STATE OF WEST VIRGINIA
GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN

PAUL H. PRICE, DIRECTOR
STATE GEOLOGIST
AND PROFESSOR OF GEOLOGY

WEST VIRGINIA UNIVERSITY
MINERAL INDUSTRIES BUILDING

September 5, 1964

LABORATORY ANALYSES
of the
W. V. STONE WELL #M-100

Operating
Company: Mountaineer Mineral Co., Inc.
318 Professional Bldg.
Clarksburg, West Virginia

Mineral Rights Owner: W. V. Stone Heirs
Farm Name: J. M. Healey
Permit No: Harrison County - 318

Well Location: Coal District, Harrison County, W. Va.
E. C. Clarksburg Quadrangle: Scale -1/62,500
5.43 miles South of Lat. 39°25'
3.02 miles West of Long. 80°15'
Located on Simpson Creek, 4-1/2 miles north-northwest of Clarksburg.

Well Head Elevation: 1023.33'
Drilling Commenced: January 30, 1964
Drilling Completed: June 12, 1964
Total Depth of Well: 3244' Bottomed in the Speechley Sand
Production: Dry Hole

Detailed Lithologic Description by: Wallace R. McCord
Sedimentary Petrographer
W.Va. Geological Survey
Morgantown, W. Va.

Core Analyses by: Charles E. Hozdic
Technical Assistant
W. Va. Geological Survey

CORE ANALYSES			LITHOLOGIC DESCRIPTION
Top	Bottom	Thickness (in feet)	Character of Rocks
0	2022'	2022.0'	WELL-CUTTINGS NOT EXAMINED
			DEVONIAN ROCK SYSTEM
2022'	2030'	8.0'	CORE #1 "Fifty-Foot" Sand
Top Sample *por. 3.60% *perm. < 0.10 mil/d			Sandstone: very light-gray, very fine- and even-grained, highly angular, glassy to slightly frosted, very hard and tightly cemented, calcareous, slightly micaceous.
Middle Sample por. 9.82% perm. < 0.10 mil/d			Sandstone: same as above except less calcareous and more argillaceous, contains numerous specks of carbonaceous material.
Bottom Sample por. 7.80% perm. < 0.10 mil/d			Sandstone: same as above, almost non-calcareous.
2030'	2438'	408.0'	INTERVAL NOT EXAMINED
2438'	2460'	22.0'	WELL-CUTTINGS "Fourth" Sand
2438'	2455'	17.0'	Sandstone (70%): light-gray, very fine- to coarse-grained, conglomeratic with subangular to rounded, frosted quartz pebbles, argillaceous, slightly calcareous, micaceous; shale (30%)--medium-gray, silty, slightly micaceous; shale fragments may be mostly cavings.
2455'	2460'	5.0'	Sandstone (65%): same as above except more argillaceous and less conglomeratic; shale (35%)--medium light-gray to medium-gray, some grayish-red shale, silty, micaceous, few specks of pyrite.
2460'	2524'	64.0'	INTERVAL NOT EXAMINED
2524'	2545'	21.0'	CORES "Fifth" Sand
2524'	2526'	2.0'	CORE #2
Top Sample por. 7.02% perm. < 0.10 mil/d			Conglomerate (80% quartz): quartz pebbles up to 12 mm. in diameter, subangular to rounded(mostly sub-rounded), slightly to highly frosted,very hard and tightly cemented, slightly calcareous (5-8% lime), argillaceous, numerous specks of micaceous and carbonaceous materials,slightly pyritic.
Middle Sample por. 9.10% perm. < 0.10 mil/d			Conglomerate (65% quartz): less conglomeratic than above, angular to rounded quartz pebbles, larger pebbles mostly subrounded to rounded, highly argillaceous and silty, partially cemented with argillaceous material, fairly micaceous, shaly.

LABORATORY ANALYSES (Cont'd).

CORE ANALYSES			LITHOLOGIC DESCRIPTION
Top	Bottom	Thickness (in feet)	Character of Rock
2524'	2526'	2.0'	CORE #2 (cont'd)
Bottom Sample por. 4.20% perm. < 0.10 mil/d			Sandstone: medium-gray, very fine-grained with abundant fine- to very coarse-sized embedded grains of quartz, angular to subrounded, tightly cemented, very silty, highly argillaceous, fairly micaceous, contains numerous specks of carbonaceous material, shaly.
2526'	2530'	4.0'	CORE #3
Top Sample			Sandstone: medium light- to medium-gray, very fine- to coarse-grained, angular to subrounded, glassy to frosted, tightly cemented, highly argillaceous, fairly silty, slightly micaceous, few specks of pyrite, shaly. These core samples were too thin for determining porosity and permeability.
Middle Sample por. 7.46% perm. 0.264 mil/d			Sandstone: medium light-gray to medium brownish-gray, same as above sandstone.
Bottom Sample por. 7.50% perm. < 0.10 mil/d			Sandstone: medium-gray, same as above except more argillaceous and shaly.
2530'	2542'	12.0'	CORE #4
Top Sample por. 9.20% perm. 0.397 mil/d			Sandstone: grayish-brown, very fine- to fine-grained with a few scattered medium-sized grains of quartz, highly angular, fairly hard and tightly cemented, argillaceous, slightly micaceous, small show of oil.
Middle Sample por. 13.33% perm. 0.240 mil/d			Sandstone: same as above, very fine- to fine-grained, small show of oil.
Bottom Sample por. 11.26% perm. < 0.10 mil/d			Sandstone: same as above, small show of oil.
2542'	2544'	2.0'	CORE #5
Top Sample			Sandstone: medium light-gray to medium-gray, very fine- to fine-grained with a few scattered medium-sized grains of quartz, angular to subangular, slightly friable, fairly argillaceous, silty, slightly micaceous, shaly, slight oil show. These core Samples were too thin for determining porosity and permeability.

LABORATORY ANALYSES (Cont'd).

CORE ANALYSES			LITHOLOGIC DESCRIPTION
Top	Bottom	Thickness (in feet)	Character of Rocks
2542'	2544'	2.0'	CORE #5 (Cont'd)
Middle Sample por. 7.32% perm. < 0.10 mil/d			Sandstone: same as above except no oil show.
Bottom Sample por. 7.50% perm. < 0.10 mil/d			Sandstone: same as above sandstone, no oil show.
2544'	2545'	1.0'	CORE #6
Top Sample por. 9.10% perm. < 0.10 mil/d			Sandstone: medium-gray, very fine- to medium-grained (mostly fine-grained), highly angular to sub-angular, fairly argillaceous, micaceous, slightly shaly.
Middle Sample por. 7.80% perm. < 0.10 mil/d			Sandstone: same as above except coarser grained.
Bottom Sample por. 9.40% perm. < 0.10 mil/d			Sandstone: same as above sandstone, contains some scattered coarse-sized grains of subrounded quartz.
2545'	3244'	699.0'	INTERVAL NOT EXAMINED.
	3244'		Total Depth of Well.

*porosity in percent (%)
*permeability in millidarcy (mil/d)