

Rock Name *alt. basalt*

896743

Serial No. *9217*

Locality *Cowichan Copper, surface at Sunnyside NDM* Field No. *59-2*

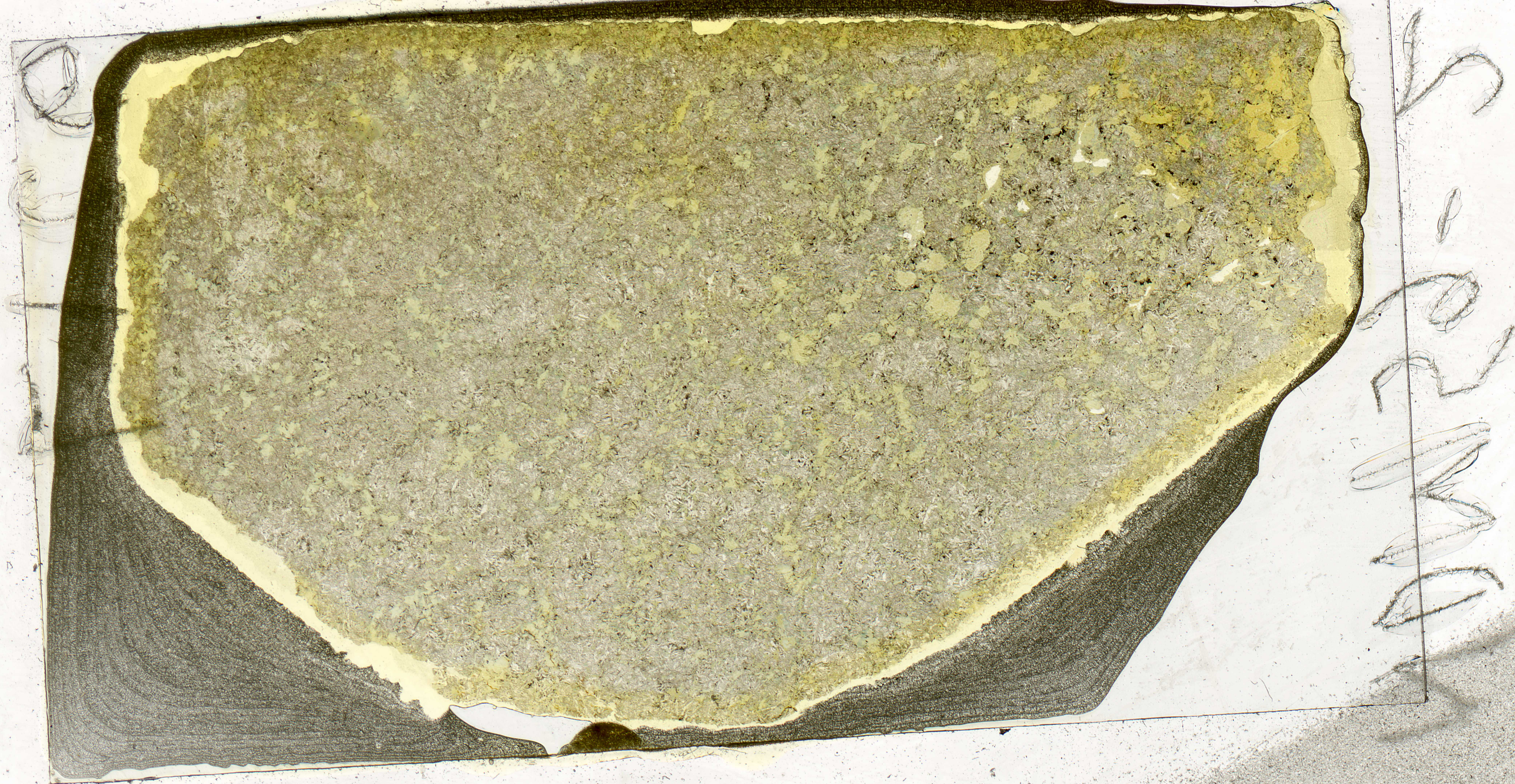
Occurrence

Megascopic *green; f. gdt, xlline; equigranular.*

Microscopic

*fine gr. smooth & free of pyroxene, large mag
masses, zoisite with faint ill outline
visible - feldspar.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>zoisite pyroxene biotite chlorite black opague.</i>			<i>NDM</i>	

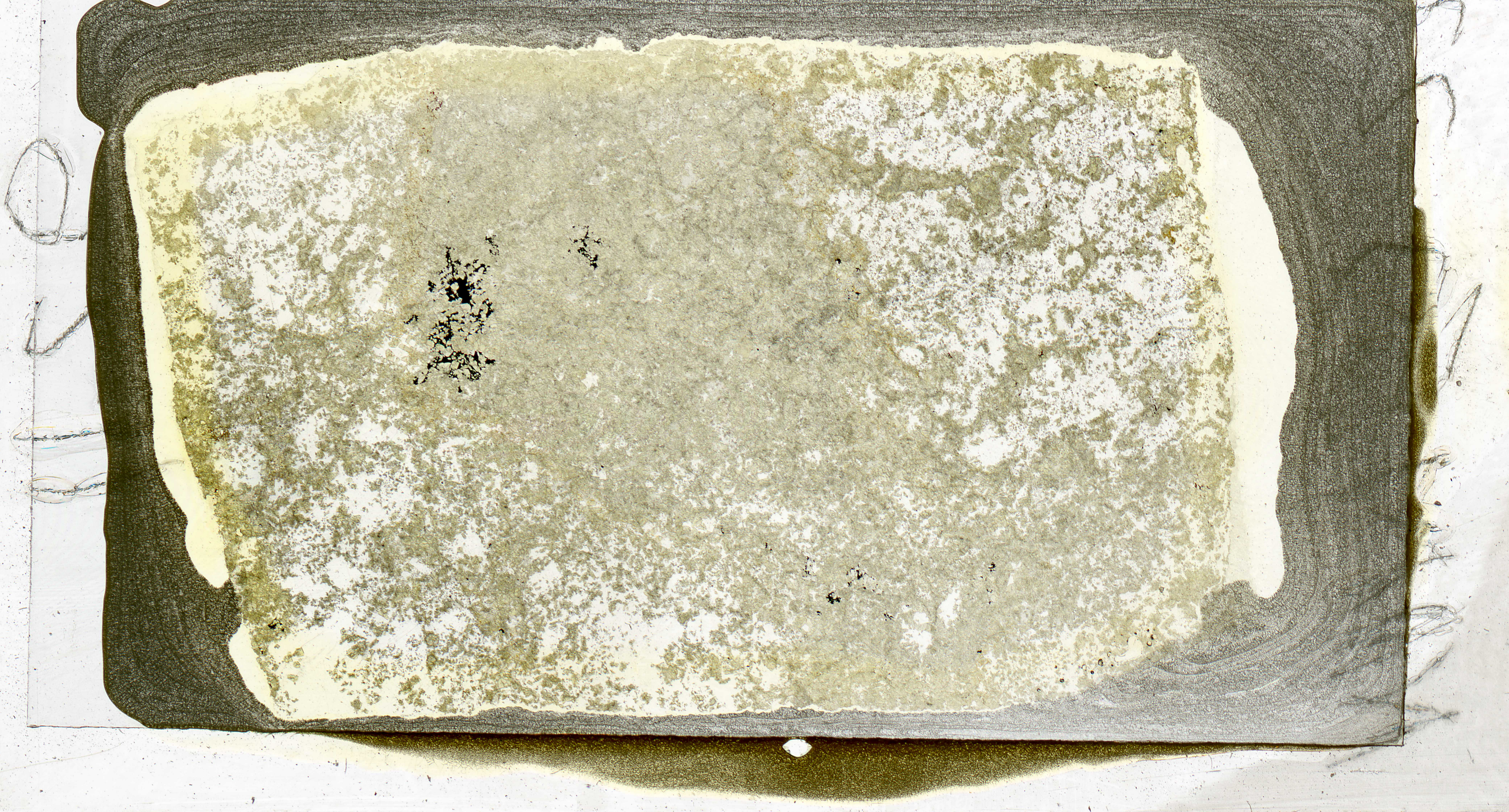


Rock Name *Skarn*Serial No. *9211*Locality *Swakum Mt. - Torwest property* NDM Field No. *59-22*Occurrence *OC on road + trench near "Grace Workings"*

Megascopic

Microscopic *epidote in groundmass of coarse & med. qtz and plagioclase. Black opaque in hematite in scattered grains. Epidote is in scattered grains and in large aggregates. Little limonite around some epidote grains.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>epidote quartz plagioclase black opaque ± limonite</i>			<i>NDM</i>	<i>7/3/60</i>



Rock Name *Crystal tuff*

Serial No. *9214*

Locality *Swakum Mtn - Torwest property*

NDM Field No. *59-24*

Occurrence *Exposure in tractor road.*

Megascopic *green, f.f.d., with light gray, angular and rounded phenos.*

Microscopic *very f.f.d. groundmass of needle-like crystallites; feldspar phenos almost all alt^d to sericite. Biotite shards. All well chloritized. Some clinzoisite.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst <i>Cham.</i>	Date <i>2/13/60</i>



Rock Name *Andesite porphyry.*Serial No. *9145*Locality *Torwest claims, Swakum Mt.*NDM Field No. *59-79*

Occurrence

Megascopic *Porphyry; $\pm$ rounded feldspar phenos in dark grey f.y.d. ground mass.*Microscopic *Sanitized plagioclase phenos in f.y.d., almost clastic matrix. Groundmass full of vesicles filled with matter of pale green, needle-shaped crystallites with near-parallel extinction. Vesicles rimmed and surrounded by fine black opaque which is unevenly distributed through ground mass**green X-ray
lit in the
vesicles with
pale crystallites*

MINERALS

Approx.
per Cent.Cut on Dotted
Line to Make
Clip for Section

Analyst

Date

*Jarm.**12/2/60**Plagioclase
sanitized
chlorite
magnetite (?)*



Rock Name

Serial No. 9184

Locality Swatun Mtⁿ - Inver property

NDM Field No. 59-80

Occurrence

Megascopic

Microscopic

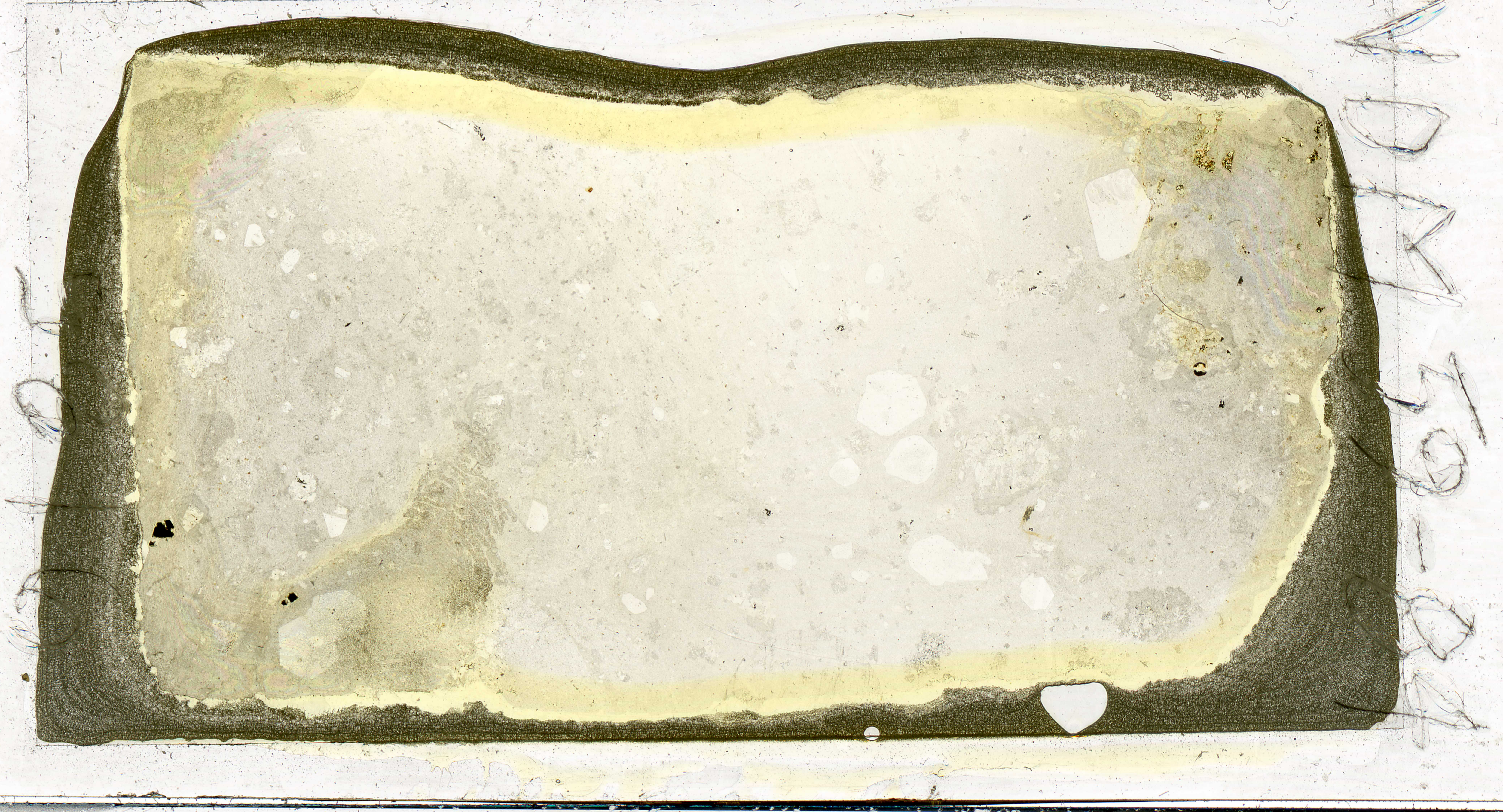
Qz-flsp - P (holocr^{ne}) in crushed, silic^d, epid^d, chlor^d (recrystallized) host-rock of uncertain origin.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
Qz plag biotite, partly chlor ^d . - in host-rock chlorite aggregates - " " hematite - " " epidote - " " F-gr ^d zoisite/grossular				



Rock Name *hyolite porphyry* Serial No. *9185*
 Locality *Sunkum Mt. - Torwest property.* NDM Field No. *59-84*
 Occurrence *Small cc. in swamp, contacts not visible.*
 Megascopic *light grey-green f.f.d. feldspathic matrix with quartz phenos.*
 Microscopic *Quartz phenos, ± rounded, in f.f.d. groundmass of gtz and antigorite. Scattered remnants of amphibole, altered olivine completely to antigorite and calcite.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Quartz</i> <i>Amphibole</i> <i>Antigorite</i> <i>Calcite</i> <i>Sericite</i> <i>lx = muscovite / biotite</i>			<i>Wdm.</i>	<i>25/2/60</i>



Rock Name *Porphyritic sill tuff*Serial No. *9144*Locality *Swakum Mt = , Towson property, NDM*Field No. *59-203*

Occurrence

Megascopic

Microscopic *Groundmass of feldspar laths and pyroxene; plagioclase, biotite and pyroxene frags and highly alt^d, feldspars sericitized, pyroxenes + biotite to chlorite*

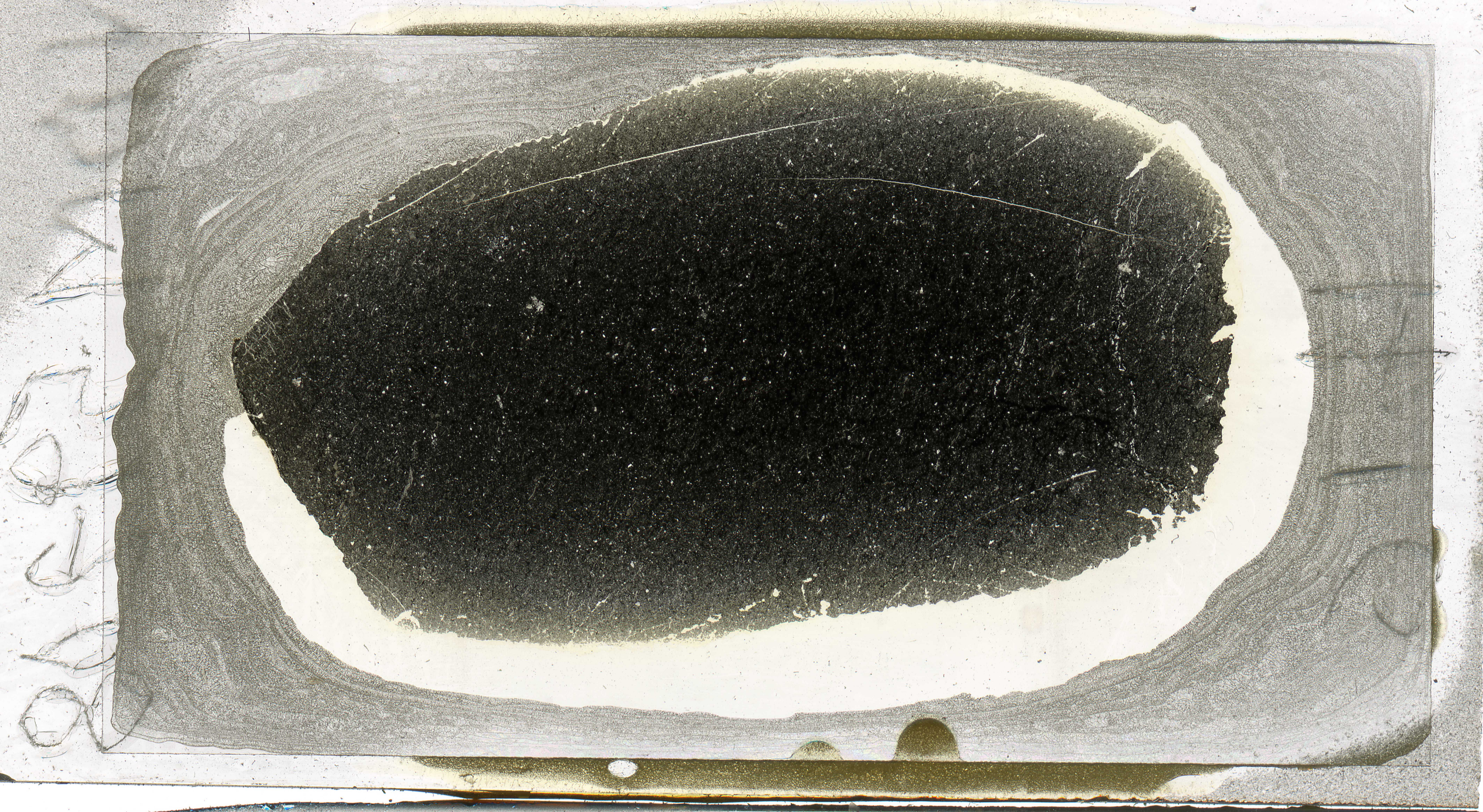
MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>plagioclase pyroxene biotite chlorite carbonate black opaque</i>			<i>NDM</i>	<i>22/3/60</i>



Rock Name *carbaceous shale; tuffaceous* Serial No. *9141*
 Locality *Swatum Mts - Jarrett property* NDM Field No. *59-203*
 Occurrence *D.D. core*
 Megascopic *black, fine gr., granular*

Microscopic *Scattered rounded and angular of grains; shreds of
 micaceous, colorless mineral; large proportion of
 black opaque material as crushed, discontinuous
 branching threads. Most grains angular
 rather than rounded.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst <i>NDM</i>	Date <i>7/2/62</i>
<i>Quartz</i> <i>White mica?</i> <i>Clay minerals?</i>				



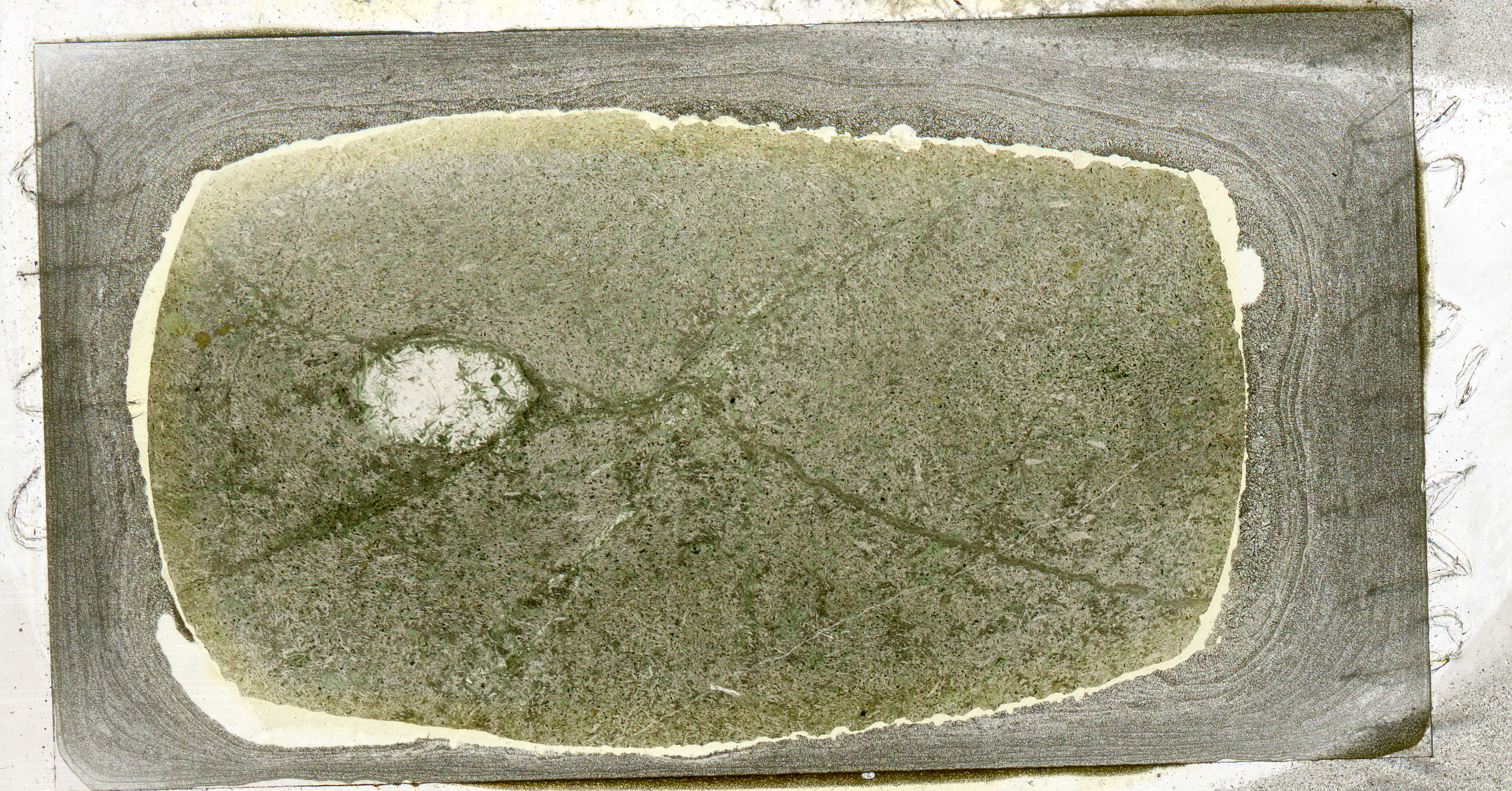
Rock Name *Tuff (211)*Serial No. *9142*Locality *Swakum Mt., Torwest D.D. H. #153, 226'*NDM Field No. *59-207*

Occurrence

Megascopic

Microscopic *band high in dusty feldspar laths - band high in feldspars. Perovskite - amphibole. Large phens & calcite with included feldspars. Fairly well chloritized.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>feldspar calcite biotite chlorite</i>			<i>NDM</i>	



Rock Name *X11 tuff*Serial No. *9143*Locality *Swakum Mt., Torwest D.D.H. #55, 7.0'*NDM Field No. *59-210*

Occurrence

Megascopic

Microscopic *phenos of plagioclase, biotite and pyroxene in dusty
d-f grey matrix. Plagioclase very dusty, some sericite.
Biotite green and veined with chlorite*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>plagioclase biotite pyroxene sericite chlorite</i>			<i>Madon</i>	<i>26/2/60</i>



Rock Name *Alt'd. gtz diorite*
Locality *Canam - Invermay.*
Occurrence
Megascopic

Serial No. *9146*
NDM Field No. *59-265*

Microscopic *Interbed and comminuted gtz grains with few
tourmaline clusters; sericite masses with scattered
feldspar cells; some outcrops fairly fresh*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Qtz</i> <i>Tourmaline</i> <i>Sericite</i> <i>Plagioclase</i> <i>Orthoclase</i>			<i>CHM</i>	<i>11/2/60</i>



Rock Name

Serial No. 9148

Locality Canam - Invermay.

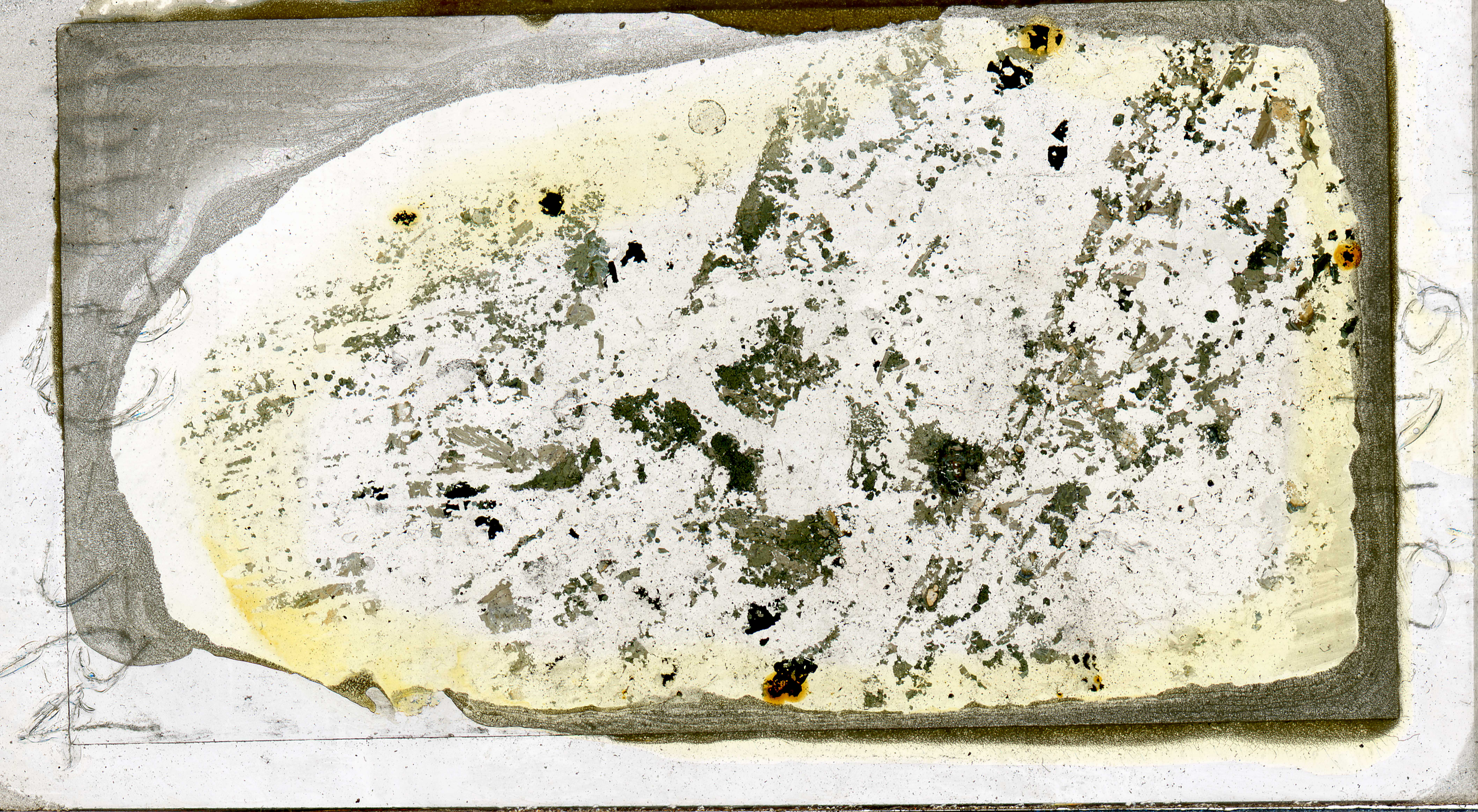
NDM Field No. 59-264

Occurrence Portal of

Megascopic Gneissic gtz - tourmaline rock. Tourmaline needles included in pyrite.

Microscopic Tourmaline sills and masses in fine to med gr. gtz. Qtz grains $\pm$ fractured.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
Quartz Tourmaline Black opaque (pyrite) Orthoclase			JRM.	10/2/60



Rock Name

Serial No. 9153

Locality Canaan

NMM Field No. 59-259

Occurrence 6"x12" fragment in breccia

Megascopic

Microscopic Feldspar phenol much fract^d. Fjd gl^z feldspar
groundmass. Pyroxenes = replaced. See slide
for spec. 59-260.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
Plagioclase Orthoclase Quartz Pyroxene Olivine alt ^d to serpentine Sericite few grains of hematite				



Rock Name

Locality *Canam*Serial No. *9154*NDM Field No. *59-260*Occurrence *6 ft x 3 ft fragment in breccia*

Megascopic

Microscopic

*Feldspar phenos in f. sd. groundmass, chiefly qtz
and feldspar. Pyroxene phenos largely replaced by
qtz, feldspar. Some feldspar phenos much fractured
and partially replaced*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Orthoclase</i> <i>Plagioclase</i> <i>Pyroxene</i>				



Rock Name

Serial No. 9155

Locality Canam

NDM Field No. 59-267

Occurrence "Feldspar porphyry" in Qtz-diorite intrusive 200' S of 103

Megascopic

Microscopic Plagioclase & $\pm$ orthoclase phenocrysts, with pyroxene - hornblende in feld. groundmass of feldspar and alt. pyroxene.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst mm.	Date 18/2/60
Orthoclase Plagioclase Pyroxene in part altered to Hornblende Qtz Black opaque.				



Rock Name

Locality *Canam*

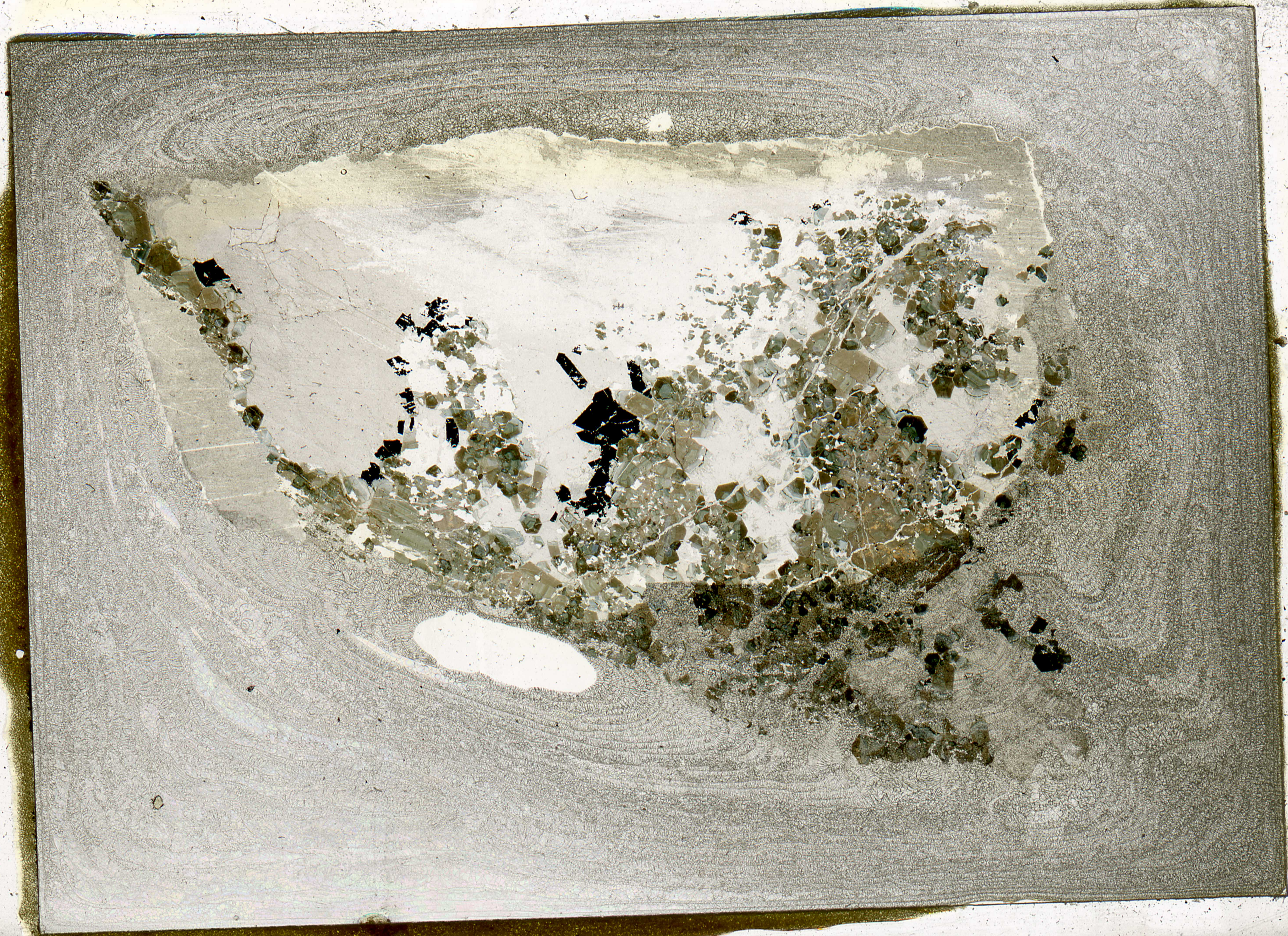
Occurrence

Megascopic

Serial No. *9147*ND17 Field No. *59-276*Microscopic *Tourmalinized feldspars show albite twinning and zoning.**Limonite along feldspar cleavage. Tourm. in groundmass chiefly calcite and sericitized feldspar with qtz.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Calcite</i> <i>Tourmaline</i> <i>Pyrrhotite</i> <i>Tourmalinized plagioclase</i> <i>qtz.</i> <i>Sericite</i> <i>Limonite</i>			<i>Canam.</i>	<i>11/2/60</i>

14



14

Rock Name

Locality *Canam*

Occurrence

Megascopic

Serial No. *9149*NDM Field No. *59-277*

Microscopic

*masses of tourmaline and tourmalinized feldspar in
fine to very finely comminuted g/b grains*

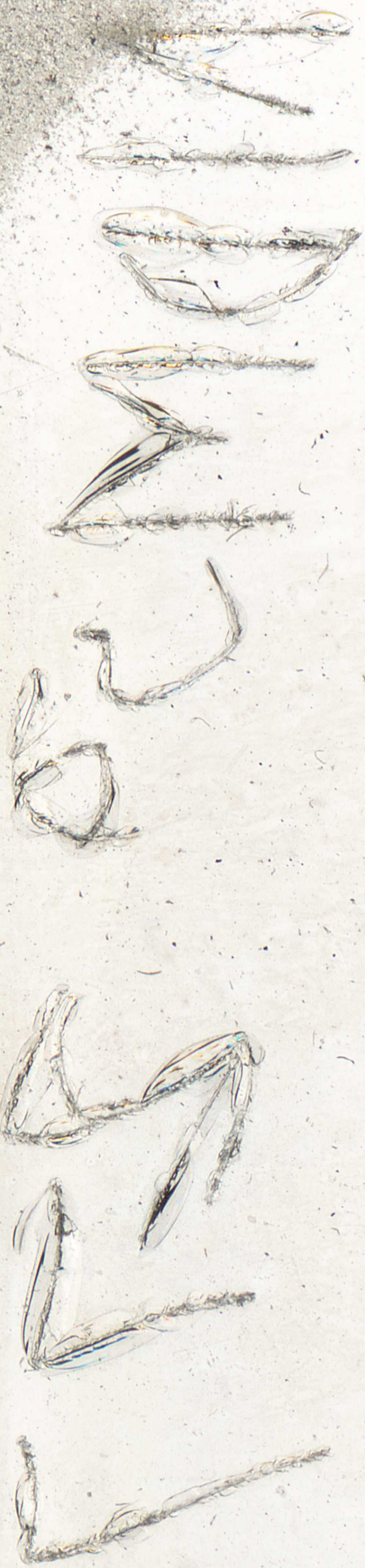
MINERALS

Approx.
per Cent.Cut on Dotted
Line to Make
Clip for Section

Analyst

Date

*JZM.**11/2/60**Tourmaline
Limonite
Tourmalinized feldspar
Antigorite or chlorite (?)*



Rock Name *Alt² syenite*
Locality *Canam, 6th Level X-cut*
Occurrence
Megascopic

Serial No. *9151*
NDM Field No. *59-283*

Microscopic *Very f.g.d. groundmass with streaky texture with threads and blebs of coarser Qtz. Little limonite and black opaque. Few recognizable plagioclases and orthoclases; groundmass chiefly sericite and carbonate.*

MINERALS

Approx.
per Cent.

Cut on Dotted
Line to Make
Clip for Section

Analyst

Date

15/2/60

Qtz
plagioclase
orthoclase
sericite
carbonate
limonite
black opaque

slide missing

Rock Name *Qtz-diorite*Serial No. *9152*Locality *Canam, 6th Level X-cut*NDM Field No. *59-284*

Occurrence

Megascopic *med. gr., white; grey,*Microscopic *Pyroxene alt^r to urtinite. Feldspars fairly fresh,
sericitized along fine fractures. Zoned plagiophenes
with interior sericitized*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Plagioclase</i>			<i>Cham</i>	<i>12/2/60</i>
<i>Orthoclase</i>				
<i>Qtz</i>				
<i>Urtinite</i>				
<i>Pyroxene</i>				
<i>Hematite</i>				

485037



Rock Name *Tuff*
~~Angilliteous tuff~~

Serial No. 9110

Locality *Mt. Washington, El. 4400', N. slope.*

Field No. NDM-39-280

Occurrence

Megascopic *fine sd., argillaceous, dr. brown*

Microscopic

fine biotite flakes in finer sd. matrix which appears to be feldspar and gta. Grains mostly shards.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst <i>Starn</i>	Date
<i>biotite gta + feldspar ?</i>				



Rock Name *Probably a crystal tuff*

Serial No. *9079*

Locality *Mt. Washington, El. 4400, north slope*

Field No. *NDM-59-289*

Occurrence

Megascopic

Microscopic

Subhedral to euhedral coarse carlsbad twins of plagioclase in very fine-grained matrix. Sericitic alteration around some of the pyrite. Matrix appears to be mostly plagioclase with a little amphibole.

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
plagioclase			<i>gsp</i>	<i>Jan 8 '60</i>
Amphibole				
sericite				
pyrite				



Rock Name *hyalite tuff (?)*Serial No. *9080*Locality *Mt. Washington, el. 4400', north slope.*Field No. *NDM-59-293*

Occurrence

Megascopic

Microscopic *fragmented quartz and orthoclase grains in fine grained sericitized matrix of similar material. Parallel markings in qtz along one side of slide. Sericite mostly in matrix, also hematite and limonite.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>orthoclase quartz sericite hematite limonite</i>			<i>NDM</i>	



Rock Name *Diorite*Serial No. *9226*Locality *Empire Development, Merry Widow Mt.*NDM Field No. *59-298*Occurrence *Dykes cutting lsc and magnetite*Megascopic *Grey-green, med. fld., alline; equigranular, fresh.*Microscopic *few plag. orthocl. phenos., mostly equigranular.
Few small possible gtz grains. Feldspars to act. of
sericite & clinozoisite.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>plagioclase</i> <i>biotite</i> <i>orthoclase</i> <i>sericite</i> <i>clinozoisite</i> <i>gtz (?)</i>			<i>NDM</i>	



Rock Name *Skarn*Serial No. *8926*Locality *Merry Widow Pit, Empire Iron Mine.*NDM Field No. *59-299*

Occurrence

Megascopic

Microscopic

*chiefly zoisite and calcite with epidote.
Few pieces of quartz and fewer of vesuvianite.
zoisite replaces both calcite and
epidote.*

MINERALS	Approx. per Cent.	Cut on Dotted Line to Make Clip for Section	Analyst	Date
<i>Calcite Zoisite Epidote quartz Vesuvianite</i>			<i>NDM</i>	

