

COMPANY THE PETTIGREW COAL
2006 MASSACHUSETTS AVENUE, N.W.
 ADDRESS WASHINGTON, D.C.

FARM JOHN TIMBERCOOK

TRACT 1 2 3 ACRES 250 LEASE NO. 50

WELL (FARM) NO. 1 SERIAL NO. _____

ELEVATION (SPIRIT LEVEL) 1198 15 Augusta 75' spot

QUADRANGLE HANGING ROCK - SC

COUNTY HAMPSHIRE DISTRICT GOBB

ENGINEER JAMES T. MORRIS

ENGINEER'S REGISTRATION NO. 1739

FILE NO. _____ DRAWING NO. _____

DATE NOV 12, 1951 SCALE 1" = 660'

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

WELL LOCATION MAP

FILE NO. HAMP-2

+ 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

100 of 1988 ✓ Deep Well

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
WELL RECORD

Permit No. Ham 2
Hanging Rock Quad.

Dry Hole
CASING & TUBING

Company T.G. Lowry et al
Address Chicago, Illinois
Farm John Timbrook Acres 250
Location Little Cacapon River
Well No. 1 Elev. 1198
District Gore Hampshire County
Surface John Timbrook, Shanks, W.Va.
Mineral Same
Commenced June 25, 1951
Completed May 13, 1952
Not shot
Dry
Fresh Water 105'; 180'
Salt Water 645, 775-80'; 7125 & 7156

10 267 267
8 1/2 1759 1759
6 5/8 4898 4898

No Packer

Casing not cemented

No coal

Siltstone Gr	S	0	40	
Siltstone Gr	H	40	105	
Shale Gr	S	105	123	
Siltstone Gr	H	123	257	
Shale Gr	S	257	267	
Shale Green	H	267	423	
Siltstone Gr	H	423	654	
Shale Blk	S	654	771	
Siltstone Gr	H	771	1867	
Shale Blk	H	1867	2118	
Siltstone Gr	H	2188	2818	
Shale Blk	S	2818	2922	
Siltstone Gr	H	2922	3016	
Shale Gr	S	3016	3135	
Limestone Dk	S	3185	3202	Fossiliferous
Shale Blk	S	3202	4807	Silty
Limestone Gr	S	4807	4835	Tully
Shale Gr	H	4835	6005	Pyritic
Bentonite Br	S	6306	6449	
Shale Blk	S	6449	6945	Marcellus
Limestone Gr	H	6945	6980	Onondaga
Shale Gr	H	6980	7124	Needmore
Sandstone Wh	H	7124	7166	Oriskany
T.D.		7166		

Show of gas and salt water at 7125 and 7156

Hamp
#2

WELL RECORD

OPERATOR Pettigrew-Lowry, et al FARM NAME John Timbercok #2
TOWNSHIP Gore COUNTY Hamshire STATE West Virginia
LOCATION Hanging Rock Quadrangle 0.5 mi S 39° 20'
4.35 mi W of 78° 35'
RESULTS: Dry Hole - P & A TOTAL DEPTH 7166'

<u>DEPTH</u>	<u>DESCRIPTION</u>
0 - 16	Siltstone, brown and red, some black
16 - 32	Shale, gray, some red-brown staining
32 - 38	Missing
38 - 47	Shale, dark gray, some red-brown staining
47 - 62	Shale, gray, small amount of red-brown staining
62 - 70	Shale, gray, interbedded with shale, light gray
70 - 92	Shale, gray and siltstone, light gray interbedded
92 - 95	Shale, gray with interbedded silty shale, gray. Some quartz and calcite stringers.
95 - 105	Siltstone, light gray, some beds greenish-gray, interbedded with brownish-gray siltstone.
105 - 123	Shale, gray
123 - 129	Siltstone, light gray, interbedded with shale, gray, and tan silty shale.
129 - 135	Shale, gray
135 - 152	Siltstone, gray and shale, gray, interbedded, some quartz fragments.
152 - 157	Shale, silty, gray
157 - 165	Shale, silty, gray with a few interbeds of light gray siltstone.
165 - 174	Shale, silty, gray.
174 - 180	Shale, silty, gray, and siltstone, gray.
180 - 188	Shale, silty, gray.
188 - 196	Shale, silty, gray and siltstone, gray
196 - 209	Shale, silty, gray

- 209 - 219 Shale, silty gray, interbedded with siltstone light gray, small amount of pyrite present.
- 219 - 224 Missing
- 224 - 230 Shale, silty, gray.
- 230 - 235 Shale, silty, gray interbedded with siltstone, gray, with black stringers. Some pyrite present.
- 235 - 242 Siltstone, gray, with some dark green siltstone. Vein quartz and calcite abundant.
- 242 - 257 Siltstone, gray interbedded with shale, silty, gray.
- 257 - 267 Shale, gray, interbedded with siltstone, gray.
- 267 - 271 Siltstone, gray with a few interbeds of shale, gray; some vein quartz and calcite.
- 271 - 277 Siltstone, greenish-gray, interbedded with shale, gray; vein quartz and calcite.
- 277 - 295 Shale, silty, gray, interbedded with siltstone, gray-green; vein quartz and calcite.
- 295 - 301 Siltstone, gray, interbedded with a few beds of gray shale; vein quartz and pyrite present.
- 301 - 308 Siltstone, gray interbedded with siltstone, black, some gray shale and vein quartz and calcite present.
- 308 - 331 Siltstone, greenish-gray interbedded with shale, gray.
- 331 - 372 Shale, gray.
- 372 - 384 Siltstone, greenish-gray, interbedded with gray shale. Some vein calcite.
- 384 - 398 Shale, gray interbedded with siltstone, gray.
- 398 - 405 Shale, gray, interbedded with greenish-gray silt.
- 405 - 414 Siltstone, dark gray interbedded with siltstone, gray with some vein calcite.
- 414 - 438 Shale, gray.
- 438 - 474 Shale, gray interbedded with gray siltstone.
- 474 - 480 Shale, gray
- 480 - 492 Shale, gray interbedded with siltstone, gray.

- 492 - 495 Siltstone, gray, with vein quartz and calcite.
- 495 - 515 Shale, gray.
- 515 - 524 Shale, gray, some vein calcite, and quartz
- 524 - 540 Shale, gray
- 540 - 543 Shale, gray, with a few interbeds of gray siltstone.
- 543 - 550 Siltstone, gray with a few interbeds of gray shale.
- 550 - 554 Shale, gray.
- 554 - 575 Shale, silty, gray, with vein quartz and calcite.
- 575 - 598 Shale, gray.
- 598 - 606 Shale, gray interbedded with shale, silty, gray.
- 606 - 612 Shale, gray.
- 612 - 644 Shale, silty, gray.
- 644 - 650 Shale, gray.
- 650 - 658 Siltstone, gray interbedded with shale, dark gray; some vein quartz and calcite.
- 658 - 665 Shale, gray, interbedded with shale, dark gray. Some vein quartz.
- 665 - 676 Siltstone, dark gray, interbedded with siltstone, gray.
- 676 - 691 Siltstone, dark gray, a few interbeds of siltstone, gray.
- 691 - 704 Shale, gray with a few interbeds of siltstone, dark gray.
- 704 - 712 Siltstone, gray, some vein quartz.
- 712 - 721 Shale, gray interbedded with siltstone, gray.
- 721 - 755 Shale, greenish gray, interbedded with siltstone, dark gray; some vein quartz.
- 755 - 763 Shale, gray.
- 763 - 771 Shale, gray interbedded with siltstone, dark gray; some vein quartz and calcite.
- 771 - 788 Siltstone, gray interbedded with siltstone, dark gray and siltstone, greenish-gray; some vein quartz.

- 788 - 806 Shale, gray, interbedded with siltstone, dark gray; some vein quartz and calcite.
- 806 - 812 Siltstone, gray; some vein quartz.
- 812 - 833 Shale, gray.
- 833 - 838 Shale, gray, a few interbeds of reddish brown siltstone.
- 838 - 850 Shale, gray, a few interbeds of greenish-gray siltstone.
- 850 - 876 Shale, gray interbedded with siltstone, greenish-gray.
- 876 - 885 Shale, gray.
- 885 - 893 Shale, gray to greenish-gray, with a few beds of dark gray shale.
- 893 - 899 Siltstone, gray.
- 899 - 904 Siltstone, gray, some beds of gray shale.
- 904 - 911 Shale, gray.
- 911 - 920 Siltstone, gray.
- 920 - 1358 Shale, gray, a few beds of gray siltstones and some vein quartz and calcite.
- 1358 - 1370 Shale, gray, with beds of siltstone, gray. A green material resembling plant fossils present in small amounts.
- 1370 - 1596 Shale, gray, interbedded with siltstone, gray; a few vein calcite and quartz fragments.
- 1596 - 1616 Siltstone, gray with interbeds of shale, dark gray.
- 1616 - 1623 Siltstone, gray with interbeds of shale, gray.
- 1623 - 1635 Siltstone, gray with interbeds of shale, gray, and a small amount of green material resembling plant fossils.
- 1635 - 1817 Siltstone, gray interbedded with shale, gray.
- 1817 - 1836 Shale, gray, with a few beds of shale, greenish-gray.
- 1836 - 1854 Shale, gray.
- 1854 - 1871 Shale, gray, and shale, dark gray.
- 1871 - 1879 Shale, gray.
- 1879 - 1888 Shale, gray, with beds of shale, greenish-gray.
- 1888 - 1897 Shale, dark gray, with beds of shale, gray.

- 1897 - 1905 Shale, dark gray, with beds of siltstone, greenish-gray.
- 1905 - 1935 Shale, gray, with beds of shale, dark gray.
- 1935 - 1942 Shale, gray with siltstone, greenish-gray.
- 1942 - 2042 Shale, gray, with interbeds of shale, dark gray. A few beds of gray and dark gray siltstone.
- 2042 - 2062 Shale, gray, with a few beds of shale, black. Some vein quartz and calcite present.
- 2062 - 2118 Shale, gray.
- 2118 - 2131 Shale, gray, with a few beds of shale, dark gray.
- 2131 - 2176 Shale, gray, with a few beds of siltstone, gray.
- 2176 - 2196 Shale, gray with a few beds of dark gray shale, and a little vein quartz and calcite.
- 2196 - 2225 Shale, gray.
- 2225 - 2232 Shale, gray with beds of shale, dark gray.
- 2232 - 2305 Shale, gray, with a few beds of siltstone, gray.
- 2305 - 2359 Shale, dark gray, with a few beds of siltstone, gray.
- 2359 - 2452 Shale, gray, with siltstone, gray. Pyrite at 2400.
- 2452 - 2460 Shale, dark gray, with beds of shale, gray, and siltstone, gray.
- 2460 - 2625 Shale, gray with a few beds of siltstone, gray.
- 2625 - 2800 Siltstone, gray and dark gray interbedded with shale gray and dark gray.
- 2800 - 2836 Shale, dark gray, partly silty, some pyrite.
- 2836 - 2884 Shale, dark gray.
- 2884 - 2895 Shale, dark gray with interbeds of light gray shale.
- 2895 - 2920 Shale, dark gray, partly pyrite.
- 2920 - 2974 Siltstone, dark gray with interbeds of shale, dark gray, with some pyrite; a few beds of light gray shale.
- 2974 - 2988 Shale, silty, gray, some vein calcite.
- 2988 - 3023 Shale, gray, with beds of shale, silty, light gray, and vein calcite.
- 3023 - 3052 Shale, gray, some partly silty, with calcite veins.

- 3052 - 3063 Shale, silty, gray, with beds of shale, dark gray to black, and vein calcite.
- 3063 - 3073 Siltstone, gray, with beds of gray shale.
- 3073 - 3129 Shale, silty, gray and shale, gray. Some vein calcite.
- 3129 - 3185 Shale, gray.
- 3185 - 3194 Shale, gray, with fossiliferous dark gray shale. Some light gray limey shale.
- 3194 - 3298 Shale, gray, some partly silty.
- 3298 - 3309 Shale, gray, with highly fossiliferous zone 1' thick.
- 3309 - 3327 Shale, gray.
- 3327 - 3336 Shale, gray, some fossil fragments.
- 3336 - 3345 Missing.
- 3345 - 3350 Shale, gray, some fossil fragments.
- 3350 - 3358 Missing.
- 3358 - 3371 Shale, gray.
- 3371 - 3381 Shale, gray with gray nodular (phosphatic?) material in a limey matrix. Zone about 1' thick.
- 3381 - 3391 Shale, gray, some vein calcite.
- 3391 - 3588 Shale, gray, a few beds slightly silty. Pyrite in almost all samples from 2800.
- 3588 - 3667 Shale, gray, some partly silty.
- 3667 - 3677 Shale, gray, partly silty; some fossil fragments.
- 3677 - 3728 Shale, gray; some pyrite.
- 3728 - 3750 Shale, gray, partly silty, some light gray shale beds and some pyrite.
- 3750 - 3760 Missing
- 3760 - 3903 Shale, gray, part slightly silty, some pyrite, some vein calcite and quartz.
- 3903 - 3943 Shale, gray.
- 3943 - 3952 Shale, dark gray.
- 3952 - 3979 Shale, gray, some beds slightly silty, some pyrite.

3979 - 4170	Shale, gray; some pyrite.
4170 - 4176	Shale, gray, partly silty.
4176 - 4244	Shale, gray, some pyrite.
4244 - 4274	Shale, gray, some beds slightly silty.
4274 - 4284	Shale, gray, some vein quartz.
4284 - 4321	Shale, gray.
4321 - 4330	Shale, gray, some vein quartz.
4330 - 4349	Shale, gray, with some pyrite.
4349 - 4380	Shale, gray.
4380 - 4400	Shale, gray, with some pyrite.
4400 - 4412	Shale, gray.
4412 - 4433	Shale, gray; some pyrite.
4433 - 4493	Shale, gray, some vein quartz and calcite
4493 - 4501	Shale, gray
4501 - 4545	Shale, gray, some vein quartz and calcite
4545 - 4553	Shale, gray, some beds dark gray to black
4553 - 4593	Shale, gray
4593 - 4812	Shale, gray; some pyrite and vein quartz and calcite.
4812 - 4865	Shale, silty, gray, with beds of dark gray shale; some pyrite
4865	Casing point
<i>for dark gray</i> 4865 - 4876	Shale, dark gray
4876 - 4895	Shale, silty, dark gray
4895 - 4900	Shale, partly silty, dark gray, vein calcite
4900 - 4951	Shale, some beds slightly silty; vein calcite & pyrite & quartz
4951 - 4978	Shale, dark gray, some beds silty, with some pyrite.
4978 - 5003	Shale, gray, some vein calcite and quartz, and pyrite.
5003 - 5010	Shale, gray, some vein quartz and calcite
5010 - 5294	Shale, dark gray with some beds of gray shale, vein calcite and quartz and pyrite
<i>publ. book</i> 5294 - 5296	Shale, dark gray to black.

- 5296 - 5304 Shale, dark gray, a few beds of gray shale, some vein calcite and quartz, and pyrite.
- 5304 - 5328 Shale, dark gray, some beds gray-black, vein calcite, quartz and pyrite.
- 5328 - 5332 Shale, gray-black, a few beds of light greenish-gray shale, pyrite, vein quartz and calcite.
- 5332 - 5338 Missing.
- 5338 - 5429 Shale, gray-black, a few beds of gray shale, pyrite, vein quartz and calcite.
- 5429 - 5444 Missing.
- 5444 - 5454 Shale, gray and some beds of shale, dark gray, vein quartz and calcite, and pyrite.
- 5454 - 5486 Shale, gray, slightly calcareous, and some beds of dark gray shale; vein calcite and quartz, and pyrite.
- 5486 - 5546 Shale, gray, calcareous, some beds of gray-black shale, vein calcite and quartz, and pyrite.
- 5546 - 5558 Shale, light gray, calcareous, with beds of black shale, vein calcite, quartz and large piece of pyrite.
- 5558 - 5564 Missing.
- 5564 - 5612 Shale, light gray, calcareous, some beds of dark gray shale, vein calcite and quartz, and pyrite.
- 5612 - 5750 Shale, gray-black and dark gray, calcareous with vein calcite, quartz and pyrite. A few beds of gray, calcareous shale.
- 5750 - 5798 Shale, black, a few beds of dark gray shale, calcareous, with vein quartz and calcite, and pyrite.
- 5798 - 5808 Shale, gray-black, calcareous.
- 5808 - 5945 Shale, gray-black and black interbedded, calcareous more in the black shales.
- 5945 - 5970 Shale, gray-black and black, some vein calcite and quartz, pyrite; slightly calcareous.
- 5970 - 6005 Missing.
- 6005 - 6018 Shale, gray-black and black, some vein calcite and quartz, pyrite; slightly calcareous.
- 6018 - 6047 Shale, black and gray black, pyrite, calcareous.

- 6047 - 6077 Shale, black and gray-black, pyritic, slightly calcareous.
- 6077 - 6092 Shale, black and gray-black, pyritic
- 6092 - 6107 Shale, gray-black, pyritic, some vein calcite.
- 6107 - 6121 Shale, black and gray-black, slightly calcareous, pyritic
- 6121 - 6125 Shale, dark gray, very slightly calcareous, pyritic
- 6125 - 6146 Shale, gray-black and dark gray, slightly calcareous, pyritic
- 6146 - 6175 Shale, black and gray-black, slightly calcareous, pyritic
- 6175 - 6291 Shale, black and gray-black, slightly calcareous, pyritic, some vein calcite.
- TOP ONONDAGA 6291
- 6291 - 6300 Shale, black and dark gray, some pyrite, vein calcite and bentonite, and light gray shale, slightly calcareous.
- 6300 - 6313 Shale, black and dark gray, some pyrite, vein calcite and bentonite, and light gray shale, calcareous
- 6313 - 6333 Shale, black and dark gray, some pyrite, vein calcite, bentonite more abundant, light gray shale, calcareous.
- 6333 - 6387 Shale, black and dark gray, some pyrite, vein calcite; slightly calcareous. Bentonite composes about 1/3 of sample.
- 6387 - 6449 Shale, black, calcareous, with bentonite, vein quartz
- 6449 - 6465 Shale, black
- 6465 - 6472 Shale, black, slightly calcareous, some bentonite
- 6472 - 6500 Shale, black, slightly calcareous
- 6500 - 6513 Shale, dark gray, slightly calcareous, slightly pyritic and with some vein calcite
- 6513 - 6558 Shale, dark gray, slightly calcareous
- 6558 - 6564 Shale, black and dark gray, slightly calcareous
- 6564 - 6593 Shale, black, some slightly calcareous
- 6593 - 6737 Shale, black and dark gray alternating beds; some slightly calcareous
- 6737 - 6740 Shale, gray and black, calcareous
- 6740 - 6753 Shale, dark gray and black, calcareous
- 6753 - 6758
- 6758 - 6783 Shale, dark gray and black, some slightly calcareous

- 6783 - 6788 Shale, dark gray and black, some slightly calcareous and with a very large amount of vein calcite.
- 6788 - 6790 Shale, black, with a small amount of bentonite, a very large amount of vein calcite, some brown shale.
- 6790 - 6792 Shale, dark gray, vein calcite in abundance.
- 6792 - 6815 Shale, dark gray and black, slightly calcareous.
- 6815 - 6821 Shale, dark gray, calcareous, some brown shale, bentonite, vein calcite and pyrite.
- 6821 - 6823 Shale, dark gray, calcareous, large amount of bentonite, some brown shale and vein calcite.
- 6823 - 6854 Shale, dark gray and black, calcareous, some brown shale, vein calcite, a little bentonite
- 6854 - 6895 Shale, black and gray, vein calcite very abundant, slightly calcareous.
- 6895 - 6905 Shale, black, slightly calcareous, some bentonite and vein calcite
- 6905 - 6916 Shale, black, slightly calcareous, some bentonite and abundant vein calcite.
- 6916 - 6920 Shale, black and dark gray, slightly calcareous, vein calcite abundant.
- 6920 - 6924 Shale, black and dark gray, slightly calcareous, some vein calcite.
- 6924 - 6950 Shale, black and dark gray, slightly calcareous.
- 6950 - 6992 Shale, gray with some black shale; calcareous.
- 6992 - 7020 Shale, dark gray, calcareous.
- 7020 - 7023 Shale, dark gray and some black shale, calcareous.
- 7023 - 7028 Shale, gray, slightly calcareous.
- 7028 - 7031 Shale, dark gray and black, some slightly calcareous.
- 7031 - 7038 Shale, gray, some dark gray, slightly calcareous.
- 7038 - 7052 Shale, light gray, calcareous, some black gray.
- 7052 - 7055 Shale, black, some gray, calcareous.
- 7055 - 7064 Shale, dark gray, some black, partly calcareous, some vein quartz
- 7064 - 7077 Shale, gray, slightly calcareous.
- 7077 - 7080 Shale, gray, small amount of black shale, slightly calcareous.
- 7080 - 7109 Shale, gray, and shale black, slightly calcareous, some vein calcite.

- 7109 - 7120 Shale, black and dark gray, very slightly calcareous.
- 7120 - 7123 Shale, black and dark gray, some quartz.
- ORISKANY TOP 7123'
- 7123 - 7127 Sandstone, colorless, calcareous, some vein calcite.
- 7127 - 7130 Shale, dark gray, about one-quarter of sample is sandstone, calcareous, colorless.
- 7130 - 7153 Sandstone, colorless, calcareous, small amount of dark gray shale.
- 7153 - 7154 Shale, dark gray and black, and sandstone, colorless.
- 7154 - 7166 Sandstone, frosted, colorless, angular, fine-grained, slightly calcareous, some clusters with included impurities; some grains milky, some black and dark gray shale.

T.D. 7166'

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Ham 2
Hanging Rock Quad.

Dry Hole
CASING & TUBING

Company T.G. Lowry et al
Address Chicago, Illinois
Farm John Timbrook Acres 250
Location Little Cacapon River
Well No. 1 Elev. 1198
District Goro Hampshire County
Surface John Timbrook, Shanks, W.Va.
Mineral Same
Commenced June 25, 1951
Completed May 13, 1953
Not shot
Dry
Fresh Water 105'; 180'
Salt Water 645, 775-80'; 7125 & 7156

10 267 267
8 1/2 1759 1759
6 5/8 4898 4898

No Packer
Casing not cemented
No coal

Sample Studies

Siltstone Gr	S	0	40
Siltstone Gr	H	40	105
Shale Gr	S	105	123
Siltstone Gr	H	123	257
Shale Gr	S	257	267
Shale Green	H	267	423
Siltstone Gr	H	423	654
Shale Blk	S	654	771
Siltstone Gr	H	771	1867
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Siltstone Gr	H	2188	2818
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Shale Gr	S	3016	3135
Limestone Dk	S	3185	3202
Shale Blk	S	3202	4807
Limestone Gr	S	4807	4835
Shale Gr	H	4835	6005
Bentonite Br	S	6306	6449
Shale Blk	S	6449	6945
Limestone Gr	H	6945	6980
Shale Gr	H	6980	7124
Sandstone Wh	H	7124	7166
T.D.		7166	475

Fossiliferous
Silty
Tully
Pyritic

Marcellus
Onondaga
Needmore
Oriskany

6306
1198

5108

6306 - 6949
6949 - 7115 (MS)
7115 -

Show of gas and salt water at 7125 and 7156

6945 7124
1198 1198

5747 5926

6945

6945 7124
1198 1198

-5747 -5926

7/2/51

PENNSYLVANIA OIL AND GAS MANAGEMENT ASSOCIATES
APPRAISALS • EXPLORATION • DEVELOPMENT • MANAGEMENT
ROOM 40 • NATIONAL TRANSIT BUILDING
OIL CITY • PENNSYLVANIA

March 15, 1956

Mr. George C. Grow, Jr.
Transcontinental Gas Pipeline Corporation
744 Broad Street
Newark, New Jersey

Dear Red:

Upon returning to the office, I looked for information concerning the dipmeter survey taken on the John Timbrook No. 1 well in Hampshire County, West Virginia but was unable to find any of the information. As I recall the original of this information was sent to Mr. T. G. Lowry. I believe your organization has had correspondence with Tim. I am also under the impression that Clarence W. Hoffer had copies of this information. Failing to get this from either of the two above mentioned sources, I'm sure that you can get a release of this information from the Schlumberger Well Surveying Corporation at Washington, Pennsylvania. It is my recollection that the dipmeter survey was taken in an interval above the coring depth and that the core was taken to substantiate or clear up the very unusual results obtained from the dipmeter.

The Timbrook well was cored December 1, 1951, in interval 5292-98 by Baker Core Tools. Recovery was estimated at better than 80% but only 10 to 12 usable biscuits were recovered in each of the three screws run. These biscuits ranged in thickness from 1/2 to 1-1/2 inches and show conclusively that the beds, at least in this interval, are essentially flat. Dips did not exceed 2 to 3 degrees. The biscuits were marked by vein quartz and calcite with the main attitude of the fracturing perpendicular to the dip and with incipient veining at 45 degrees to the main fractures or ~~to~~ the dip.

At this point in the drilling we were thinking that this was Marcellus and that we might encounter the Oriskany at about 5800 feet.

Mr. George C. Grow, Jr. - 2

March 15, 1956


I am also sending you Gamma Ray Logs of several wells including the three different logs that were run on the Timbrook well. I would like to call your attention to the shift of radiation on the first Gamma Ray Log that was run on November 7, 1951, on the Timbrook well. At a depth of 4270' you will note a decrease in radio-activity. This decrease carries through somewhat uniformly to the Tully. On other logs, you will note that below the Tully the radiation again increases until the Onondaga or equivalent formation is reached. This shift of radiation intensity has been noted on the three other Gamma Ray Logs which I am enclosing.

In my opinion this may well be the Genessee formation. I use the nomenclature of Genessee as is used in Hampshire County, West Virginia reports. I feel that the shift of radiation is more than pure coincidence as I have several other logs in my possession which also show this same shift.

I would appreciate having the logs, other than those of the Timbrook well, returned to me after you have had a chance to look at them.

Cordially,

POGMA, INC.


Q. L. Wilcox, Vice President

QLW/hg