

## **APPENDIX A2. SOUTH RANGE**

### **Contact Ni-Cu-Co-PGE Mineralization**

Bleazard deposit  
Clarabelle deposit  
Crean Hill deposit  
Creighton mine  
Falconbridge mine  
East, Main, and West Kirkwood deposit  
Lindsley deposit  
Little Stobie mine  
Mt Nickel deposit  
Murray mine  
Vermilion mine  
Victoria embayment

### **Footwall Cu-PGE Mineralization**

Creighton mine, 403 and 126 orebodies  
Segway deposit

### **Offset Ni-Cu-PGE Mineralization**

**Copper Cliff offset:** Copper Cliff North and South deposits (100, 175, 810, and 800–810 orebodies),  
Denison Township, Evans mine, Kelly Lake deposit

**MacLennan offset:** MacLennan deposit

**Worthington offset:** Totten deposit, Vermilion mine, Victoria mine, Worthington mine

## **APPENDIX A2. SOUTH RANGE**

### **Frood-Stobie Breccia Belt Ni-Cu-PGE mineralization**

Frood mine  
Frood-Stobie mine  
Stobie mine

### **Tectonically Modified Ni-Cu-PGE mineralization**

Falconbridge mine  
Garson mine



**Figure SR1.1a. Blezard deposit.** 30% interstitial pyrrhotite-pentlandite in gabbro. Sample 01-AV-225A.



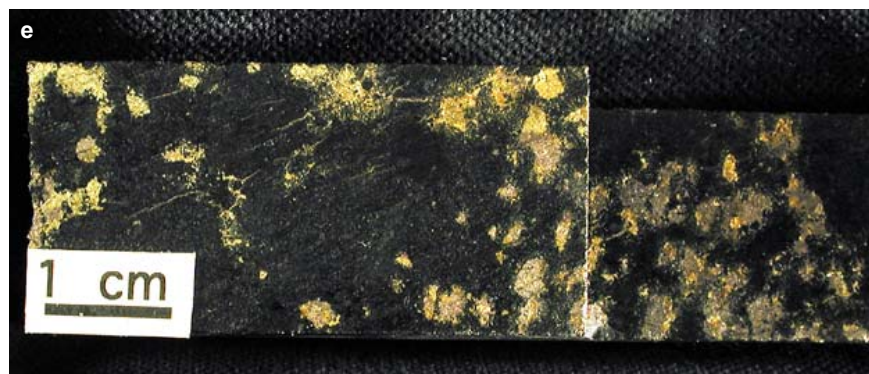
**Figure SR1.1b. Blezard deposit.** 30% interstitial pyrrhotite-pentlandite in gabbro. Sample 01-AV-225B.



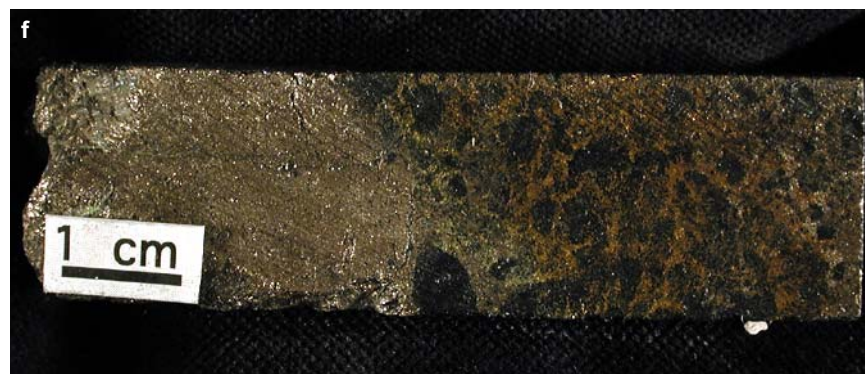
**Figure SR1.1c. Blezard deposit.** Massive pyrrhotite-pentlandite-bornite. Sample 01-AV-226.



**Figure SR1.1d. Blezard deposit.** Massive pyrrhotite-pentlandite-bornite. Sample 01-AV-227.



**Figure SR1.1e. Blezard deposit.** Blebby to interstitial pyrrhotite-pentlandite-chalcocopyrite in gabbro. Sample 01-AV-228.

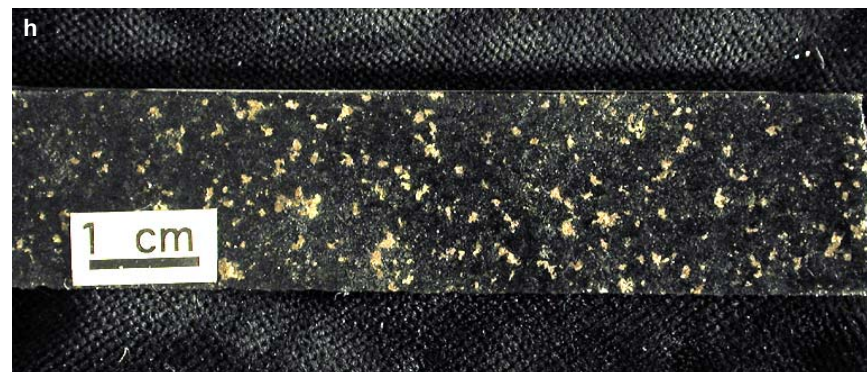


**Figure SR1.1f. Blezard deposit.** Semi-massive pyrrhotite-pentlandite. Sample 01-AV-229.





**Figure SR1.1g. Blezard deposit.** Massive pyrrhotite-pentlandite. Sample 01-AV-230.



**Figure SR1.1h. Blezard deposit.** 20% disseminated to blebby pyrrhotite-pentlandite-chalcopyrite. Sample 01-AV-231.



**Figure SR1.1i. Blezard deposit.** Massive sulphide composed of pyrrhotite-pentlandite. Sample 01-AV-233.



**Figure SR1.1j. Blezard deposit.** Semi-massive pyrrhotite-pentlandite. Sample 01-AV-234.

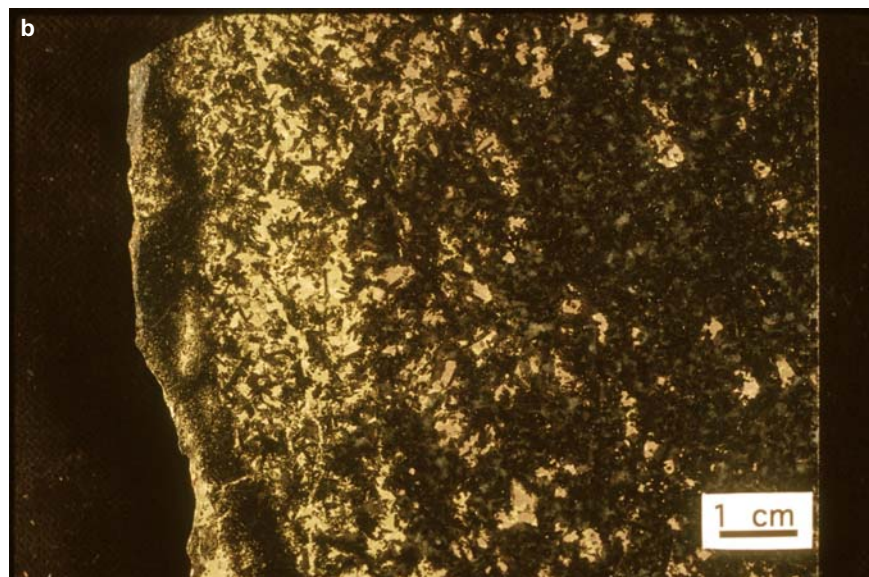


**Figure SR1.1k. Blezard deposit.** 2% disseminated pyrrhotite-pentlandite in fine-grained mafic rock. Sample 01-AV-235.

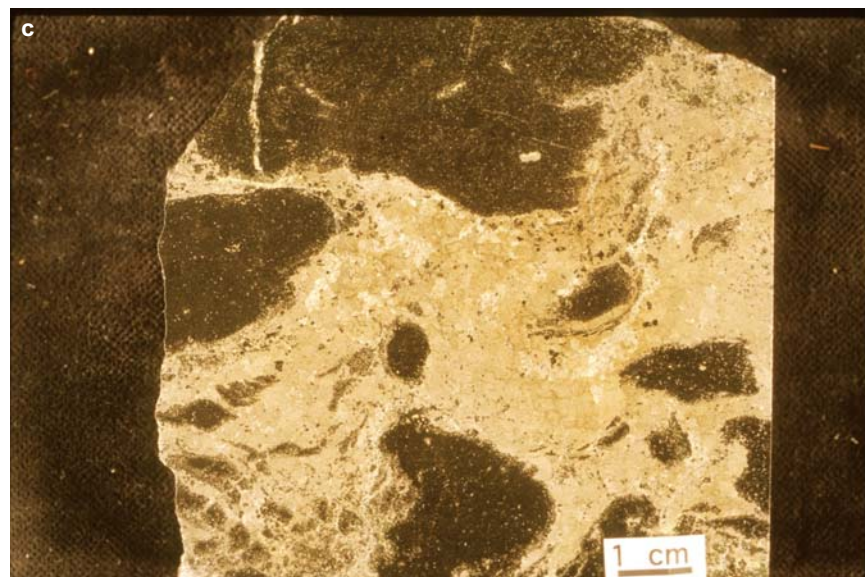


**Figure SR1.2a. Clarabelle deposit.** Representative contact massive sulphide composed of coarse pyrrhotite with pentlandite-chalcopyrite-magnetite. Sample CL-1, Inco collection, Creighton funnel.

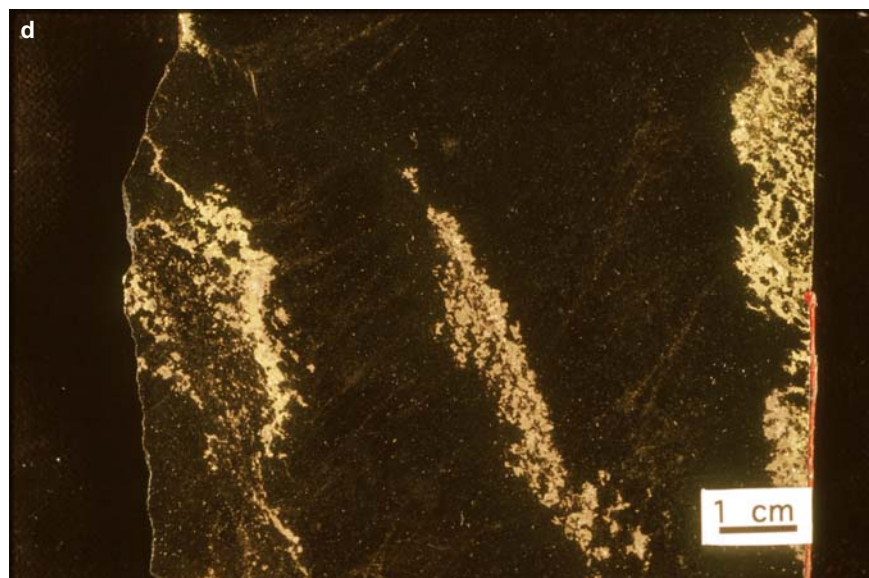




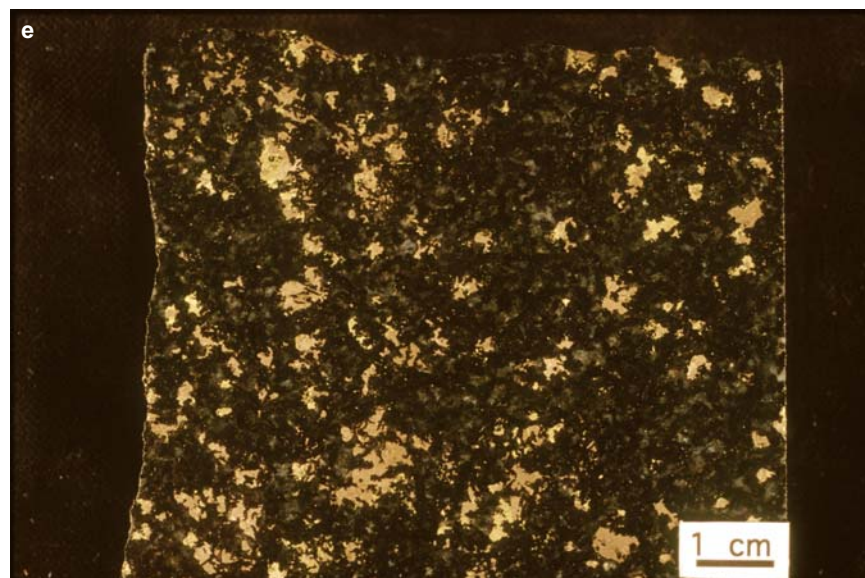
**Figure SR1.2b. Clarabelle deposit.** Typical ore with 20% interstitial sulphides; chalcopyrite replaced pyrrhotite, pyrrhotite-pentlandite in norite. Sample CL-2, Inco collection.



**Figure SR1.2c. Clarabelle deposit.** Representative sample of massive sulphide pyrrhotite-pentlandite-chalcopyrite in fine-grained norite. Sample CL-3, Inco collection.

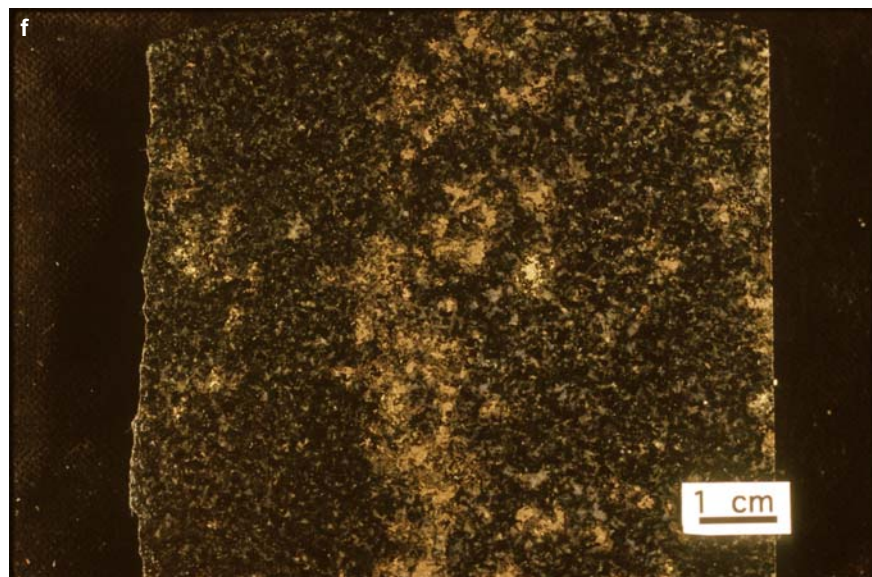


**Figure SR1.2d. Clarabelle deposit.** Representative sample of veins and disseminated sulphides pyrrhotite-cubanite-chalcopyrite in footwall amphibolite. Sample CL-4, Inco collection.

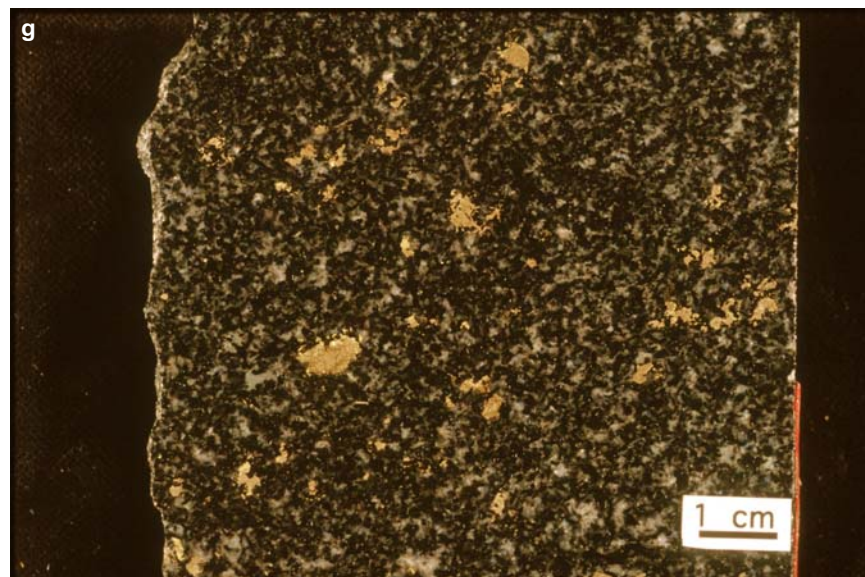


**Figure SR1.2e. Clarabelle deposit.** Typical ore with 15% interstitial pyrrhotite-pentlandite-chalcopyrite in norite. Sample CL-5, Inco collection.

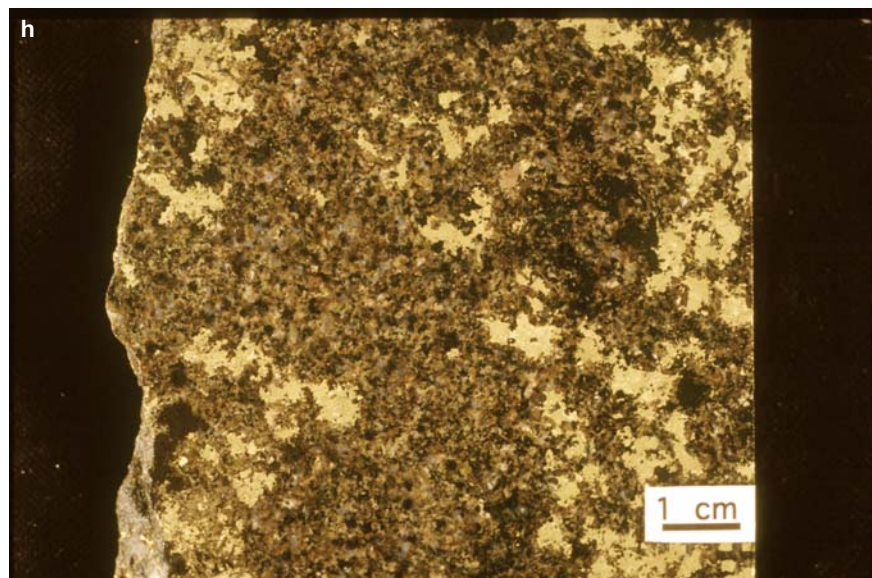




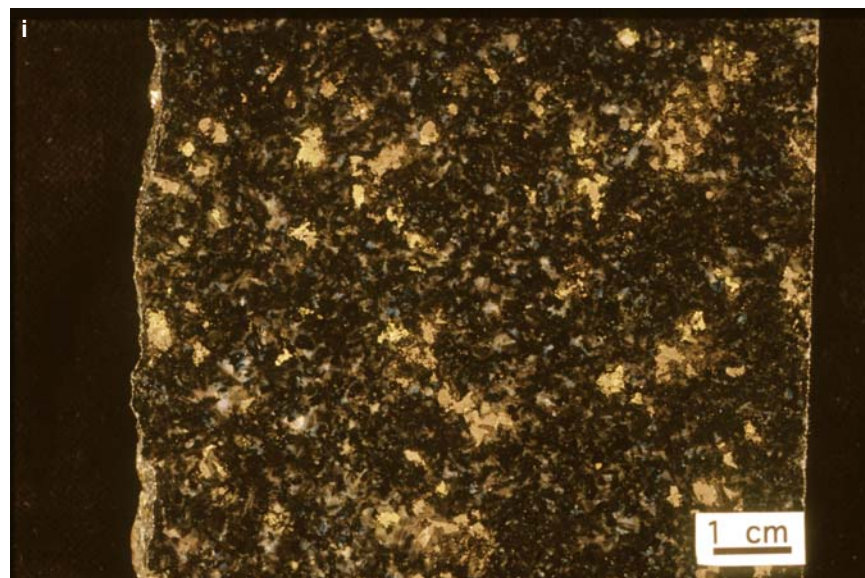
**Figure SR1.2f. Clarabelle deposit.** Typical ore with 12% stringer and blebby pyrrhotite-chalcopyrite in norite. Sample CL-6, Inco collection.



**Figure SR1.2g. Clarabelle deposit.** Typical ore with 5% blebby pyrrhotite-pentlandite-chalcopyrite in quartz-rich norite. Sample CL-7, Inco collection.

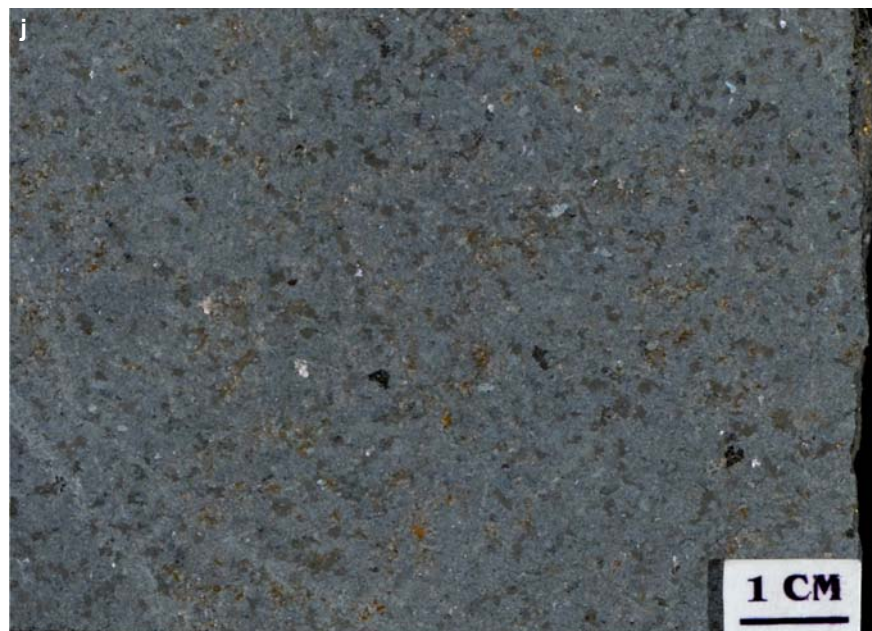


**Figure SR1.2h. Clarabelle deposit.** Typical ore with 30% interstitial chalcopyrite-pyrrhotite in norite. Sample CL-8, Inco collection.



**Figure SR1.2i. Clarabelle deposit.** Typical ore with 12% interstitial pyrrhotite-chalcopyrite in norite. Sample CL-9, Inco collection.

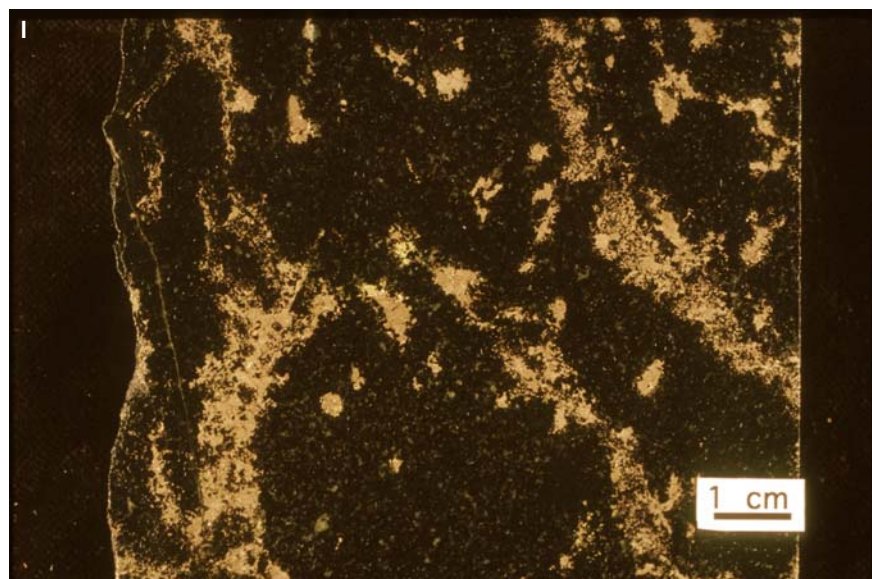




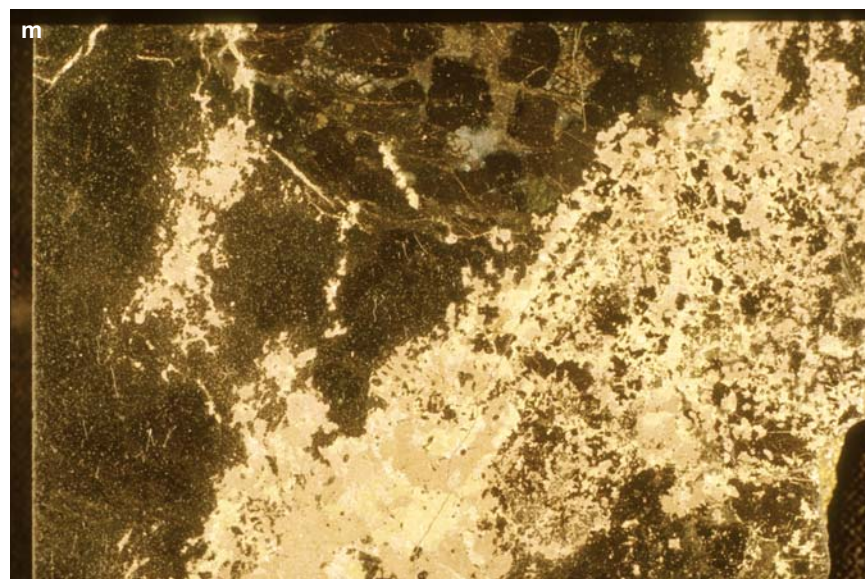
**Figure SR1.2j. Clarabelle deposit.** Typical ore with 15% disseminated blebs pyrrhotite-chalcopyrite in norite. Sample CL-10, Inco collection.



**Figure SR1.2k. Clarabelle deposit.** Representative massive sulphide composed of pyrrhotite-pentlandite-chalcopyrite and bornite. Sample CL-11, Inco collection.

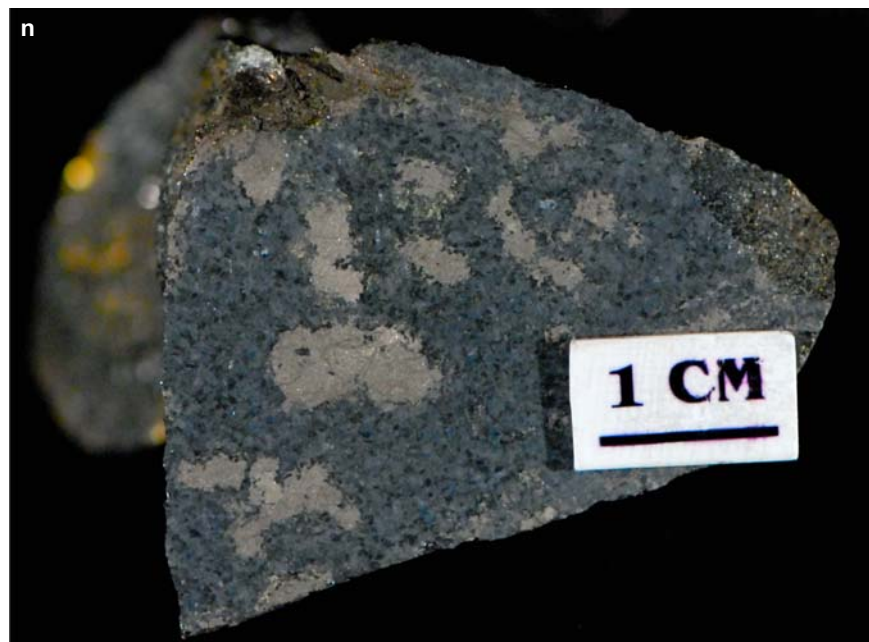


**Figure SR1.2l. Clarabelle deposit.** Typical ore with 25% stringers of pyrrhotite with pentlandite along fractures and chalcopyrite blebs hosted by norite and quartz diorite. Sample CL-12, Inco collection.



**Figure SR1.2m. Clarabelle deposit.** Representative massive sulphide veins composed of pyrrhotite-pentlandite-chalcopyrite-cubanite in footwall amphibolite next to footwall contact. Sample CL-13, Inco collection.





**Figure SR1.2n. Clarabelle deposit.** Quartz diorite with disseminated pyrrhotite-chalcopyrite. Sample EI-70-09A, Clarabelle Pit (south side). Collected by Roger Eckstrand.



**Figure SR1.2o. Clarabelle deposit.** Interstitial to disseminated sulphide chalcopyrite-pyrrhotite. Sample EI-70-09B, Clarabelle Pit (south side). Collected by Roger Eckstrand.



**Figure SR1.3a. Crean Hill deposit.** Massive pyrrhotite with blebby pentlandite and disseminated chalcopyrite and small mafic fragments. Sample 98-AV-45, 2800 level 2800A.

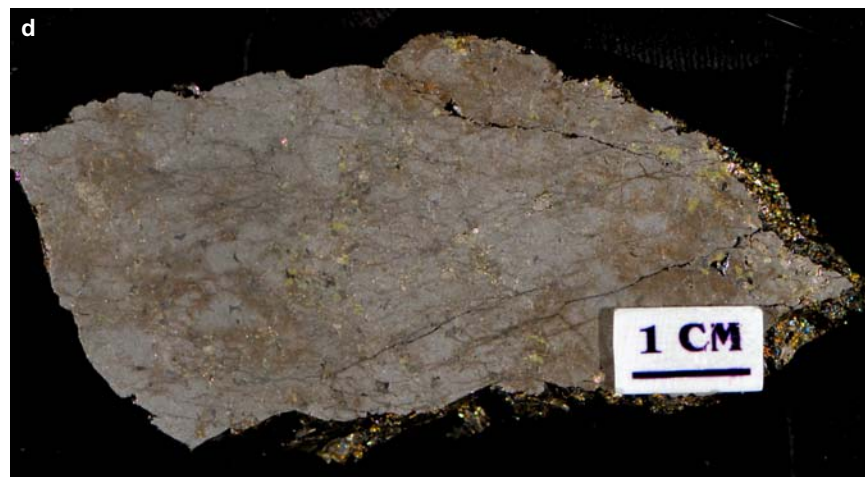


**Figure SR1.3b. Crean Hill deposit.** Massive pyrrhotite with blebby pentlandite. Sample 98-AV-46, 2800 level 2800B.





**Figure SR1.3c. Crean Hill deposit.** Massive pyrrhotite-marcasite with blebby pentlandite and disseminated chalcopyrite. Sample 98-AV-47, 3840 level 3840C.



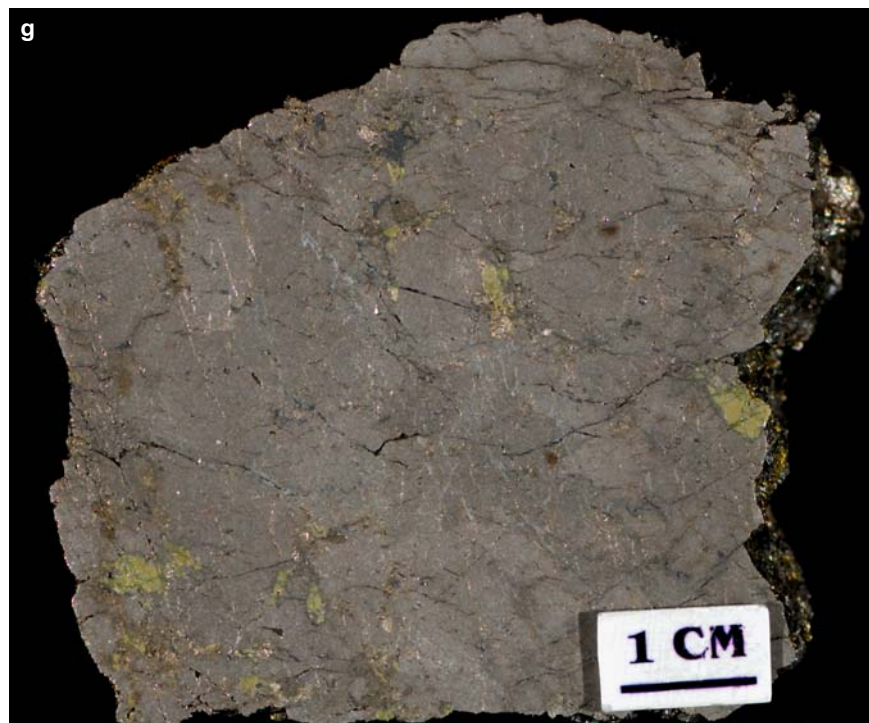
**Figure SR1.3d. Crean Hill deposit.** Massive pyrrhotite with minor blebby pentlandite and disseminated chalcopyrite stringers. Sample 98-AV-48, 3980 level 3980A.



**Figure SR1.3e. Crean Hill deposit.** Massive marcasite with blebby pentlandite and disseminated chalcopyrite. Sample 98-AV-49, 3980 level 3980B.



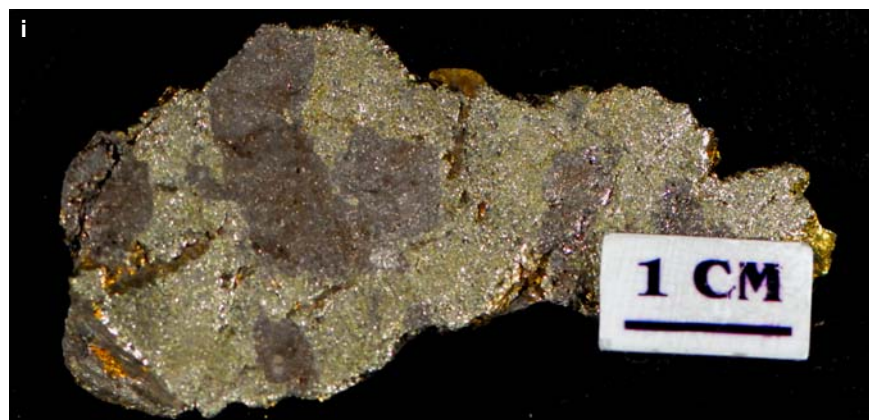
**Figure SR1.3f. Crean Hill deposit.** Semi-massive chalcopyrite vein. Sample 98-AV-50, 3840 level 3840B.



**Figure SR1.3g. Crean Hill deposit.** Massive pyrrhotite with blebby chalcopyrite. Sample 98-AV-51, 3980 level 3980C.



**Figure SR1.3h. Crean Hill deposit.** Massive marcasite(?) Sample 98-AV-52, 3840 level 3840A.

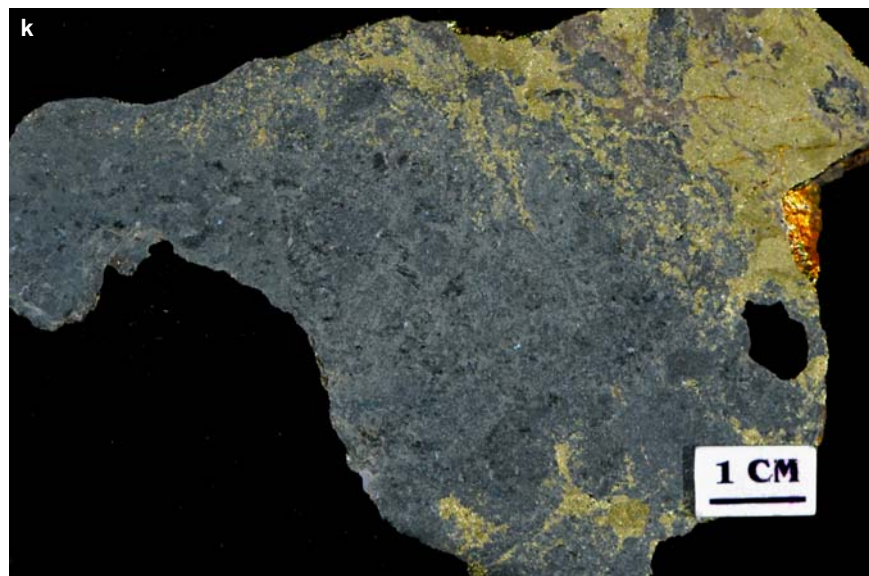


**Figure SR1.3i. Crean Hill deposit.** Massive chalcopyrite with pyrrhotite blebs. Sample 98-AV-68, collected by Ellsworth from Lot 5, Con 5, Denison Township.

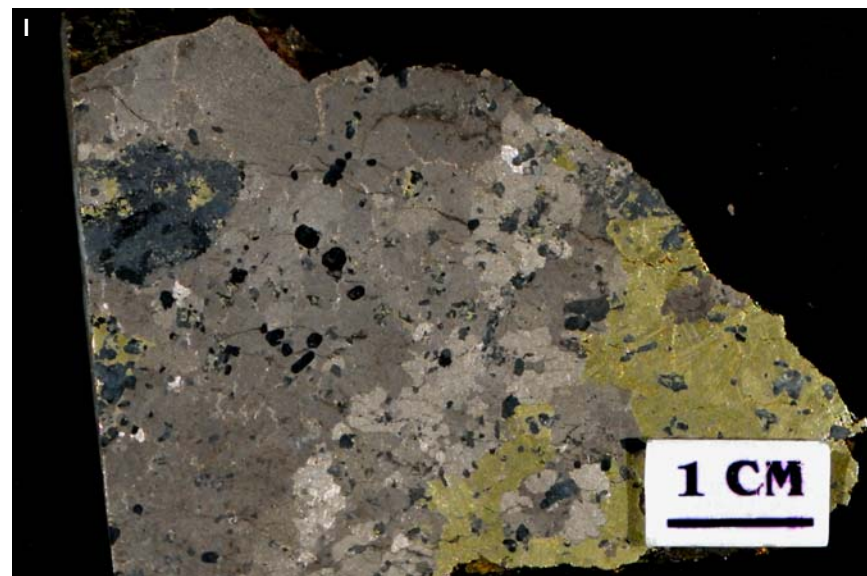


**Figure SR1.3j. Crean Hill deposit.** 20% blebby chalcopyrite vein and disseminated magnetite. Sample 98-AV-69, collected by Ellsworth from Lot 5, Con 5, Denison Township.

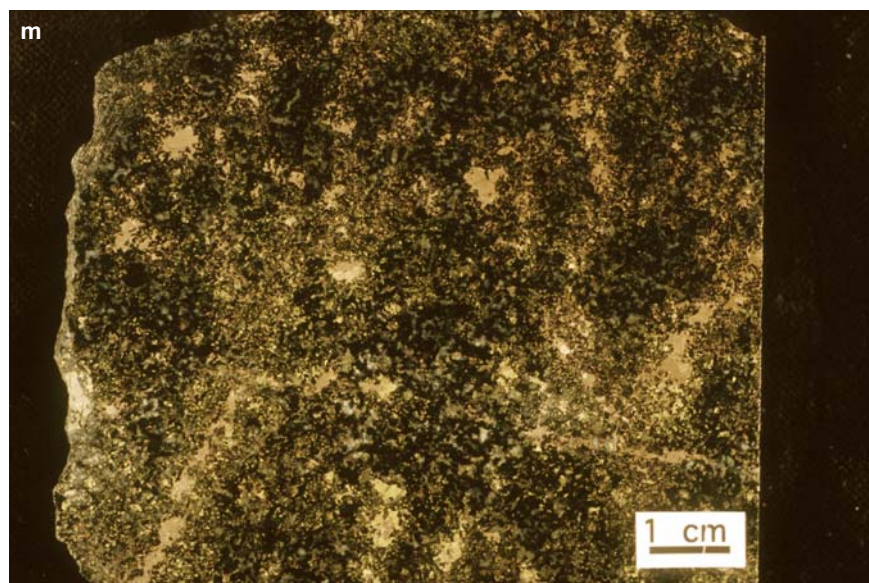




**Figure SR1.3k. Crean Hill deposit.** Vein and stringer of chalcopyrite with minor pyrrhotite. Sample 98-AV-73, collected by Ellsworth from Lot 5 Con 5 Denison Township.



**Figure SR1.3l. Crean Hill deposit.** Massive pyrrhotite-chalcopyrite-pentlandite. Sample 98-AV-96, collected by Ellsworth.

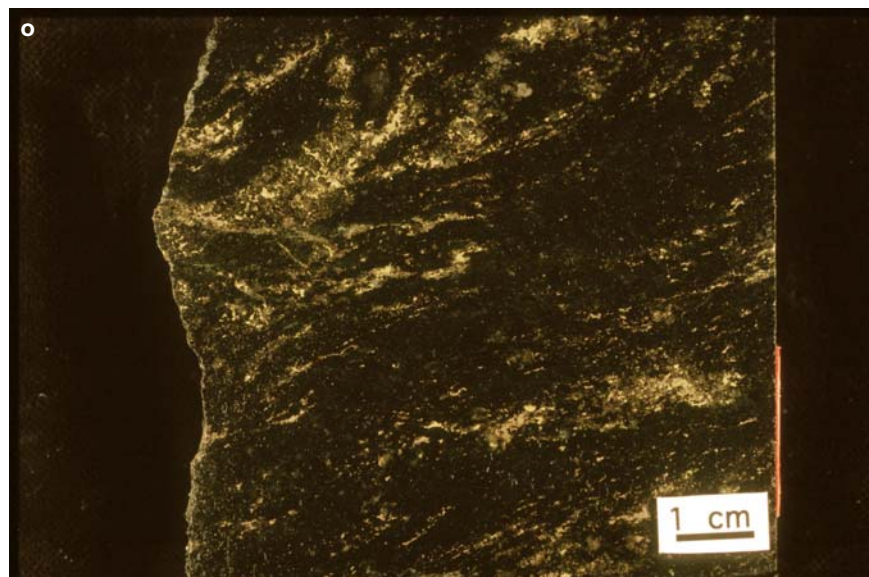


**Figure SR1.3m. Crean Hill deposit.** Typical ore with 25% disseminated and pods of coarse of pyrrhotite-chalcopyrite in coarse-grained gabbro. Sample CH-1, Inco collection, collected between approximately 1996 and 1971.

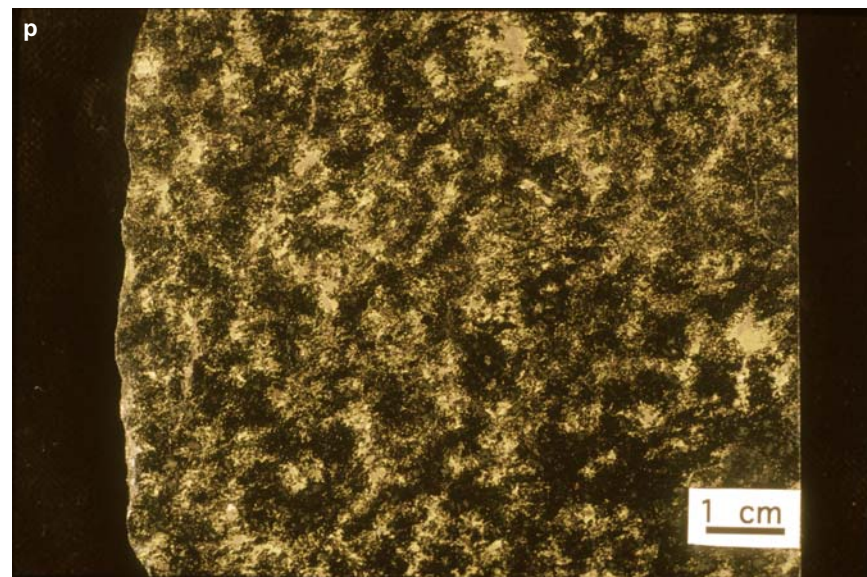


**Figure SR1.3n. Crean Hill deposit.** Typical ore with 10% blebby chalcopyrite-pyrrhotite-millerite in coarse-grained gabbro. Sample CH-3, Inco collection, collected between approximately 1996 and 1971.





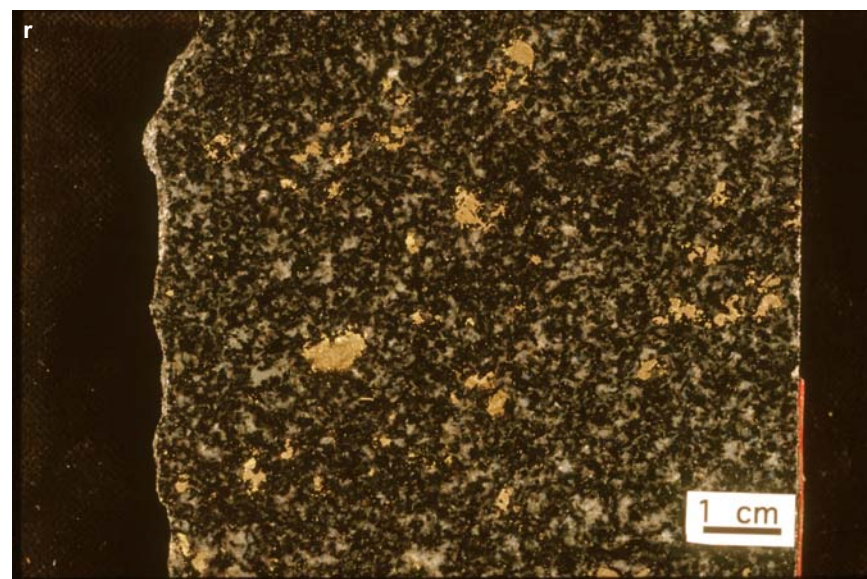
**Figure SR1.3o. Crean Hill deposit.** Typical ore with 5% stringer of pyrrhotite-chalcopyrite-pentlandite in altered gabbro. Sample CH-4, Inco collection, collected between approximately 1996 and 1971.



**Figure SR1.3p. Crean Hill deposit.** Typical ore with 25% disseminated to blebby pyrrhotite-chalcopyrite-pentlandite in medium-grained gabbro. Sample CH-5, Inco collection, collected between approximately 1996 and 1971.

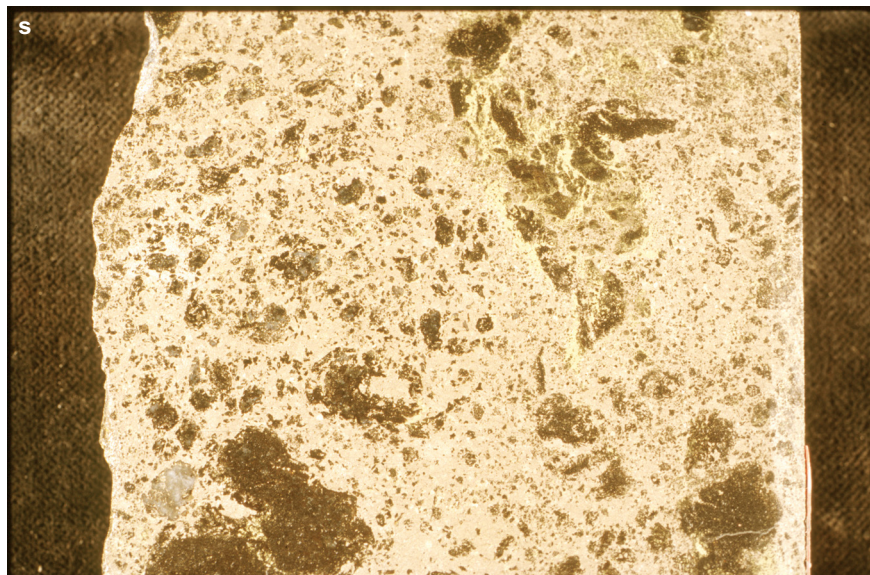


**Figure SR1.3q. Crean Hill deposit.** Representative massive pyrrhotite-pentlandite-chalcopyrite-magnetite. Sample CH-6, Inco collection, collected between approximately 1996 and 1971.

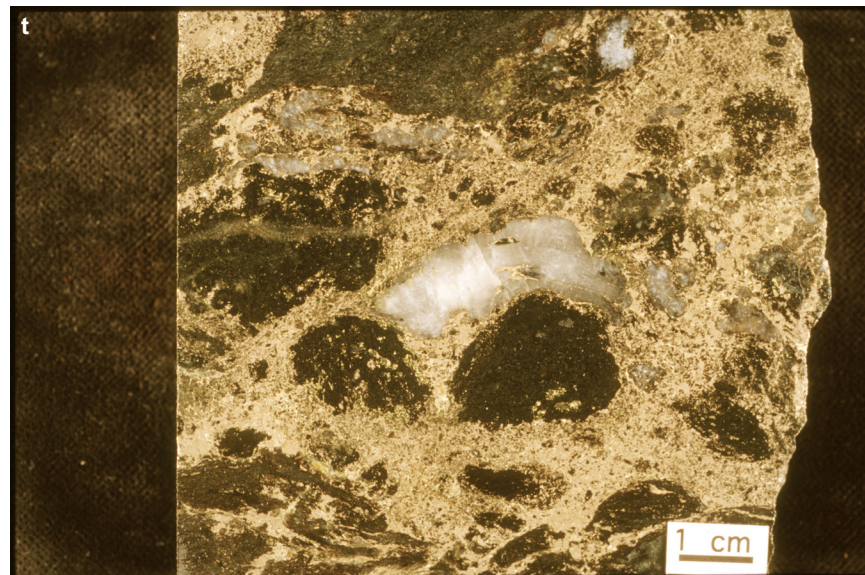


**Figure SR1.3r. Crean Hill deposit.** Typical ore with 10% coarse-grained pods of pyrrhotite-chalcopyrite in altered gabbro. Sample CH-7, Inco collection, collected between approximately 1996 and 1971.

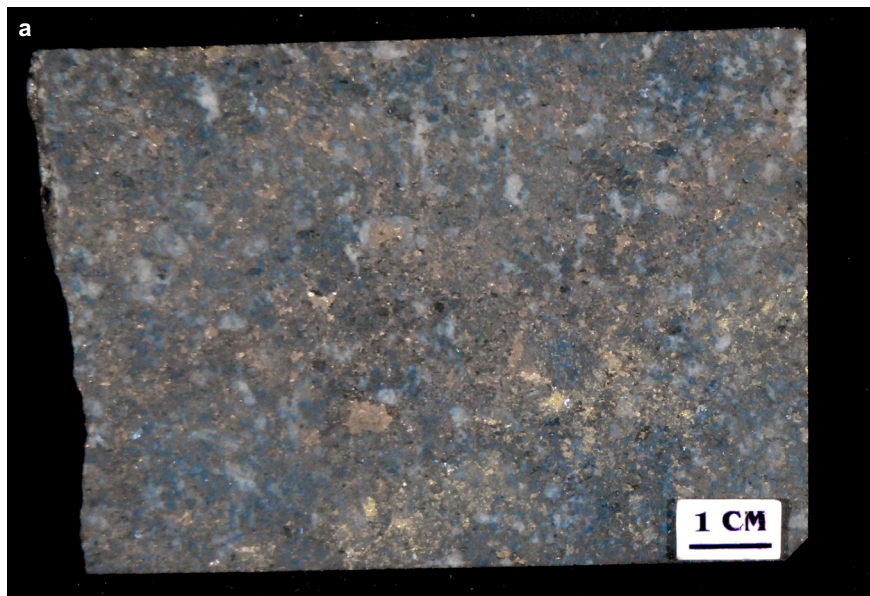




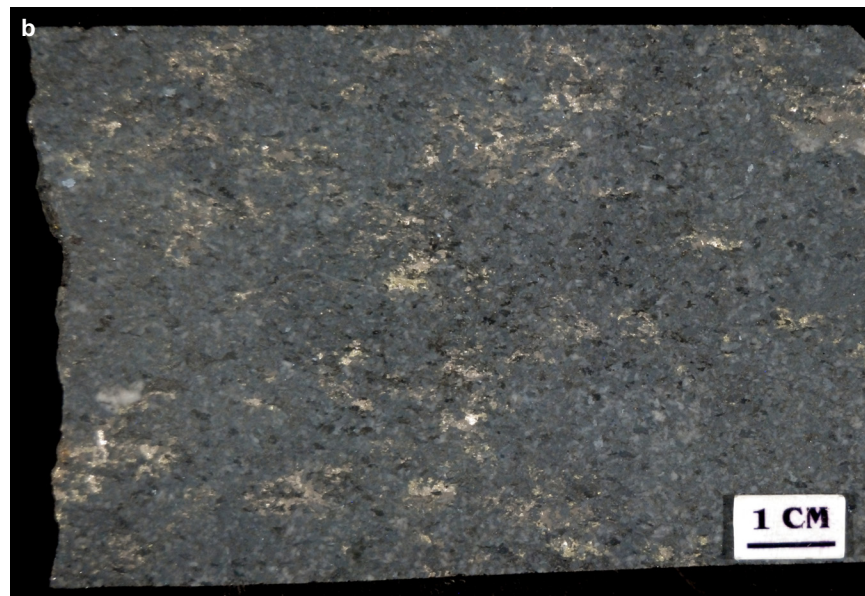
**Figure SR1.3s. Crean Hill deposit.** Representative semi-massive pyrrhotite-chalcopyrite in pseudotachylite. Sample CH-8, Inco collection, collected between approximately 1996 and 1971.



**Figure SR1.3t. Crean Hill deposit.** Representative semi-massive veins of pyrrhotite within gabbro. Sample CH-9, Inco collection, collected between approximately 1996 and 1971.

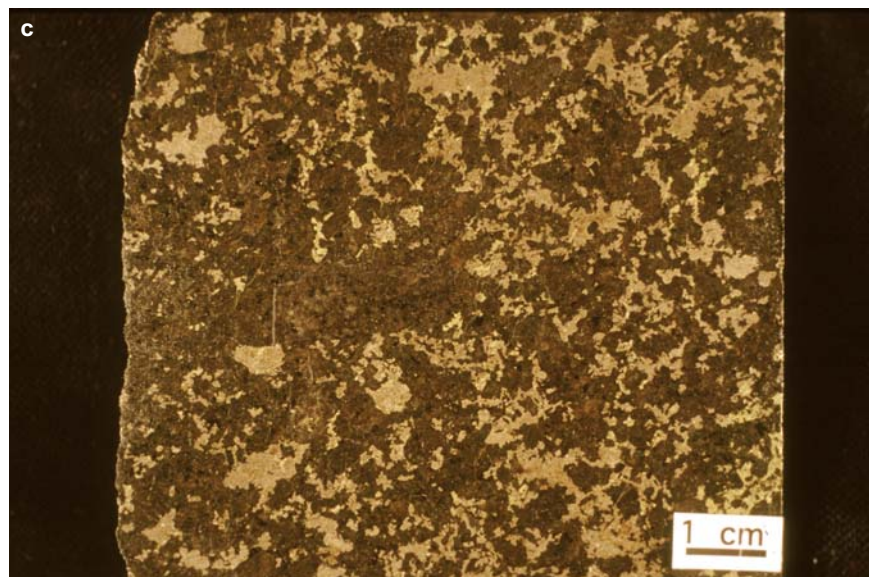


**Figure SR1.4a. Creighton mine.** Typical ore with 10% disseminated to blebby pyrrhotite-chalcopyrite in coarse-grained gabbro. Sample CA-1B, Inco collection.

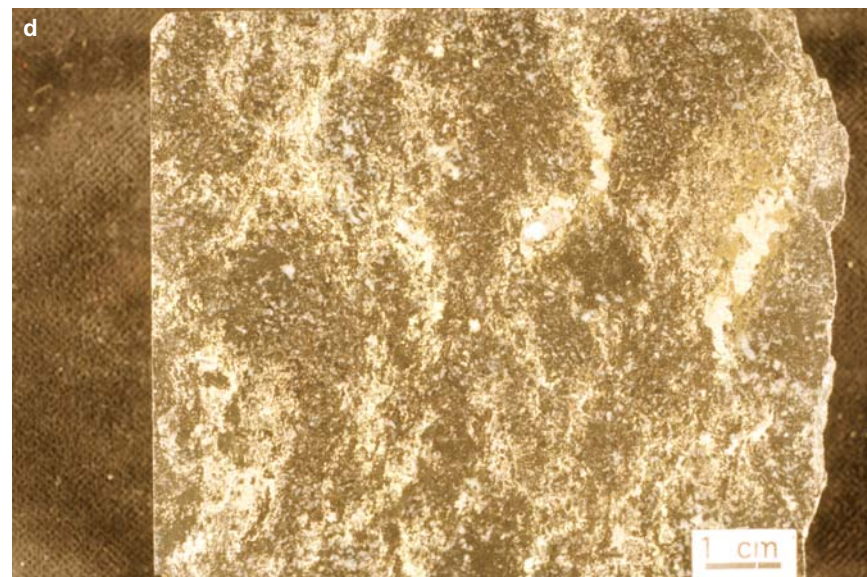


**Figure SR1.4b. Creighton mine.** Typical ore with 12% pyrrhotite-chalcopyrite-pentlandite stringers in coarse-grained gabbro. Sample CA-2B, Inco collection.

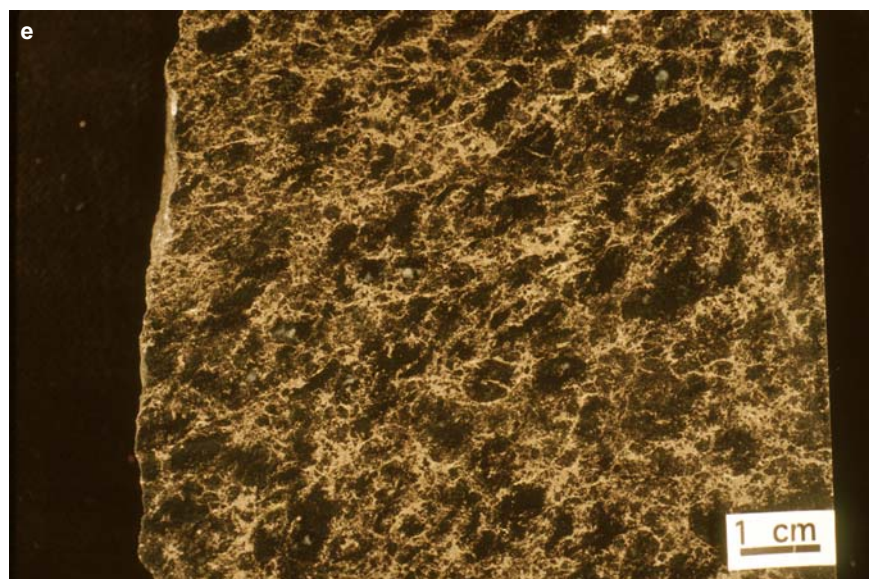




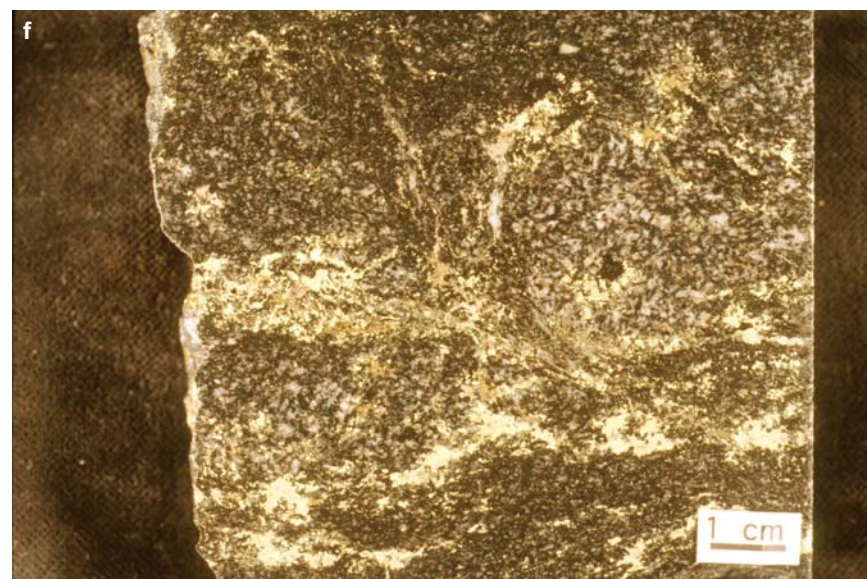
**Figure SR1.4c. Creighton mine.** Typical ore with 30% stringer and blebby pyrrhotite-chalcopyrite in coarse-grained gabbro. Sample CA-3, Inco collection.



**Figure SR1.4d. Creighton mine.** Typical ore with 20% stringer and disseminated chalcopyrite-pyrrhotite-pentlandite in coarse-grained gabbro. Sample CA-4, Inco collection.

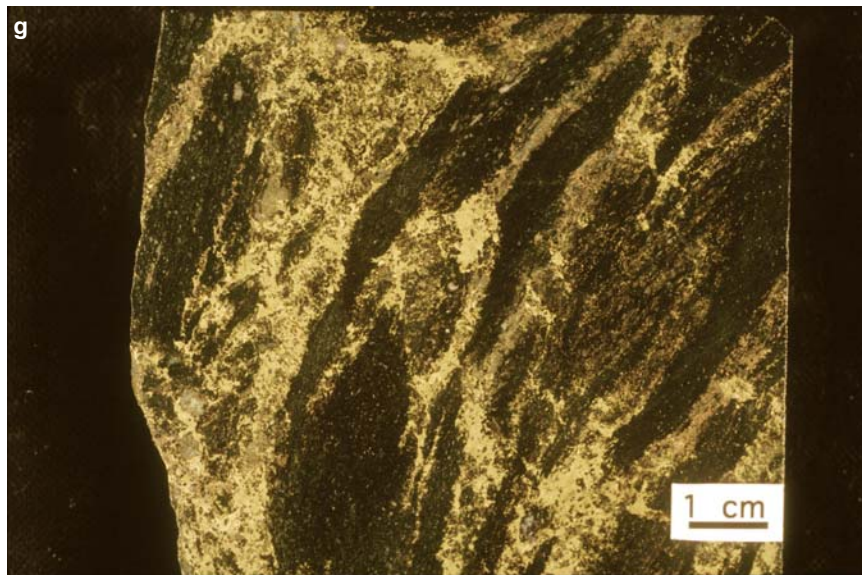


**Figure SR1.4e. Creighton mine.** Typical ore with 25% stringer of pyrrhotite-chalcopyrite forming haloes around rounded gabbro fragments. Sample CA-5, Inco collection.

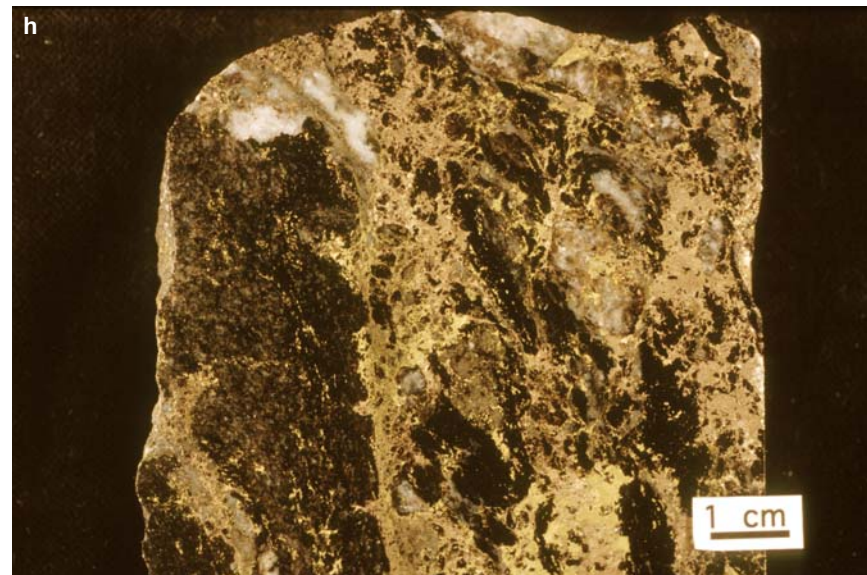


**Figure SR1.4f. Creighton mine.** Typical ore with 15% blebby and disseminated chalcopyrite-pyrrhotite-pentlandite in gabbro. Sample CA-6, Inco collection.

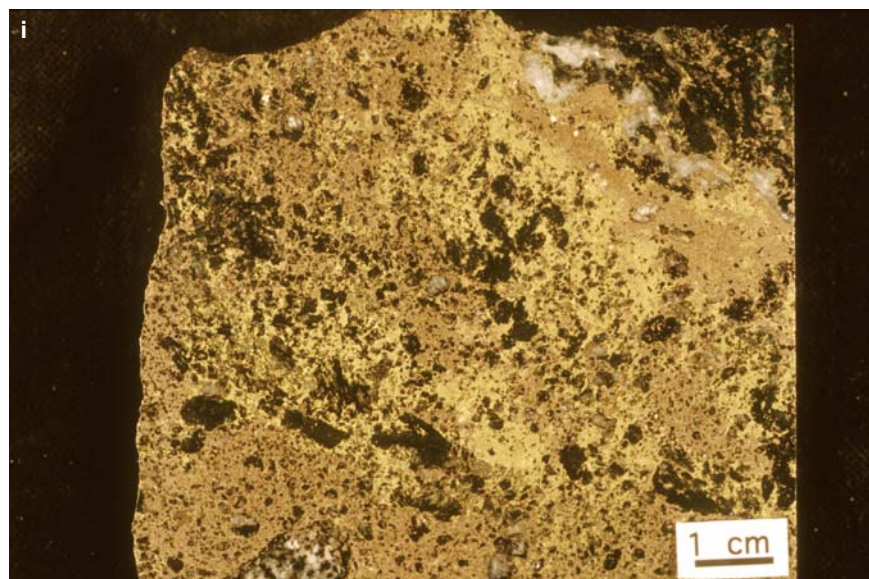




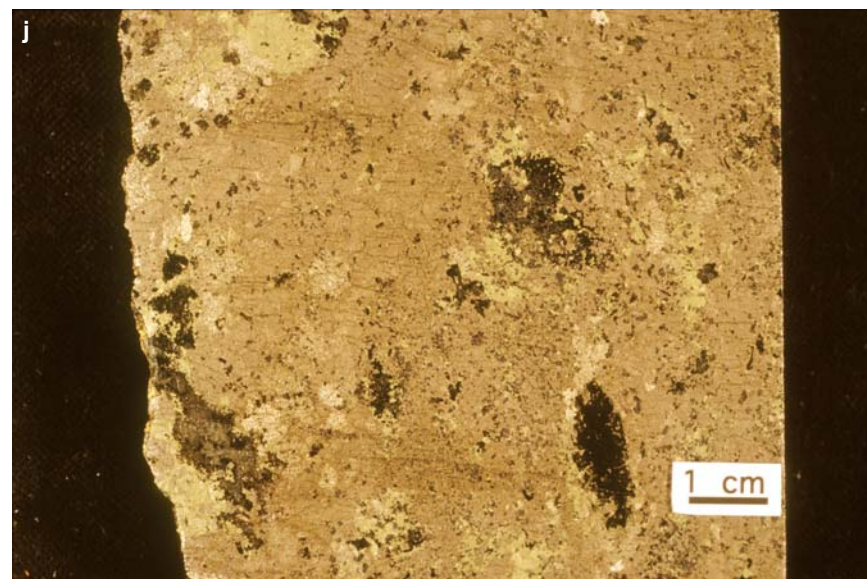
**Figure SR1.4g. Creighton mine.** Typical ore with 20% stringer and blebby chalcopyrite-pyrrhotite in fine-grained gabbro. Sample CB-1, Inco collection.



**Figure SR1.4h. Creighton mine.** Typical ore with 15% stringer and blebby pyrrhotite-chalcopyrite in Levack Gneiss Complex. Sample CB-4, Inco collection.

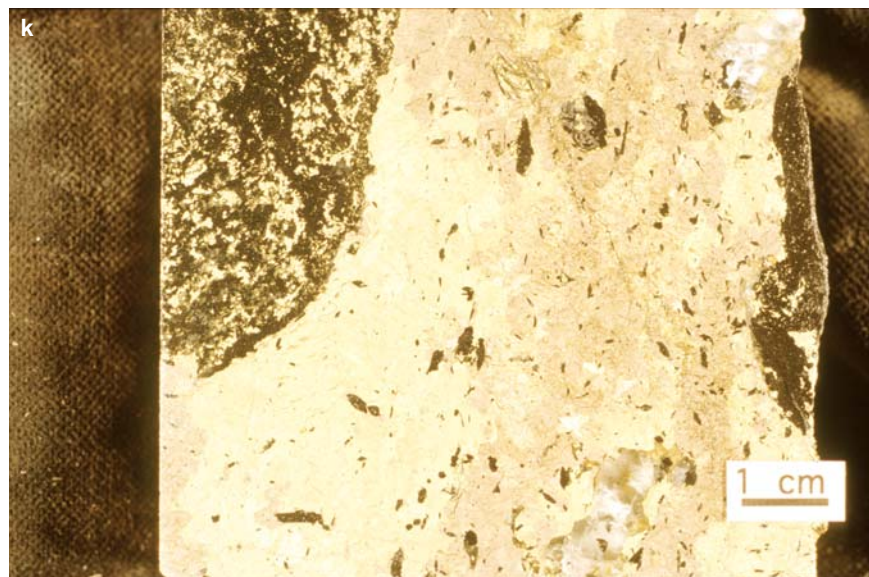


**Figure SR1.4i. Creighton mine.** Representative semi-massive pyrrhotite-chalcopyrite-pyrite in Levack Gneiss Complex. Sample CC-1A, Inco collection.

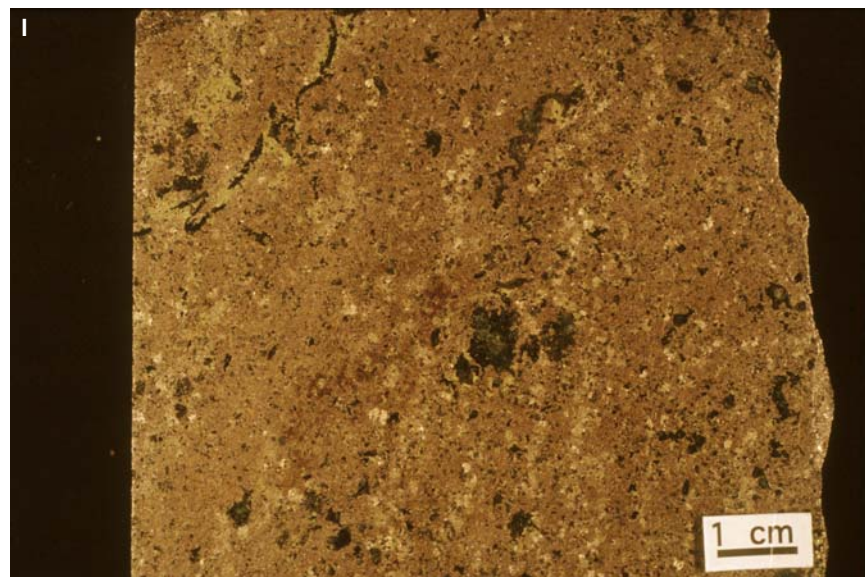


**Figure SR1.4j. Creighton mine.** Representative massive pyrrhotite-pentlandite-chalcopyrite. Sample CC-2B, Inco collection.

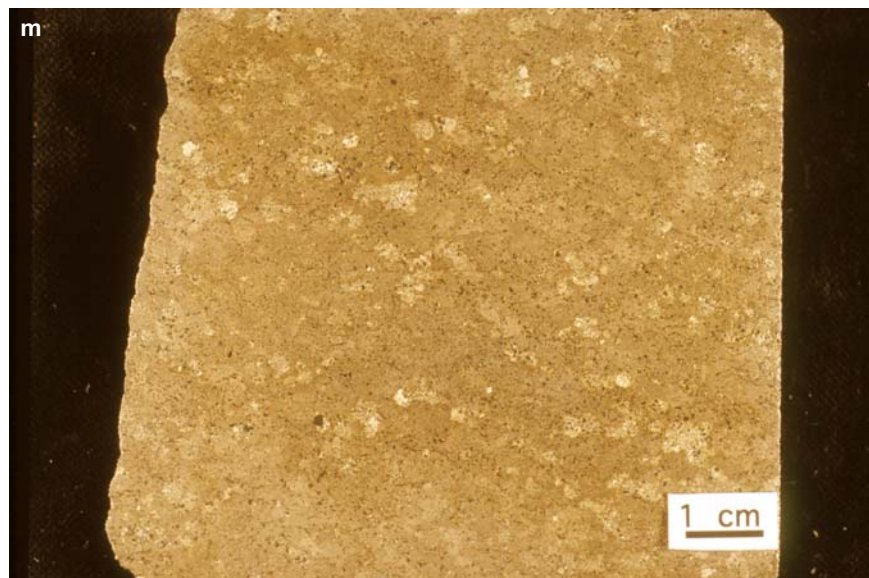




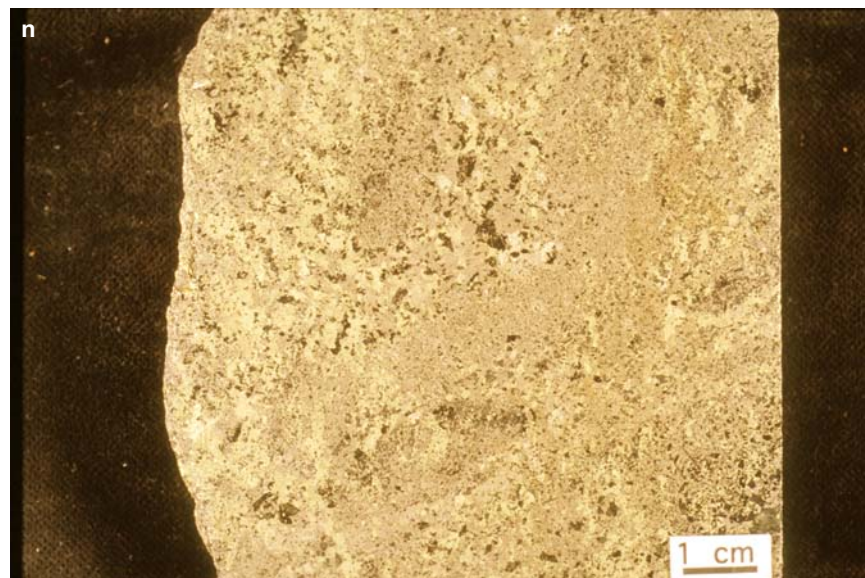
**Figure SR1.4k. Creighton mine.** Representative massive vein composed of chalcopyrite-pentlandite-pyrrhotite-pyrite and disseminated sulphides in Levack Gneiss Complex. Sample CC-3, Inco collection.



**Figure SR1.4l. Creighton mine.** Representative massive pyrrhotite-pentlandite with minor chalcopyrite. Sample CD-2, Inco collection.

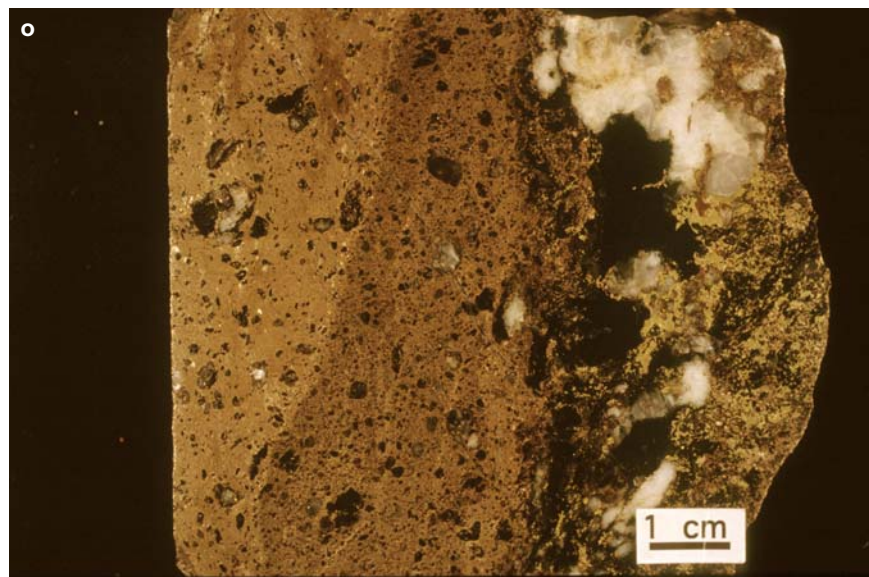


**Figure SR1.4m. Creighton mine.** Representative massive pyrrhotite-pentlandite. Sample CD-3, Inco collection.

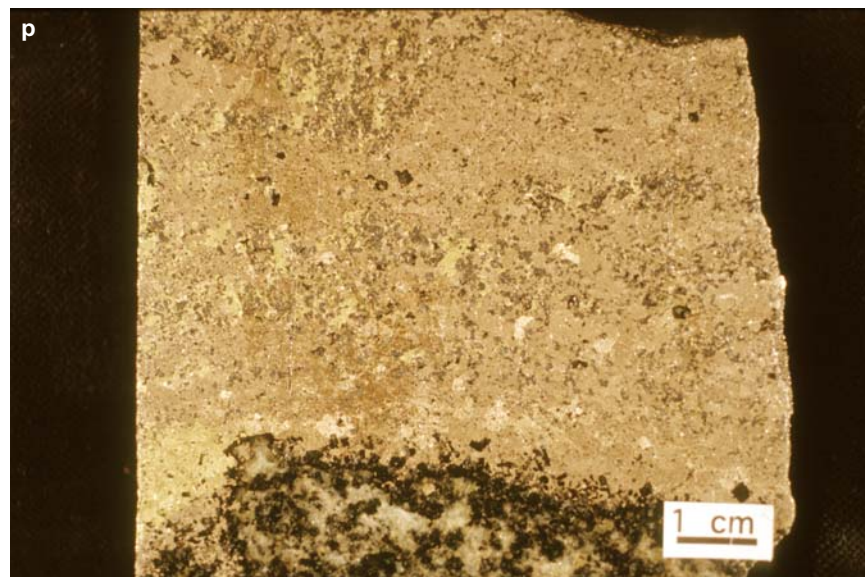


**Figure SR1.4n. Creighton mine.** Representative massive chalcopyrite-pyrrhotite-pentlandite. Sample CD-4, Inco collection.

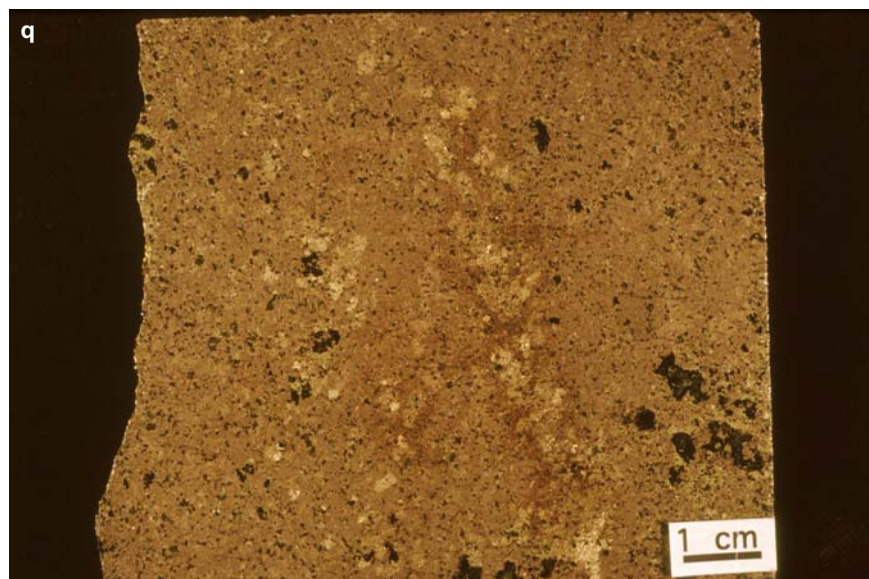




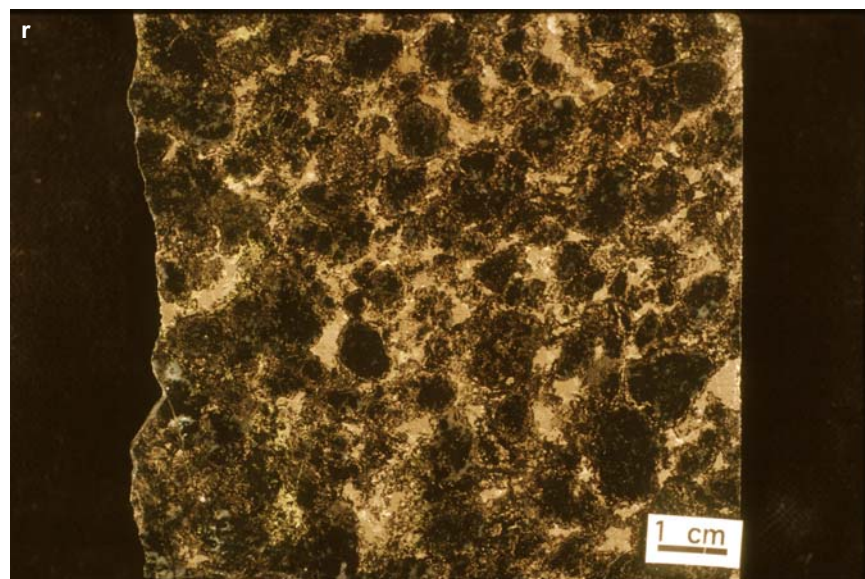
**Figure SR1.4o. Creighton mine.** Representative massive to semi-massive milnerite-pyrrhotite vein and chalcopyrite-pyrrhotite vein. Sample CD-5, Inco collection.



**Figure SR1.4p. Creighton mine.** Representative massive pyrrhotite-pentlandite-chalcopyrite. Sample CD-6, Inco collection.

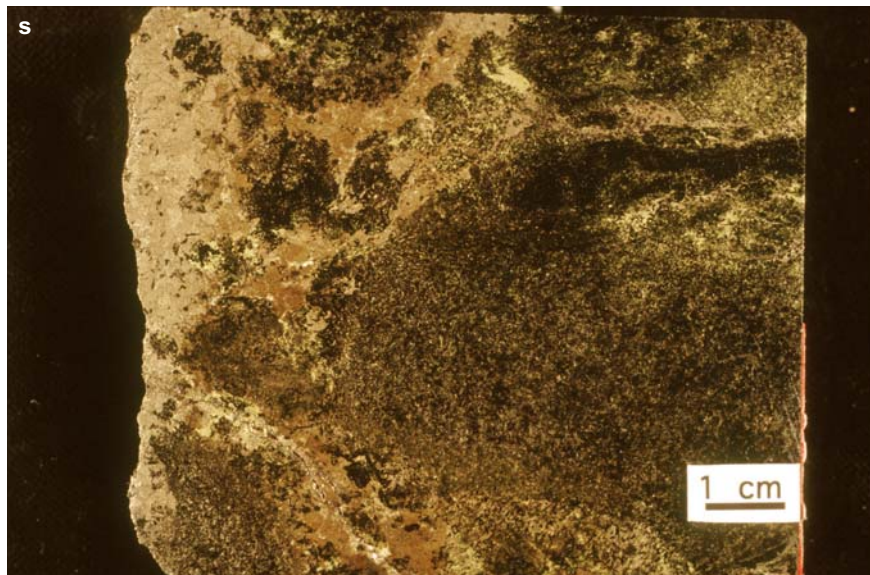


**Figure SR1.4q. Creighton mine.** Representative massive pyrrhotite-pentlandite-chalcopyrite. Sample CD-7, Inco collection.



**Figure SR1.4r. Creighton mine.** Representative interstitial to semi-massive chalcopyrite-pyrrhotite with alteration haloes within gabbro. Sample CE-2, Inco collection.





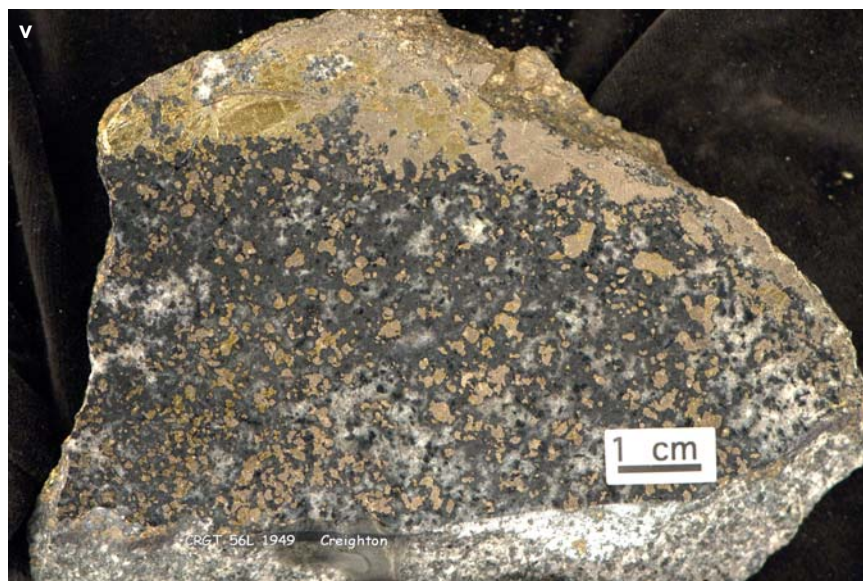
**Figure SR1.4s. Creighton mine.** Representative sample of variably textured sulphide mineralization including stringers, semi-massive, and disseminated chalcopyrite-millerite-pyrrhotite within gabbro. Note alteration haloes around sulphides. Sample CE-3, Inco collection.



**Figure SR1.4t. Creighton mine.** Disseminated sulphide in sheared, possibly sedimentary, biotite-quartz rock. Sample 02-AV-657, 5900 level 4930 drift 4030B.

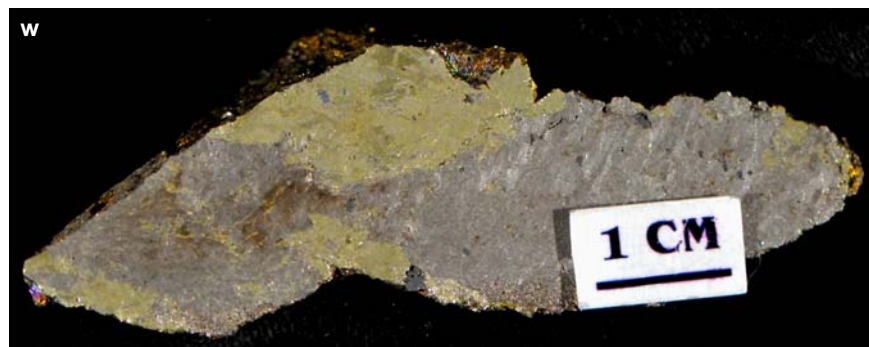


**Figure SR1.4u. Creighton mine.** 3% blebby and disseminated chalcopyrite-pyrrhotite in sheared, possibly sedimentary, biotite-quartz rock. Sample 02-AV-658, 4030B 5900 Level 4930 drift.

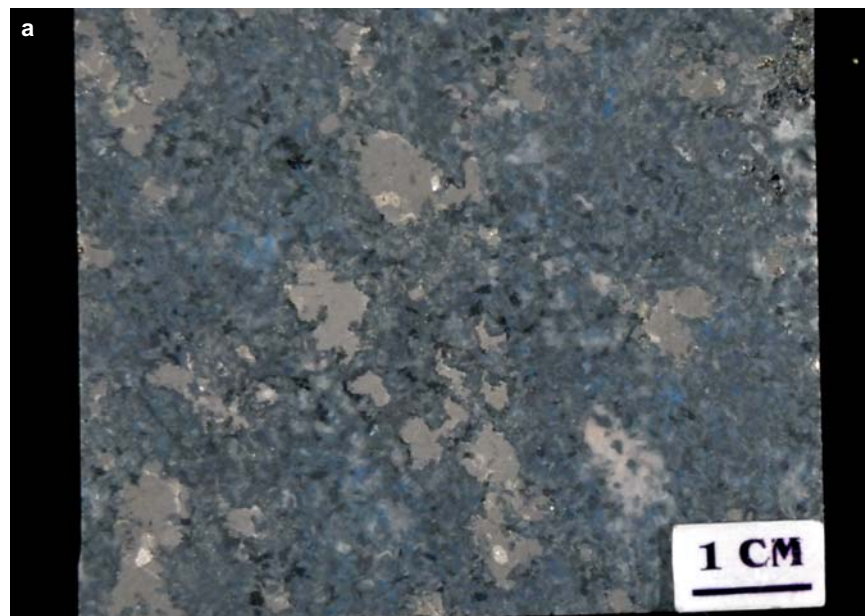


**Figure SR1.4v. Creighton mine.** Massive vein of pyrrhotite-pentlandite and disseminated blebs of pyrrhotite-pentlandite in norite. Sample CRGT1949-1, collected by W.C. Ringsleben in 1949 from the 56 level.

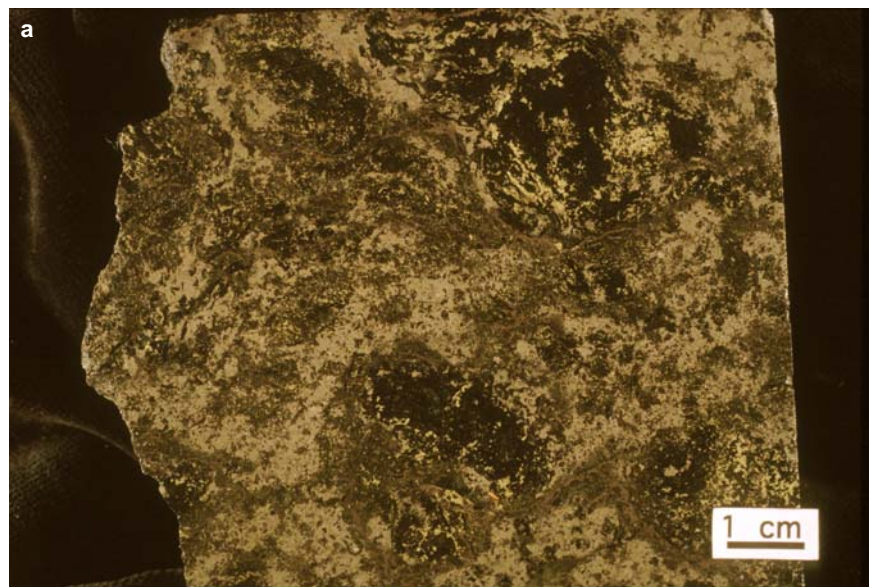




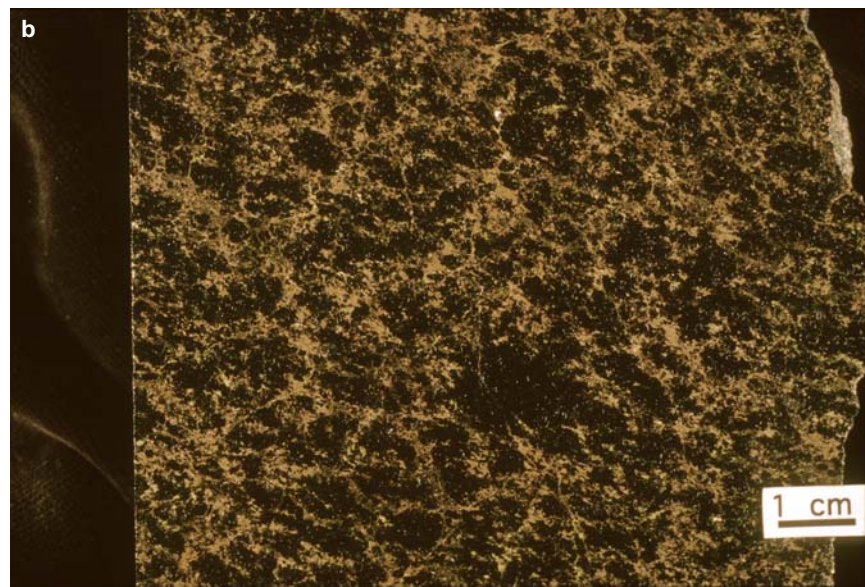
**Figure SR1.4w. Creighton mine.** Massive pyrrhotite-chalcopyrite ore. Sample 98-AV-74, 56 level.



**Figure SR1.5a. Falconbridge mine.** 15% disseminated blebby pyrrhotite-chalcopyrite ore in leucocratic diorite. Sample FLCN1952-1, collected in 1952 by W.C. Ringsleben.



**Figure SR1.6a. East Kirkwood deposit.** Representative massive pyrrhotite-chalcopyrite ore. Sample K-2, Inco collection.

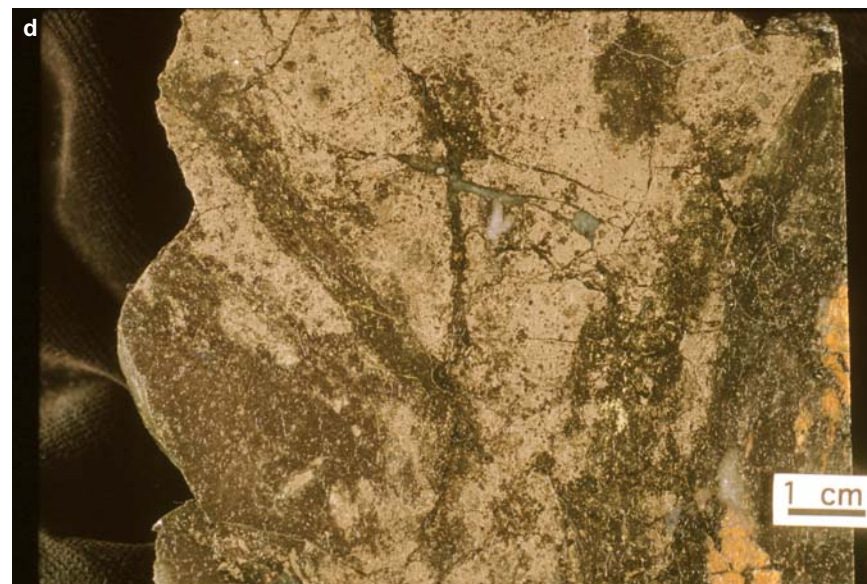


**Figure SR1.6b. East Kirkwood deposit.** Representative semi-massive pyrrhotite-chalcopyrite ore. Sample K-4, Inco collection.

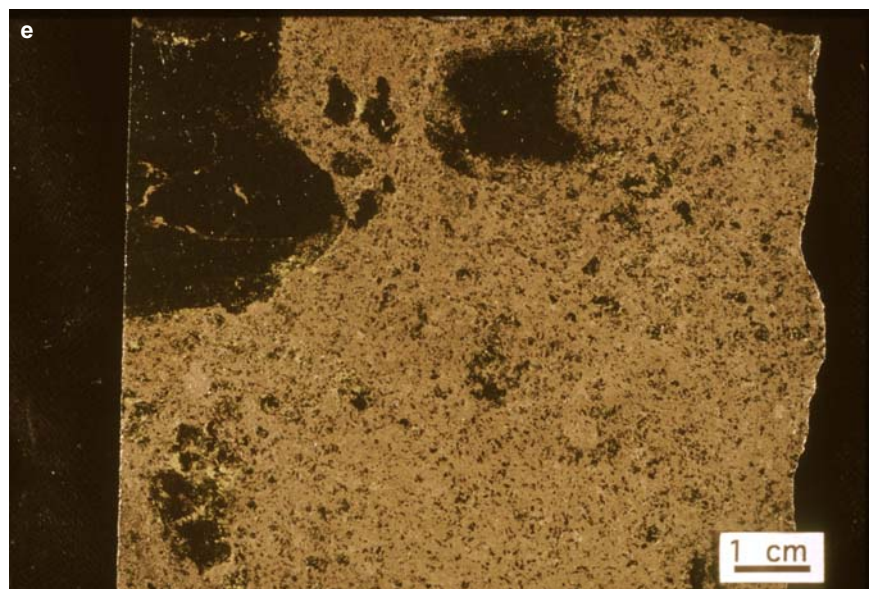




**Figure SR1.6c. Main Kirkwood mine.** Representative massive pyrrhotite-chalcopyrite-magnetite ore. Sample K-3, Inco collection.



**Figure SR1.6d. Main Kirkwood mine.** Representative massive pyrrhotite ore within Levack Gneiss Complex. Sample K-5, Inco collection.



**Figure SR1.6e. Main Kirkwood mine.** Representative massive pyrrhotite-chalcopyrite within coarse-grained gabbro. Sample K-6, Inco collection.

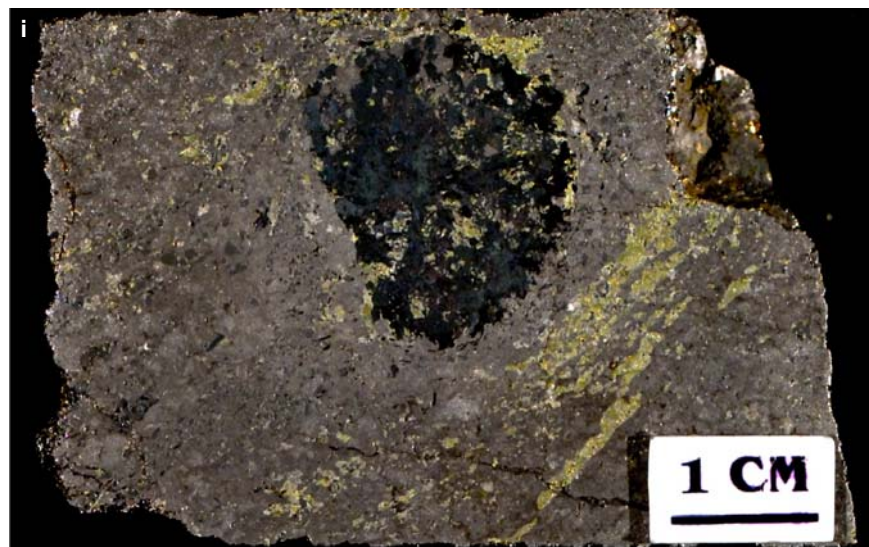


**Figure SR1.6f. West Kirkwood mine.** Typical ore with 15% blebby to stringer pyrrhotite-chalcopyrite in coarse-grained diorite. Sample K-7, Inco collection.





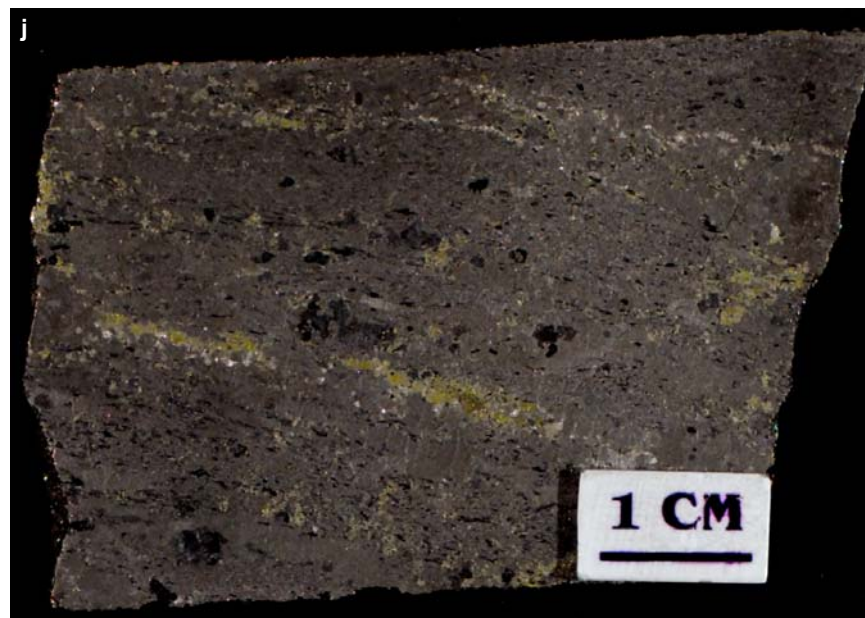
**Figure SR1.6g. Kirkwood deposit.** Semi-massive pyrrhotite in quartz diorite (barren 0.09% Cu, 0.05% Ni, 0.06 TPM). Sample 99-AV-101, collected by Everett Makela from a surface outcrop.



**Figure SR1.6i. Kirkwood deposit.** Massive pyrrhotite with disseminated chalcopyrite-magnetite and mafic rock clasts with alteration halos (5.4ft @ 3.39% Cu, 1.02% Ni, 0.099 oz per ton TPMS). Sample 99-AV-103, collected by Everett Makela from bore hole 93662-1, 2639.5-2644.9 ft.

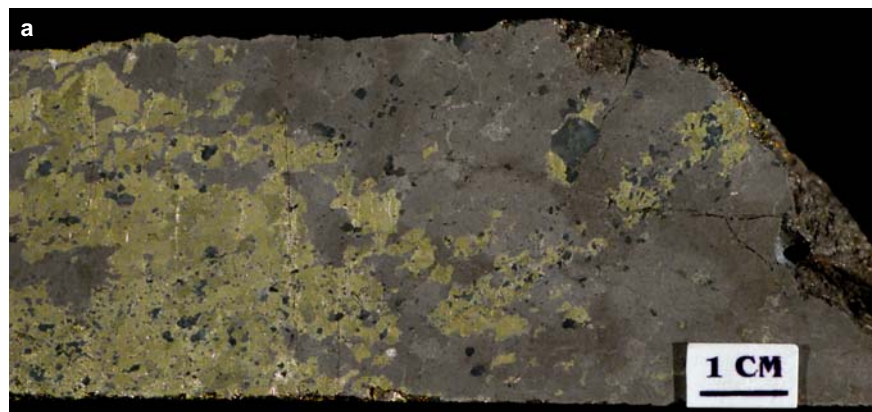


**Figure SR1.6h. Kirkwood deposit.** Pyrrhotite-chalcopyrite vein and disseminated chalcopyrite-pyrrhotite vein within pelite (2.4 ft @ 3.94% Cu, 0.27% Ni 0.793 oz/ton TPMS). Sample 99-AV-102, collected by Everett Makela from bore hole 93662-1, 2631.6-2634 ft.

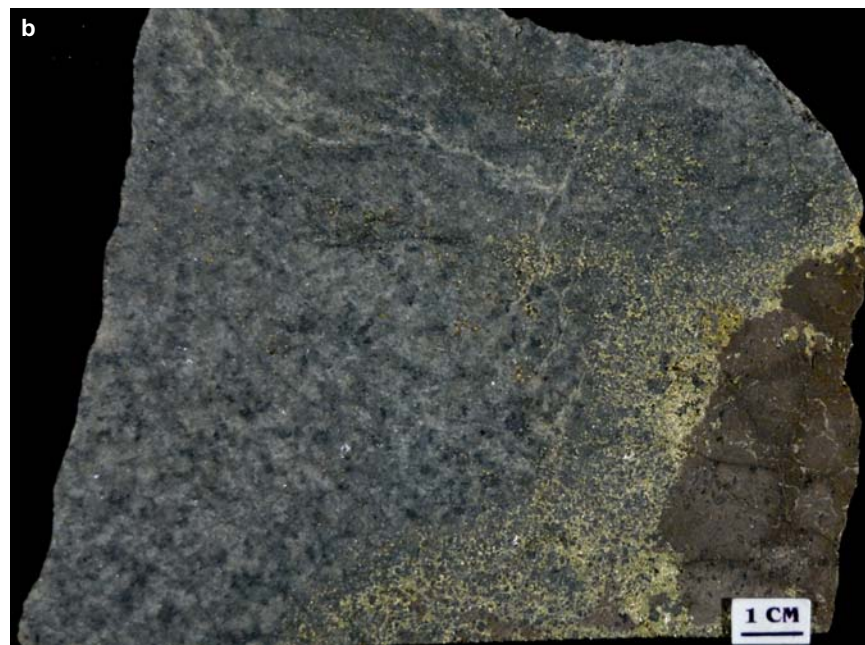


**Figure SR1.6j. Kirkwood deposit.** Massive pyrrhotite with chalcopyrite stringers and disseminated magnetite blebs (4.3 ft @ 1.76% Cu, 1.37% Ni, 0.094 oz per ton TPMS). Sample 99-AV-104, collected by Everett Makela from bore hole 93662-1, 2657.3-2661.6 ft

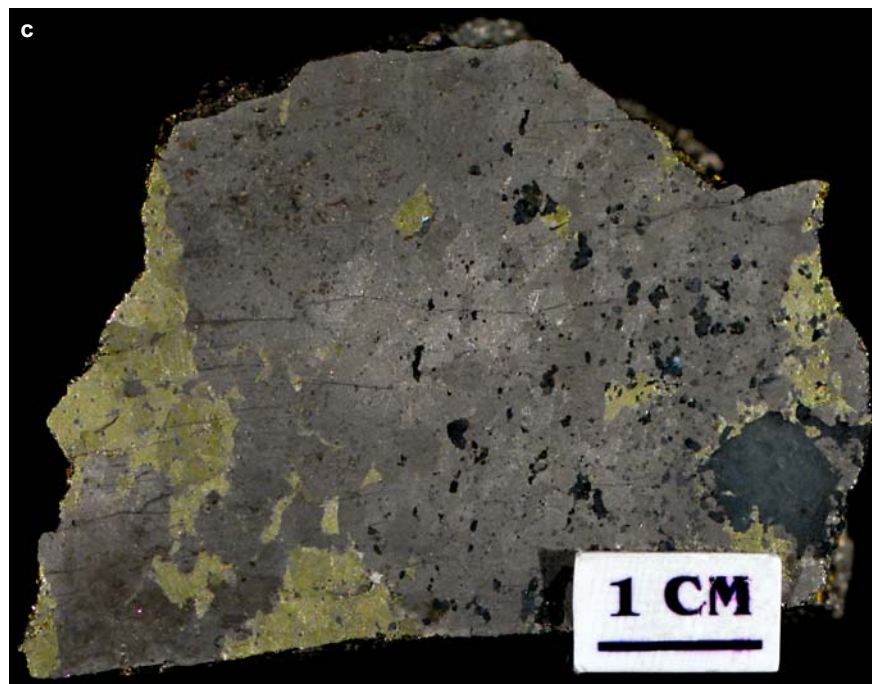




**Figure SR1.7a. Lindsley deposit.** Massive coarse pyrrhotite-chalcopyrite-magnetite ore. Sample 01-AV-184, collected by Watkinson.



**Figure SR1.7b. Lindsley deposit.** Massive pyrrhotite with finely disseminated magnetite and with a rim of chalcopyrite disseminates outward into the Levack Gneiss Complex. Sample 01-AV-210, collected by Watkinson.

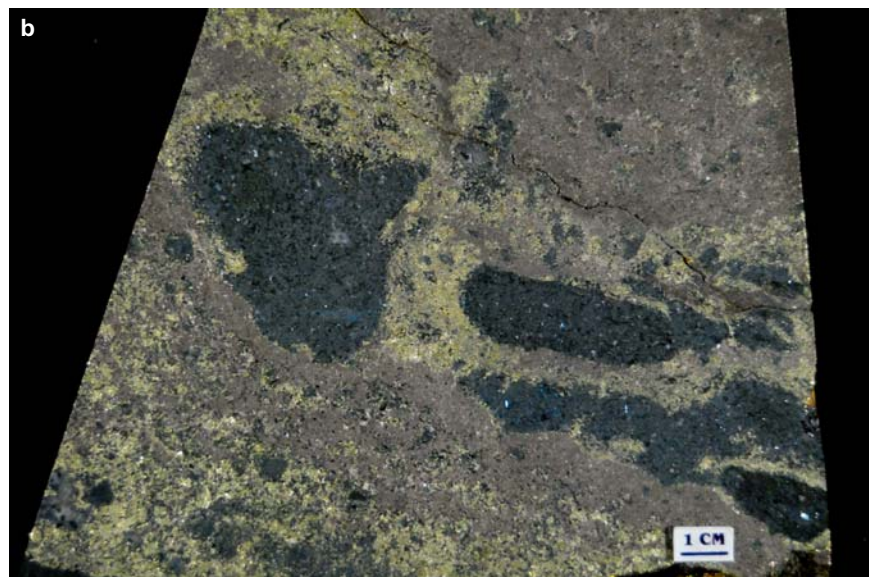


**Figure SR1.7c. Lindsley deposit.** Massive pyrrhotite with blebby chalcopyrite stringers and silicate inclusions. Sample AV-L4b, 4B.

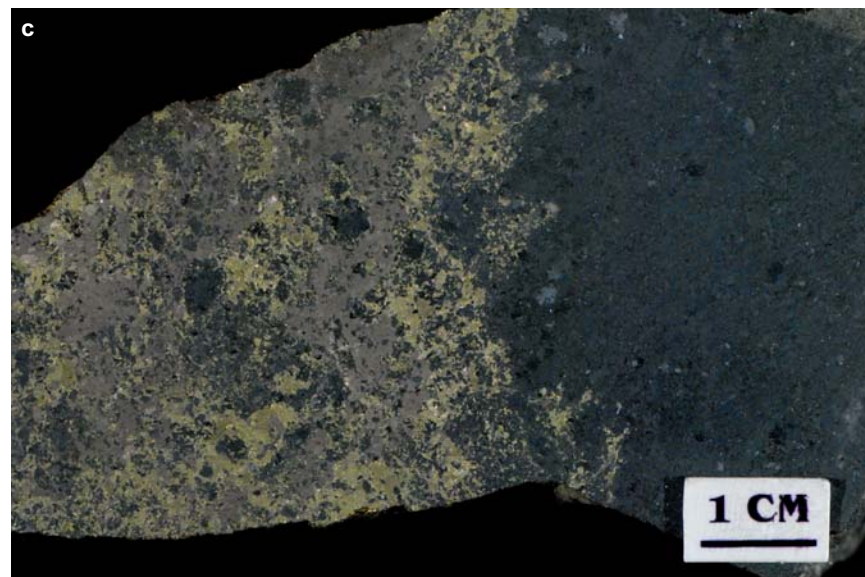


**Figure SR1.8a. Little Stobie mine.** Blebby to disseminated pyrrhotite with minor chalcopyrite within mafic rock. Sample EI-70-27.

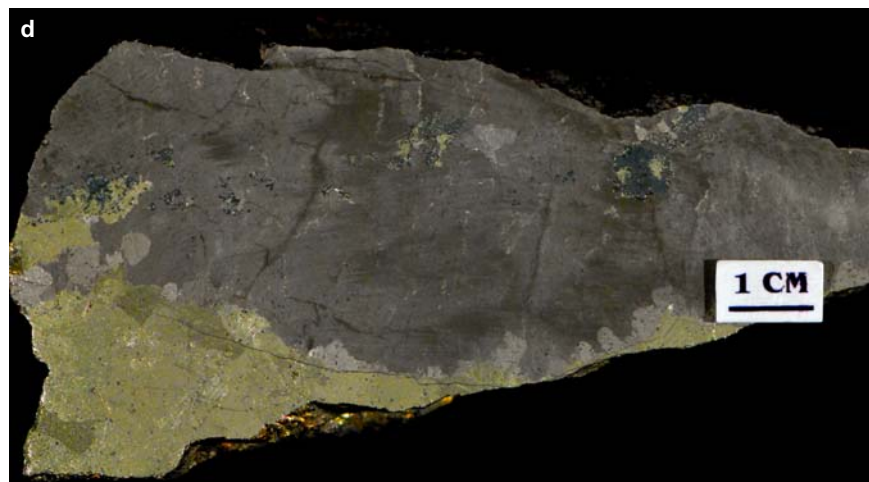




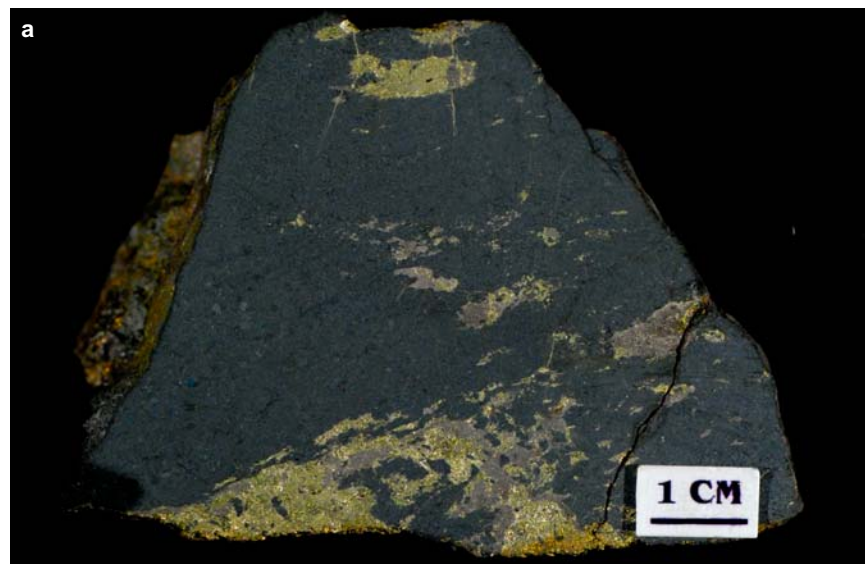
**Figure SR1.8b. Little Stobie mine.** Semi-massive sulphide coarse pyrrhotite-chalcopyrite in mafic Levack Gneiss Complex. Sample 01-AV-212, collected by Watkinson.



**Figure SR1.8c. Little Stobie mine.** Interstitial to semi-massive pyrrhotite-chalcopyrite-bornite in Levack Gneiss Complex. Sample 01-AV-214, collected by Watkinson.

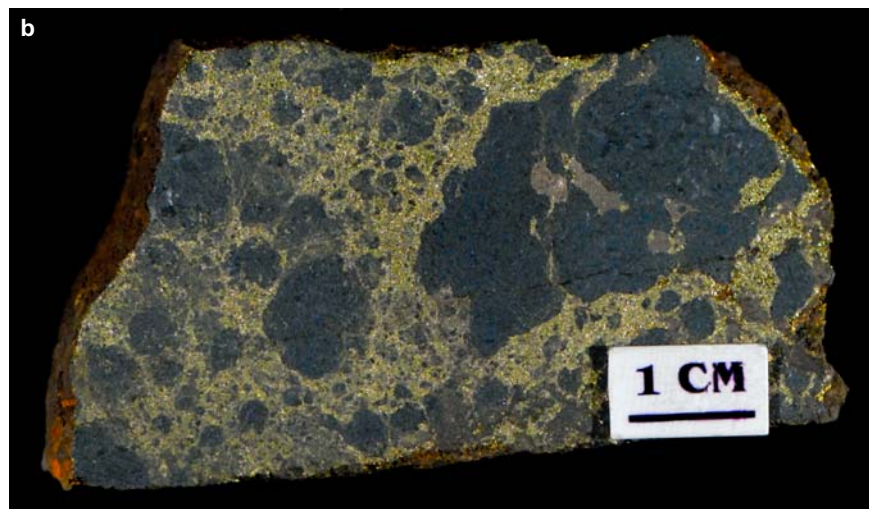


**Figure SR1.8d. Little Stobie mine.** Massive pyrrhotite with minor pentlandite cross-cut by a coarse chalcopyrite vein. Sample 01-AV-217, 1600, collected by Watkinson.



**Figure SR1.9a. Mt Nickel deposit.** Blebby to stringer and disseminated chalcopyrite-pyrrhotite in fine-grained mafic rock. Sample 02-AV-842.





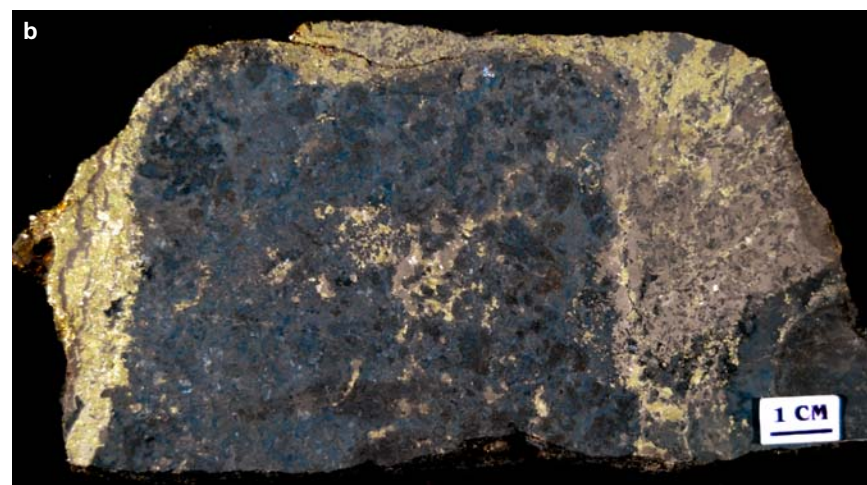
**Figure SR1.9b. Mt Nickel deposit.** Stringer to interstitial chalcopyrite with minor pyrrhotite in fine-grained mafic breccia. Sample 02-AV-843.



**Figure SR1.9c. Mt Nickel deposit.** 25% blebby to stinger and disseminated coarse pyrrhotite-chalcopyrite in gabbro. Sample 02-AV-844.

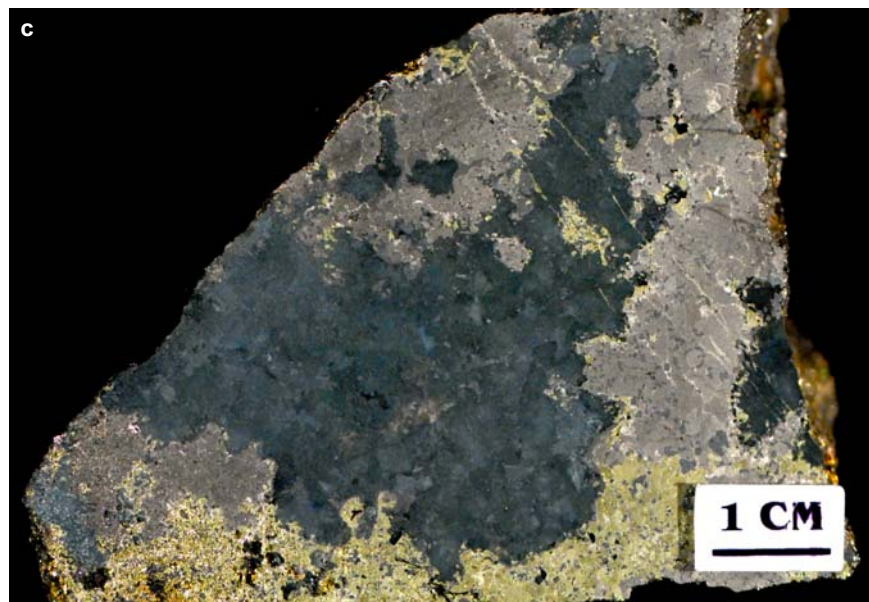


**Figure SR1.10a. Murray mine.** Semi-massive sulphide chalcopyrite > pyrrhotite, form lace-like texture. Sample MRRY1893-1, collected in 1893 by R. Bell (Walker).



**Figure SR1.10b. Murray mine.** Semi-massive sulphide vein and blebby pyrrhotite-chalcopyrite within mafic norite. Sample EI-70-02, collected by Roger Eckstrand from the 1650 level.





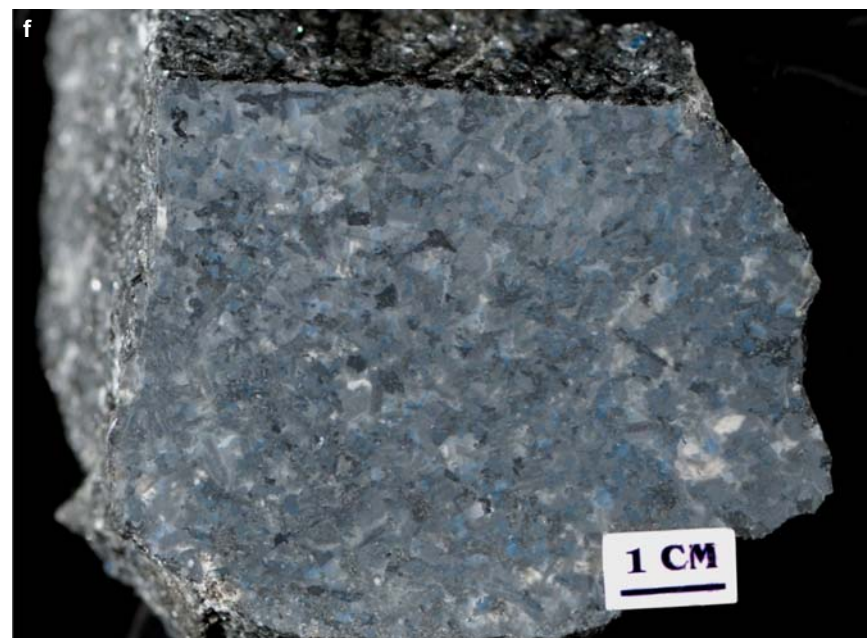
**Figure SR1.10c. Murray mine.** Massive sulphide veins composed of pyrrhotite-chalcopyrite cross-cutting volcanic rock. (GPIS with exotic inclusions. Some "Sudburyite" inclusions of hornfelsed volcanic rock). Sample EI-70-03, collected by Roger Eckstrand from the 1650 level.



**Figure SR1.10d. Murray mine.** Massive banded pyrrhotite-chalcopyrite (chalcopyrite veins cross-cutting pyrrhotite) with minor disseminated magnetite. Sample EI-70-04, collected by Roger Eckstrand.

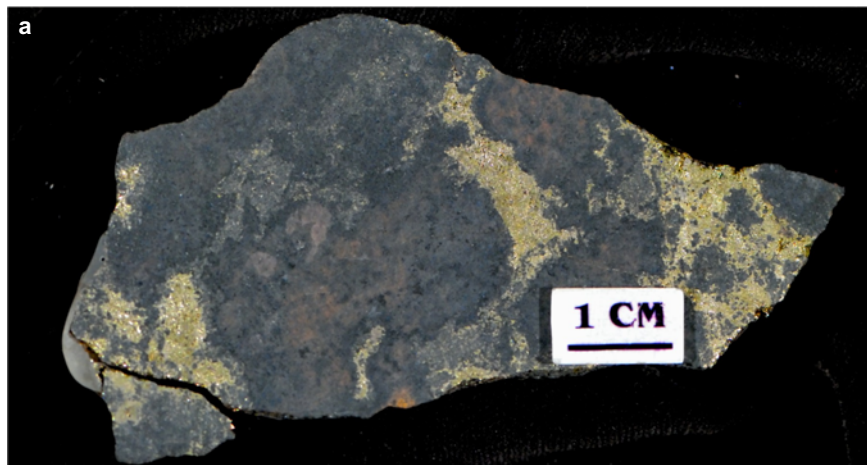


**Figure SR1.10e. Murray mine.** Massive pyrrhotite vein with minor chalcopyrite-magnetite cross-cutting Footwall granite. Sample EI-70-05, collected by Roger Eckstrand from the 1650 level.



**Figure SR1.10f. Murray mine.** 1% disseminated pyrrhotite within quartz-rich norite. Sample EI-70-06, collected by Roger Eckstrand from the pit.

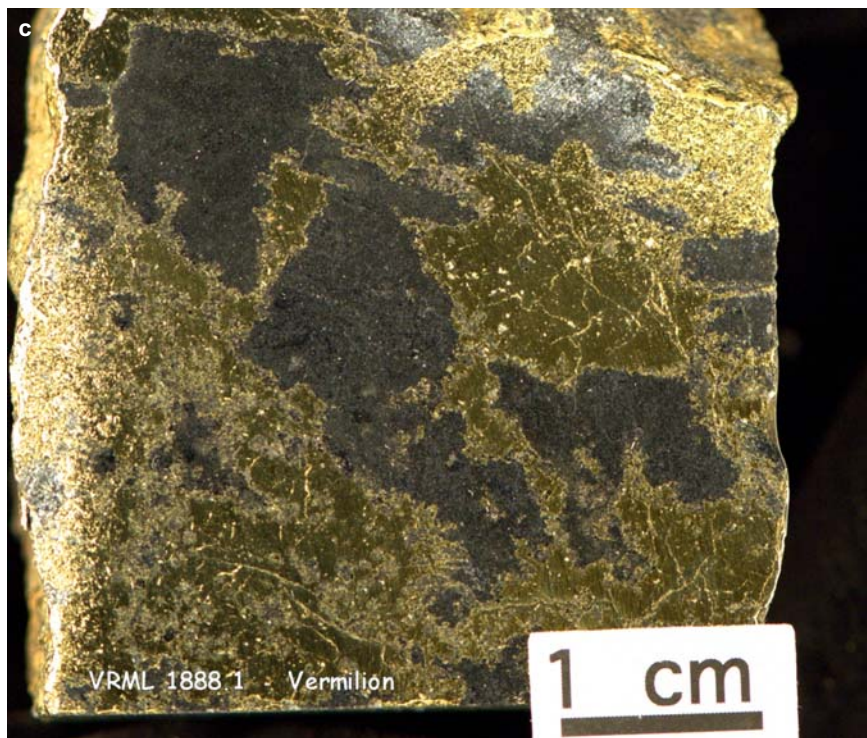




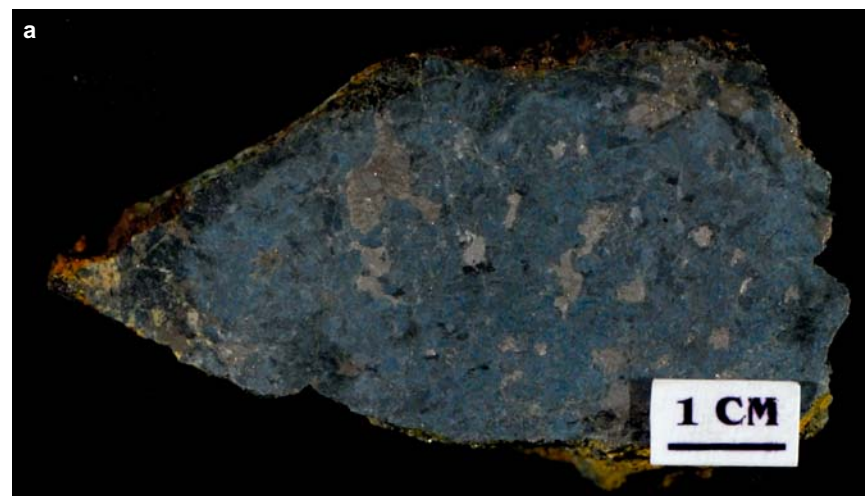
**Figure SR1.11a. Vermillion mine.** Stringer chalcopyrite, possibly sperrylite within altered quartz diorite. Sample 98-AV-95.



**Figure SR1.11b. Vermillion mine.** 20% disseminated chalcopyrite-PGM, very PGE-rich minerals, niccolite-violarite-gersdorffite-maucherite, polydymite in fine-grained chloritized quartz diorite. Sample A88-04-2A, collected in 1988 by H.G. Ansell from Denison Township.



**Figure SR1.11c. Vermillion mine.** Semi-massive chalcopyrite, inclusion-rich chlorite-altered quartz diorite. Sample VRML1888-1, collected in 1888 by R. Bell presented by Mr. Duncan from No. 1 Shaft.

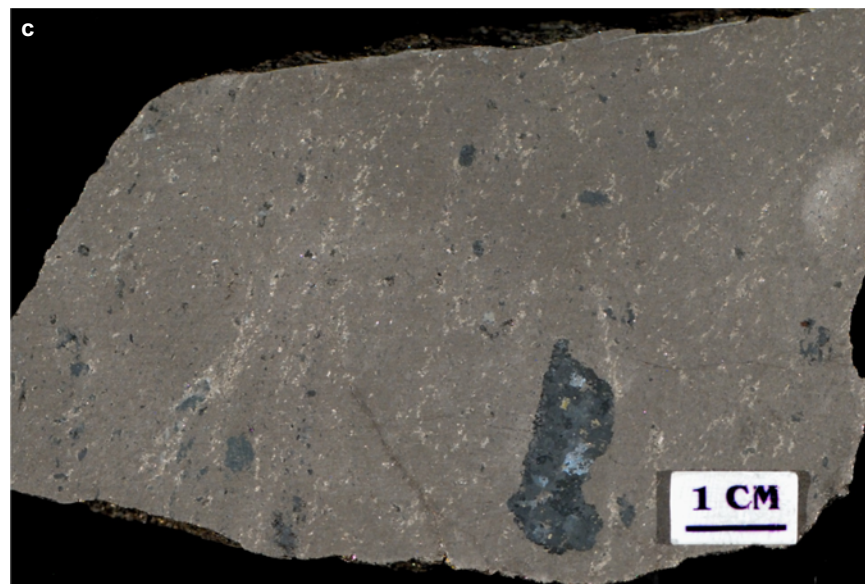


**Figure SR1.12a. Victoria Embayment.** 5% disseminated to blebby pyrrhotite-chalcopyrite, sulphide matrix to sublayer. Note chlorite alteration. Sample 00AV-509, collected near drill hole 99409, Pit 2.

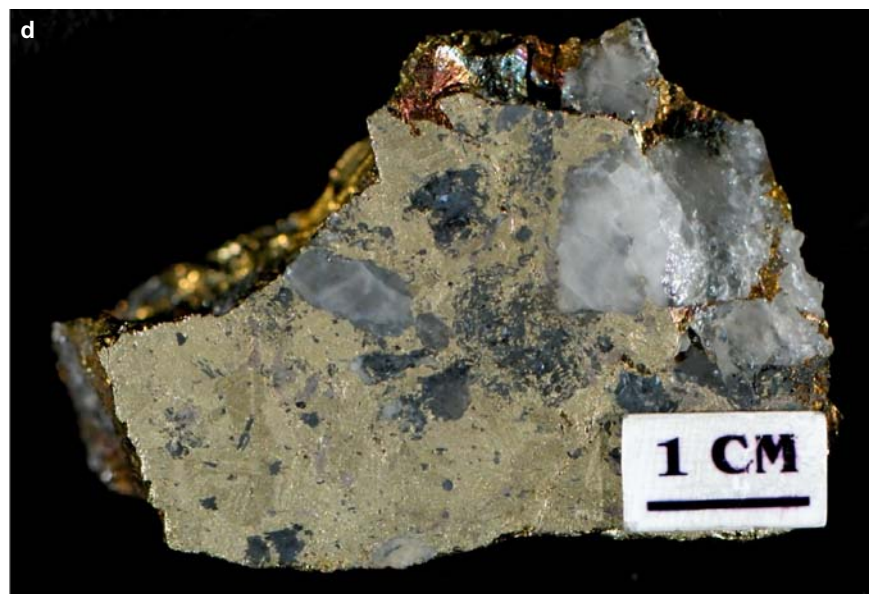




**Figure SR1.12b. Victoria Embayment.** Massive chalcopyrite-cubanite-pyrrhotite-bornite, mineralized amphibolite inclusion surrounded by massive sulphide. Sample 00AV-510, Pit 2.



**Figure SR1.12c. Victoria Embayment.** Massive pyrrhotite with small mafic fragments. Sample 98-AV-82, collected in 1918 by H.V. Ellsworth from Lot 8, Con 2, Denison Township.



**Figure SR1.12d. Victoria Embayment.** Massive chalcopyrite vein with minor pyrrhotite. Sample 98-AV-83, collected in 1918 by H.V. Ellsworth from Lot 8, Con 2, Denison Township.



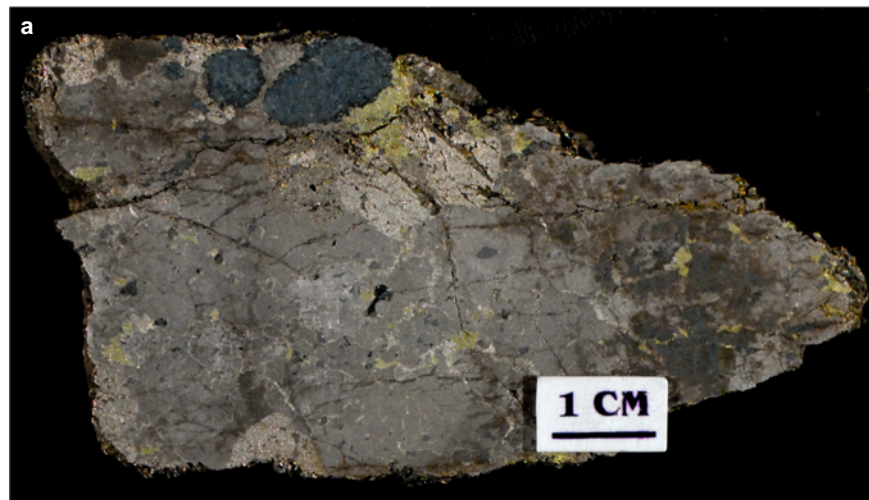
**Figure SR1.12e. Victoria Embayment.** Massive pyrrhotite-chalcopyrite with minor fine-grained magnetite in the chalcopyrite. Sample 98-AV-85, collected in 1918 by H.V. Ellsworth from Lot 8, Con 2, Denison Township.



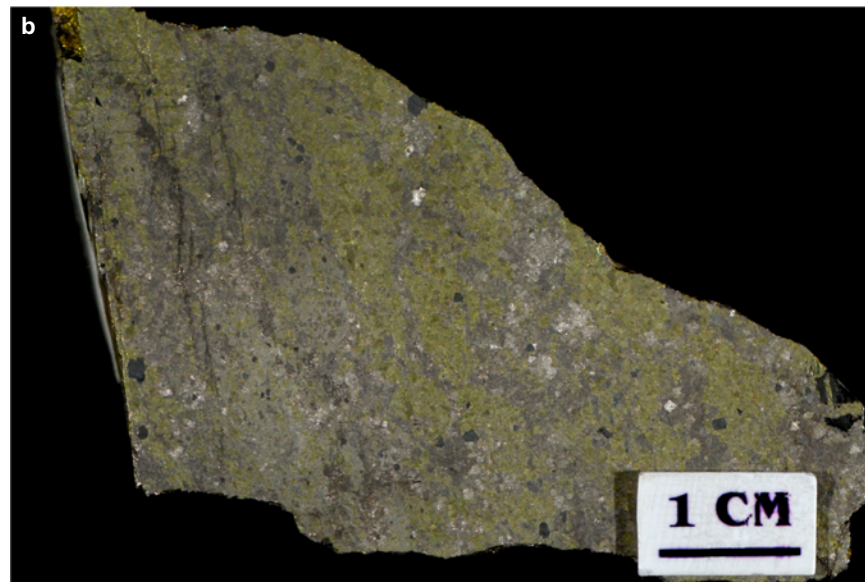


**Figure SR1.12f. Victoria Embayment.** Sheared massive pyrrhotite with interstitial pentlandite and minor chalcopyrite and porphyroclasts of altered host rock. Sample 98-AV-87, collected in 1918 by H.V. Ellsworth from Lot 8, Con 2, Denison Township.





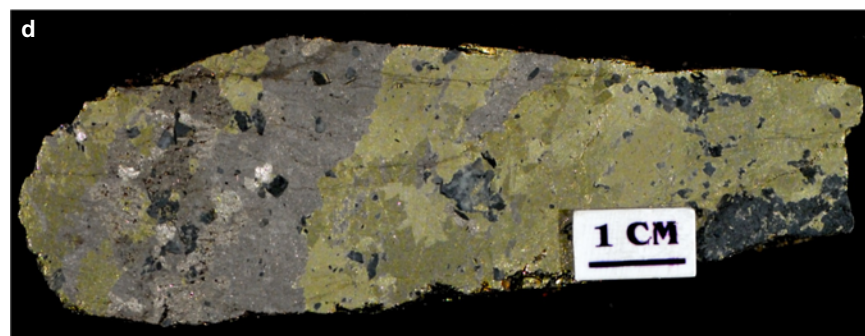
**Figure SR2.1a. Creighton mine.** Massive pyrrhotite-pentlandite-chalcopyrite. Sample 02-AV-654, 403 orebody.



**Figure SR2.1b. Creighton mine.** Massive chalcopyrite-pentlandite with 2 mm blebs of magnetite. Sample 02-AV-656, 4030B 5900 level 4930 drift, 403 orebody.

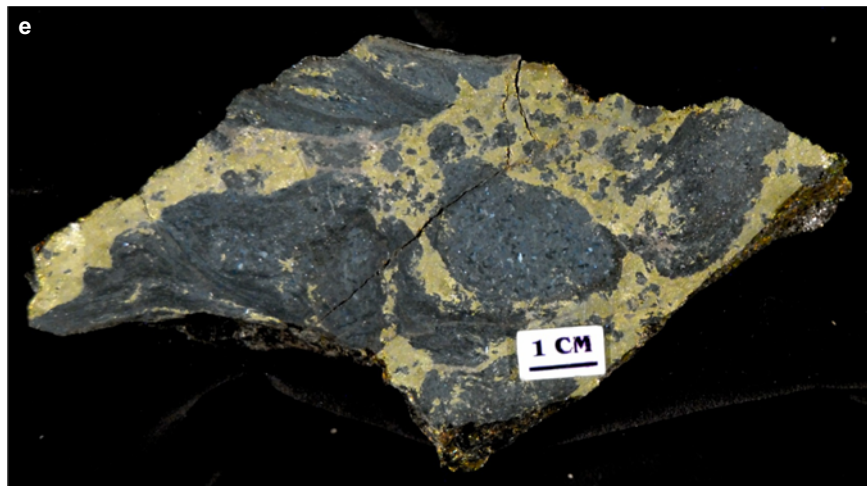


**Figure SR2.1c. Creighton mine.** Semi-massive chalcopyrite-pyrite-millerite(?) in quartz diorite. Sample EI-74-312, collected by Roger Eckstrand from the 5800 level, 403 orebody.

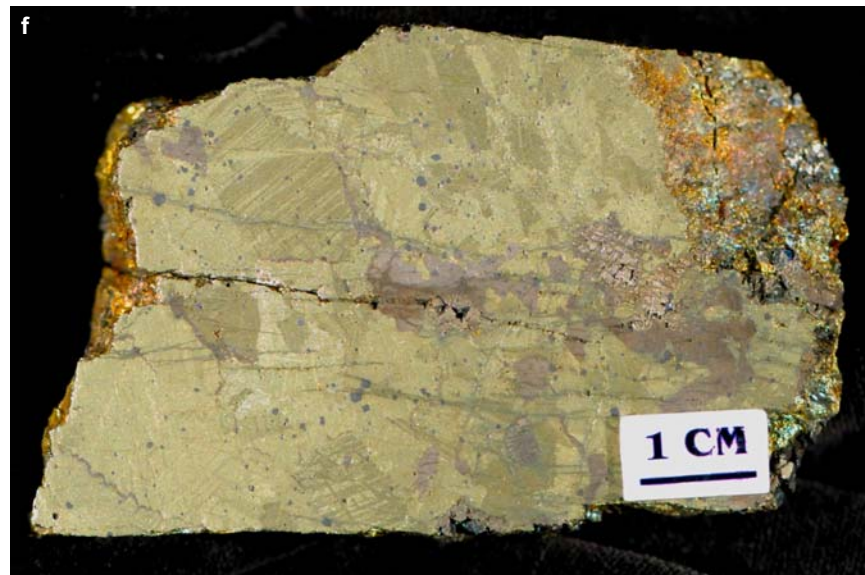


**Figure SR2.1d. Creighton mine.** Massive chalcopyrite with minor chalcopyrite and some mafic xenoliths. Sample EI-74-314A, collected by Roger Eckstrand from the 5800 level, 403 orebody.





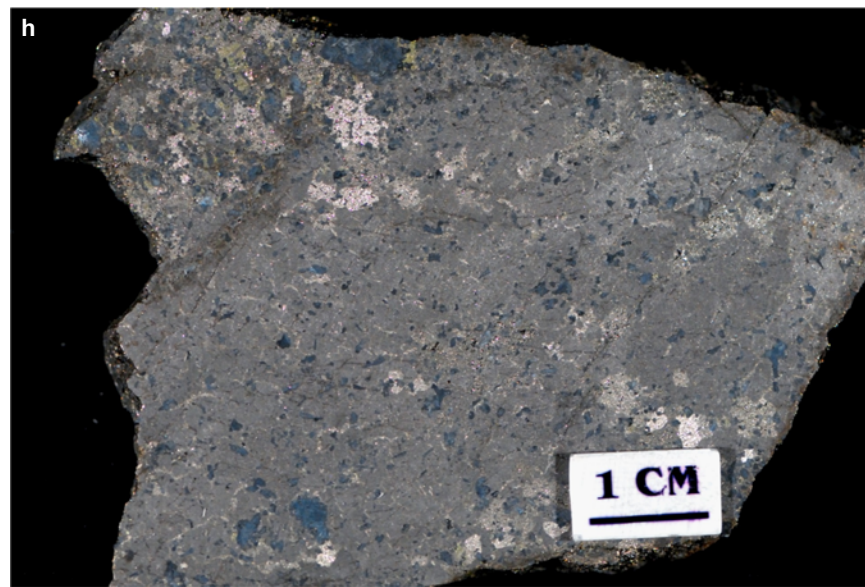
**Figure SR2.1e. Creighton mine.** Massive chalcopyrite vein with minor pyrrhotite in biotite schist. Sample EI-74-315, collected by Roger Eckstrand from the 5800 level, 403 orebody.



**Figure SR2.1f. Creighton mine.** Massive chalcopyrite-pyrrhotite vein with disseminated magnetite blebs. Sample EI-74-309A, collected by Roger Eckstrand from the 126 orebody, 5400 level.

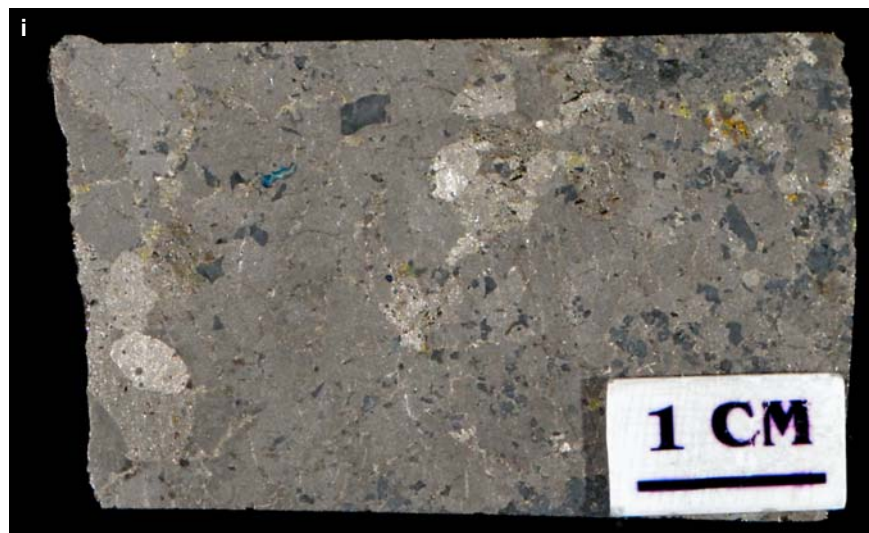


**Figure SR2.1g. Creighton mine.** Massive chalcopyrite-pentlandite-pyrrhotite. Sample EI-74-309B, collected by Roger Eckstrand from the 126 orebody, 5400 level.

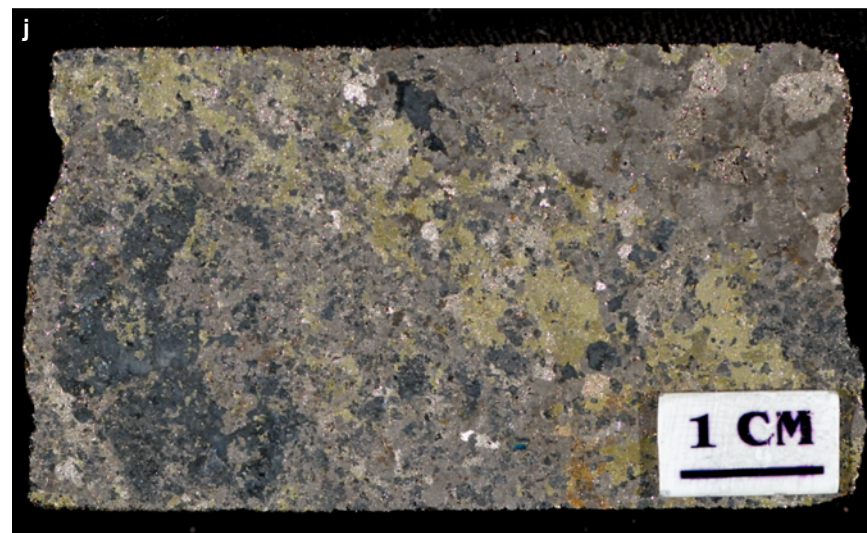


**Figure SR2.1h. Creighton mine.** Massive pyrrhotite with blebby pentlandite and disseminated chalcopyrite (1% Cu, 6.9% Ni). Sample 98-AV-32, 7400 level - 6535D.

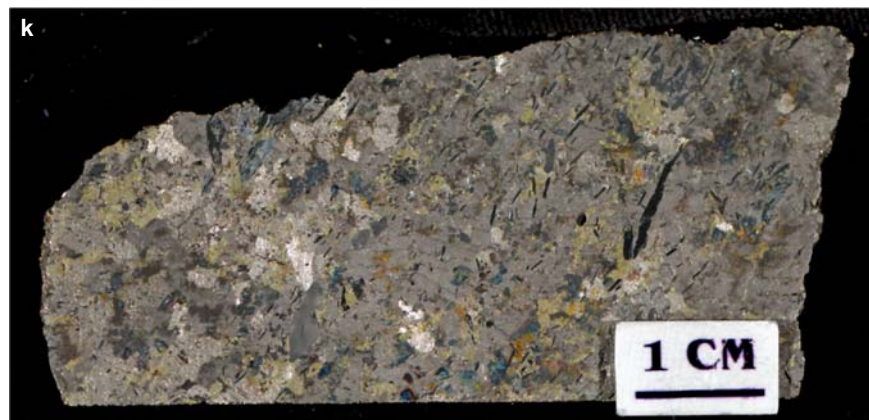




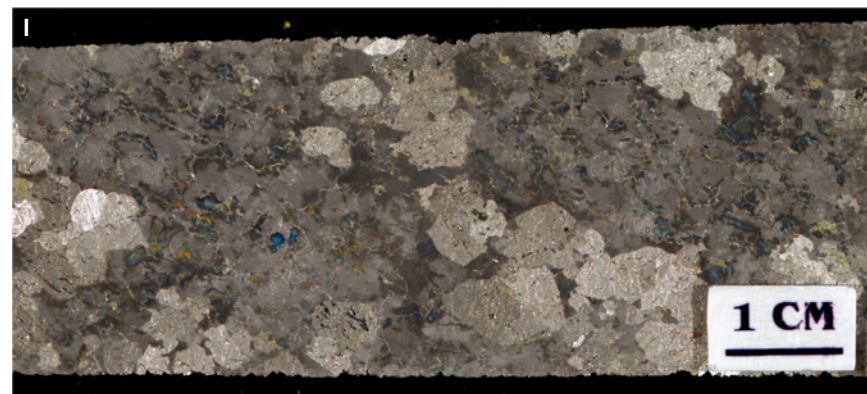
**Figure SR2.1i. Creighton mine.** Massive pyrrhotite with blebby pentlandite and disseminated chalcopyrite and mafic fragments (0.8% Cu, 6.3% Ni). Sample 98-AV-33, 7400 level- 6605Dr.



**Figure SR2.1j. Creighton mine.** Massive pyrrhotite-chalcopyrite-pentlandite-magnetite. Sample 98-AV-34, bore hole 93763, 1050 ft.



**Figure SR2.1k. Creighton mine.** Massive pyrrhotite with blebby pentlandite-chalcopyrite and mafic fragments. Sample 98-AV-35, bore hole 93763, 1030 ft.



**Figure SR2.1l. Creighton mine.** Massive pyrrhotite-pentlandite with disseminated chalcopyrite. Sample 98-AV-36, bore hole 93763, 1060 ft.

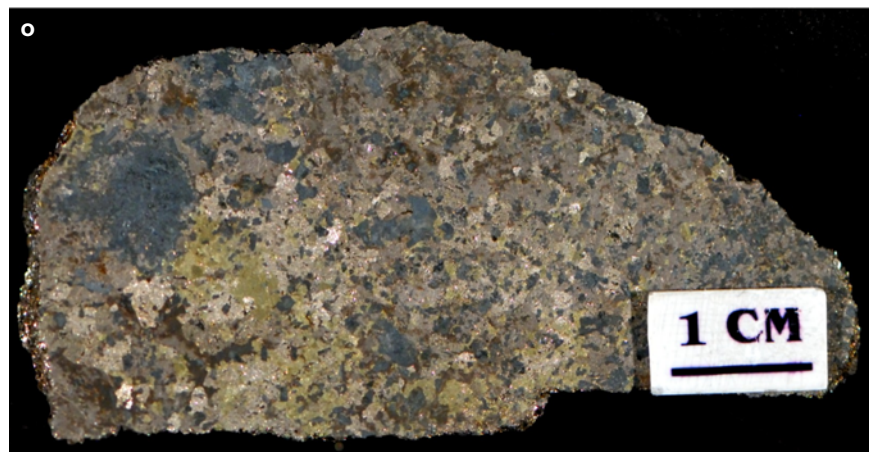




**Figure SR2.1m. Creighton mine.** Massive pyrrhotite-pentlandite-chalcopyrite. Sample 98-AV-37, bore hole 93763-1040 ft.



**Figure SR2.1n. Creighton mine.** Massive pyrrhotite-pentlandite with minor chalcopyrite (1.6% Cu, 5.7% Ni). Sample 98-AV-38, 7400 level- 6635D.

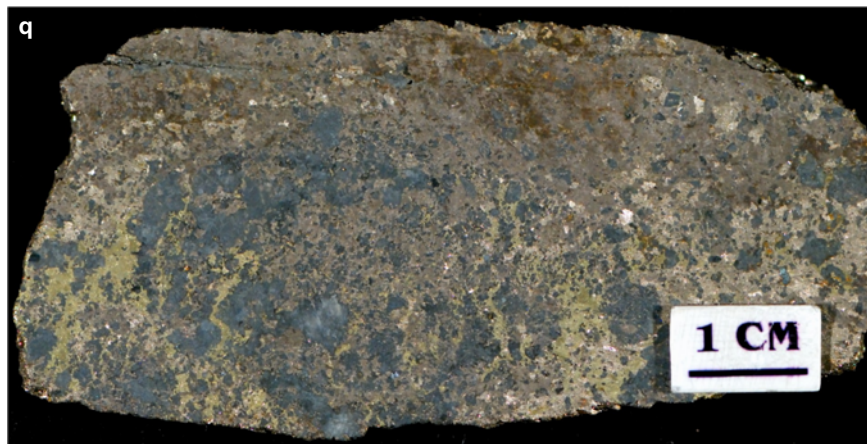


**Figure SR2.1o. Creighton mine.** Massive pyrrhotite with interstitial pentlandite-chalcopyrite and small mafic fragments (2.0% Cu, 4.2% Ni). Sample 98-AV-39, 7400 level -6505D.



**Figure SR2.1p. Creighton mine.** Massive pyrrhotite with blebby pentlandite and disseminated chalcopyrite (1.8% Cu, 6.9% Ni). Sample 98-AV-40, 7400 level - 6545D.





**Figure SR2.1q. Creighton mine.** Semi-massive pyrrhotite with interstitial pentlandite-chalcopyrite in mafic rock (1.6% Cu, 6.7% Ni). Sample 98-AV-41, 7400 level -6605D.



**Figure SR2.2c. Segway deposit.** Very weakly mineralized quartz diorite with less than 1% sulphide. Note chlorite alteration. Sample 05AV-15, bore hole FNX8001, 217.1 ft.



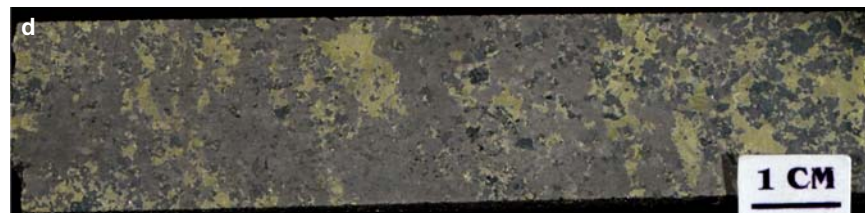
**Figure SR2.2e. Segway deposit.** Massive coarse chalcopyrite-magnetite-pyrrhotite. Sample 05AV-16, bore hole FNX8001, 222.3 ft.



**Figure SR2.2a. Segway deposit.** Massive coarse pyrrhotite with interstitial chalcopyrite and finely disseminated magnetite. Sample 05AV-13, bore hole FNX8001, 207 ft.



**Figure SR2.2b. Segway deposit.** Massive coarse chalcopyrite with coarse blebby magnetite and minor coarse pyrrhotite. Sample 05AV-14, bore hole FNX8001, 208.7 ft.

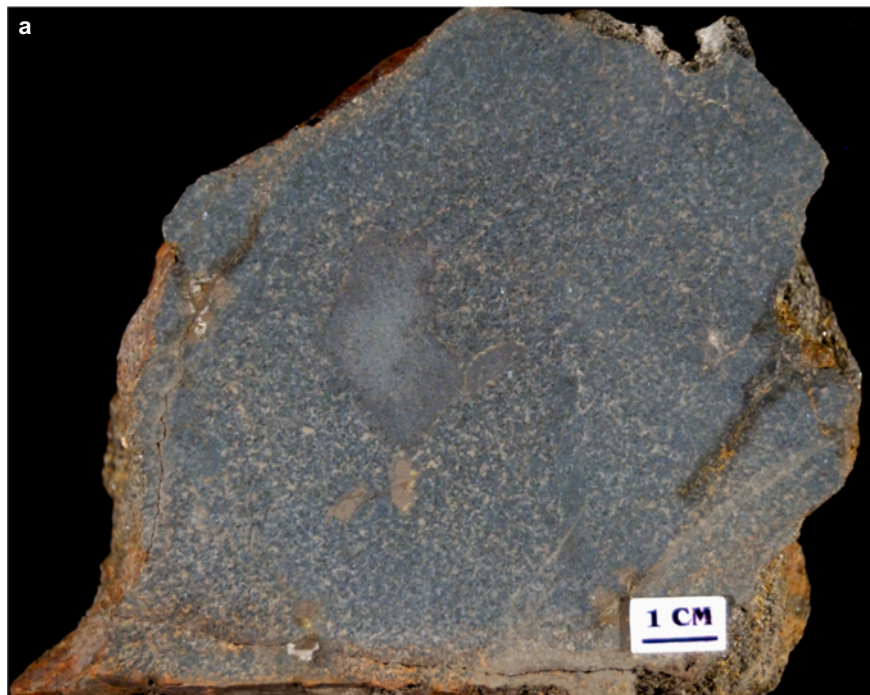


**Figure SR2.2d. Segway deposit.** Massive coarse pyrrhotite-chalcopyrite-magnetite. Sample 05AV-17, bore hole FNX8001, 222.8 ft.

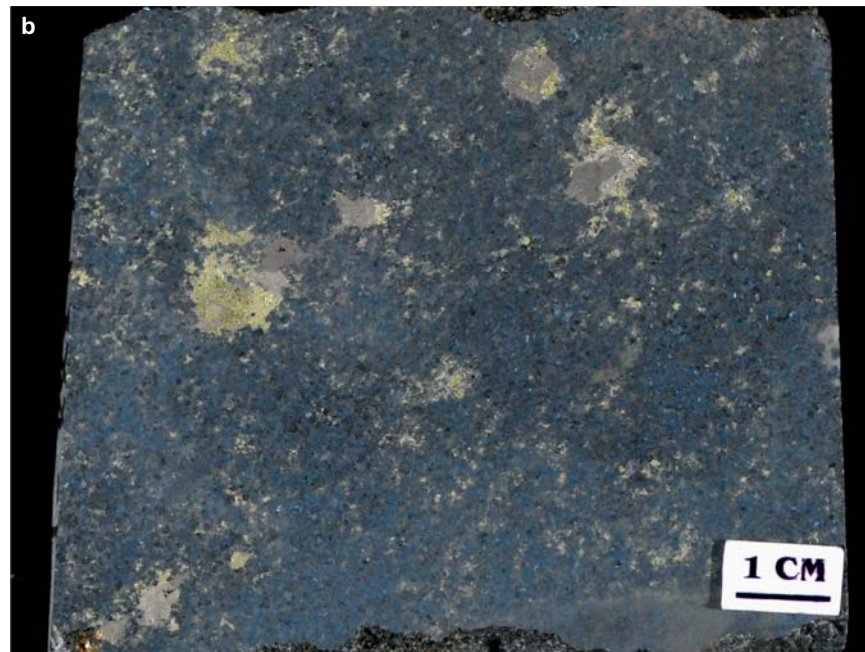


**Figure SR2.2f. Segway deposit.** Massive coarse pyrrhotite with blebby magnetite-chalcopyrite. Sample 05AV-18, bore hole FNX8001, 229 ft.

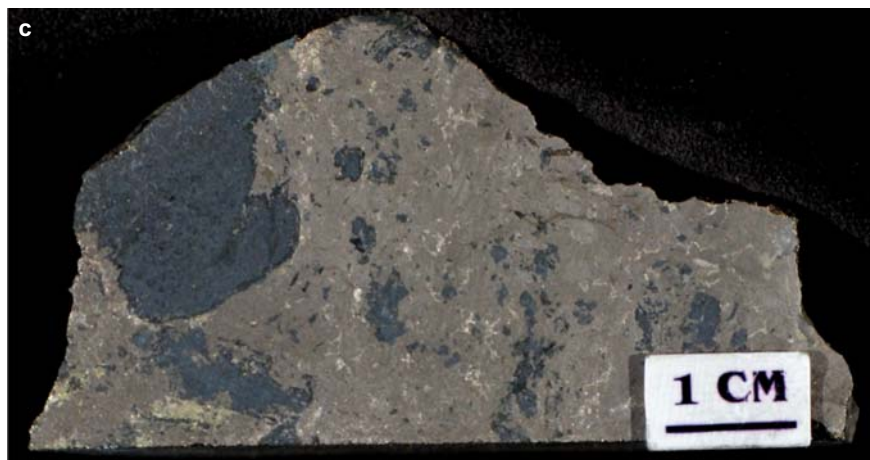




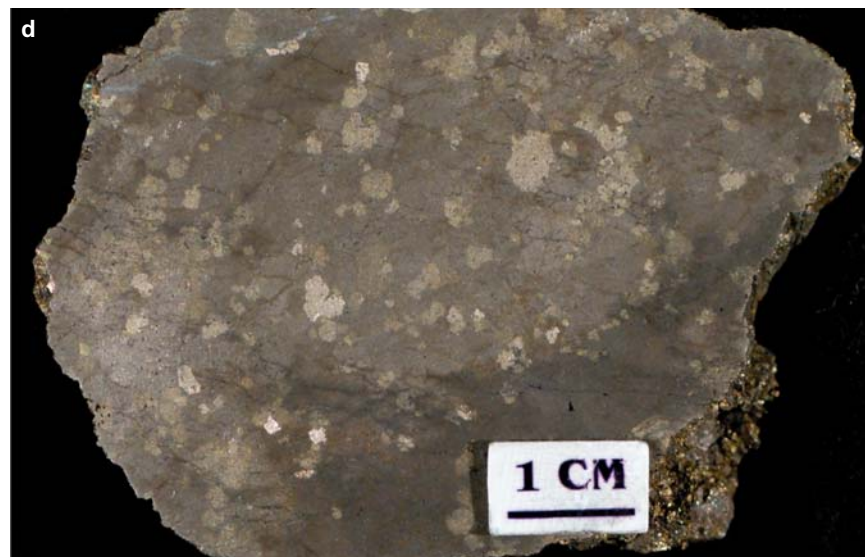
**Figure SR3.1a. Copper Cliff deposit.** Disseminated to blebby pyrrhotite-chalcopyrite (5%) in quartz diorite. Sample EI-76-146.



**Figure SR3.1b. Copper Cliff deposit.** Blebby to disseminated chalcopyrite-pyrrhotite within gabbro. Sample CPPC1888-1, R. Bell, Ccmine shaft.



**Figure SR3.1c. Copper Cliff deposit.** Weakly banded ore consisting of massive pyrrhotite-chalcopyrite. Sample 98-AV-88, Collected in 1887 by R.C. Van Horne from Lot 12, Con 2, McKim Township.



**Figure SR3.1d. Copper Cliff deposit.** Massive coarse pyrrhotite-pentlandite. Note pentlandite occurs interstitial to pyrrhotite. Sample 98-AV-89, Collected in 1887 by R.C. Van Horne from Lot 12, Con 2, McKim Township.





**Figure SR3.1e. Copper Cliff deposit.** Banded massive chalcopyrite- pyrrhotite, "tiger striped" with banded pyrrhotite within chalcopyrite. Sample 98-AV-90, collected in 1887 by R.C. Van Horne from Lot 12, Con 2, McKim Township.



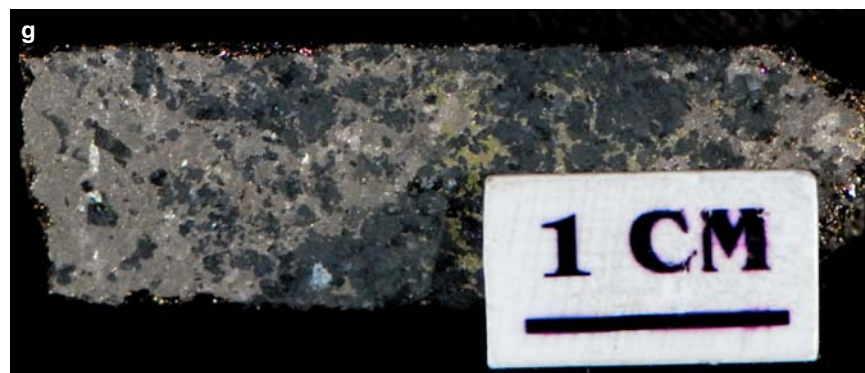
**Figure SR3.1f. Copper Cliff deposit.** Semi-massive pyrrhotite-chalcopyrite-pentlandite. Sample 98-AV-56, bore hole 100506, 312-312.5 ft, 100 orebody.



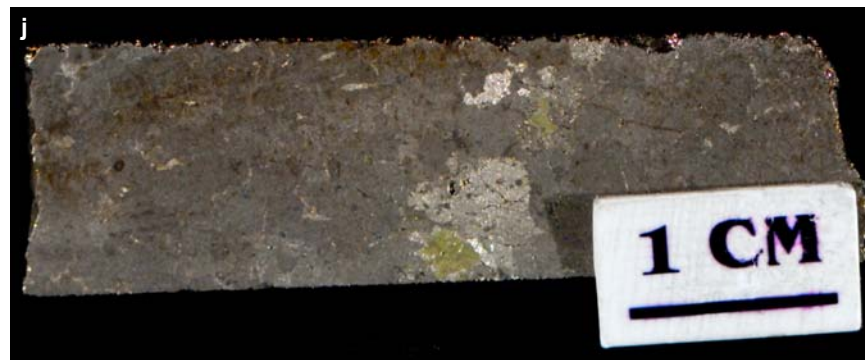
**Figure SR3.1i. Copper Cliff deposit.** Massive pyrrhotite. Sample 98-AV-57, bore hole 100505, 188.5-189 ft, 100 orebody.



**Figure SR3.1f. Copper Cliff deposit.** 10% stringer of pyrrhotite-chalcopyrite. Note epidote alteration around stringers. Sample 98-AV-54, bore hole 100505, 257.5-258 ft, 100 orebody.

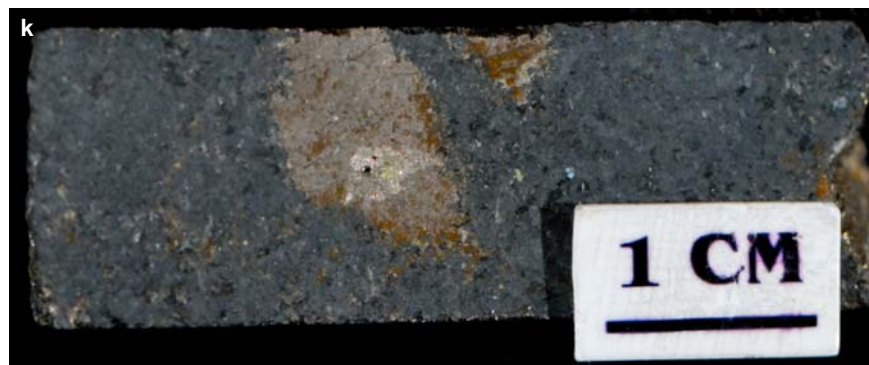


**Figure SR3.1g. Copper Cliff deposit.** Semi-massive pyrrhotite-chalcopyrite. Sample 98-AV-55, bore hole 100506, 248-248.5 ft, 100 orebody.



**Figure SR3.1j. Copper Cliff deposit.** Massive pyrrhotite-pentlandite-chalcopyrite. Sample 98-AV-58, bore hole 100505, 240-240.5 ft, 100 orebody.

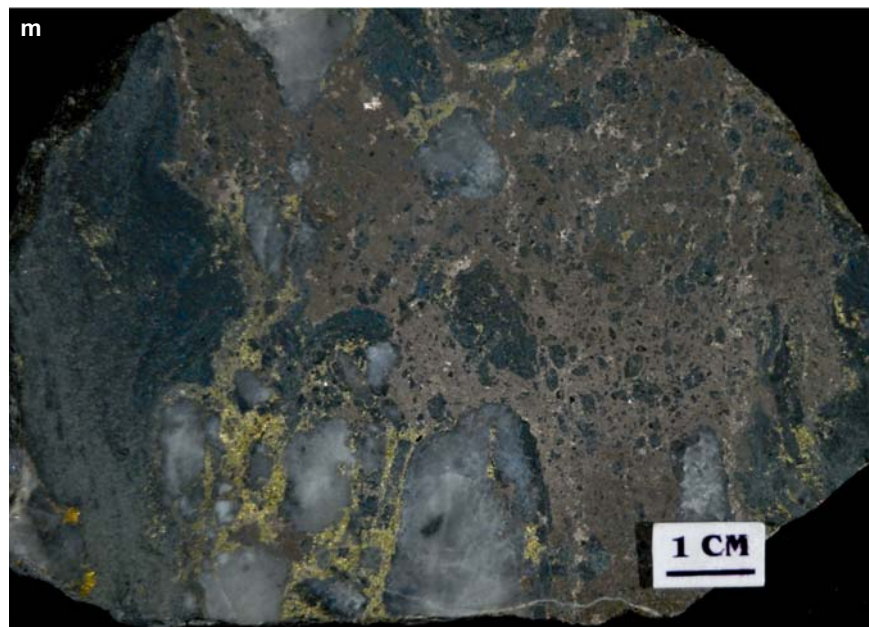




**Figure SR3.1k. Copper Cliff deposit.** 15% blebby and disseminated pyrrhotite-chalcopyrite-pentlandite. Sample 98-AV-59, bore hole 100505, 245-245.5 ft, 100 orebody.



**Figure SR3.1l. Copper Cliff deposit.** Massive pyrrhotite. Sample 98-AV-60, bore hole 100506, 237.5-238 ft, 100 orebody.

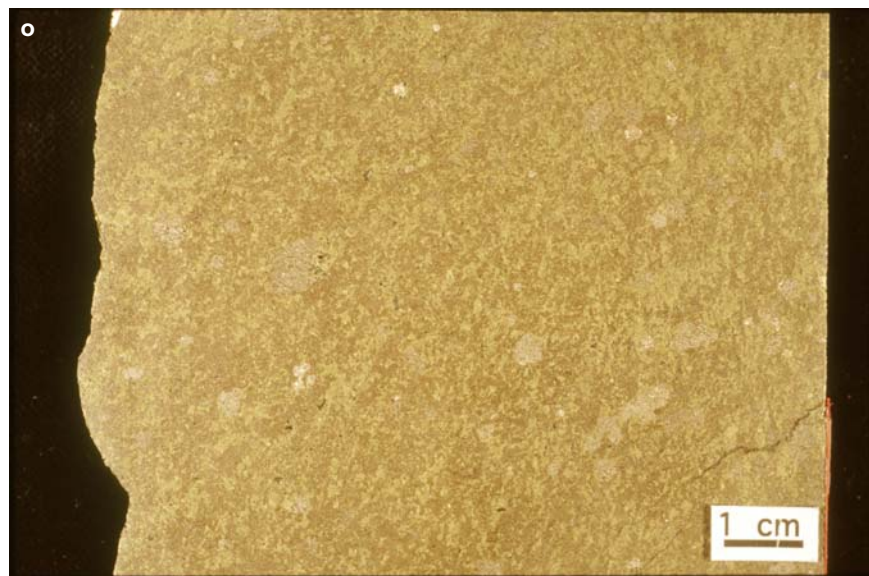


**Figure SR3.1m. Copper Cliff deposit.** Semi-massive remobilized pyrrhotite-pentlandite and volumetrically lesser chalcopyrite in a quartz vein and sheared host rock. Chalcopyrite is concentrated along the contact of sheared host mafic rock and quartz veins. Sample 02-AV-655, 175 orebody.

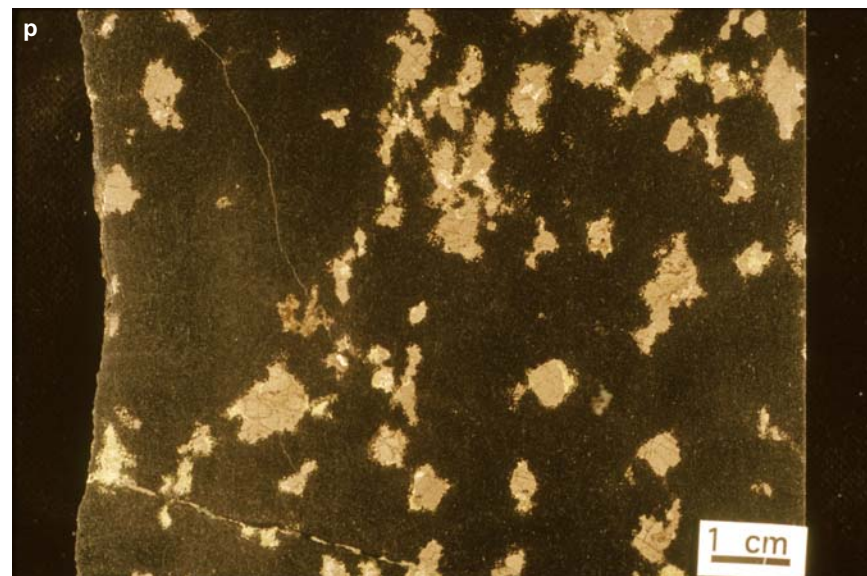


**Figure SR3.1n. Copper Cliff deposit.** 1% disseminated pyrrhotite-chalcopyrite in sheared quartz diorite. Sample EI-70-07, collected by Roger Eckstrand from a surface outcrop.

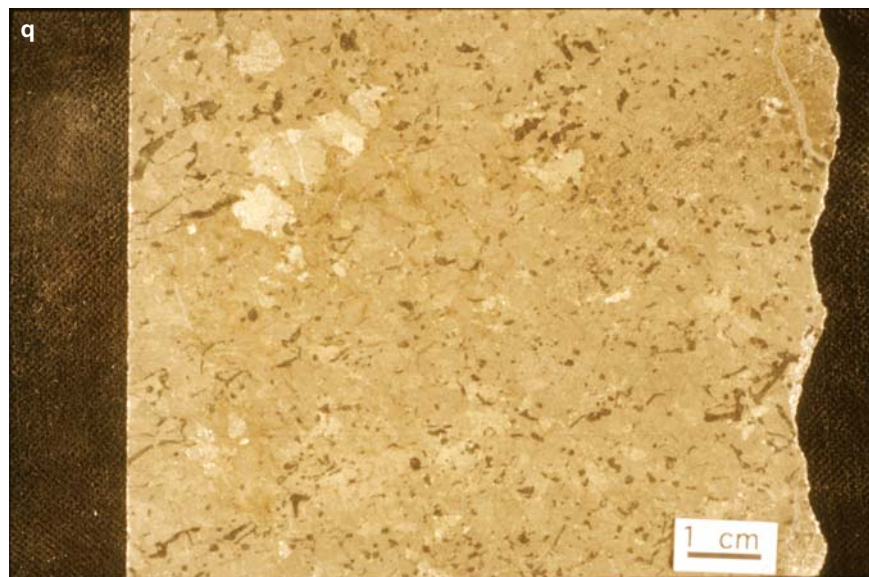




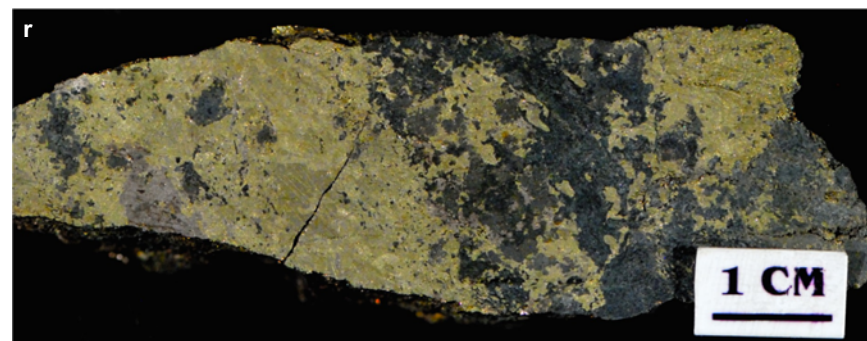
**Figure SR3.1o. Copper Cliff deposit.** Representative massive sulphide containing chalcopyrite-pyrrhotite-pentlandite, coarse pentlandite and exsolution lamellae between pyrrhotite and chalcopyrite. Sample CCS-1, Inco collection, 810 orebody.



**Figure SR3.1p. Copper Cliff deposit.** Typical ore with 20% sulphide, coarse pods of pyrrhotite and chalcopyrite in fine-grained gabbro. Sample CCS-3, Inco collection, 810 orebody.

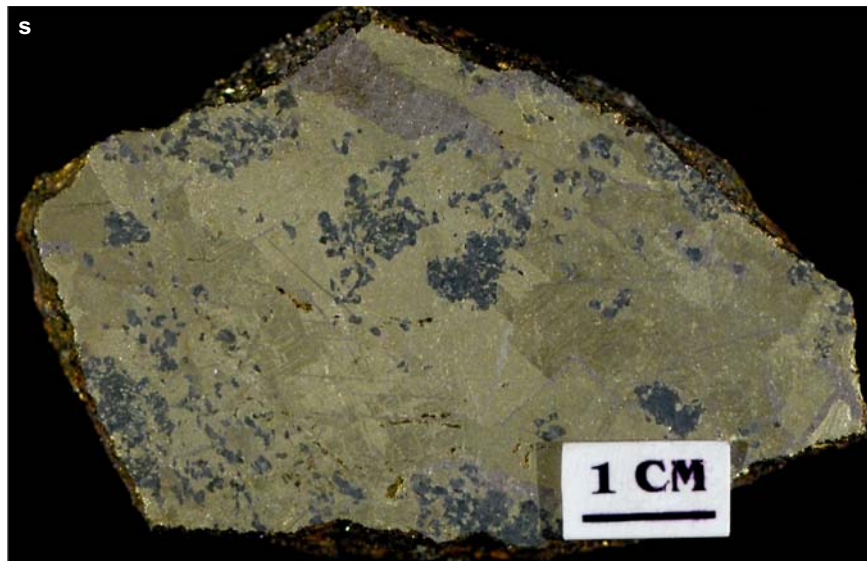


**Figure SR3.1q. Copper Cliff deposit.** Representative massive sulphide coarse crystals of pyrrhotite-pentlandite. Sample CCS-4, Inco collection, 810 orebody.

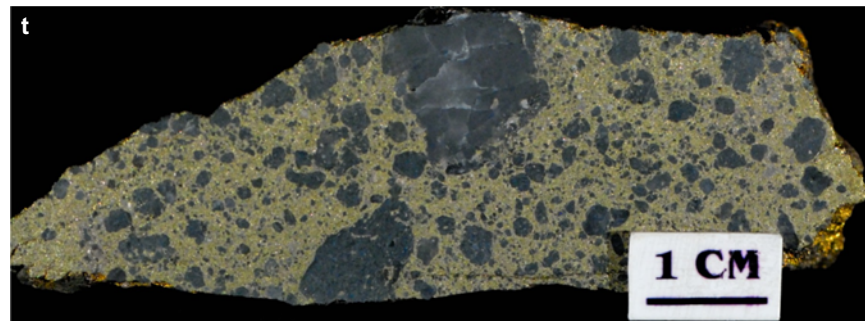


**Figure SR3.1r. Copper Cliff deposit.** Representative semi-massive chalcopyrite-pyrrhotite. Sample CF99-12, 3700 level, 7400 cross-cut, 800-810 cross-over orebody.





**Figure SR3.1s. Copper Cliff deposit.** Representative semi-massive chalcopyrite with minor bornite. Sample CF99-13, 1070 footwall drift/7400 drift, 800-810 cross-over orebody.



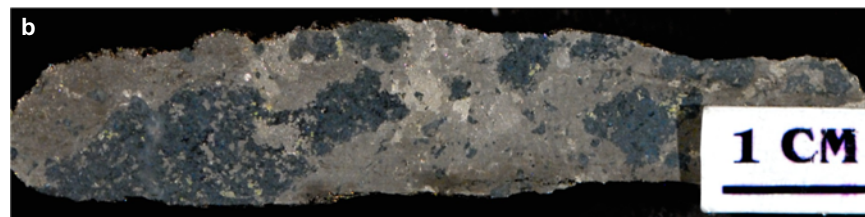
**Figure SR3.1t. Copper Cliff deposit.** Representative interstitial to semi-massive chalcopyrite. Sample CF99-15, 1200 sill drift, 800-810 cross-over orebody.



**Figure SR3.2a. Denison Township.** 50% niccolite-gersdorffite>chalcopyrite in mafic-ultramafic rock with quartz veins. Gersdorffite forms 3 to 4 mm cubes. Sample DNSN1949-1, collected in 1949 by W.C. Ringsleben from Lot 8 Con X1.

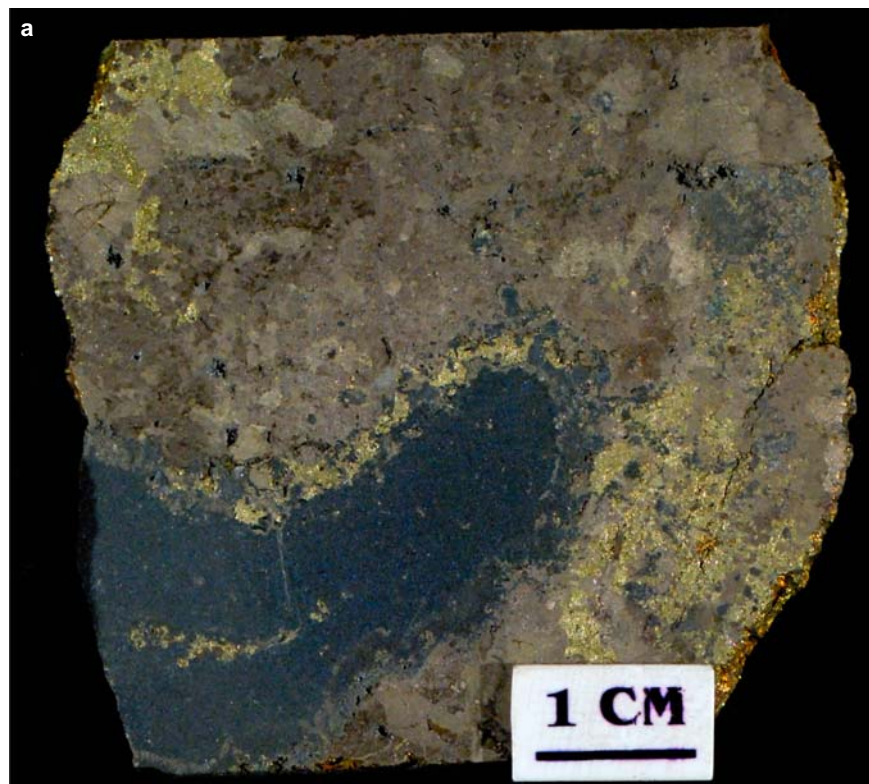


**Figure SR3.3a. Evans mine.** Semi-massive pyrrhotite-chalcopyrite-millerite. Sample 98-AV-80, collected by H.V. Ellsworth in 1929 from Lot 1, Con 1, Snider Township.

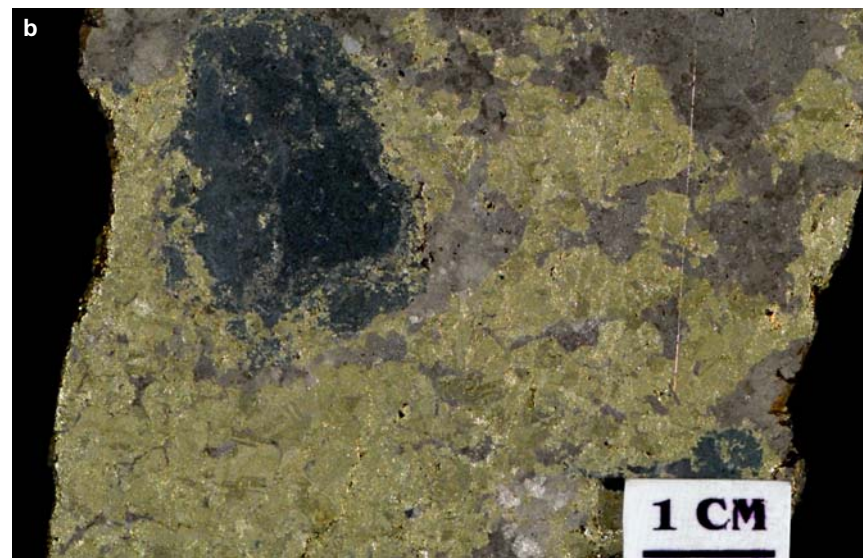


**Figure SR3.3b. Evans mine.** Massive pyrrhotite-chalcopyrite with minor millerite. Sample 98-AV-81, collected by H.V. Ellsworth in 1929 from Lot 1, Con 1 Snider Township.

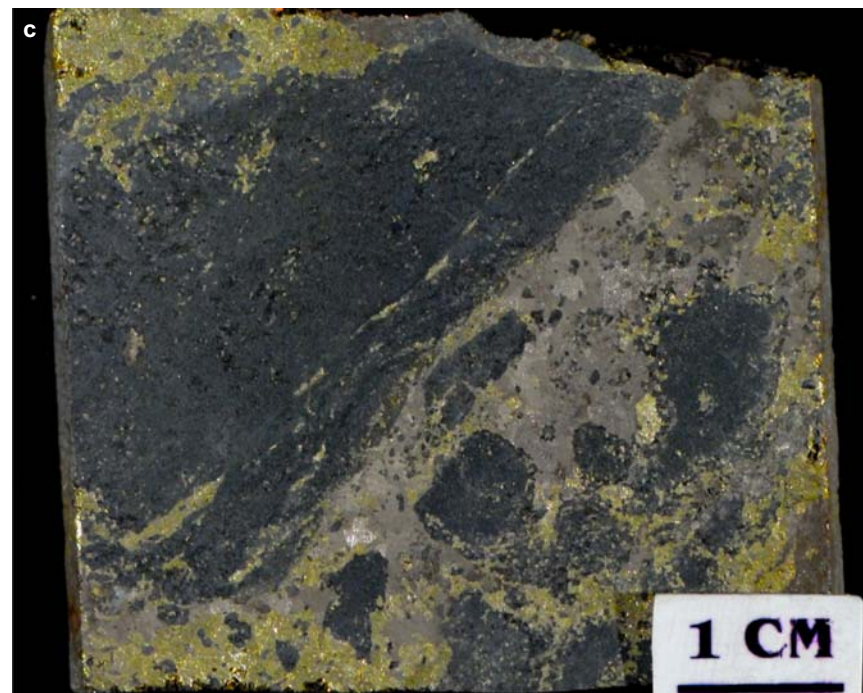




**Figure SR3.4a. Kelly Lake deposit.** Massive chalcopyrite-pyrrhotite-marcasite replacing pentlandite. Sample CF99-6, bore hole 97120 M, 4257 ft (C99-0063).

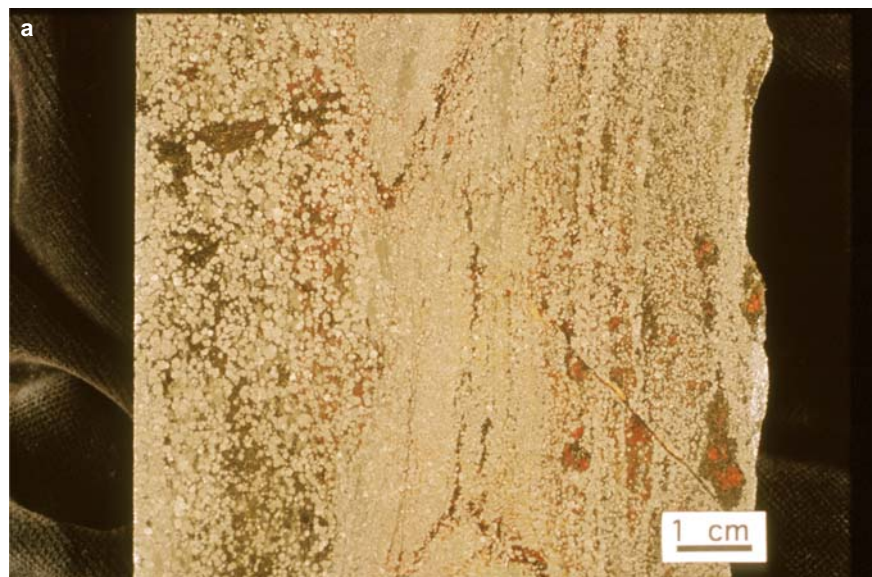


**Figure SR3.4b. Kelly Lake deposit.** Massive chalcopyrite-pyrrhotite. Sample CF99-7, bore hole 97120 M, 4257.8 ft (C99-0064).

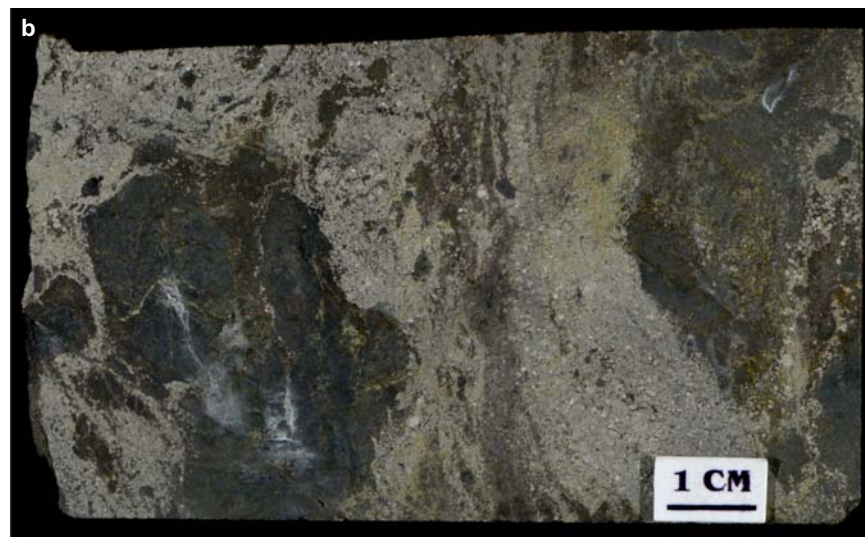


**Figure SR3.4c. Kelly Lake deposit.** Stringer and veins of chalcopyrite-pyrrhotite. Sample CF99-9, bore hole 97120 M, 4279 ft (C99-0066).

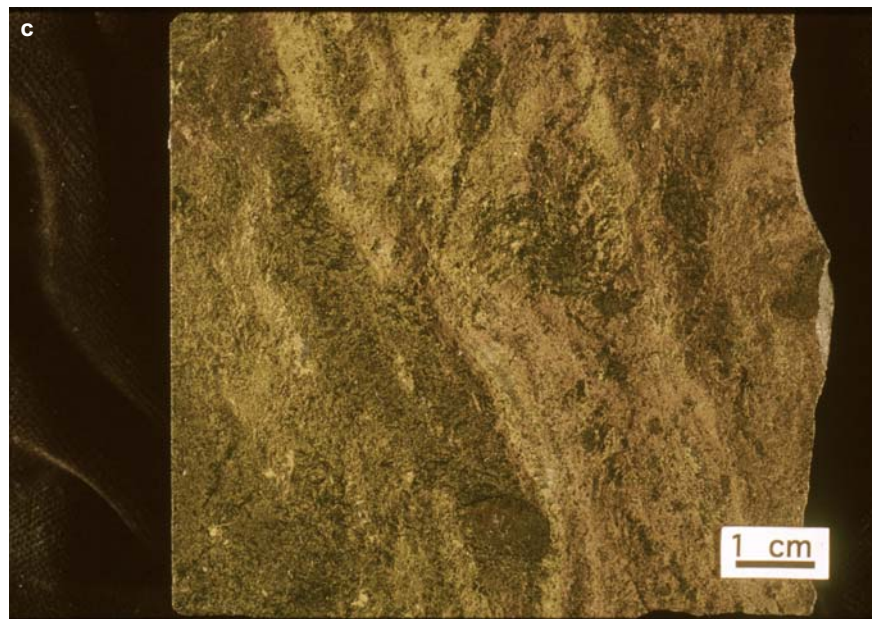




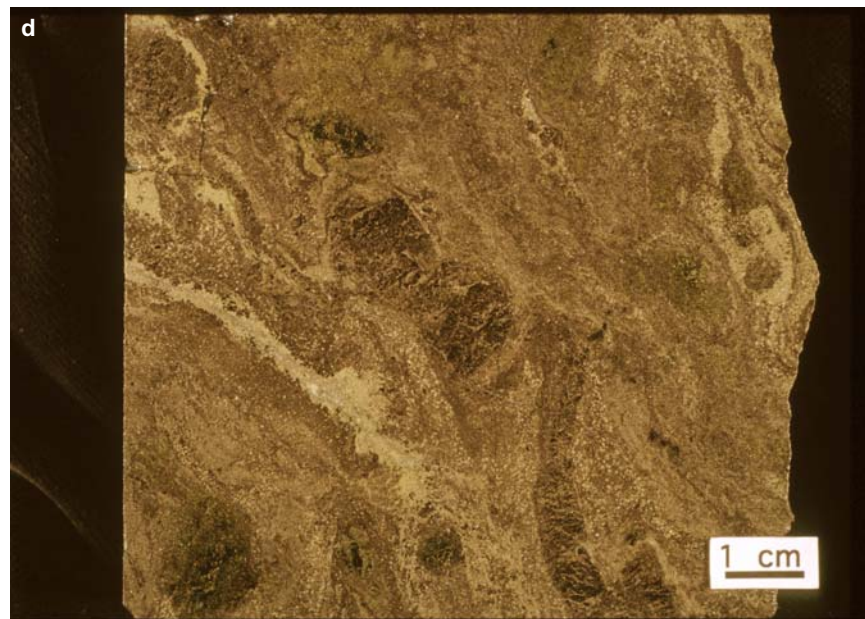
**Figure SR3.5a. MacLennan deposit.** Representative massive pyrite-pyrrhotite with intergrowths of pentlandite-chalcopyrite and garnet. Sample MAC-A1, Inco collection.



**Figure SR3.5b. MacLennan deposit.** Representative massive pyrrhotite-pyrite-chalcopyrite in fine mafic rock. Sample MAC-A2, Inco collection.

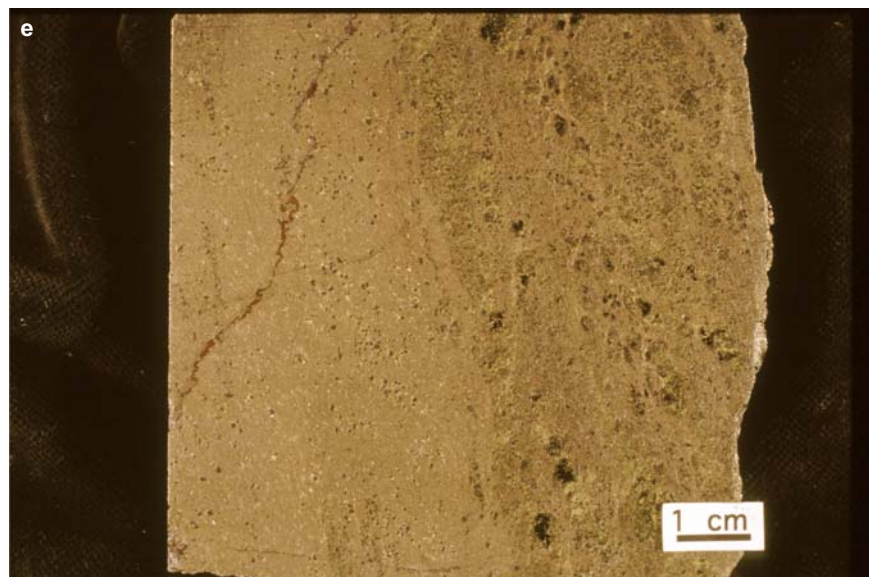


**Figure SR3.5c. MacLennan deposit.** Representative massive pyrrhotite-chalcopyrite and moderate pyrite. Sample MAC-A3A, Inco collection.

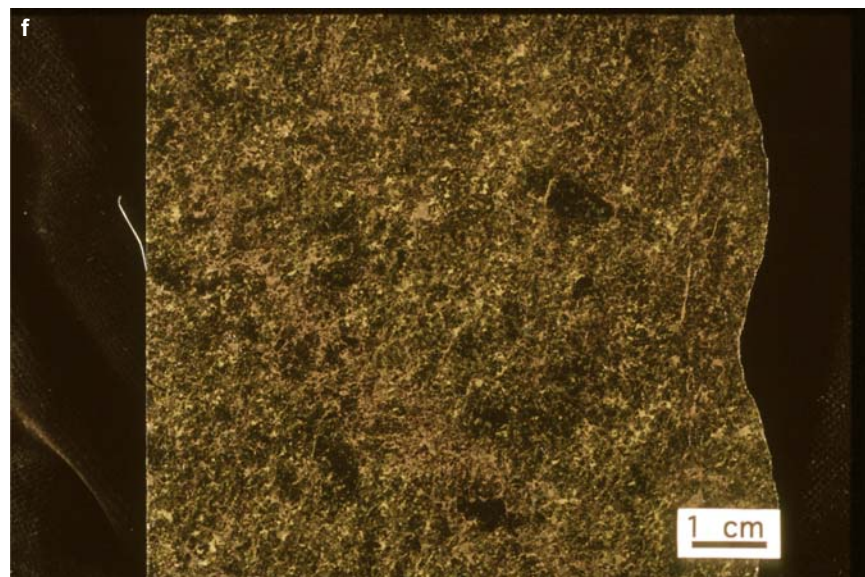


**Figure SR3.5d. MacLennan deposit.** Representative massive pyrrhotite-chalcopyrite-pyrite. Sample MAC-A3B, Inco collection.

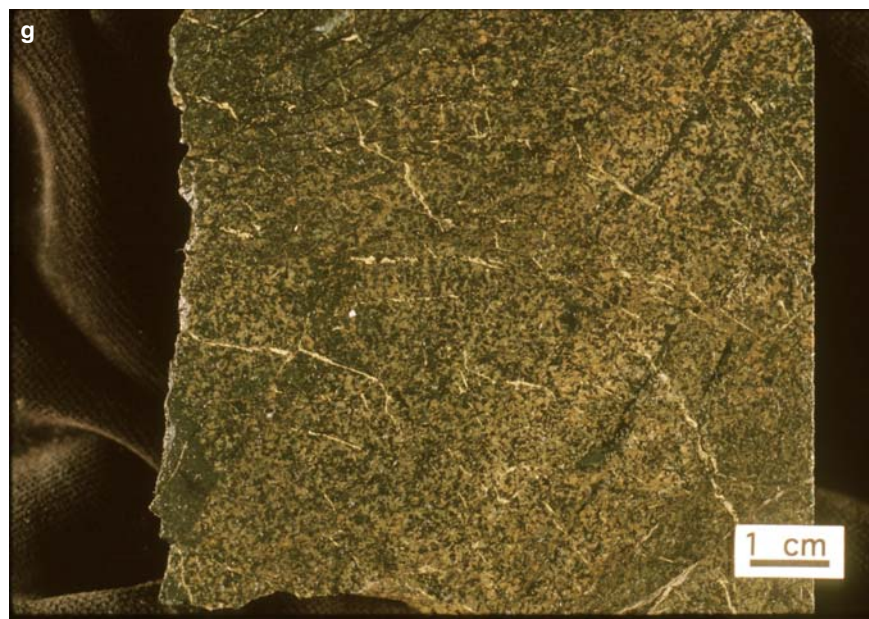




**Figure SR3.5e. MacLennan deposit.** Representative massive pyrrhotite-chalcopyrite-magnetite. Sample MAC-B, Inco collection.



**Figure SR3.5f. MacLennan deposit.** Representative semi-massive chalcopyrite-pyrrhotite. Sample MAC-C1, Inco collection.



**Figure SR3.5g. MacLennan deposit.** Typical ore with 2% chalcopyrite-pyrrhotite stringers in Levack Gneiss Complex. Sample MAC-C2, Inco collection.

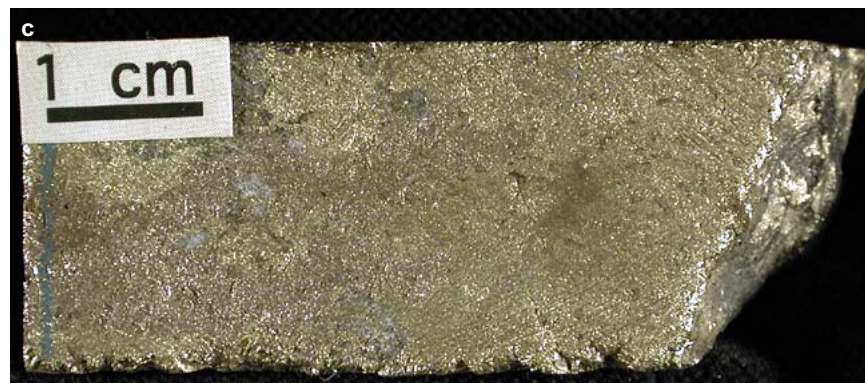


**Figure SR3.6a. Totten deposit.** 25% disseminated and banded silver-bearing sulphide mineral in epidote-altered quartz diorite(?). Sample 01-AV-241, RX#230292.





**Figure SR3.6b. Totten deposit.** Semi-massive chalcopyrite-pyrrhotite in fine-grained amphibolite. Sample 01-AV-242.



**Figure SR3.6c. Totten deposit.** Massive pyrrhotite-chalcopyrite. Sample 01-AV-243.



**Figure SR3.6d. Totten deposit.** Massive pyrrhotite-pentlandite. Sample 01-AV-244.



**Figure SR3.6e. Totten deposit.** Semi-massive interstitial chalcopyrite-pyrrhotite in breccia. Sample 01-AV-245.

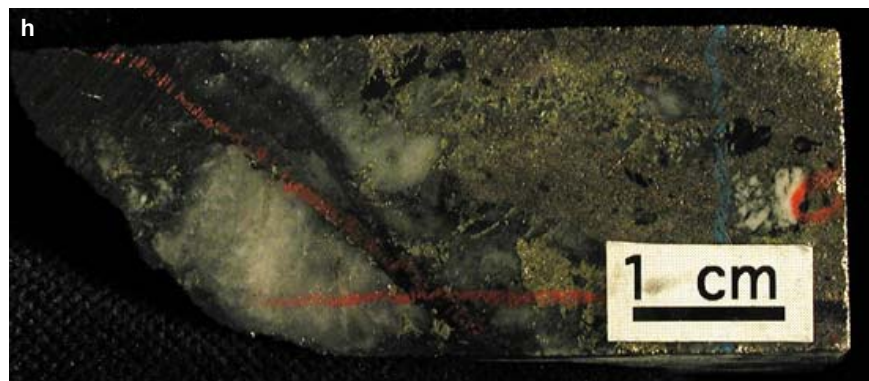


**Figure SR3.6f. Totten deposit.** 25% blebby pyrrhotite-chalcopyrite. Sample 01-AV-246.

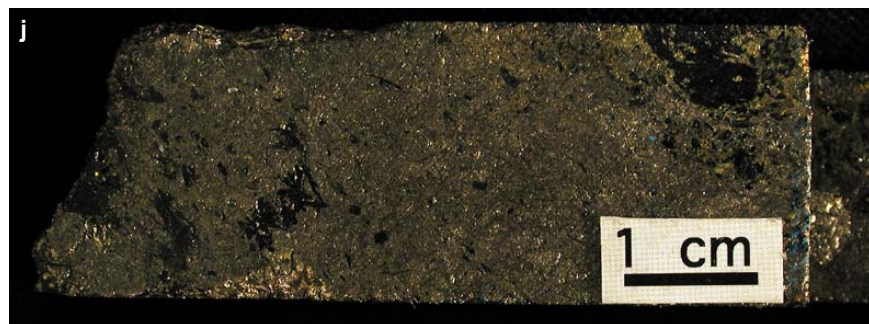


**Figure SR3.6g. Totten deposit.** 25% disseminated to interstitial pyrrhotite-chalcopyrite in breccia. Sample 01-AV-247.





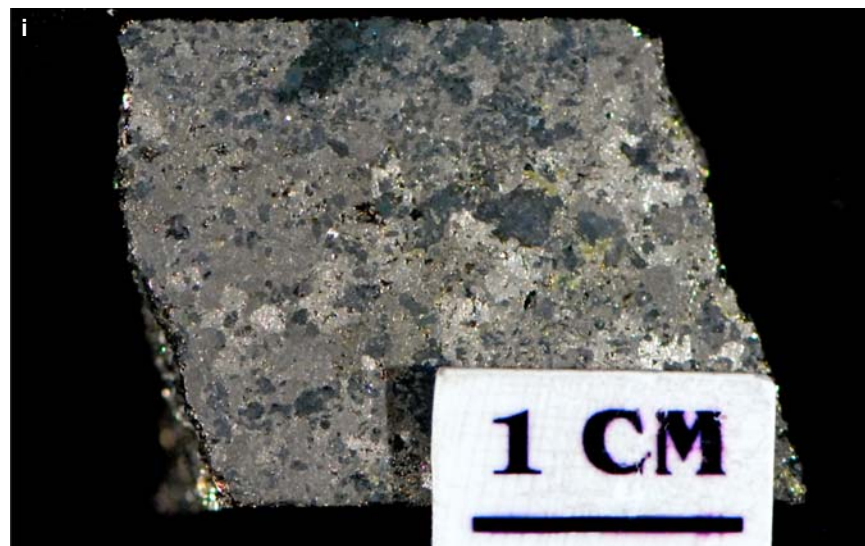
**Figure SR3.6h. Totten deposit.** Semi-massive pyrrhotite-chalcopyrite in breccia. Sample 01-AV-248.



**Figure SR3.6j. Totten deposit.** Massive pentlandite-pyrrhotite-chalcopyrite. Sample 01-AV-250.



**Figure SR3.6l. Totten deposit.** Massive pentlandite. Sample 01-AV-252.

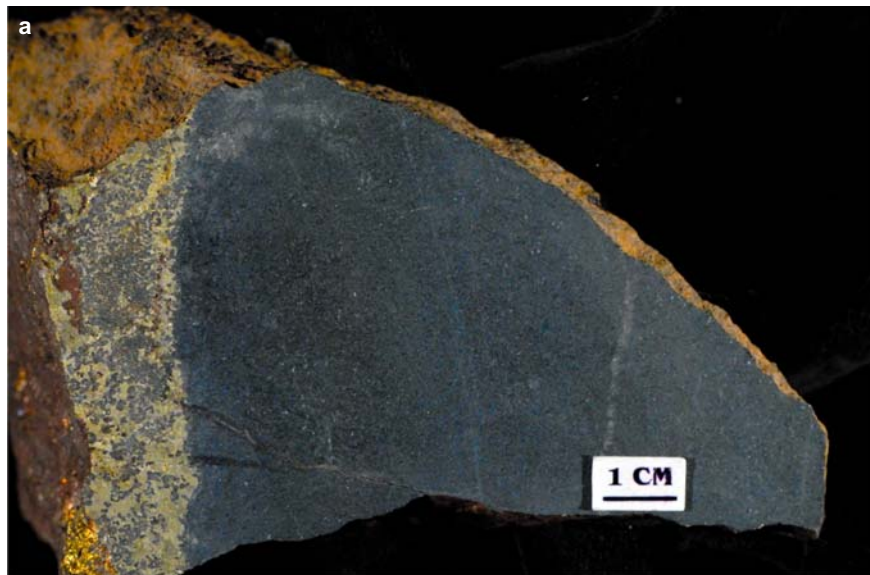


**Figure SR3.6i. Totten deposit.** Massive pentlandite with minor chalcopyrite. Sample 01-AV-249.



**Figure SR3.6k. Totten deposit.** Massive pyrrhotite-pentlandite with minor chalcopyrite. Sample 01-AV-251.





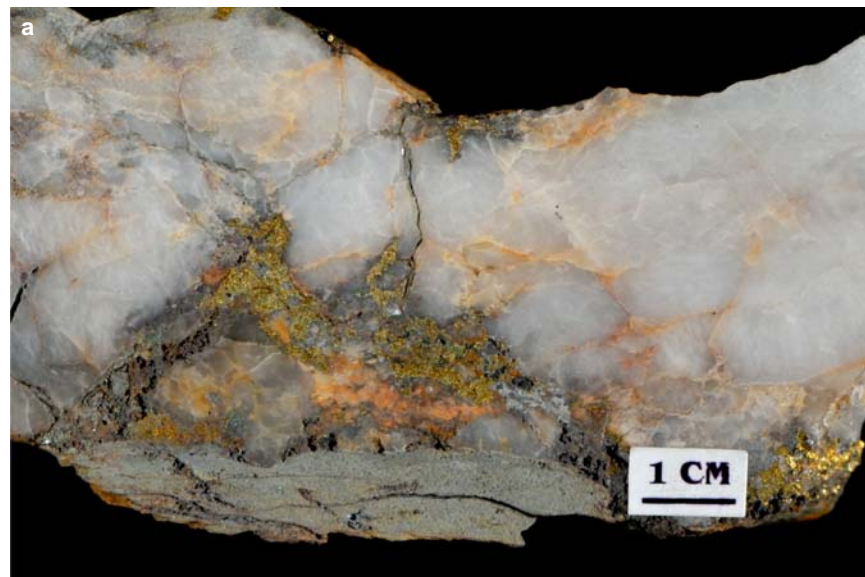
**Figure SR3.7a. Vermillion mine.** Semi-massive chalcopyrite vein cross-cutting pelite. Sample 99-AV-93.



**Figure SR3.7b. Vermillion mine.** Chalcopyrite-rich stringer between two pods of quartz diorite. Sample 00AV-506.

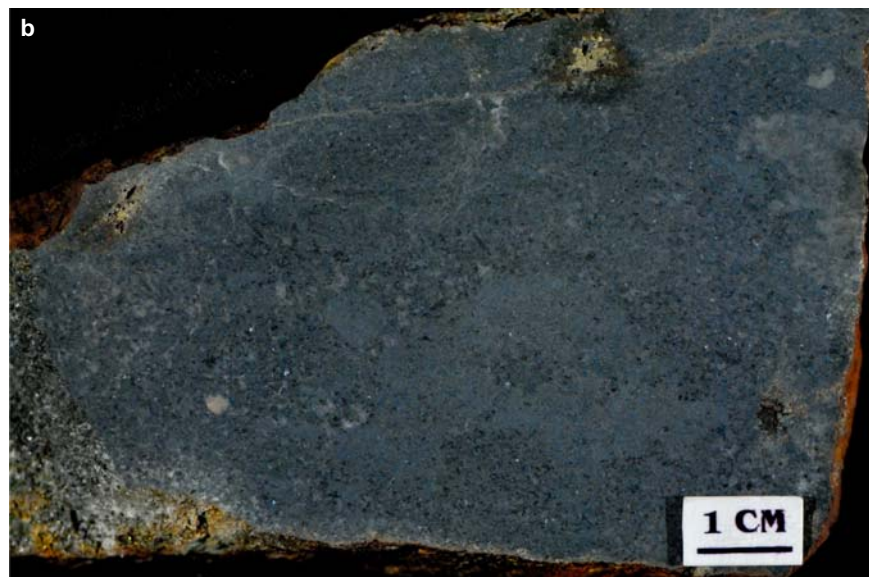


**Figure SR3.7c. Vermillion mine.** 5% disseminated bornite-chalcopyrite in quartz diorite. Sample 00AV-507.



**Figure SR3.8a. Victoria mine.** Stringer chalcopyrite within quartz vein with sub-layer near contact with felsic pod. Sample 00AV-500.

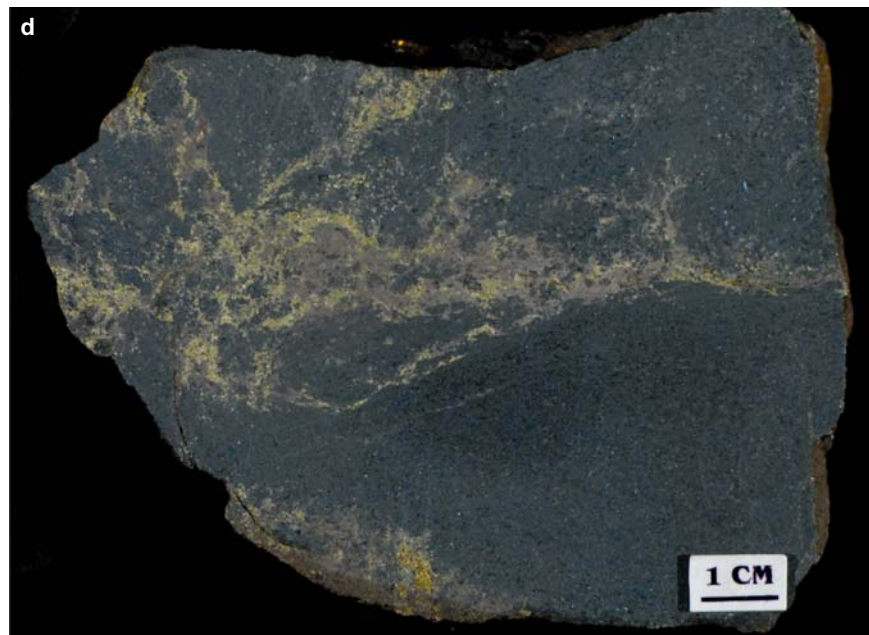




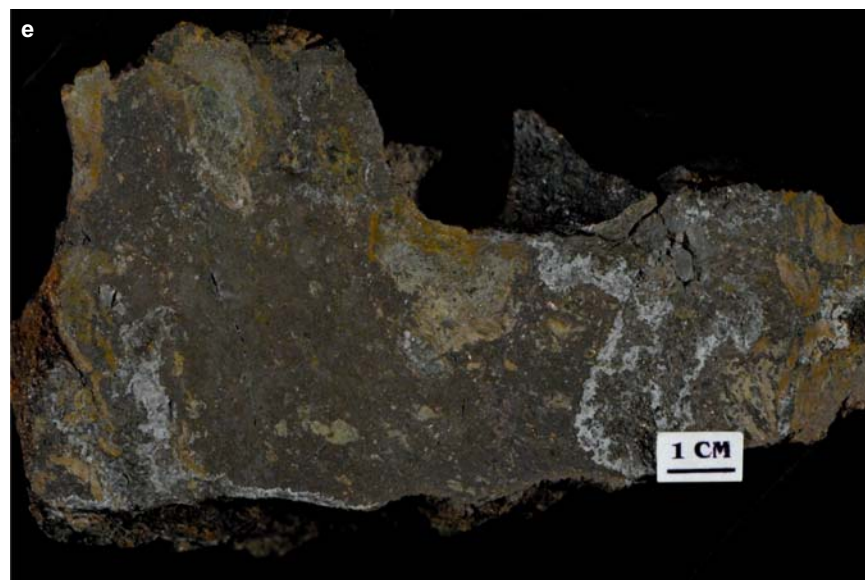
**Figure SR3.8b. Victoria mine.** 5% disseminated to blebby pyrrhotite-chalcopyrite with minor magnetite in quartz diorite. Note chlorite alteration. Sample 00AV-503.



**Figure SR3.8c. Victoria mine.** 2% disseminated chalcopyrite-pyrrhotite within quartz diorite. Note aplite dyke cross-cuts quartz diorite, associated with shear zone. Sample 00AV-504.

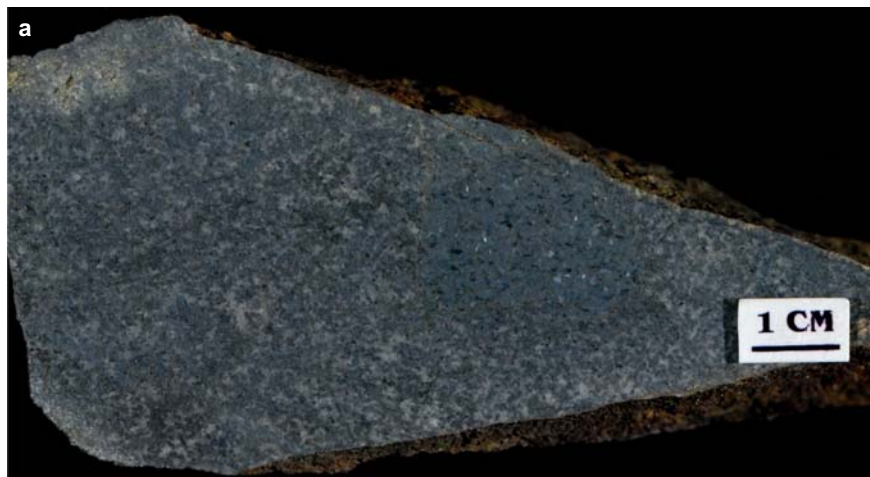


**Figure SR3.8d. Victoria mine.** 25% veinlets to disseminated sulphide chalcopyrite-pyrrhotite in quartz diorite. Note chlorite alteration. Sample 00AV-505.



**Figure SR3.8e. Victoria mine.** Massive marcasite replacing pyrrhotite. Note very strong chlorite alteration. Sample 00AV-508, Pit 1.





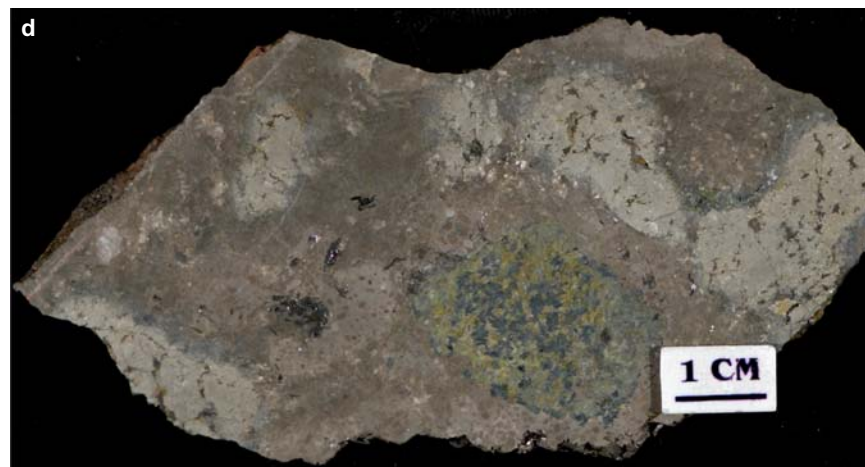
**Figure SR3.9a. Worthington mine.** Finely disseminated pyrrhotite-chalcopyrite in quartz diorite. Note chlorite alteration. Sample 00AV-306.



**Figure SR3.9b. Worthington mine.** Massive pyrrhotite-pentlandite with disseminated chalcopyrite blebs. Note large 2-3 cm pentlandite crystals. Sample 98-AV-61, collected by Barlow from Lot 2, R2, Drury Township.



**Figure SR3.9c. Worthington mine.** Massive pyrrhotite with disseminated chalcopyrite stringers and 20% disseminated magnetite blebs. Sample 98-AV-62, collected in 1900 by H.V. Ellsworth from Lot 2, Con 1, Drury Township.



**Figure SR3.9d. Worthington mine.** Massive pyrrhotite with blebby pentlandite and altered host-rock fragments. Note the unidentified black mineral. Sample 98-AV-63, collected in 1917 by Mond Nickel Co. from Coniston, Ontario.

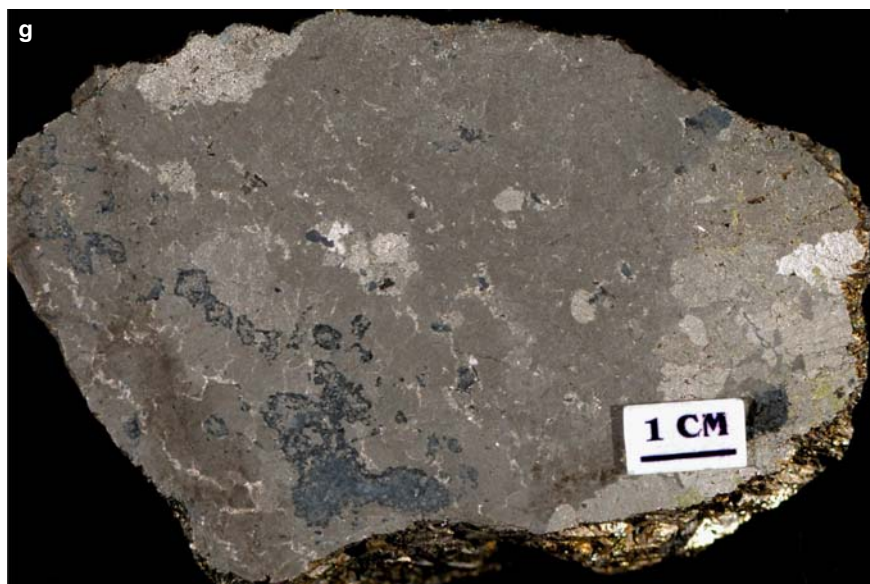




**Figure SR3.9e. Worthington mine.** Massive pyrrhotite-pentlandite with minor chalcopyrite. Note 2 cm pentlandite crystals. Sample 98-AV-64, collected in 1918 by H.V. Ellsworth from Lot 2, Con 2, Drury Township.

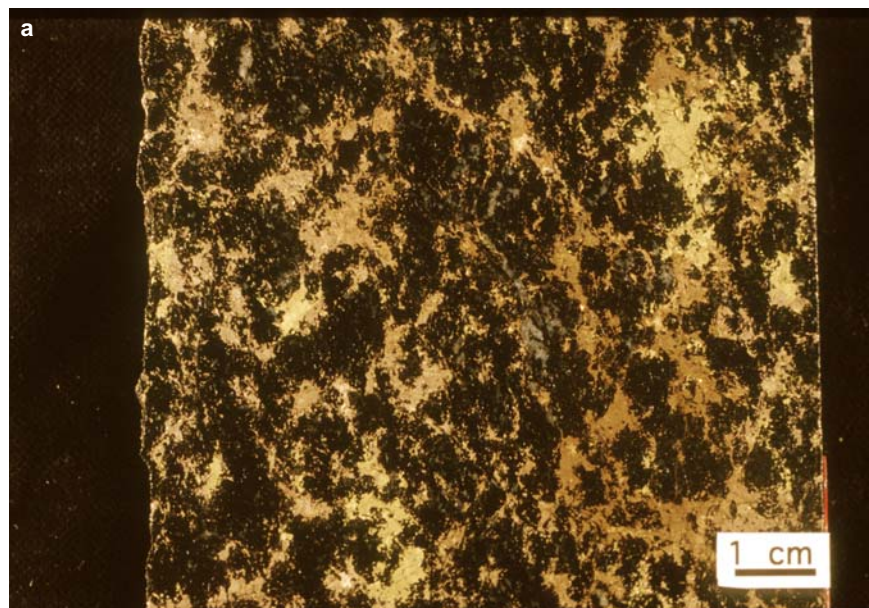


**Figure SR3.9f. Worthington mine.** Massive pyrrhotite-pentlandite. Note 3 cm pentlandite crystals. Sample 98-AV-65, collected in 1918 by H.V. Ellsworth from Lot 2, Con 2, Drury Township.

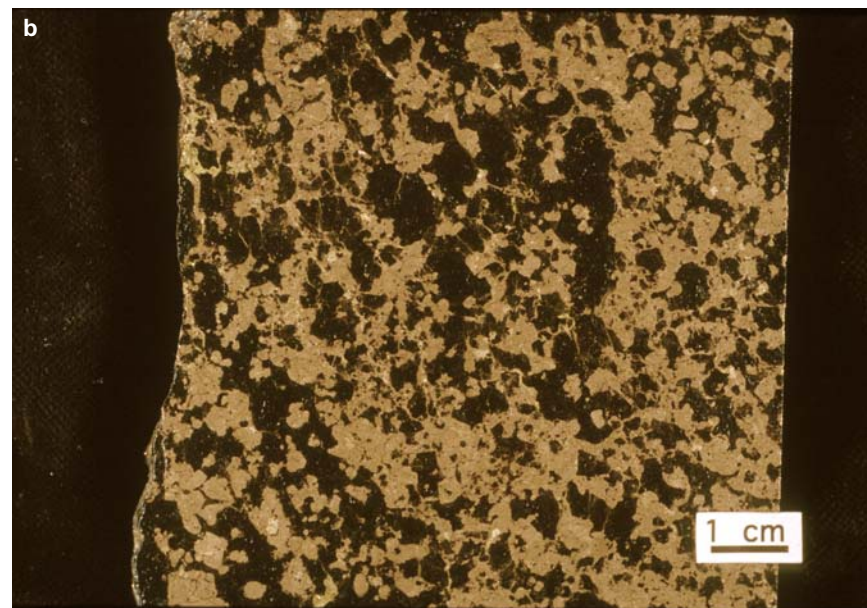


**Figure SR3.9g. Worthington mine.** Massive pyrrhotite-pentlandite with minor chalcopyrite. Sample 98-AV-66, collected in 1918 from Lot 2, Con 2, Drury Township.

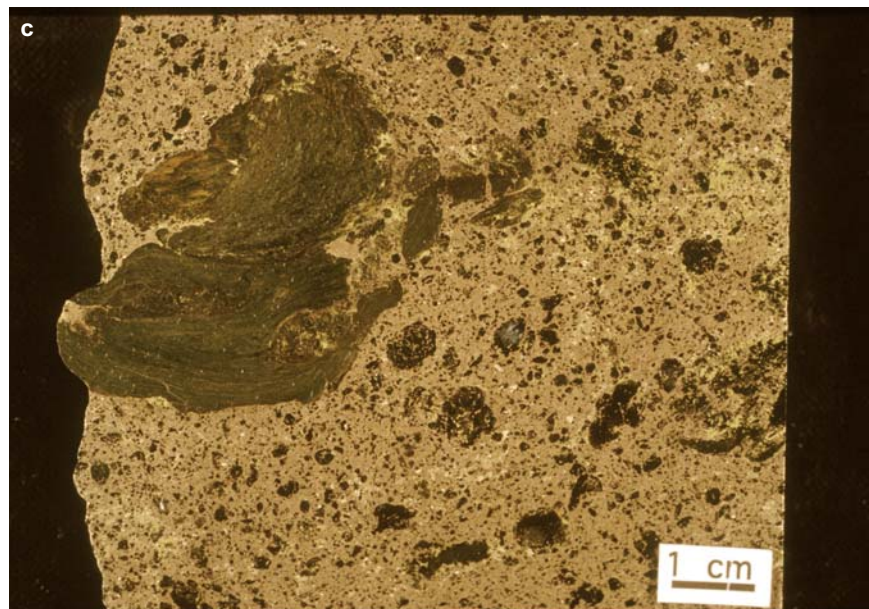




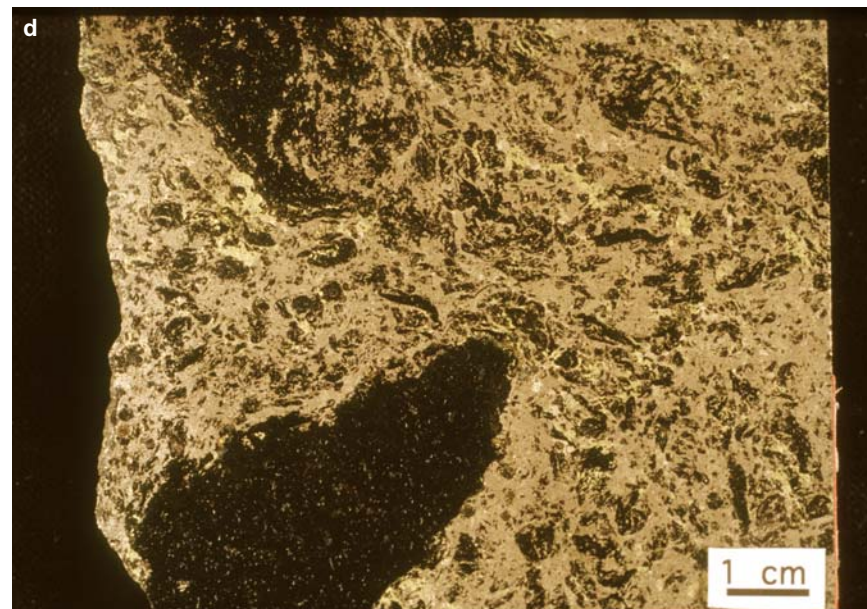
**Figure SR4.1a. Frood mine.** Typical ore with 30% interstitial to blebby pyrrhotite-chalcopyrite-pentlandite in mafic gneiss. Sample F-1, Inco collection.



**Figure SR4.1b. Frood mine.** Representative semi-massive, blebby, coarse pyrrhotite-chalcopyrite-pentlandite. Sample F-3, Inco collection.

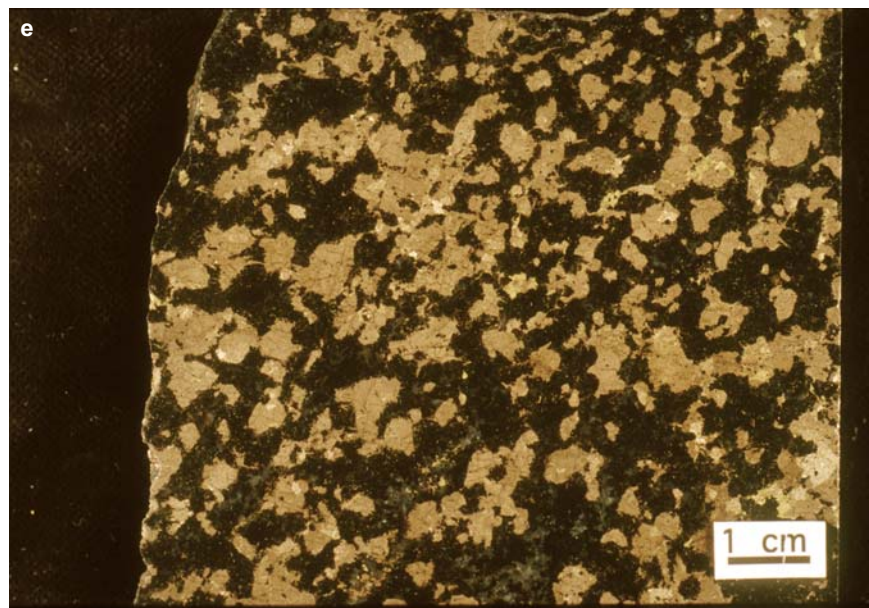


**Figure SR4.1c. Frood mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite and pseudotachylite. Sample F-4, Inco collection.

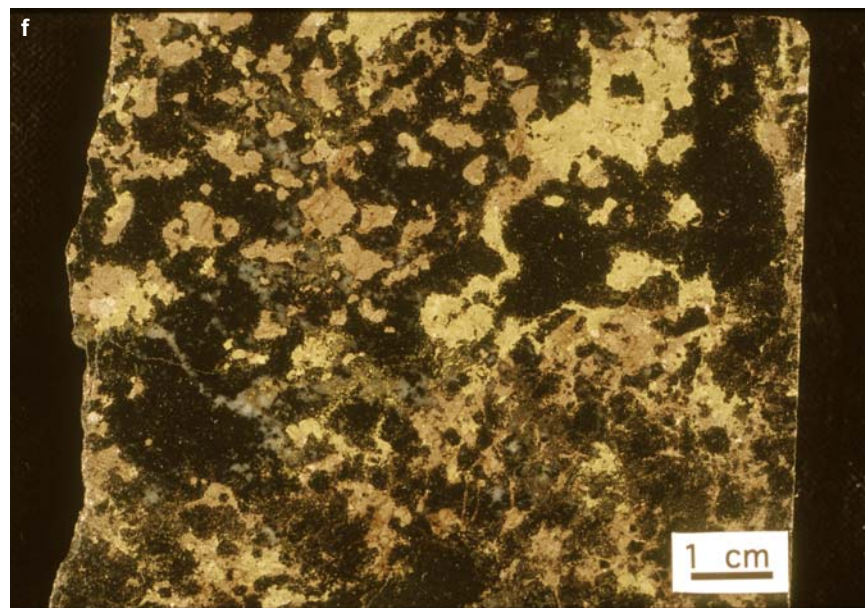


**Figure SR4.1d. Frood mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite and mafic fragments. Sample F-6, Inco collection.

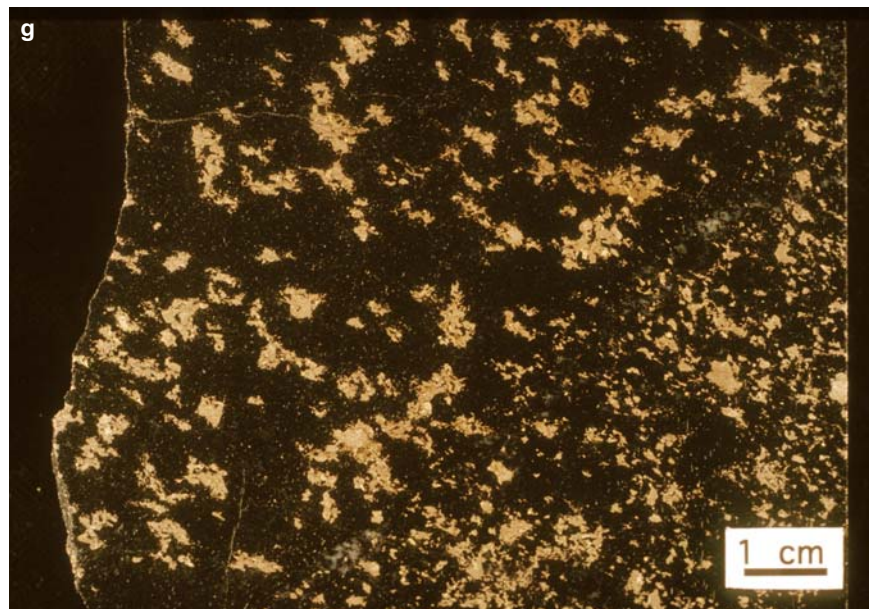




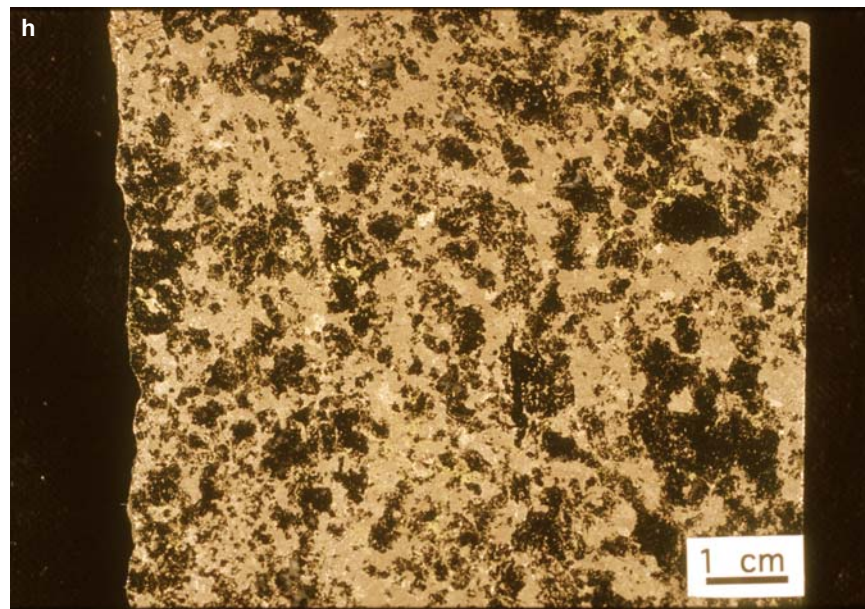
**Figure SR4.1e. Frood mine.** Representative semi-massive, coarse, blebby pyrrhotite-chalcopyrite-pentlandite in medium-grained gabbro. Sample F-7, Inco collection.



**Figure SR4.1f. Frood mine.** Representative semi-massive stringer and blebby pyrrhotite-chalcopyrite-pentlandite in fine-grained gabbro. Sample F-8, Inco collection.

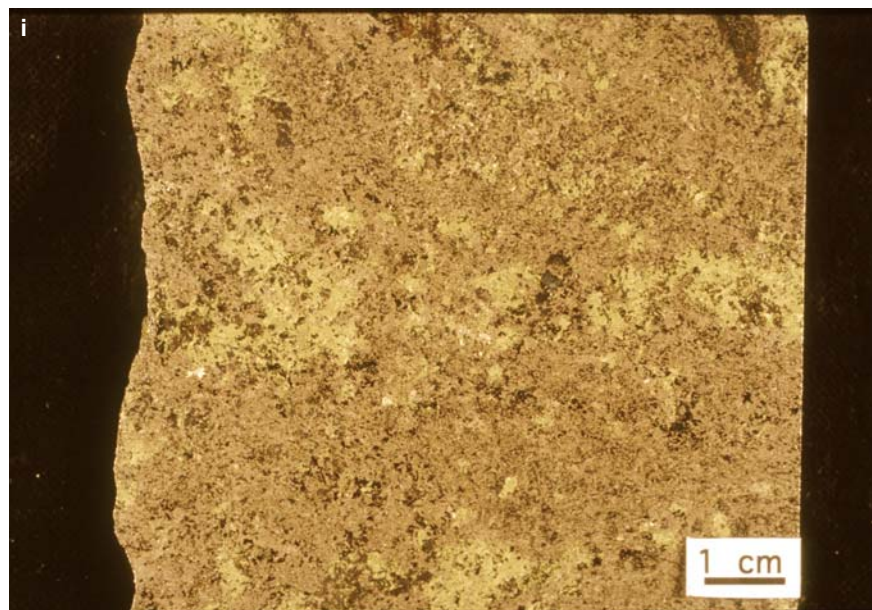


**Figure SR4.1g. Frood mine.** Typical ore with 25% blebby pyrrhotite-chalcopyrite-pentlandite in fine-grained gabbro. Sample F-10, Inco collection.

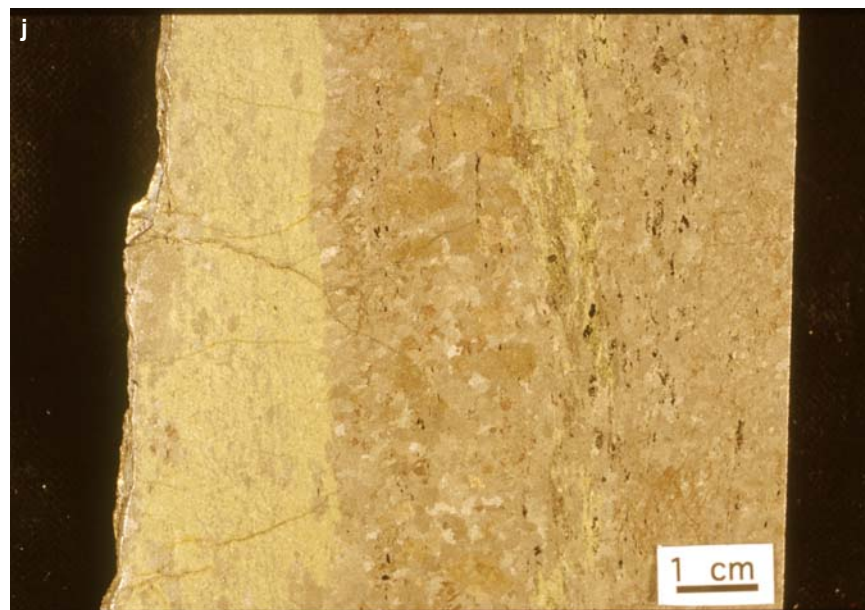


**Figure SR4.1h. Frood mine.** Representative semi-massive pyrrhotite-pentlandite-chalcopyrite in fine-grained gabbro. Sample F-12, Inco collection.

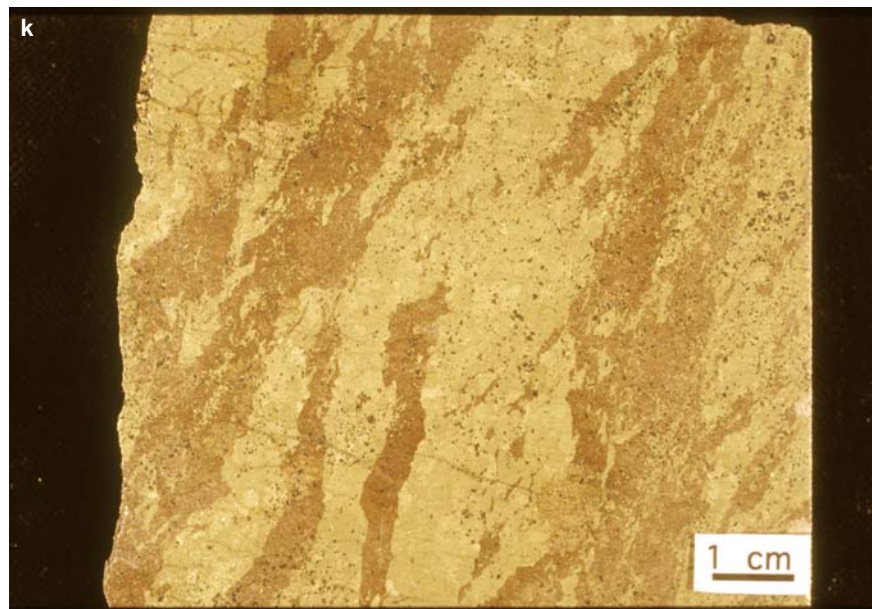




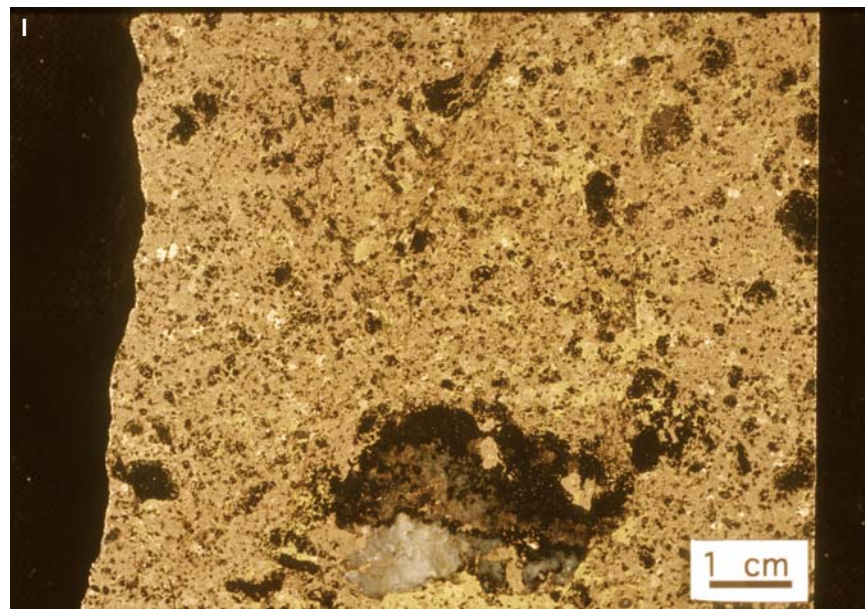
**Figure SR4.1i. Frood mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite-magnetite. Sample F-16, Inco collection.



**Figure SR4.1j. Frood mine.** Representative massive pentlandite-chalcopyrite. Sample F-18, Inco collection.

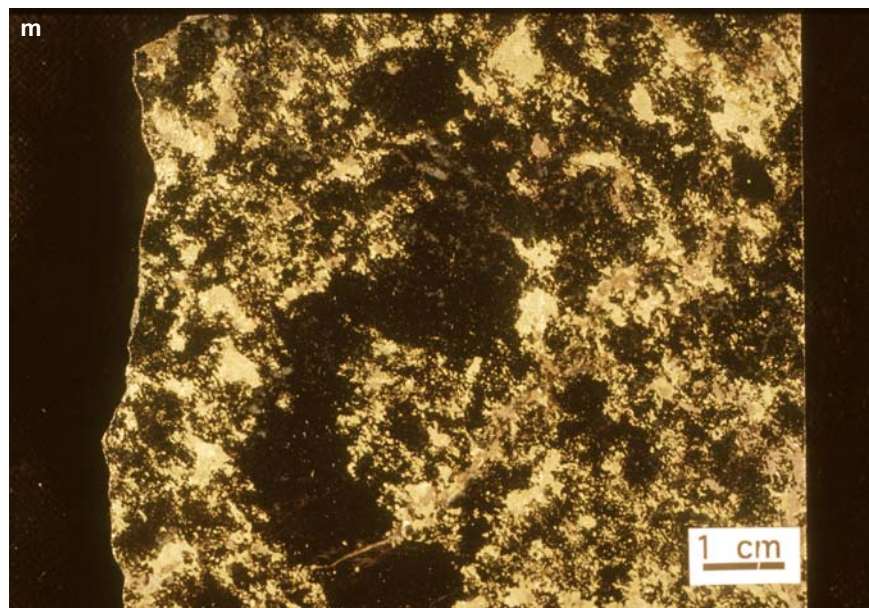


**Figure SR4.1k. Frood mine.** Representative massive pyrrhotite-chalcopyrite-marcasite. Sample F-20, Inco collection.

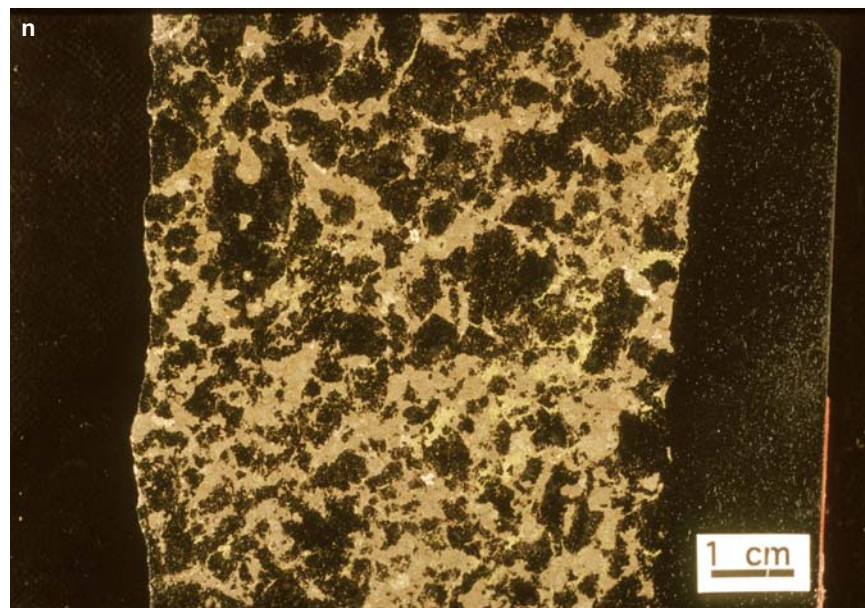


**Figure SR4.1l. Frood mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite. Sample F-23, Inco collection.

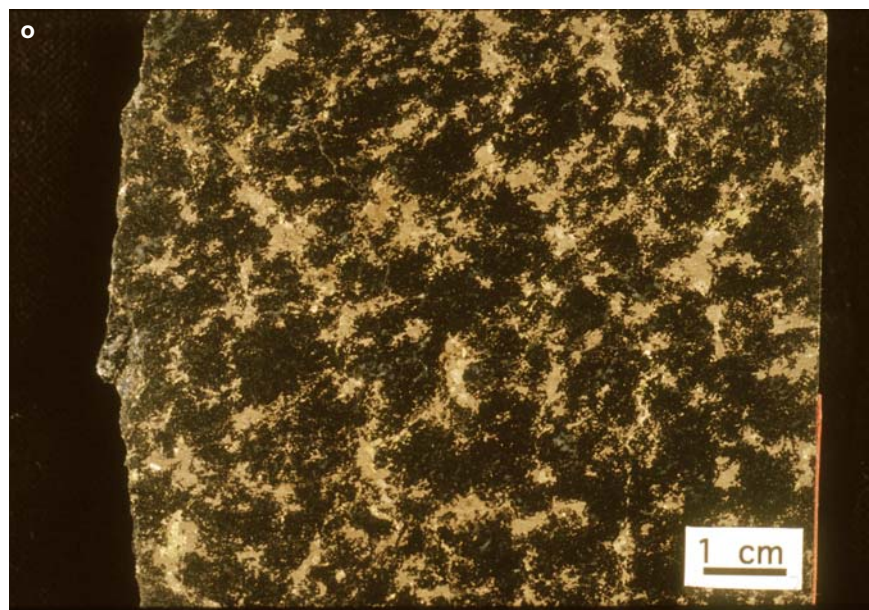




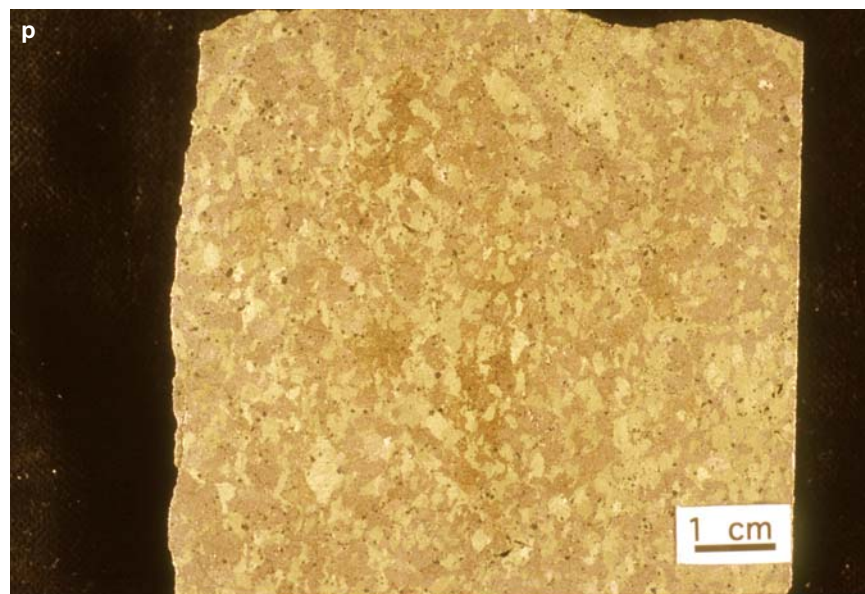
**Figure SR4.1m. Frood mine.** Representative semi-massive chalcopyrite-pyrrhotite-pentlandite. Sample F-24, Inco collection.



**Figure SR4.1n. Frood mine.** Representative semi-massive pyrrhotite-pentlandite-chalcopyrite in fine-grained gabbro, adjacent to very fine-grained mafic rock. Sample F-26, Inco collection.

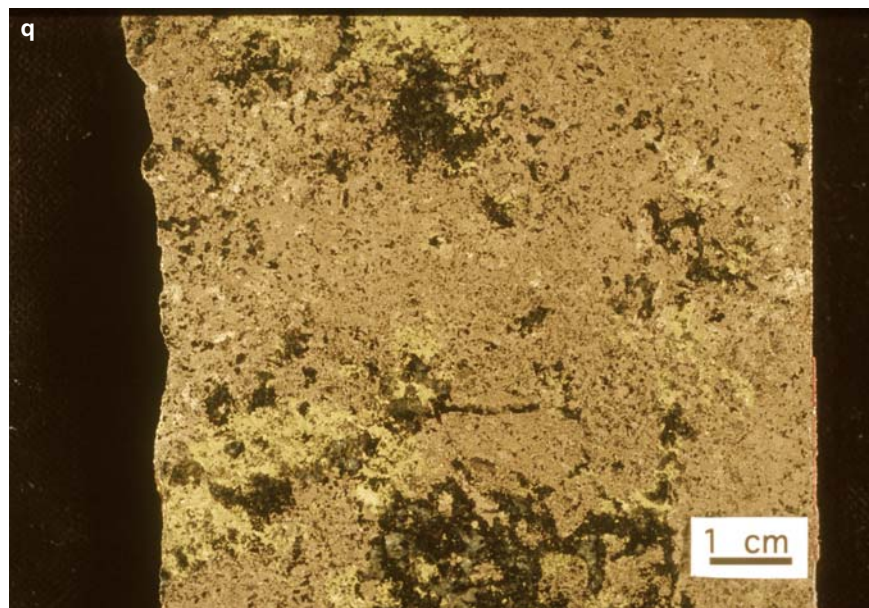


**Figure SR4.1o. Frood mine.** Representative semi-massive pyrrhotite-pentlandite-chalcopyrite. Sample F-28, Inco collection.

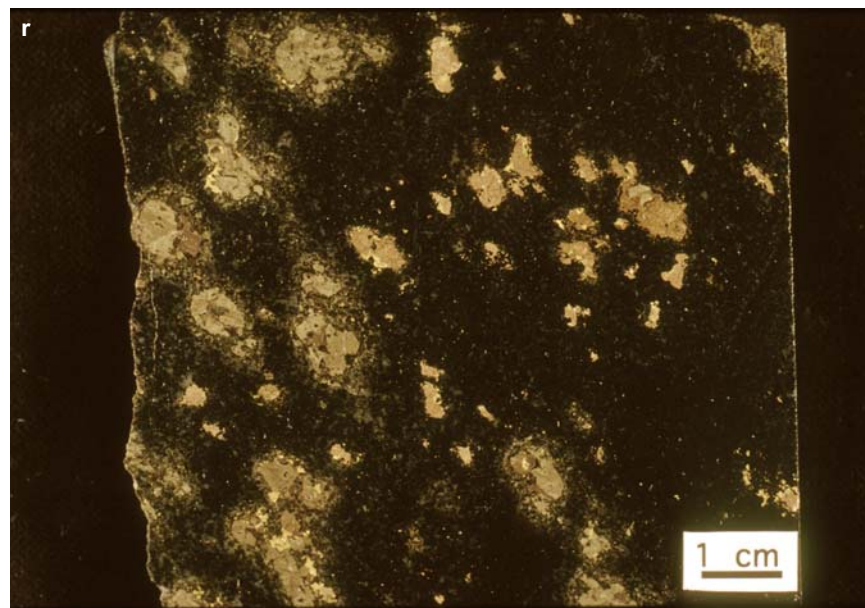


**Figure SR4.1p. Frood mine.** Representative massive sulphide consisting of coarse chalcopyrite crystals in a finer grained pyrrhotite groundmass. Sample F-29, Inco collection.

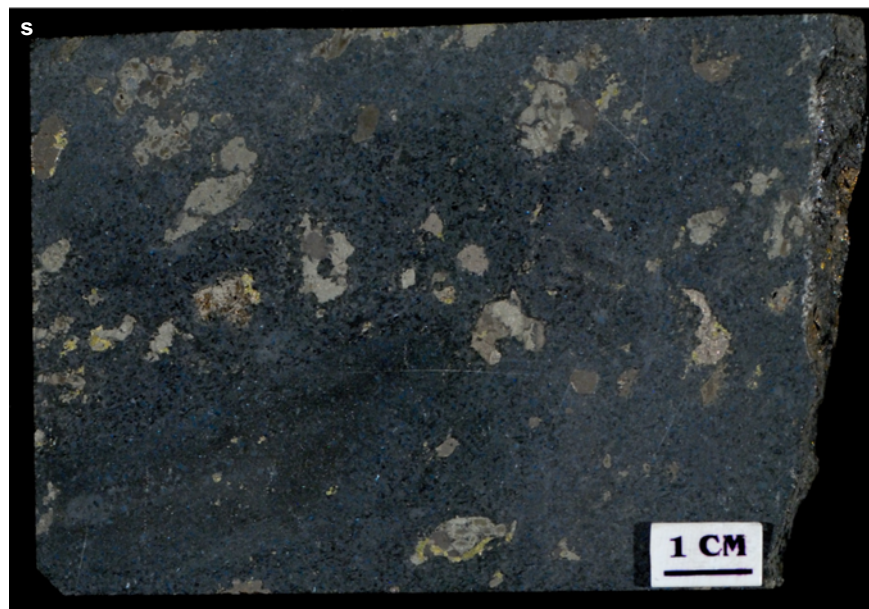




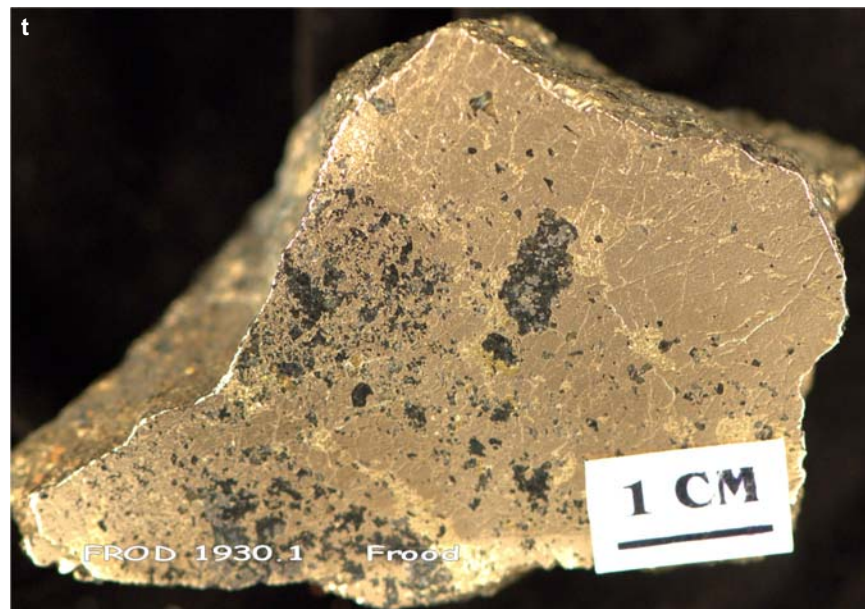
**Figure SR4.1q. Frood mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite. Sample F-30, Inco collection.



**Figure SR4.1r. Frood mine.** Representative blebby chalcopyrite-cubanite with minor magnetite. Sample F-32, Inco collection.

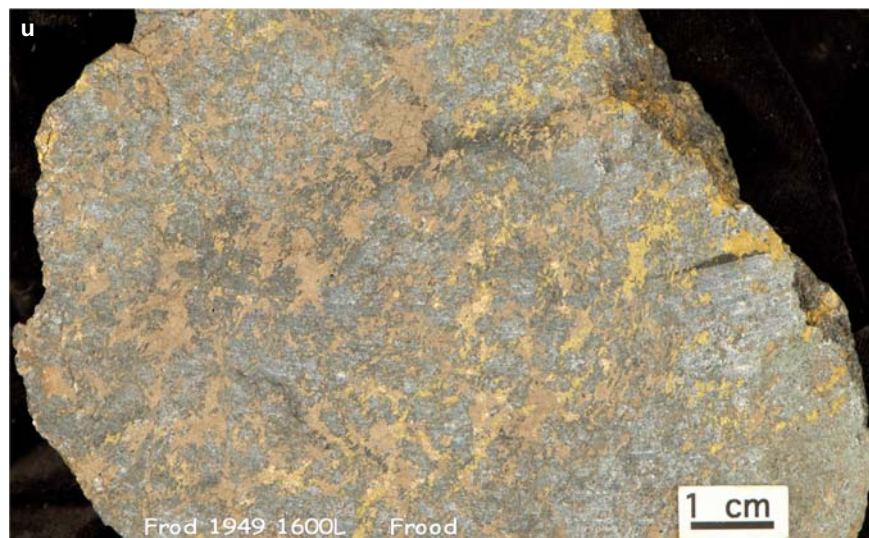


**Figure SR4.1s. Frood mine.** Typical ore with 15% blebby pyrrhotite replaced by marcasite and chalcopyrite. Sample F-34, Inco collection.



**Figure SR4.1t. Frood mine.** Massive pyrrhotite-chalcopyrite and less than 5% magnetite. Sample FROD1930-1, collected in 1930 by W.C. Ringsleben as part of the mining engineer collection.

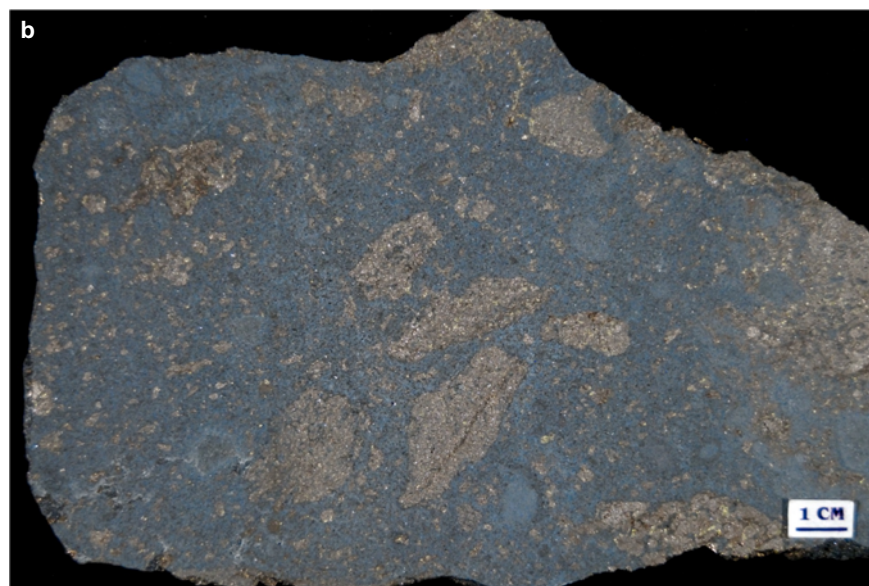




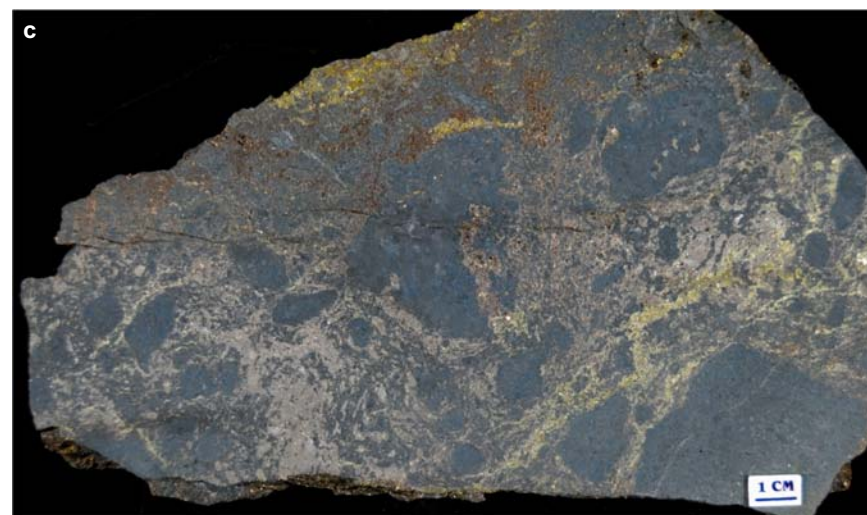
**Figure SR4.1u. Frood mine.** 45% disseminated chalcopyrite-pyrrhotite in chloritized diorite. Sample FROD1949-1, collected in 1949 by W.C. Ringsleben from the No. 4 Drift, 1600 level as part of the mining engineer collection.



**Figure SR4.2a. Frood-Stobie mine.** Blebbly to disseminated pyrrhotite-pentlandite with minor chalcopyrite within mafic norite. Sample EI-75-07, collected by Roger Eckstrand from the 2200 level.



**Figure SR4.2b. Frood-Stobie mine.** 40% blebby pyrrhotite with minor disseminated chalcopyrite within mafic norite. Sample EI-75-08, collected by Roger Eckstrand from the 2200 level.

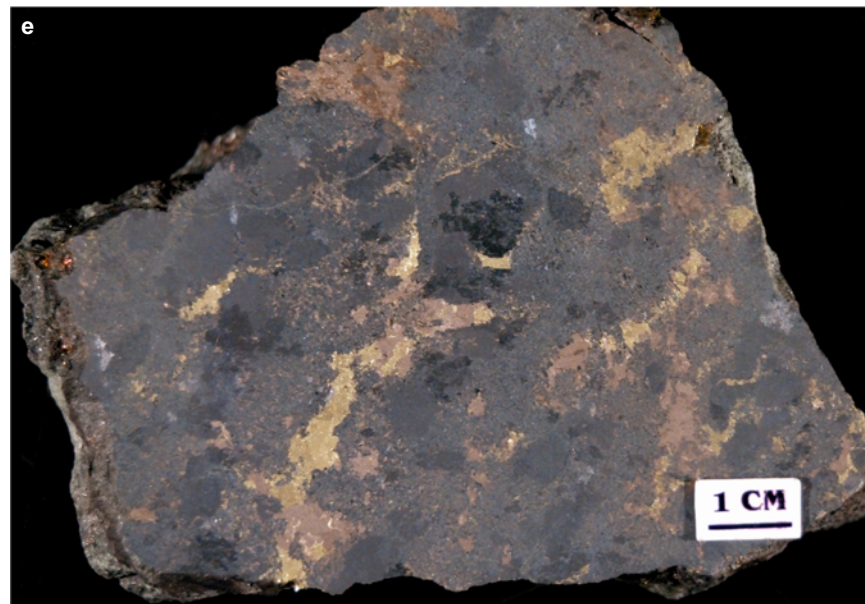


**Figure SR4.2c. Frood-Stobie mine.** Semi-massive pyrrhotite-chalcopyrite with mafic clasts. Sample EI-75-09, collected by Roger Eckstrand from the 2200 level.

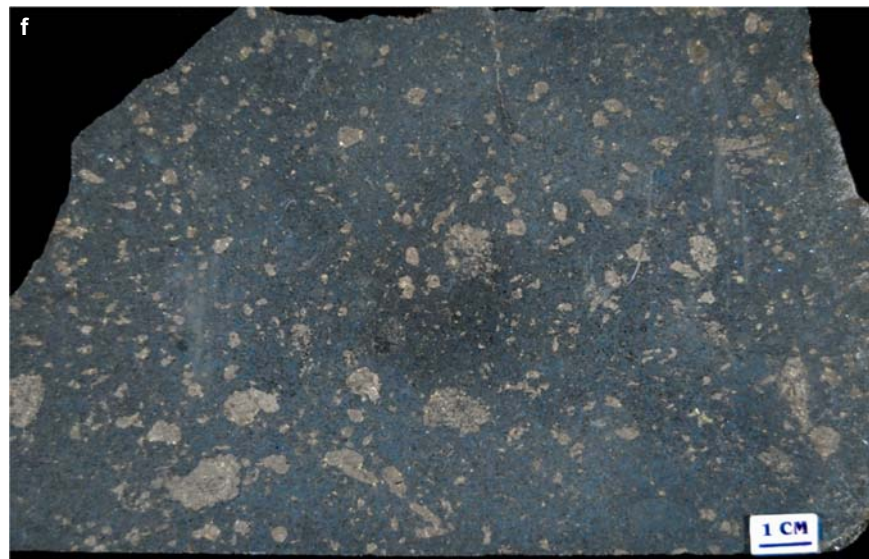




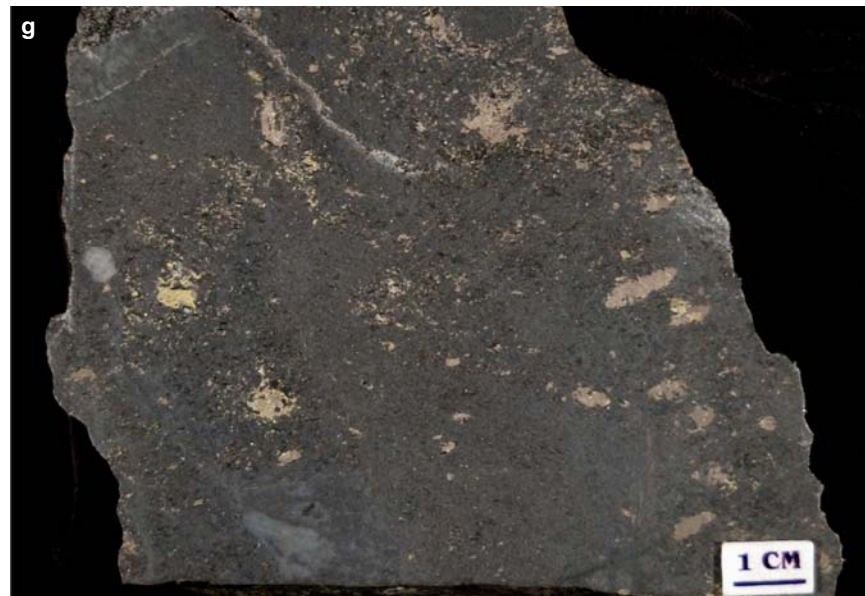
**Figure SR4.2d. Frood-Stobie mine.** Pyrrhotite-pyrite vein with minor chalcopyrite adjacent to quartz vein. Sample EI-75-11, collected by Roger Eckstrand from the 1200 level.



**Figure SR4.2e. Frood-Stobie mine.** 25% blebby, coarse, pyrrhotite-chalcopyrite within chlorite-altered host rock. Sample EI-75-12, collected by Roger Eckstrand from the 1200 level.

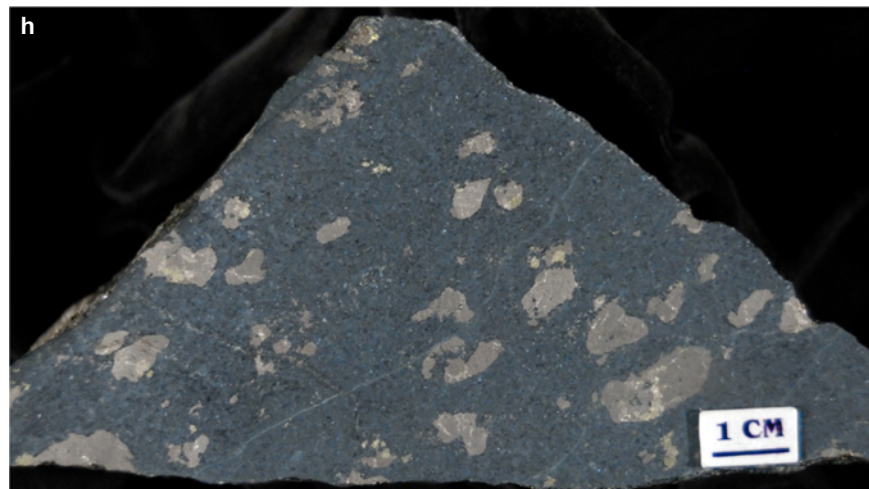


**Figure SR4.2f. Frood-Stobie mine.** 30% blebby pyrrhotite with minor chalcopyrite in mafic norite. Sample EI-75-13, collected by Roger Eckstrand from the 1200 level.

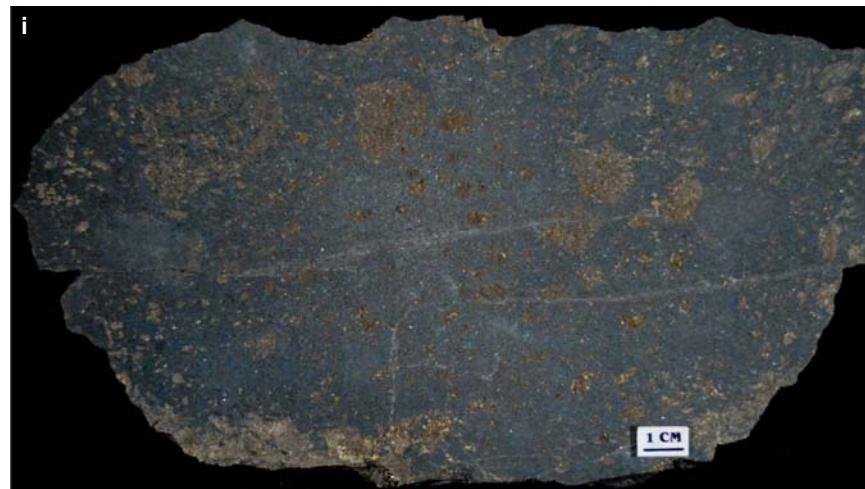


**Figure SR4.2g. Frood-Stobie mine.** Blebby to semi-massive pyrrhotite with minor chalcopyrite within mafic norite. Sample EI-75-14, collected by Roger Eckstrand from the 1200 level.

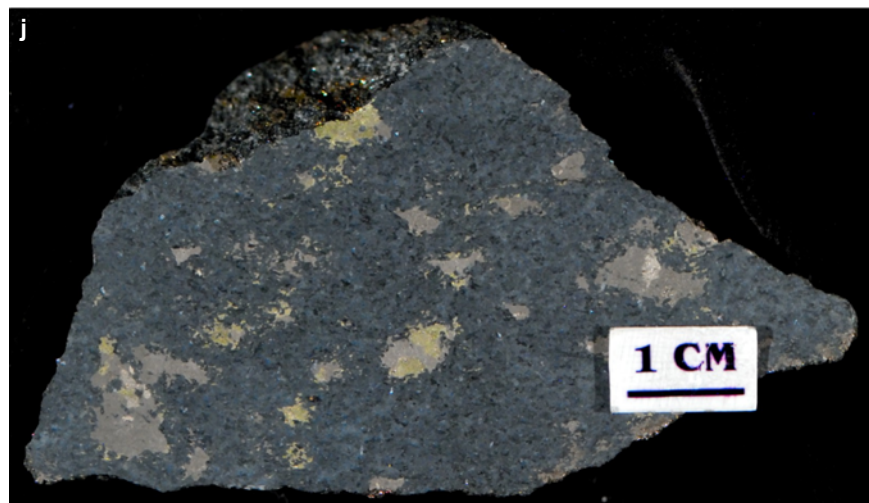




**Figure SR4.2h. Frood-Stobie mine.** 35% blebby pyrrhotite-chalcocopyrite in mafic norite. Sample EI-75-16, collected by Roger Eckstrand.



**Figure SR4.2i. Frood-Stobie mine.** 40% blebby pyrrhotite-chalcocopyrite in medium-grained mafic rock. Sample EI-75-17, collected by Roger Eckstrand.

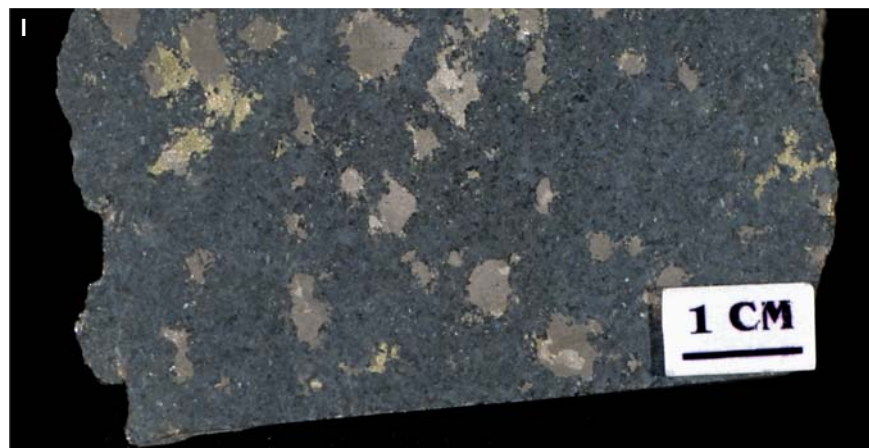


**Figure SR4.2j. Frood-Stobie mine.** 25% blebby pyrrhotite-chalcocopyrite within a noritic rock. Sample 98-AV-75, collected by Rod Kirkham from the Frood-Stobie pit.

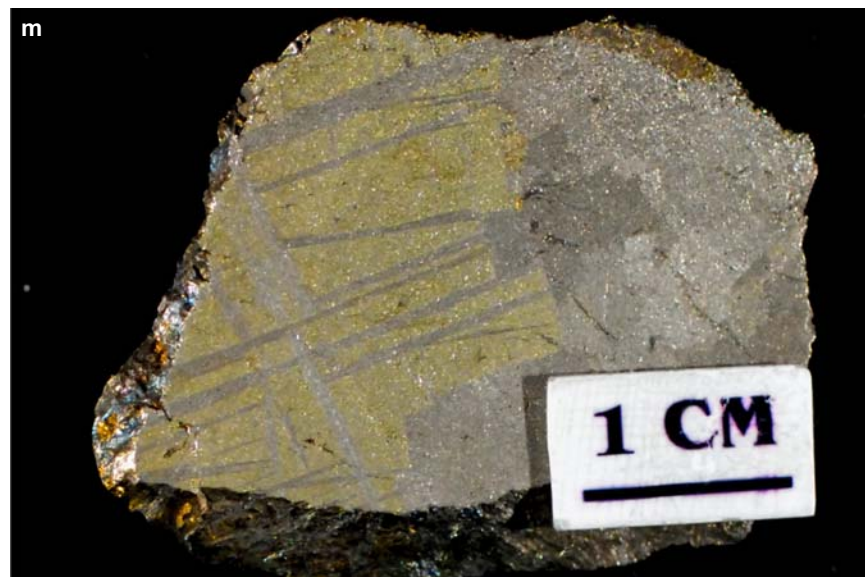


**Figure SR4.2k. Frood-Stobie mine.** Interstitial to semi-massive pyrrhotite-chalcocopyrite within mafic rock. Sample 98-AV-76, collected by Rod Kirkham from the Frood-Stobie pit.





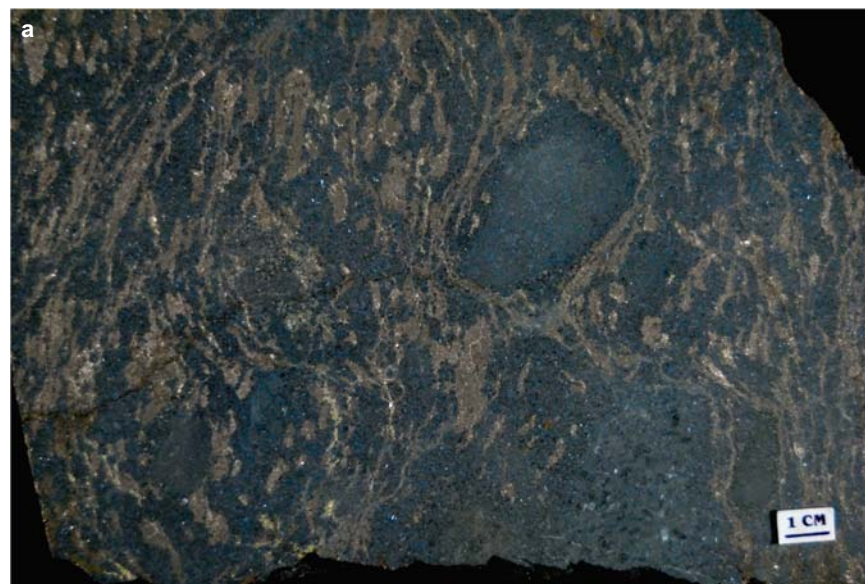
**Figure SR4.2l. Frood-Stobie mine.** 25% blebby pyrrhotite with minor chalcopyrite. Sample 98-AV-77, collected by Rod Kirkham from the Frood-Stobie pit.



**Figure SR4.2m. Frood-Stobie mine.** Massive chalcopyrite-cubanite. Sample 98-AV-78, collected in 1929 from the 2800 level.

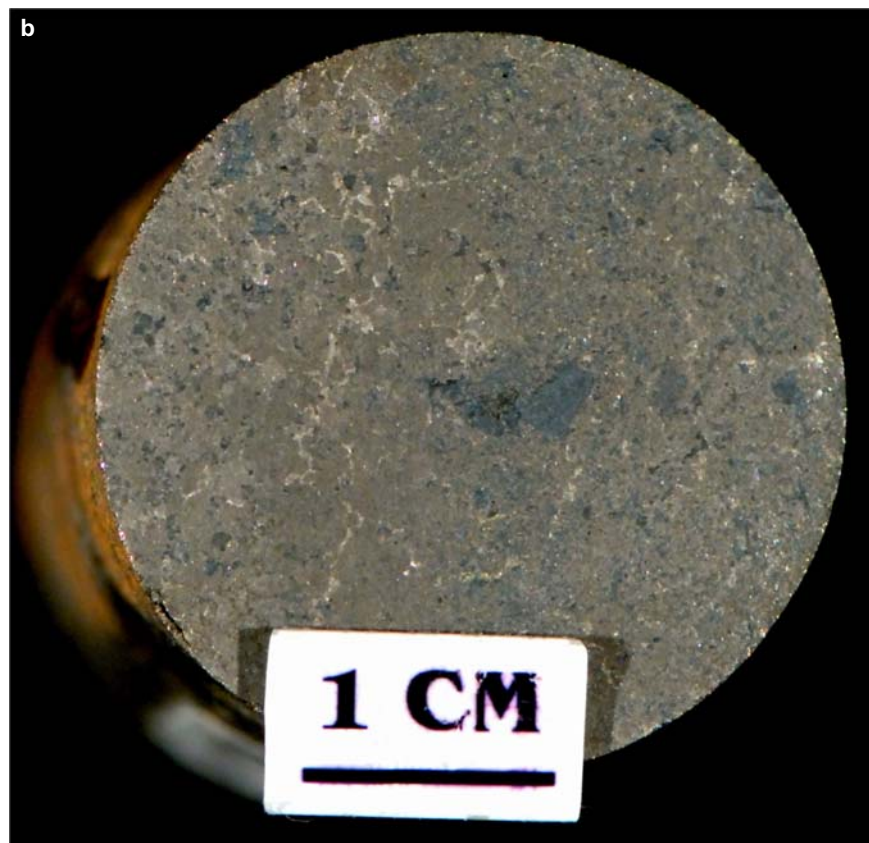


**Figure SR4.2n. Frood-Stobie mine.** Interstitial to semi-massive pyrrhotite-chalcopyrite in quartz diorite. Sample 98-AV-79, collected in 1929 from the 2400 level.

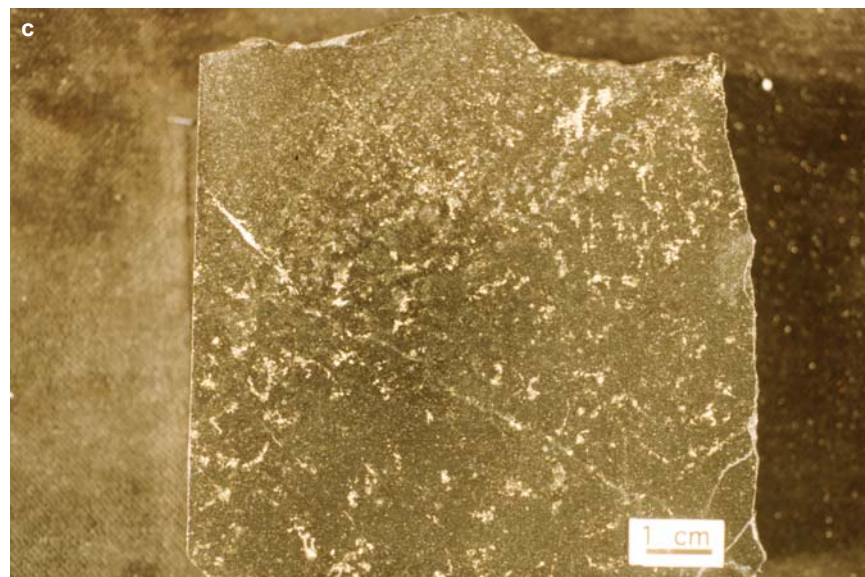


**Figure SR4.3a. Stobie mine.** Blebby to semi-massive pyrrhotite with minor chalcopyrite within sheared mafic clasts, Levack Gneiss Complex. Sample 01-AV-213, collected by Watkinson.

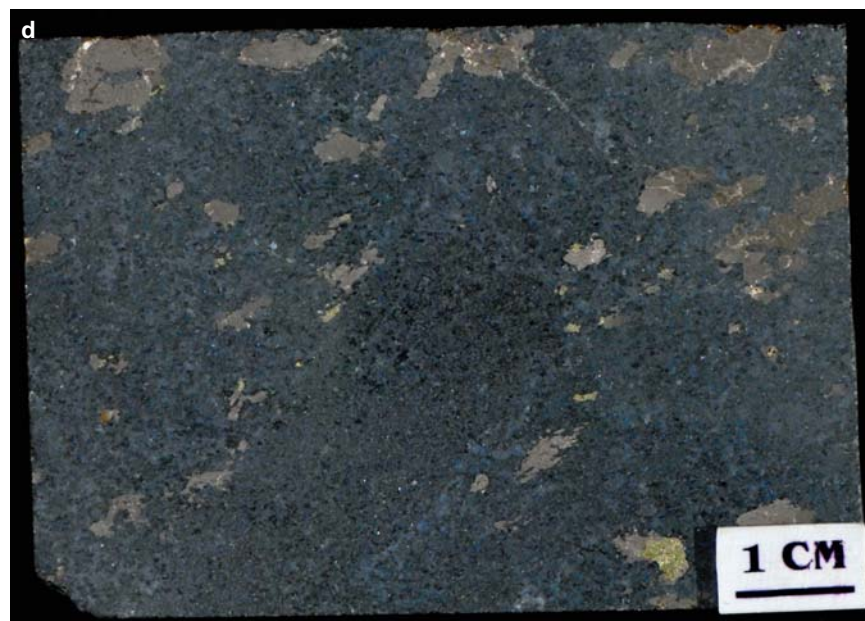




**Figure SR4.3b. Stobie mine.** Massive pyrrhotite-pentlandite with silicate inclusions and chlorite alteration. Sample STOB1888-1, collected by R. Bell in 1888.

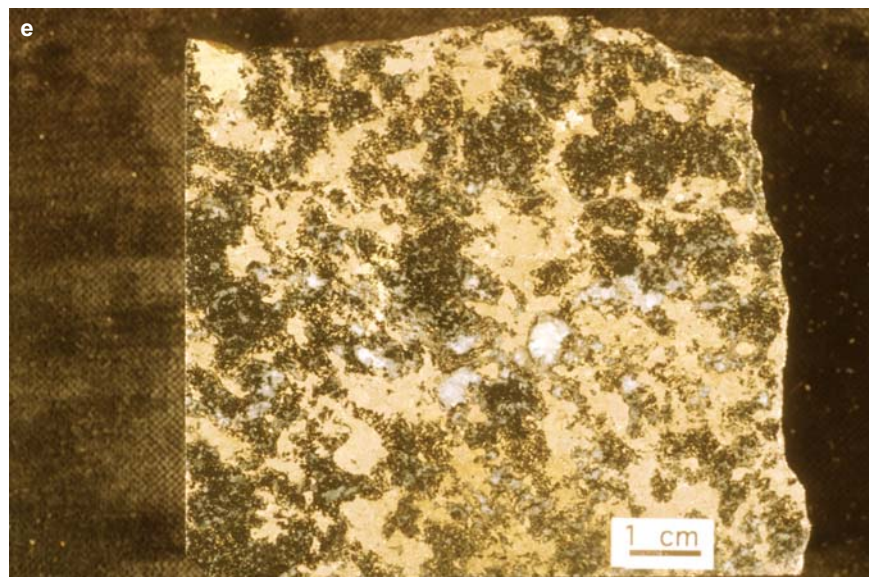


**Figure SR4.3c. Stobie mine.** Typical ore with 8% blebby pyrrhotite-chalcopyrite in fine-grained gabbro. Sample S11, Inco collection.

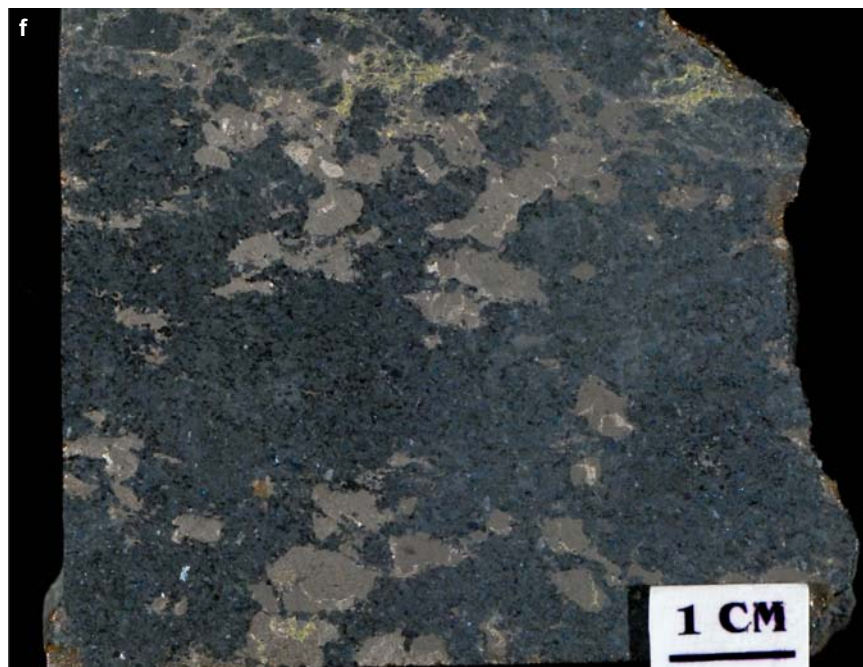


**Figure SR4.3d. Stobie mine.** Typical ore with 15% blebby pyrrhotite-pentlandite-chalcopyrite in medium-grained gabbro. Sample S14, Inco collection.

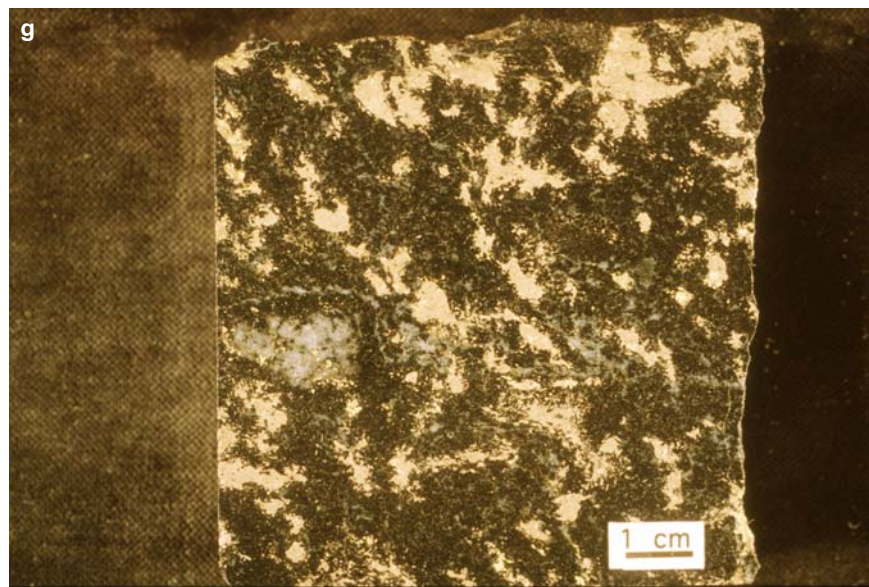




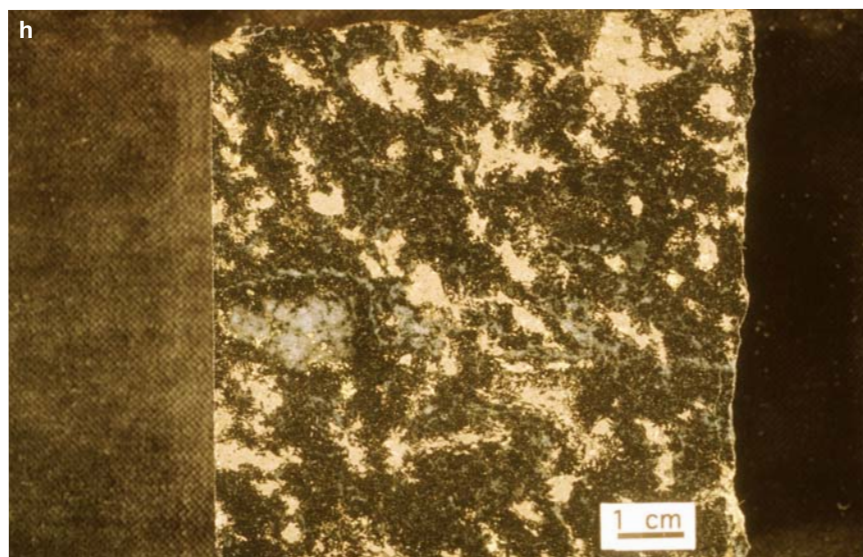
**Figure SR4.3e. Stobie mine.** Typical ore with 25% blebs and stringers of pyrrhotite-pentlandite in coarse-grained quartz phyric gabbro. Sample S16, Inco collection.



**Figure SR4.3f. Stobie mine.** Typical ore with 20% blebby to stringer pyrrhotite-chalcocopyrite in fine-grained gabbro. Sample S17, Inco collection.

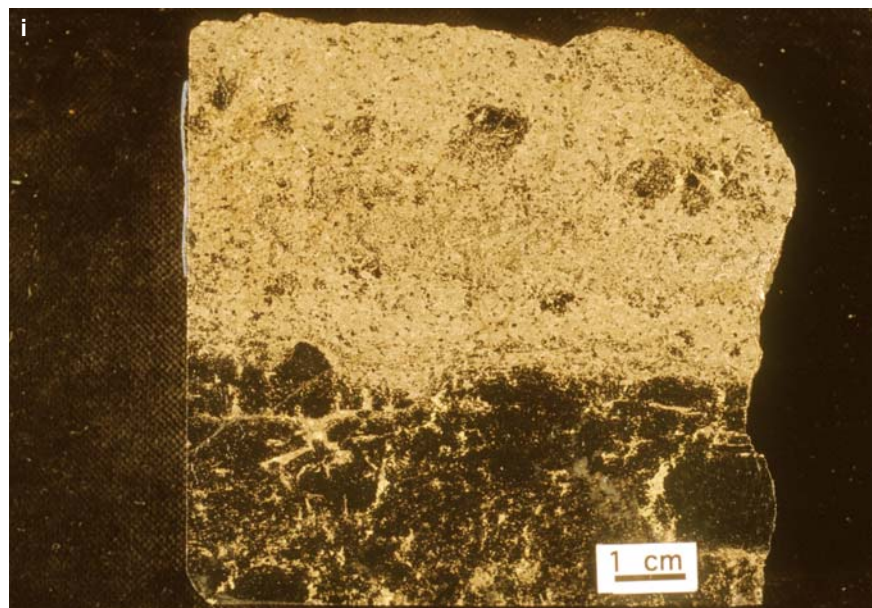


**Figure SR4.3g. Stobie mine.** Typical ore with 20% blebby coarse pyrrhotite-chalcocopyrite-pentlandite in medium-grained gabbro. Sample S18, Inco collection.

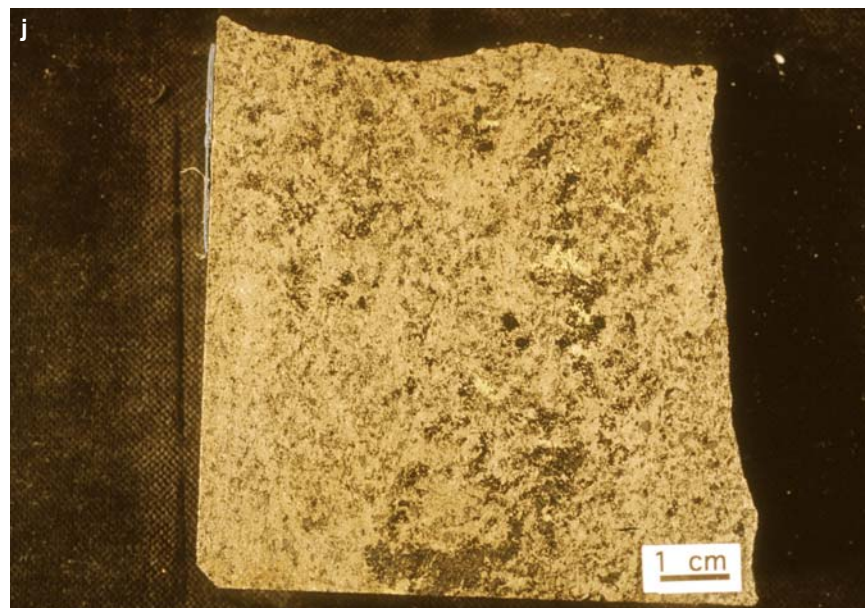


**Figure SR4.3h. Stobie mine.** Typical ore with 15% blebby coarse pyrrhotite-chalcocopyrite in medium-grained altered gabbro. Sample S19, Inco collection.

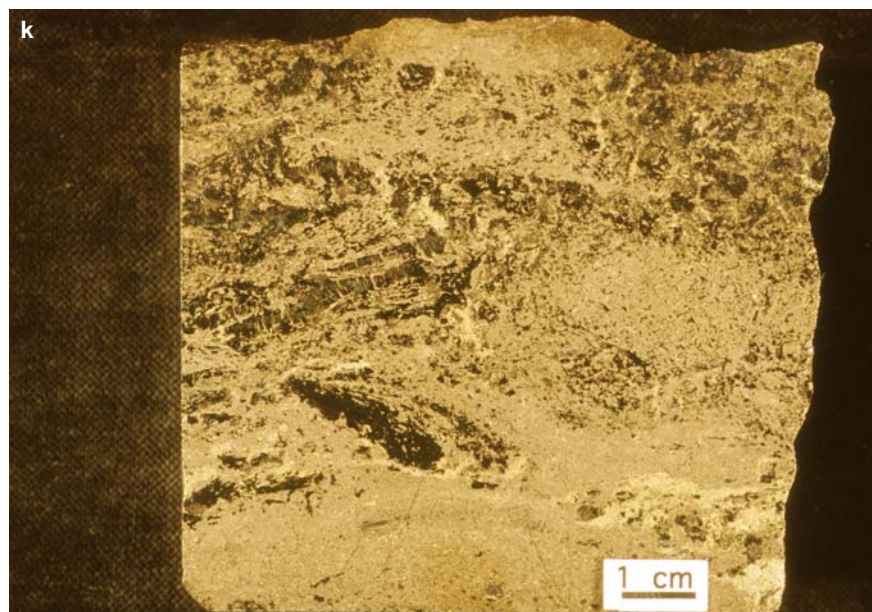




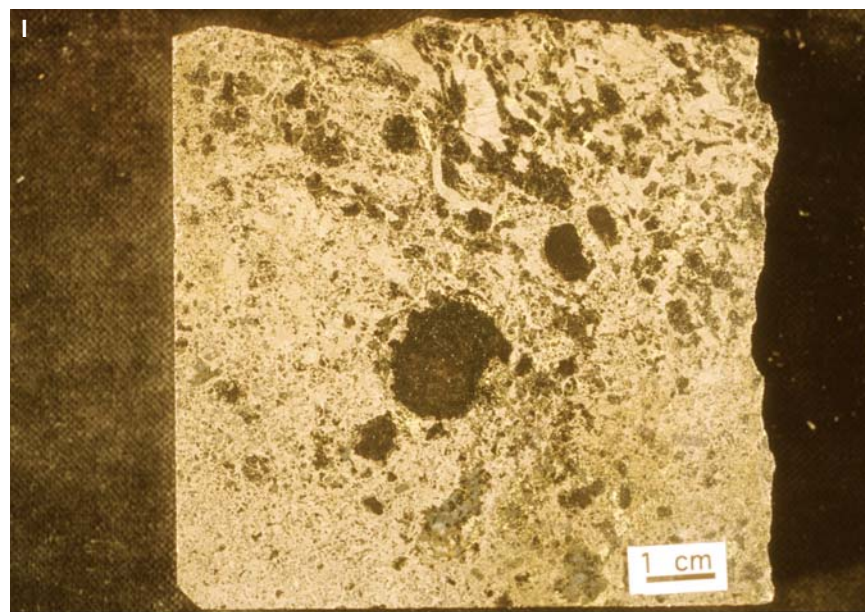
**Figure SR4.3i. Stobie mine.** Representative pyrrhotite vein with a halo of pyrrhotite-chalcopyrite stringer in the adjacent host fine-grained gabbro. Sample S31, Inco collection.



**Figure SR4.3j. Stobie mine.** Representative massive pyrrhotite-chalcopyrite. Sample S32, Inco collection.

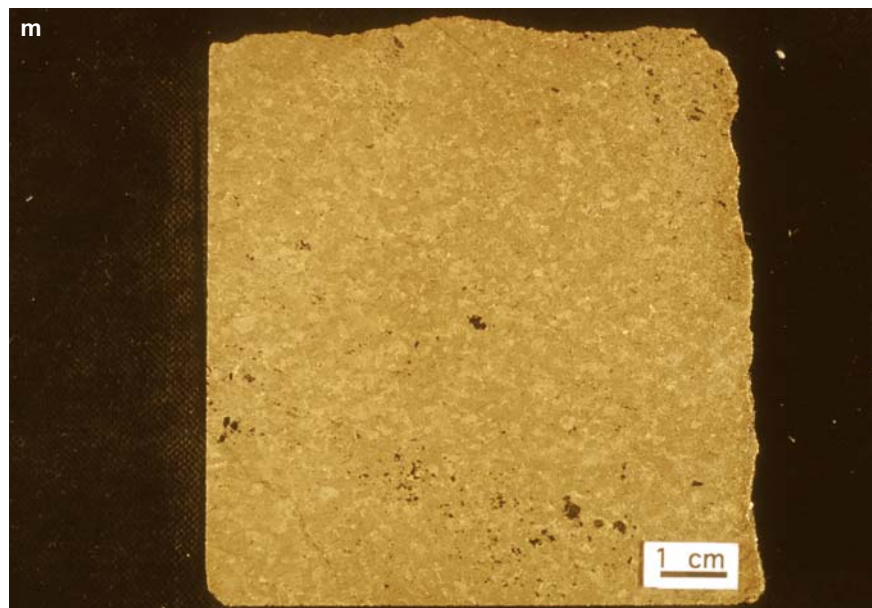


**Figure SR4.3k. Stobie mine.** Representative massive pyrrhotite-chalcopyrite. Sample S33, Inco collection.



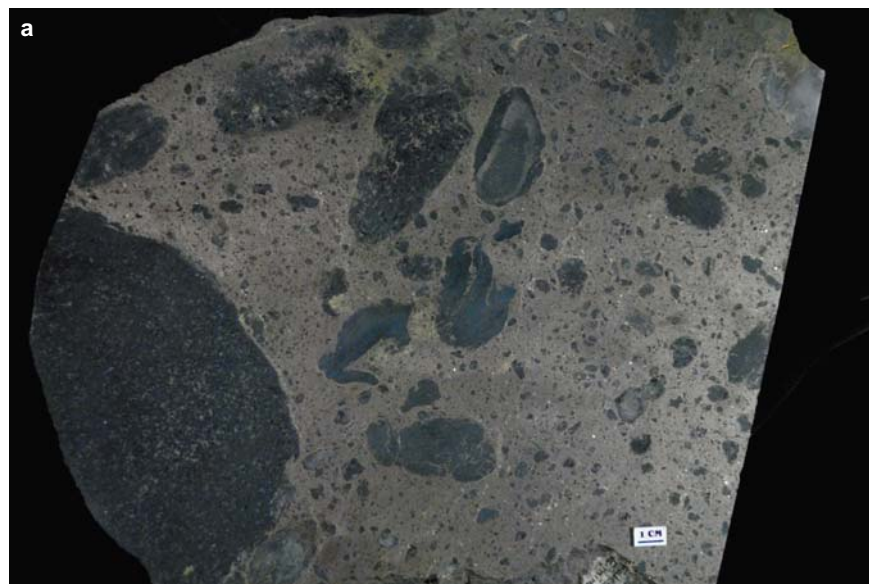
**Figure SR4.3l. Stobie mine.** Representative massive pyrrhotite-chalcopyrite. Sample S41, Inco collection.





**Figure SR4.3m. Stobie mine.** Representative massive pyrrhotite-chalcopyrite. Sample S51, Inco collection.





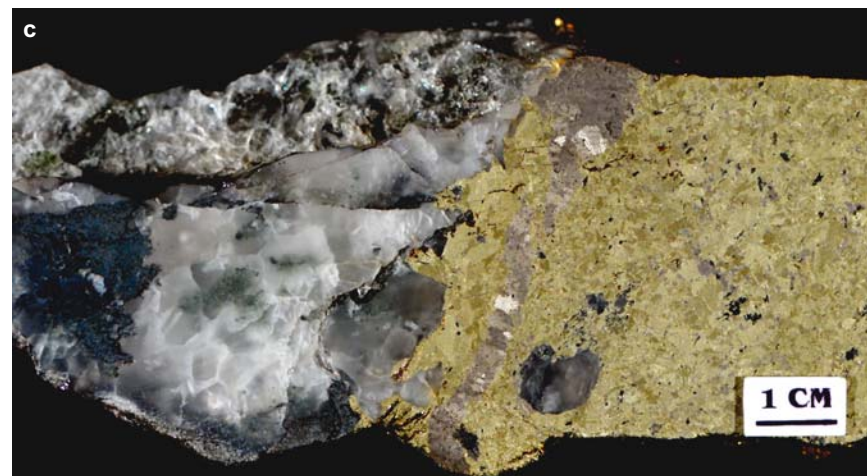
**Figure SR5.1a. Falconbridge East mine.** Semi-massive to interstitial pyrrhotite-pyrite-chalcopryite in mafic Levack Gneiss Complex. Sample 01-AV-195, collected by Watkinson.



**Figure SR5.2a. Falconbridge mine.** Semi-massive pyrrhotite with blebby pentlandite and disseminated chalcopryite stringers. Sample 98-AV-67.

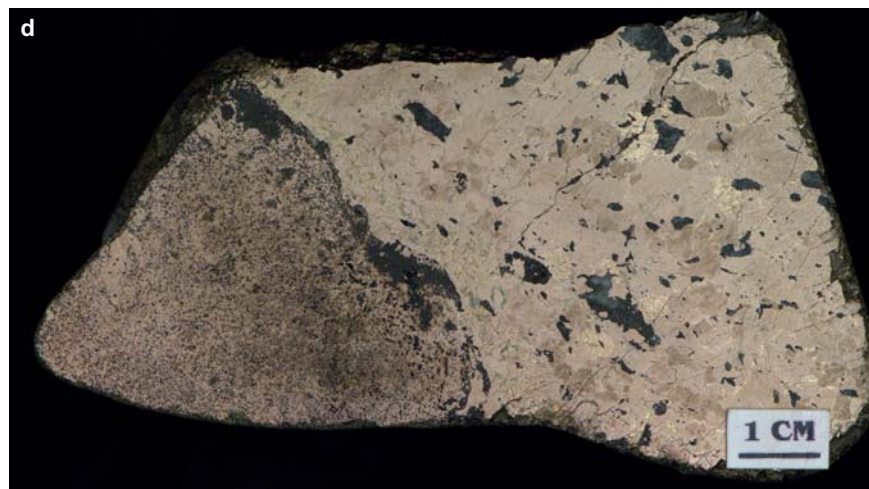


**Figure SR5.2b. Falconbridge mine.** Banded massive pyrrhotite with minor chalcopryite along scapolite vein (in mafic host rock?). Sample EI-70-15A, collected by Roger Eckstrand from the #5 zone, 4800 level.

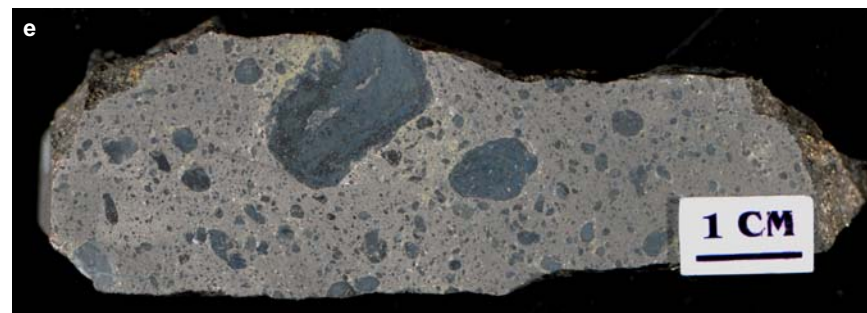


**Figure SR5.2c. Falconbridge mine.** Massive pyrrhotite-chalcopryite adjacent to a quartz vein. Note some minor green epidote alteration in the quartz. Sample EI-70-15B, collected by Roger Eckstrand from the #5 zone, 4800 level.

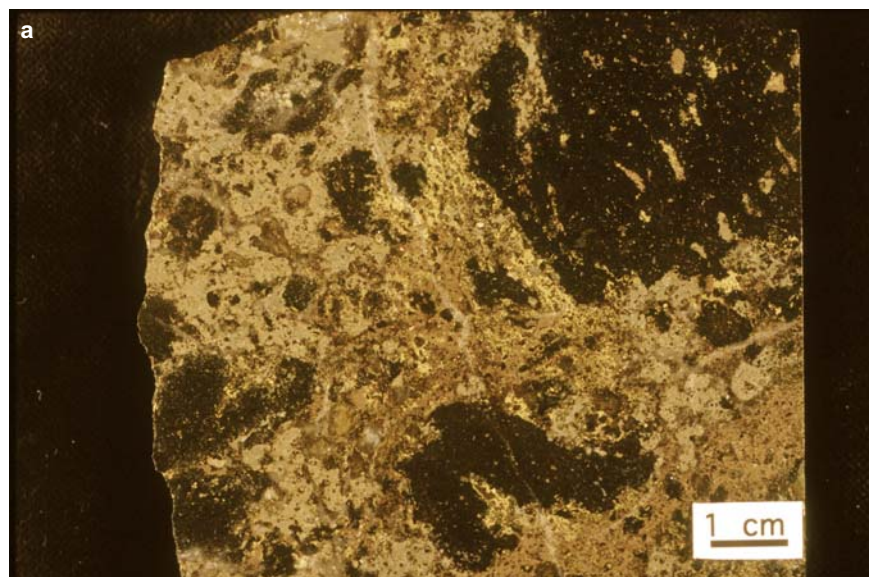




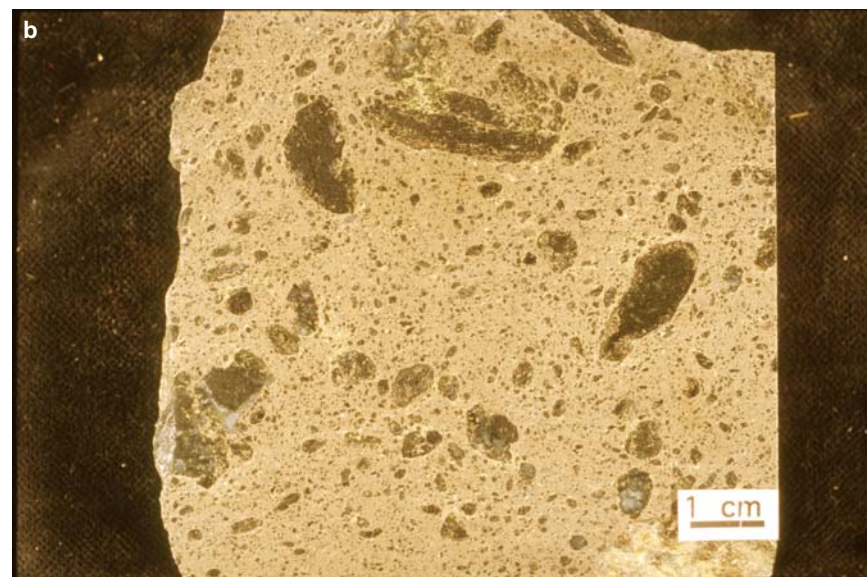
**Figure SR5.2d. Falconbridge mine.** Massive pyrrhotite-pentlandite-chalcopyrite with mafic inclusions. Sample EI-70-16, collected by Roger Eckstrand from the #5 zone.



**Figure SR5.2e. Falconbridge mine.** Massive pyrrhotite with interstitial pentlandite-chalcopyrite and mafic fragments. Sample EI-70-17, #5 zone.

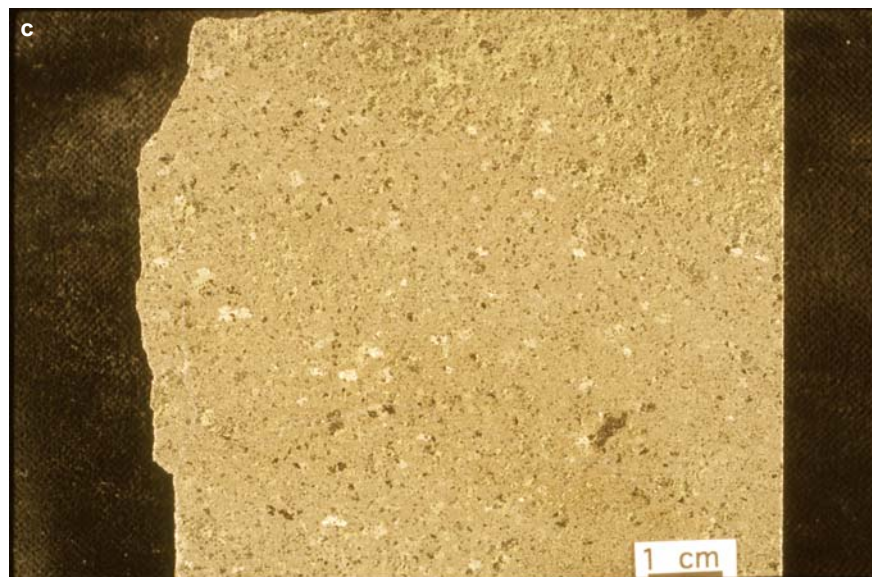


**Figure SR5.3a. Garson mine.** Representative semi-massive pyrrhotite-chalcopyrite with chlorite alteration in Sudbury Igneous Complex. Sample G-1, Inco collection.

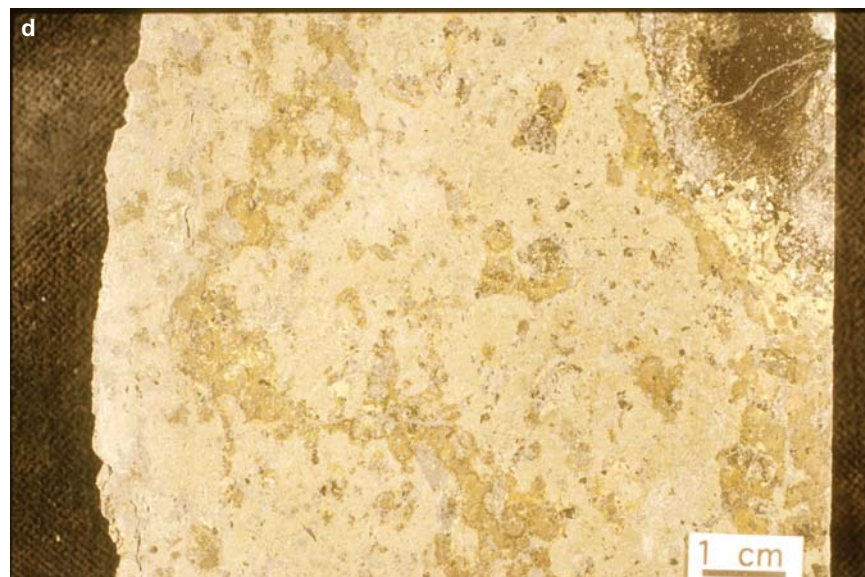


**Figure SR5.3b. Garson mine.** Representative massive pyrrhotite-pentlandite. Sample G-3, Inco collection.

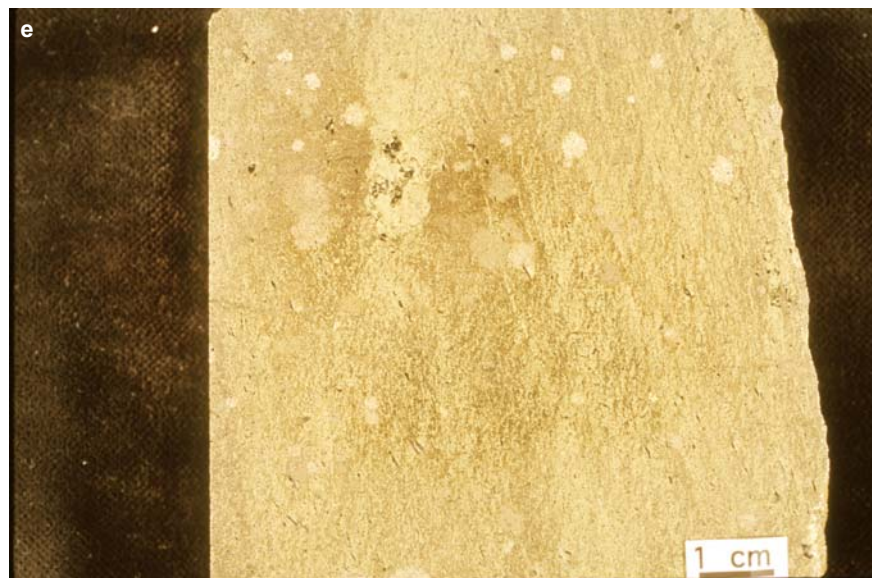




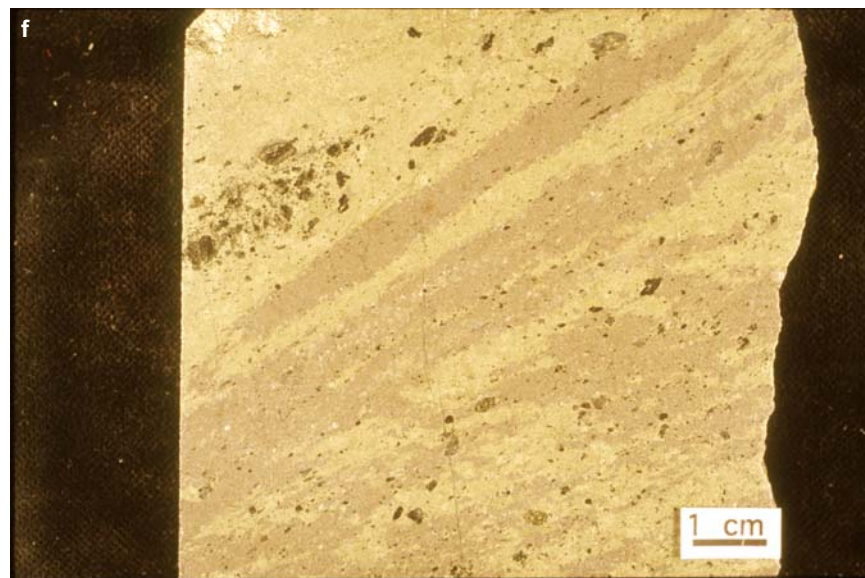
**Figure SR5.3c. Garson mine.** Representative massive pyrrhotite-pentlandite-chalcopyrite. Sample G-5, Inco collection.



**Figure SR5.3d. Garson mine.** Representative massive marcasite replacing pyrrhotite-pentlandite, chalcopyrite, Ni-pyrite, Ni-marcasite, high arsenides. Sample G-7, Inco collection.

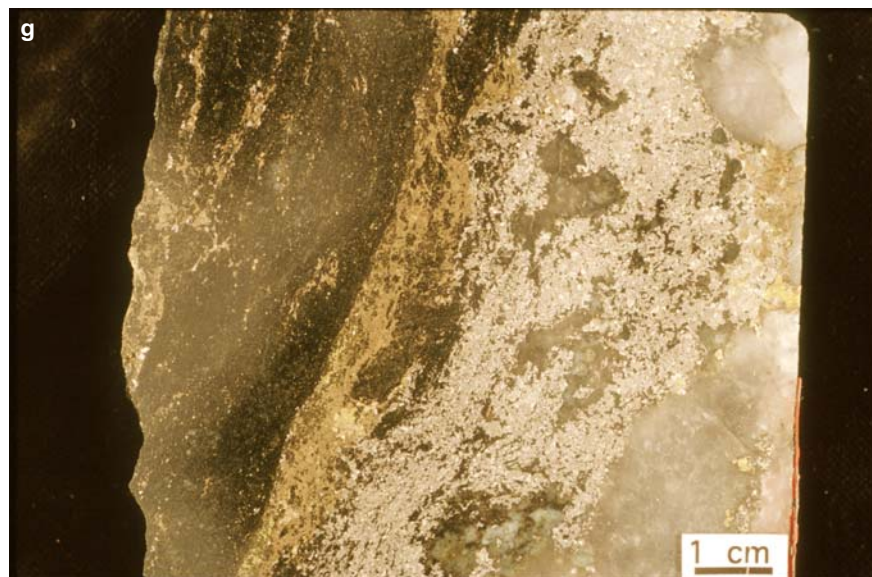


**Figure SR5.3e. Garson mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite. Sample G-8, Inco collection, Inco collection.

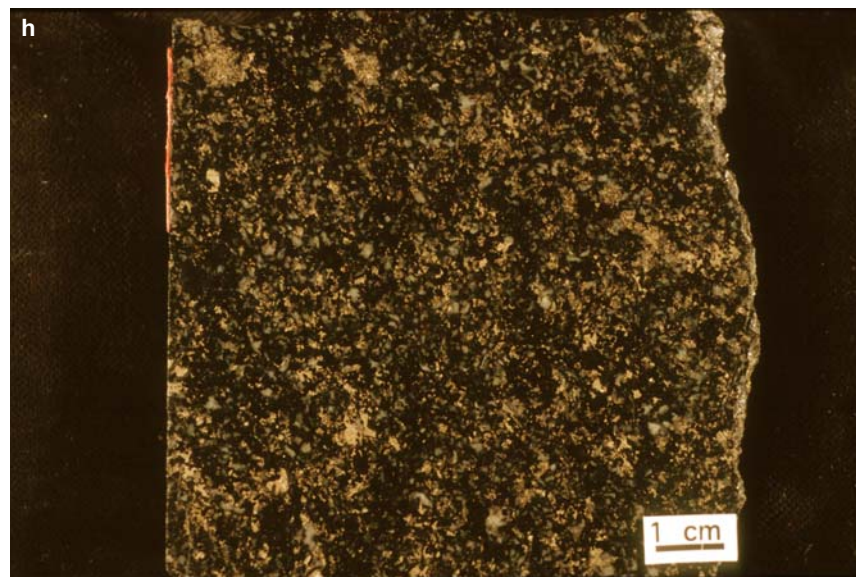


**Figure SR5.3f. Garson mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite. Sample G-10, Inco collection, Inco collection.

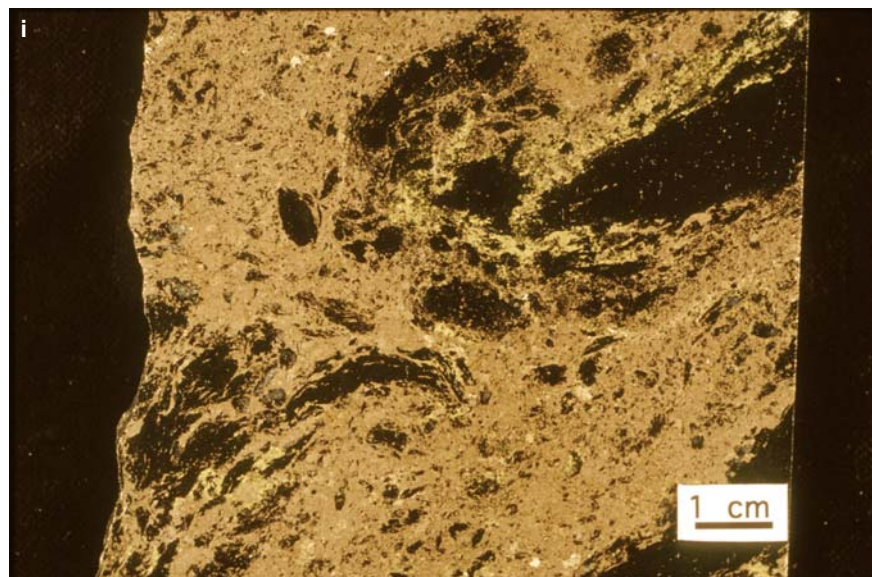




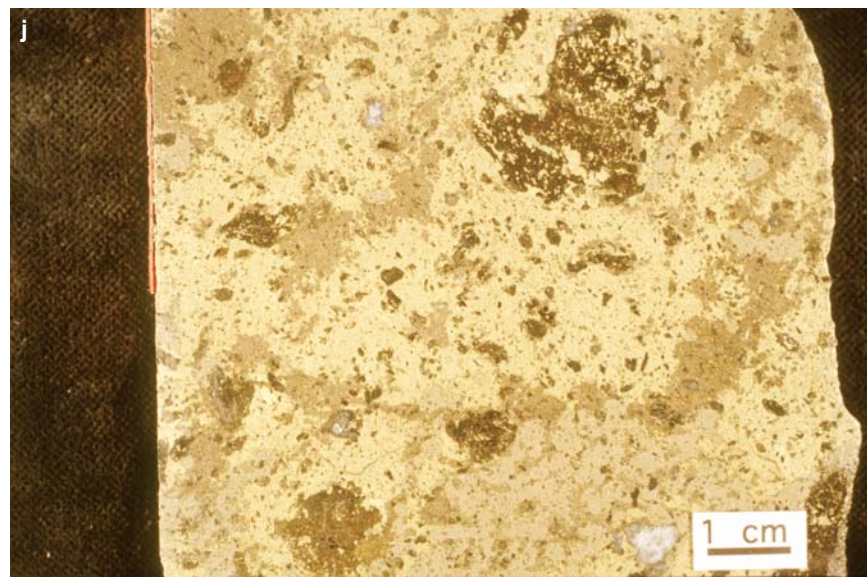
**Figure SR5.3g. Garson mine.** Representative semi-massive, interstitial and disseminated pyrrhotite-pentlandite-chalcopyrite within Sudbury Igneous Complex. Sample G-12, Inco collection.



**Figure SR5.3h. Garson mine.** Typical ore with 15% interstitial pyrrhotite-pentlandite within Sudbury Igneous Complex. Sample G-14, Inco collection.

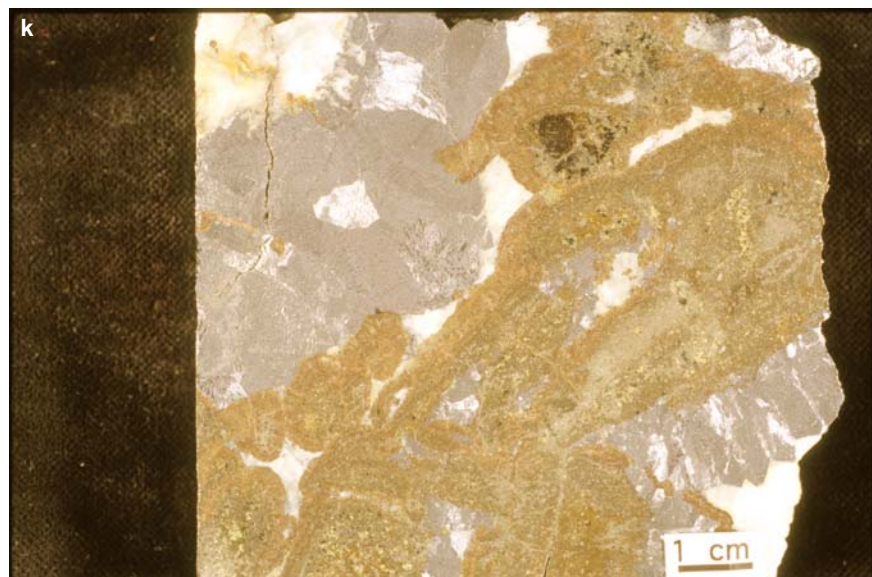


**Figure SR5.3i. Garson mine.** Representative massive pyrrhotite-chalcopyrite-pentlandite. Sample G-15, Inco collection.

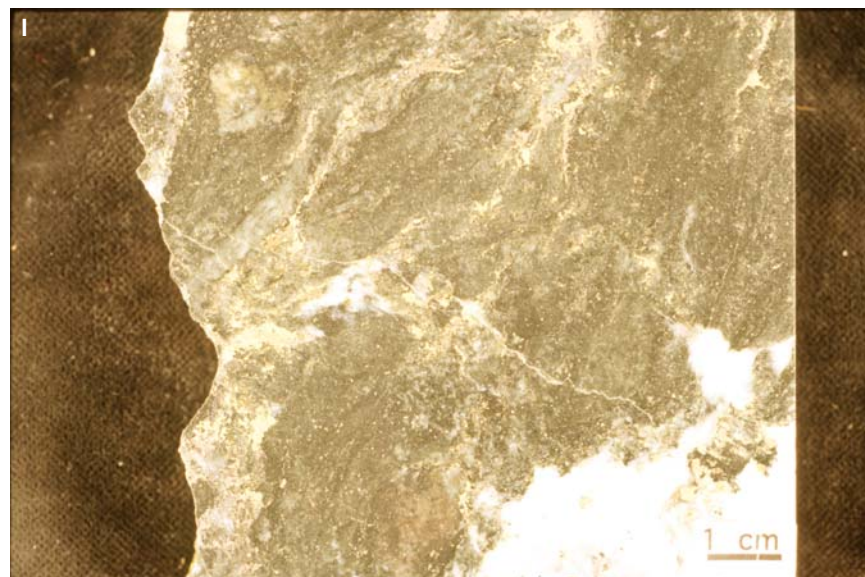


**Figure SR5.3j. Garson mine.** Representative massive chalcopyrite-pyrite. Sample G-16, Inco collection.





**Figure SR5.3k. Garson mine.** Representative massive sphalerite-galena-pyrrhotite-chalcopyrite. Sample G-19, Inco collection.



**Figure SR5.3l. Garson mine.** Representative stringer chalcopyrite-pyrrhotite in fine-grained altered Sudbury Igneous Complex with quartz, K-feldspar pegmatite. Sample G-20, Inco collection.