

INTERVAL SHEET

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VDMR Well No: W-1719

Date rec'd: 10-10-66

Sample Interval: from 50 to 250

PROP: Preddy Creek #3

Number of samples: 53

COMP: American Metals Climax, Inc.

Total Depth: 250

COUNTY: Albemarle (Stony Point)

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
No Sample	168.0 -173.0	-	-
50.0-60.0	173.0 -175.0	-	-
60.0-70.0	175.0 -180.0	-	-
70.0-80.0	180.0 -185.0	-	-
80.0-90.0	185.0 -188.0	-	-
90.0-94.0	188.0 -189.0	-	-
94.0-99.0	189.0 -189.2	-	-
99.0-100.0	189.2 -194.2	-	-
100.0-102.0	194.2 -199.2	-	-
102.0-104.0	199.2 -204.2	-	-
104.0-109.0	204.2 -208.2	-	-
109.0-111.5	208.2 -213.2	-	-
111.5-111.7	213.2 -216.2	-	-
111.7-114.0	216.2 -221.2	-	-
114.0-119.0	221.2 -225.0	-	-
119.0-124.0	225.0 -227.0	-	-
124.0-127.5	227.0 -228.0	-	-
127.5-132.5	228.0 -233.0 A	-	-
132.5-136.0	228.0 -233.0 B	-	-
136.0-141.8	233.0 -234.0	-	-
141.8-143.6	234.0 -239.0	-	-
143.6-147.5	239.0 -244.0	-	-
147.5-147.7	244.0 -249.0	-	-
147.7-150.8	249.0 -250.0	-	-
150.8-152.0	-	-	-
152.0-156.5	-	-	-
156.5-157.0	-	-	-
157.0-162.0	-	-	-
162.0-163.0	-	-	-
163.0-168.0	-	-	-

INTERVAL SHEET

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10-10-66

VDMR Well No: **WELL NO. 1719**

Date recd: **PROP: PREDDY CREEK #3**
COMP: AMERICA METALS
CLIMAX, INC.
COUNTY: ALBEMARLE
(STONY POINT)

Sample Interval: from 50 to 250

Number of samples: 53

Total Depth: 250

~~VDMR WELL NO: W 1719~~
FROM: TO:

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
50.-60.	163.-168.	-	-
60.-70.	168.-173.	-	-
70.-80.	173.-175.	-	-
80.-90.	175.-180.	-	-
90.-94.	180.-185.	-	-
94.-99.	185.-188.	-	-
99.-100.	188.-189.	-	-
100.-102.	189.-189.2	-	-
102.-104.	189.2-194.2	-	-
104.-109.	194.2-199.2	-	-
109.-111.5	199.2-204.2	-	-
111.5-111.7	204.2-208.2	-	-
111.7-114.0	208.2-213.2	-	-
114.-119.	213.2-216.2	-	-
	216.2-221.2	-	-
119.-124.	221.2-225.	-	-
124.-127.5	225.-227.	-	-
127.5-132.5	227.-228.	-	-
132.5-136.	228.-233.-A	-	-
	228.-233.-B	-	-
136.-141.8	233.-234.	-	-
141.8-143.6	234.-239.	-	-
143.6-147.5	239.-244.	-	-
147.5-147.7	244.-249.	-	-
147.7-150.8	249.-250.	-	-
150.8-152.	-	-	-
152.-156.5	-	-	-
156.5-157.	-	-	-
157.-162.	-	-	-
162.-163.	-	-	-

WELL NO : Preddy Creek Church #3

COUNTY: Albemarle

FARM:

VDMR Well No. 1719

DRILLER: American Metals Climax, Inc.

LOCATION: 1 1/2 miles ENE of Stony Point within several hundred feet of Preddy Creek Church, NW corner of 7 1/2 minute Keswick quadrangle. Exact location is not known.

DIRECTION DRILLED: N 25° W

DIP DRILLED: 75°

ELEVATION: About 500'

TOTAL DEPTH: 250'

SAMPLE DESCRIPTION: Richard S Good. September 1966

GEOLOGIC LOG

Depth, ft.	Thickness, ft.	Description
0-50	50.0	No core
50-94	44.0	Felsic tuff: gray to cream colored soft, laminated aphanite with thin 0.1-2 mm brown and gray laminae which make angles of 70° at 55' and 60° at 79'. Scattered throughout are minute (0.1 mm) grains of magnetite. Minute (0.15 mm) cream grains and broken crystals (leucoxene?) can be seen under the binocular microscope on wet core surfaces. At 55' X-ray examination (X-500) showed muscovite, quartz, plagioclase, and chlorite (Kammerite). From 80'-94' porous, limonitic fractures run parallel to the core axis.

94-102

8.0

Felsic tuff with quartz veins:
 light brown ^{to gray} laminated aphanite as in 50'-94'
 but with vuggy limonitic fractures and
 quartz veins at 94'-99' and 100'-102'.
 The vein quartz contains vugs, some of
 which contain iridescent, pisolitic goethite
 or limonite. No sulfides are evident.

R 3221

A thin section taken at 95' showed a
 very fine grained (0.01-0.1 mm) mixture of
 quartz and sericite (90%) and 7% magnetite
 with ferruginous opaque material. The
 opaque material forms thin, discontinuous,
 undulose wisps which are seen megascop-
 ically as laminae. Tourmaline (0.01 x 0.1 mm)
 crystals occur as traces. X-ray (X-483)
 examination indicated quartz and muscovite.

102-104

2.0

Felsic tuff: brown, aphanitic with
 2 mm mafic bands and microfaulting
 with slips of 3-4 mm.

104-109

7.5

Andesitic tuff: light and dark green,
 alternating bands with carbonated fracture
 cleavage and microfaulting. There is an
 unconformity at 109' between green and
 darker green beds.

109-111.5

2.5

Andesitic lapilli tuff: dark green, angular
 clasts or lapilli (50%) in hard, gray aphanitic
 matrix. At 110' bedding is 90° to core
 axis.

- 111.7-114.0 2:3 Tuffaceous sediment: green graywacke with ^{angular} 1-2 mm blue quartz and feldspar in dark green aphanitic matrix. White, acicular crystals 1-2 mm long occur in vugs.
- 114.0-127.5 13.5 Basaltic flow: greenish black, massive to vesicular, with breccia from 118-119'. The breccia consists of dark green, angular, aphanitic fragments with black ^{ish-brown} matrix (devitrified glass). There is a fault at 120-121' and more breccia from 120.8-121.0'. Calcite and traces of chalcopryrite fill fractures. At 122' X-ray (X-501) examination showed plagioclase, chlorite, and calcite.
- 127.5-132.5 5.0 Andesitic tuff: banded green-gray laminated with lapilli and microfaulting at 129.5'.
- 132.5-136.0 3.5 Andesitic tuff breccia: ^{banded} gray tuff with quartz and calcite and microfaulting. 90% of the core is missing.
- 136.0-141.8 5.8 Andesitic tuffs: gray ^{and white}, altered, banded. Core is missing between 139.5-141.5'.
- 141.8-143.6 1.8 Quartz veins with massive dolomite*: dolomite was determined by X-ray analysis.
- 143.6-147.5 3.9 Andesite: green, finely laminated ^{to massive,} with pyrite and carbonate fracture filling.

* determined by X-ray

- 147.5-147.7 0.2 Dolomite: pale brown, with quartz.
- 147.7-150.8 3.1 Andesite: green and gray, banded with dolomite band 18 mm thick.
- 150.8-152.0 1.2 Quartz vein: vuggy with calcite and traces of pyrite crystals.
- 152.0-156.5 4.5 Andesitic tuffs: gray and green, banded.
- 156.5-157.0 0.5 Calcite vein: with gray xenolith of altered andesite.
- 157.0-162.0 5.0 Andesite: gray and gray-green, with quartz and calcite fracture filling and pyritic drill cuttings.
- 162.0-163.0 1.0 Andesite: green, massive.
- 163.0-175.0 12.0 Andesitic tuff and greywacke: green, angular ^{fragments} and bulbous mafic lapilli, ^{fragments} chaotically mixed with cream-colored, medium-grained greywacke.
- 175.0-185.0 10.0 Andesitic tuffs: gray-green, banded with a few lenticular lapilli.
- 185.0-188.0 3.0 Andesite tuff and greywacke: gray-green, irregular, blob-like lapilli in medium-grained greywacke. ^{with 0.5 mm quartz grains} X-ray (X-502) determination of the greywacke showed

5.

- 185.0-188.0 3.0 (cont.) showed quartz, plagioclase, muscovite, chlorite, microcline, pyrite, and epidote. The graywacke consists of 1-1.5 mm subangular quartz and finer grained feldspar in a green to gray matrix of sericite, chlorite with carbonate veins and accessory pyrite.
- 188.0-189.0 1.0
- 189.0-189.2 0.2 Dolomite, white, massive, reacts very slowly with acid
- 189.2-194.2 5.0 Andesite: gray-green, massive with calcite fracture filling and pyrite
- 194.2-208.2 14.0 Andesitic tuff: greenish gray to gray sharply banded, with pyrite and some calcite fracture filling. X-ray examination (X-503 at 203') showed plagioclase, chlorite and epidote.
- 208.2-
- 208.2-216.2 8.0 Andesitic tuff and graywacke: interbanded, tuffaceous sediments with sharply delineated, pale green, parallel bands, and gray ^{Fine-grained} graywacke. Andesitic lapilli ^{occur} from 208.2' to 213.2'
- 216.2-225.0 8.8 Tuffaceous sediments: white, altered, soft, clayey from 221.2'-225.0'
- 225.0-233.0 Altered tuffs with quartz veins: gray aphanite with vuggy quartz veins containing limonite, goethite, hematite, and traces of chalcopyrite.

6.

233.0-250 17.0 Andesite : green, largely massive but with small, flat lying lapilli at 234.5' Banded from 239' 250'.

250' End of hole

GEOLOGIC SUMMARY

<u>Depth, Ft</u>	<u>Thick, ft</u>	<u>Description</u>	<u>Age</u>
0-50	50.0	No core	
50.0-94.0	24.0	Swift Run formation: gray to white laminated felsic tuffs	Late Precambrian (?)
94.0-104.0	10.0	Swift Run formation: altered tuff with quartz veins and limonite-goethite	
104.0-114.0	10.0	Swift Run formation: andesitic tuffs with lapilli and tuffaceous sediments.	
114.0-127.5	13.5	Swift Run formation: ^{vesicular} andesite - basalt-flow	
127.5-250.0	122.5	Swift Run formation: andesite tuffs, altered-flows tuffaceous sediments (graywacke). Quartz veins and dolomite occur at 141.8-143.6 147.5-147.7, 150.8-152.0, 156.5-157 189.0-189.2, and 225-233.0	

250.0
127.5
122.5