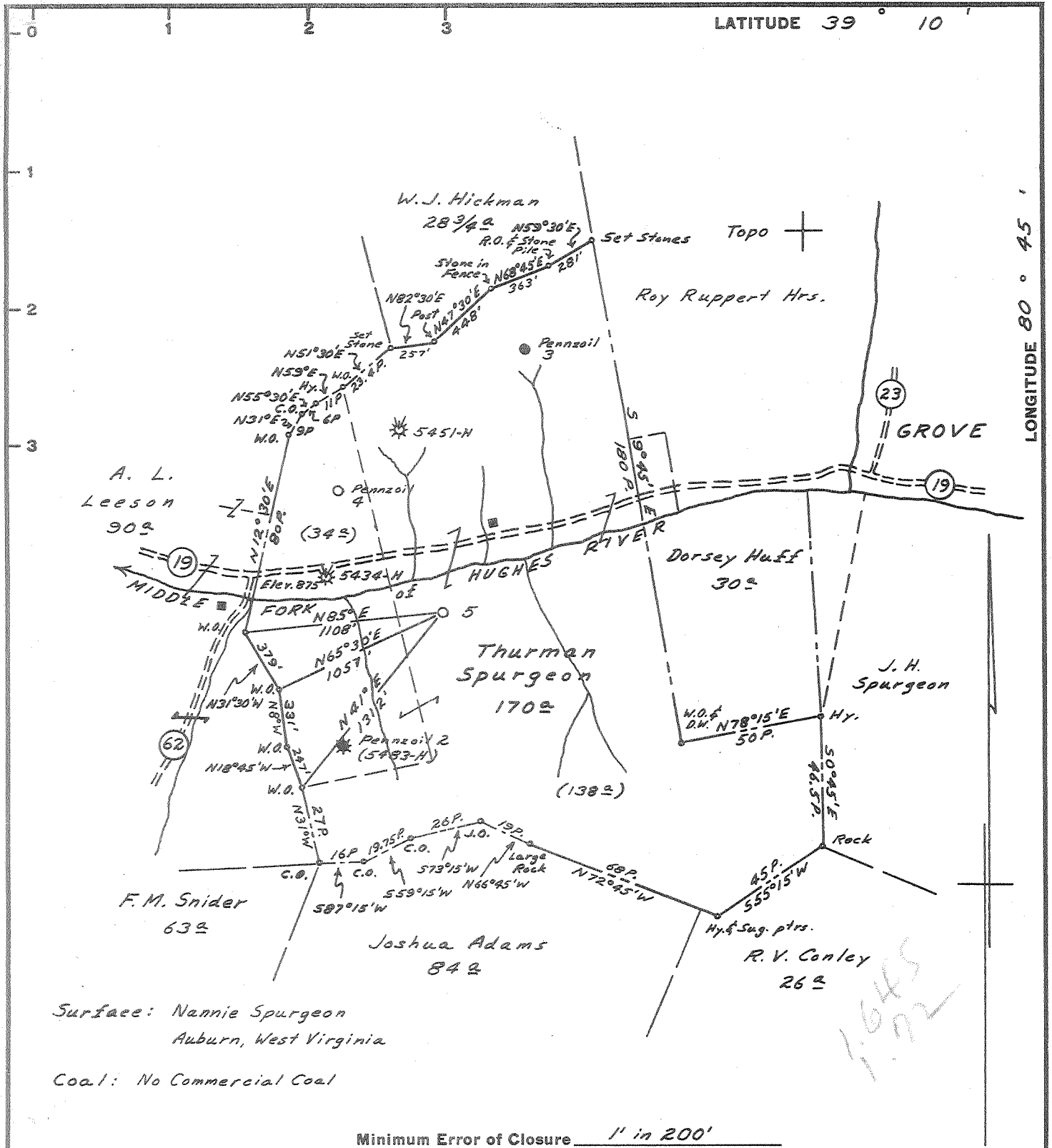


m P



Surface: Nannie Spurgeon
 Auburn, West Virginia
 Coal: No Commercial Coal

Minimum Error of Closure 1" in 200'
 Source of Elevation H.N.G. Co. Well # 5434 H (Abd. Permit Dod-1052A)
Elev. 875' ground.

- 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: A.C. Hillert

Map No. 647 Squares: N 21 E 9-10

Company	PENNZOIL COMPANY		
Address	P. O. BOX 1588, PARKERSBURG, W. VA.		
Farm	Thurman Spurgeon		
Tract	Acres	Lease No.	
	170	71767	
Well (Farm) No.	(5)	Serial No.	
Elevation (Spirit Level)	917.33' ground		
Quadrangle	HOLBROOK - EC		
County	DODDRIDGE	District	COVE
Engineer	A.C. Hillert		
Engineer's Registration No.	2534		
File No.	1416	Drawing No.	
Date	Sept. 2, 1965 Scale 1" = 800'		

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

WELL LOCATION MAP

FILE NO. Dod-1307

† 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.



STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

Rotary [X] Spudder [] Cable Tools [] Storage []

10-27-65

Gas oil well

Quadrangle HOLBROOK Permit No. DOD-1307/

WELL RECORD

Oil or Gas Well (KIND)

Company PENNZOIL COMPANY Address P. O. Box 1588, Parkersburg, W. Va. Farm Thurman Spurgeon Acres 170 Location (waters) Well No. 5 Elev. 917.33' District Cove County Doddridge

Table with columns: Casing and Tubing, Used in Drilling, Left in Well, Packers. Includes rows for sizes 8-5/8", 5-1/2", 2-3/8" and packer types like Steel Shoe, Guide Shoe, Float Collar.

The surface of tract is owned in fee by Nannie Spurgeon Address Auburn, W. Va. Mineral rights are owned by LaVaughn Wolverton, et al West Union, W. Va. Drilling commenced September 11, 1965 Drilling completed September 18, 1965

CASING CEMENTED 8-5/8" SIZE 278 No. Ft. 9-13-65 Date 5-1/2" 1918 9-18-65

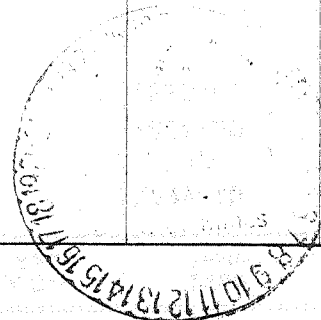
COAL WAS ENCOUNTERED AT FEET INCHES FEET INCHES FEET INCHES

WELL FRACTURED September 23, 1965 Used: 41,202 Gals. Water - 1000 Gals. Mud Acid - 300# WAC-8 1 Gal. Inhibitor - 40 Gals. Morflo - 5 Gals. Howco Suds - 20 Perf. Balls - 1 Manual Injector

RESULT AFTER TREATMENT Gas: 30 Mcf. Oil: 110 Bbls/Day ROCK PRESSURE AFTER TREATMENT 320#

Fresh Water Feet Salt Water Feet

Large table with columns: Formation, Color, Hard or Soft, Top, Bottom, Oil, Gas or Water, Depth, Remarks. Lists geological layers from Salt & Slt. to Pencil Cave.



Formation	Color	Hard or Soft	Top γ	Bottom	Oil, Gas or Water	Depth Found	Remarks
Blue Monday			1708	1721	Oil	1708-18	Show
Big Lime			1721	1774			
Big Injun			1774	1864	Oil	1826-30	Show
Silts. & Shale			1864	1920	Oil	1835-41	Show
Total Depth				1920'			

Date October 26, 1965

APPROVED PENNZOIL COMPANY, Owner

By A. C. Hilbert
 A. C. Hilbert (Title) Engineer
 Engineering Department