

Company: United Fuel Gas Co.  
 Farm: National Shawmut Bank of Boston  
 Well No.: 6628  
 Elevation: 1857.74'  
 Total Depth: 3831'  
 Location: Buchanan County  
           13,000' S of 37°25'  
           11,950' E of 82°00'  
 Drilling Commenced: 11/7/50  
 Well Completed: 5/18/51  
 Result: Dry Hole

Geologic Log  
 Samples studied and  
 described by:  
 Clarke Jones  
 Virginia Division of  
 Mineral Resources  
 April, 1963

## GEOLOGIC LOG

<u>Depth</u>	<u>Interval</u>	<u>Description</u>
0-986	986	No samples
986-997	11	Siltstone, locally finely sandy, locally shaly, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, rare pyrite; with stringers of. Sandstone, white, moderately cemented, fine-grained, well sorted, subrounded to subangular, interstitially silty siliceous; with common biotite, abundant muscovite, common chlorite, rare carbonaceous material, slightly porous
997-1003	6	Siltstone, locally shaly, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous; with rare pyrite
1003-1022	19	Shale, dark gray, moderately hard, brittle, poor to fair fissility, argillaceous; with rare pyrite
1022-1038	16	Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous; with common biotite, abundant muscovite, common carbonaceous material, stringers of Sandstone, light gray, moderately cemented, very fine-grained, well sorted, subrounded to subangular, siliceous; with; common biotite, abundant muscovite, common chlorite, slightly porous

1038-1053	15	Sandstone, white to clear, well cemented, fine to medium grained well sorted, rounded to subrounded, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, abundant chlorite, stringers of slightly porous, with; Siltstone, locally shaly, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, rare carbonaceous material
1053-1080	27	Sandstone, white to light gray, moderately cemented, fine to medium grained, well sorted, rounded to subrounded, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, common chlorite, rare carbonaceous material, abundant iron oxide stains, slightly porous
1080-1130	50	Siltstone, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, with; common muscovite
1130-1142	12	Sandstone, white to clear, moderately cemented, very fine-grained, well sorted, subrounded to subangular, siliceous, with; abundant muscovite, common iron oxide stains, stringers of slightly porous, with; Siltstone, dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
1142-1154	12	Siltstone, locally finely sandy, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous,
1154-1190	36	Sandstone, white to clear, poorly cemented, fine to medium-grained, well sorted, subrounded to subangular, siliceous, abundant biotite, common muscovite, common chlorite, common carbonaceous material, stringers of slightly porous, with; Siltstone, dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite, with; common carbonaceous material

1190-1234	44	Interbedded Sandstone, light gray, moderately cemented, fine grained, well sorted, subrounded to subangular, siliceous, calcareous, abundant biotite, abundant muscovite, common carbonaceous material, slightly porous, interbedded Siltstone, dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
1234-1309	75	Sandstone, white to clear, moderately cemented, fine to coarse grained, medium sorted, rounded to subangular, siliceous, with; abundant biotite, abundant muscovite, common chlorite, rare carbonaceous material, common iron oxide stains, stringers of, slightly porous, with; Siltstone, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite,
1309-1310	1	No sample
1310-1360	50	Interbedded Sandstone, light gray, moderately cemented, fine grained, well sorted, subrounded, to subangular, siliceous, with; abundant biotite, abundant muscovite, common chlorite, common carbonaceous material, slightly porous, with; interbedded Siltstone, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, abundant muscovite, rare carbonaceous material
1360-1364	4	Interbedded Sandstone, white to clear, moderately cemented, fine grained, well sorted, subrounded to subangular, siliceous, with; common biotite, common muscovite, common chlorite, slightly porous, with; interbedded Siltstone, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
1364-1365	1	Coal, interpreted depth and thickness
1365-1385	20	Sandstone, white, clear, light gray, moderately cemented, fine to medium grained, well sorted, subrounded to subangular, siliceous, with; common biotite, abundant muscovite, common chlorite, common carbonaceous material, abundant iron oxide stains, stringers of, slightly porous, with; Siltstone, dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant muscovite

1385-1408	23	Interbedded Sandstone, white, clear, moderately cemented, fine to medium-grained, well sorted, subrounded, subangular, siliceous, common biotite, abundant muscovite, abundant iron oxide stains, slightly porous, with; interbedded Siltstone, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant muscovite
1408-1437	29	Sandstone, white to clear, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, common muscovite, abundant iron oxide stains, slightly porous
1437-1450	13	Interbedded Sandstone, white to clear, moderately cemented, very fine to fine-grained, well sorted, subrounded, to subangular, interstitially silty, siliceous, calcareous, common biotite, abundant muscovite, common chlorite, rare carbonaceous material, abundant iron oxide stains, slightly porous, with; interbedded Siltstone, locally finely sandy, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant muscovite
1450-1462	12	Sandstone, white to clear, moderately cemented, very fine to fine-grained, well sorted, subrounded to subangular, siliceous, calcareous, common biotite, abundant muscovite, rare carbonaceous material, abundant iron oxide stains, slightly porous
1462-1513	51	Siltstone, locally finely sandy, locally shaly, medium gray, moderately hard, brittle, fair fissility, siliceous, argillaceous, abundant muscovite, common iron oxide stains, stringers of Sandstone, white, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, slightly porous
1513-1520	7	Interbedded Sandstone, white to clear, light gray, moderately cemented, very fine to fine-grained, well sorted, rounded to subangular, interstitially silty, siliceous, with; common biotite, abundant muscovite, common chlorite, slightly porous, interbedded Siltstone, locally shaly, carbonaceous, medium gray to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, common carbonaceous
1520-1535	15	Sandstone, white to clear, light gray, moderately cemented, fine to medium grained, well sorted, subrounded to sub-

		angular, interstitially clayey, siliceous, with; abundant biotite, abundant muscovite, common chlorite, common iron oxide stains, stringers of slightly porous, with; Siltstone, locally shaly, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous
1535-1580	45	Siltstone, locally finely sandy, locally shaly, carbonaceous, medium gray to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, common carbonaceous laminae, common coal
1580-1605	25	Sandstone, light to medium gray, moderately cemented, very fine grained, well sorted, subrounded to subangular, siliceous, abundant muscovite, slightly porous
1605-1620	15	Sandstone, white to light gray, moderately cemented, fine grained, well sorted, subrounded to subangular, siliceous, with; abundant biotite, abundant muscovite, common chlorite, common carbonaceous material, stringers of slightly porous, with; Siltstone, locally shaly, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, rare pyrite
1620-1651	31	Sandstone, white to clear, poorly cemented, very fine to fine grained, well sorted, rounded to subangular, interstitially clayey, siliceous, with; common biotite, abundant muscovite, common carbonaceous material, stringers of, slightly porous, with; Siltstone, locally shaly, carbonaceous, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, abundant muscovite, common carbonaceous laminae
1651-1667	16	Siltstone, locally finely sandy, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant biotite, common muscovite, common carbonaceous material
1667-1700	33	Interbedded conglomeratic Sandstone, white to clear, moderately cemented, fine-grained, to granular, poorly sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, rare carbonaceous material, slightly porous, with; Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, common carbonaceous material

1700-1716	16	Conglomeratic Sandstone, white to clear, moderately cemented, fine grained, to granular, medium sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, rare muscovite, rare chlorite, common carbonaceous material, stringers of slightly porous, with; Siltstone, locally shaly, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous
1716-1870	54	Conglomeratic Sandstone, white, clear, milky white, moderately cemented, medium grained, to granular, medium sorted, subrounded to angular, siliceous, rare biotite, rare muscovite, rare carbonaceous material, abundant iron oxide stains, slightly porous
1870-1880	10	Conglomeratic Sandstone, white, clear, milky white, moderately cemented, medium grained to granular, medium sorted, subrounded to angular, interstitially silty, siliceous, with; iron oxide stains, stringers of slightly porous, with; Siltstone, locally finely sandy, carbonaceous, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite, common carbonaceous material
1880-1890	10	Interbedded conglomeratic Sandstone as in 1870-1880, interbedded Siltstone as in 1870-1880
1890-1896	6	Sandstone, clear to light gray, moderately cemented, fine to medium grained, well sorted, rounded to subangular, interstitially silty, siliceous, common biotite, abundant muscovite, rare pyrite, common iron oxide stains, stringers of slightly porous, with; interbedded Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
1896-1904	8	Interbedded Sandstone, light gray, moderately cemented, fine to coarse grained, medium sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, common iron oxide stains, slightly porous, with; interbedded Shale, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous

1904-1906	2	No sample
1906-1970	64	Sandstone, white to clear, light gray, moderately cemented, fine to medium grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, common chlorite, rare carbonaceous material, rare coal, abundant iron oxide stains, stringers of slightly porous, with; Shale, locally finely sandy, carbonaceous, medium gray to dark gray, moderately hard, brittle, poorly fissile, argillaceous
1970-2146	176	No sample
2146-2155	9	Interbedded Siltstone, locally finely sandy, locally shaly, light to medium gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common biotite, abundant chlorite
2155-2164	9	No sample
2164-2170	6	Siltstone, as in 2146-2155
2170-2192	22	Siltstone, locally finely sandy, locally shaly, light to dark gray, red-brown, moderately hard, brittle, no apparent bedding, calcareous, siliceous, argillaceous, rare pyrite, rare carbonaceous material
2192-2230	38	Siltstone, locally finely sandy, light to medium gray, red-brown, moderately hard, brittle, no apparent bedding, calcareous, siliceous, argillaceous, with; common carbonaceous material, rare coal
2230-2250	20	Interbedded Sandstone, white to clear, light gray, moderately cemented, very fine to medium-grained, medium sorted, subrounded, subangular, interstitially silty, siliceous, common biotite, common muscovite, rare carbonaceous material, slight porous with; interbedded Siltstone, locally finely sandy, locally shaly, carbonaceous, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, rare carbonaceous material
2250-2258	8	Siltstone, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite, with; rare carbonaceous laminae Sandstone, white to clear, light gray, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, interstitially clayey, siliceous, abundant biotite,

2250-2258 (cont'd) 8

Common muscovite, common chlorite, stringers of slightly porous

2258-2266 8

Sandstone, white, clear, moderately cemented, very fine to fine-grained, well sorted, rounded, to subrounded, siliceous, calcareous, abundant biotite, common muscovite, common chlorite, stringers of slightly porous Siltstone, locally shaly, carbonaceous, light gray to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, common carbonaceous laminae

2266-2326 60

Interbedded Sandstone, white to clear, moderately cemented, very fine to fine grained, well sorted, rounded to subrounded, interstitially silty, siliceous, abundant biotite, common muscovite, common chlorite, slightly porous, with; interbedded Siltstone, locally shaly, light to dark gray, red-brown, moderately hard to moderately soft, brittle to flaky, poorly fissile, siliceous, argillaceous, abundant biotite, rare carbonaceous material

2326-2357 31

Shale, locally finely sandy, dark gray, moderately hard, brittle, fair fissility, calcareous, siliceous, argillaceous,

2357-2380 23

Interbedded Sandstone, white to clear, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, calcareous, abundant biotite, rare pyrite, common chlorite, slightly porous, with; interbedded Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, rare pyrite

2380-2425 45

Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant biotite, common muscovite, rare pyrite

2425-2440 15

Sandstone, white to light gray, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, siliceous, abundant biotite, common muscovite, common chlorite, stringers of slightly porous Siltstone, locally shaly, light to dark gray, red-brown, moderately hard, brittle, fair fissility, siliceous, argillaceous, abundant biotite, abundant muscovite

2440-2450	10	No sample
2450-2494	44	Interbedded Sandstone, clear to milky white, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, abundant biotite, common muscovite, rare pyrite, abundant chlorite, abundant iron oxide stains, slightly porous, with; interbedded Siltstone, locally finely sandy, carbonaceous, light gray to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common biotite, common muscovite, rare pyrite
2494-2496	2	No sample
2496-2500	4	Interbedded Sandstone, clear to milky white, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, abundant biotite, common muscovite, rare pyrite, abundant chlorite, abundant iron oxide stains, slightly porous, with; interbedded Siltstone, locally finely sandy, carbonaceous, light to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant biotite, common muscovite, rare pyrite
2500-2508	8	Sandstone, white to clear, moderately cemented, very fine to fine-grained, well sorted, subrounded to subangular, siliceous, common biotite, common muscovite, rare pyrite, abundant chlorite, abundant iron oxide stains, stringers of slightly porous, with; Siltstone, locally shaly, carbonaceous, light to dark gray, moderately hard, brittle, fair fissility, siliceous, argillaceous, rare pyrite, abundant iron oxide stains
2508-2512	4	Sandstone, white to clear, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, with; abundant iron oxide stains, slightly porous
2512-2524	12	Interbedded Sandstone, conglomeratic Sandstone, white to clear, light gray, moderately cemented, fine to medium-grained, granular, well sorted, rounded to subangular, interstitially clayey, siliceous, calcareous, common biotite, rare pyrite, abundant iron iron oxide stains, slightly porous, with; interbedded Shale, carbonaceous, medium to dark gray, moderately hard, brittle, fair fissility, argillaceous, abundant carbonaceous laminae

2524-2530	6	Sandstone, white to clear, moderately cemented, fine to medium-grained, well sorted, subrounded to subangular, interstitially clayey, siliceous, rare pyrite, stringers of slightly porous, with; Siltstone, locally shaly, carbonaceous, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite, abundant iron oxide stains
2530-2556	26	Sandstone, white, clear, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, common biotite, common muscovite, abundant chlorite, stringers of slightly porous, with; Siltstone, locally finely sandy, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, rare pyrite, common carbonaceous material
2556-2567	11	Sandstone, white, clear, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, abundant biotite, common muscovite, common chlorite, abundant iron oxide stains, stringers of slightly porous with; Siltstone, locally finely sandy, carbonaceous, medium to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, rare pyrite, common carbonaceous material
2567-2570	3	Sandstone, white, clear, moderately cemented medium-grained, well sorted, subrounded to subangular, siliceous, rare biotite, rare pyrite, abundant iron oxide stains, slightly porous
2570-2620	50	Limestone, silty, light to dark gray, moderately hard, fragmental rare crinoid stems, rare brachiopods, no apparent bedding, cryptocrystalline, rare pyrite, abundant iron oxide staining
2620-2646	26	Siltstone, locally shaly, medium gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, rare muscovite
2646-2648	2	No sample
2648-2658	10	Siltstone, locally finely sandy, locally shaly, light to medium gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, rare muscovite

2658-2680	22	Siltstone, locally finely sandy, locally shaly, light to dark gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common biotite, rare muscovite, rare pyrite, common carbonaceous material
2680-2703	23	Sandstone, white, clear, moderately cemented, medium to coarse-grained, well sorted, subrounded to subangular, interstitially clayey, siliceous, common biotite, rare pyrite, rare chlorite, abundant iron oxide stains, stringers of, slightly porous, with; Siltstone, locally finely sandy, locally shaly, light to dark gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common biotite, rare muscovite, rare pyrite, common carbonaceous material
2703-2715	12	Siltstone, locally finely sandy, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common biotite, common muscovite, common carbonaceous material
2715-2763	48	Siltstone, locally finely sandy, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, calcareous, siliceous, argillaceous, common muscovite, rare pyrite, common carbonaceous material
2763-2796	33	Sandstone, light gray, moderately cemented, fine-grained, well sorted, subrounded, subangular, siliceous, with; abundant biotite, abundant muscovite, abundant chlorite, slightly porous
2796-2825	29	Sandstone, white, clear, light gray, moderately cemented, fine-grained, well sorted, subrounded, subangular, siliceous, abundant biotite, common muscovite, rare pyrite, common carbonaceous material, stringers of, slightly porous, with; Siltstone, locally shaly, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant biotite, common muscovite, rare pyrite, common carbonaceous material
2825-2830	5	No sample
2830-2848	18	Limestone, shaly, sandy, light gray, dark gray, red-brown, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite, rare carbonaceous material
2848-2874	26	Sandstone, white, clear, light gray, moderately cemented, fine-grained, well sorted, subrounded, subangular, siliceous, common biotite, common carbonaceous material, abundant iron oxide stains, slightly porous, with; Siltstone, locally finely sandy, locally shaly, carbonaceous, light gray,

		dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common carbonaceous material
2874-2884	10	Siltstone, locally shaly, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous, rare pyrite, rare coal
2884-2895	11	Sandstone, light gray, moderately cemented, fine-grained, well sorted, subrounded to subangular, siliceous, abundant biotite, common muscovite, common chlorite, stringers of, slightly porous, with; Siltstone as in 2874-2884
2895-2918	23	Limestone, shaly, silty, light to dark gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite
2918-2935	17	Interbedded Sandstone, white, clear, light gray, moderately cemented, fine-grained, well sorted, subrounded, subangular, siliceous, abundant iron oxide stains, slightly porous, with; Shale, carbonaceous, dark gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
2935-2950	15	Interbedded Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite, with; Shale, locally finely sandy, carbonaceous, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous
2950-2961	11	Shale, light to medium gray, red-brown, moderately hard, brittle, fair fissility, argillaceous, common carbonaceous laminae
2961-2978	17	Shale as in 2950-2961, stringers of, with; Sandstone, white, clear, light gray, moderately cemented, very fine to fine-grained, well sorted, subrounded, subangular, siliceous, with; abundant chlorite, slightly porous
2978-3012	34	Shale, light to dark gray, red-brown, moderately hard, brittle, poorly fissile, argillaceous, common carbonaceous material
3012-3025	13	Sandstone, white, clear, light gray, moderately cemented, very fine-grained, well sorted, subrounded, subangular, siliceous, abundant biotite, common muscovite, common chlorite, stringers of, slightly porous, with; Siltstone, locally shaly, light gray to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous,

3025-3072	47	Siltstone, locally finely sandy, locally shaly, light to dark gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite
3072-3112	40	Shale, light to dark gray, red-brown, moderately hard, brittle, poorly fissile calcareous, argillaceous, rare pyrite
3112-3152	40	Interbedded Sandstone, clear, light gray, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, siliceous, common biotite, common muscovite, rare pyrite, slightly porous, with; interbedded Siltstone, locally shaly, carbonaceous, medium to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous
3152-3158	6	Sandstone, white, clear, light gray, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, siliceous, stringers of, slightly porous, with; Siltstone, locally shaly, carbonaceous, medium gray to dark gray, red-brown, moderately hard, brittle, poorly fissile, siliceous, argillaceous
3158-3164	6	Siltstone, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous
3164-3165	1	No sample
3165-3198	33	Siltstone, locally finely sandy, light to medium gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, common muscovite
3198-3218	20	Limestone, dolomitic, shaly, light to dark gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline
3218-3253	35	Interbedded Sandstone, white, clear, light gray, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, siliceous, common biotite, slightly porous, with; interbedded Siltstone, locally shaly, medium to dark gray, moderately hard, brittle no apparent bedding, siliceous, argillaceous, common muscovite, rare pyrite, rare carbonaceous laminae
3253-3290	37	Shale, locally finely sandy, carbonaceous medium gray to dark gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, common muscovite, rare pyrite
3290-3308	18	Limestone, dolomitic, shaly, light to dark gray, moderately hard, fragmental rare crinoids, calamites (?) no apparent bedding, cryptocrystalline

3308-3505	197	Limestone, calcareous, light to dark gray, moderately hard, fragmental rare crinoids, rare calamites (?), rare brachiopods, cryptocrystalline, rare pyrite
3505-3516	11	Limestone, light gray, moderately hard, oolitic, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite
3516-3576	60	Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline
3576-3583	8	Limestone, light to dark gray, moderately hard, oolitic, no apparent fossil content, no apparent bedding, cryptocrystalline
3583-3592	9	Limestone, light to dark gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline
3592-3602	10	Limestone, light to dark gray, moderately hard, oolitic, no apparent fossil content, no apparent bedding, cryptocrystalline
3602-3637	35	Limestone, light to dark gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite
3637-3650	13	Limestone, light gray, moderately hard, oolitic, no apparent fossil content, no apparent bedding, cryptocrystalline, rare carbonaceous material
3650-3664	14	Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, rare pyrite, rare carbonaceous material
3664-3694	30	Limestone, light gray, moderately hard, oolitic, fragmental unidentified fossil content, no apparent bedding, cryptocrystalline
3694-3724	30	Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline
3724-3736	12	Limestone, light gray, moderately hard, oolitic, no apparent fossil content, no apparent bedding, cryptocrystalline
3736-3737	1	No sample
3737-3806	69	Limestone, light gray, moderately hard, oolitic, fragmental foraminifera(?) (3747-3757) no apparent bedding, cryptocrystalline, rare pyrite
3806-3819	13	Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline

3819-3825

6

Interbedded Limestone, light gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline, with; interbedded Siltstone, light to dark gray, red-brown, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, abundant biotite

3825-3831

6

Siltstone, red-brown, greenish-gray, moderately hard, brittle, poorly fissile, siliceous, argillaceous, abundant biotite, common muscovite, common chlorite

GEOLOGIC SUMMARY

Pennsylvanian System

Pennsylvanian undivided	in	986
	bottom	(?)

Mississippian System

Bluestone Formation	top	?
	bottom	2357

Princeton Sandstone	top	2357
	bottom	2570

Hinton Formation	top	2570
	bottom	3158

Stony Gap Sandstone	top	2961
	bottom	3158

Bluefield Formation	top	3158
	bottom	3290

Greenbrier Limestone	top	3290
	bottom	3819

Maccrady Formation	top	3819
	in	3831 (deepest sample)