

Electron Microprobe Data

Ruff ID: **R050208** Mineral: **Chalcopyrite**
Locality: Kidd Creek mine, Timmins, Ontario, Canada

Weight Percents

Analysis	#75	#76	#77	#78	#80	#82	#85	#87	#88	#90	Average	StDev
S	35.05	35.20	34.98	35.02	34.96	34.94	34.89	34.96	34.87	34.90	34.98	0.10
Fe	30.15	30.29	29.82	30.07	30.12	30.15	30.49	30.38	30.12	30.18	30.18	0.18
Cu	34.09	34.01	33.87	34.10	34.29	33.92	33.31	33.89	33.54	33.71	33.87	0.29
Totals	99.29	99.50	98.67	99.19	99.37	99.01	98.69	99.23	98.53	98.79	99.03	0.34

Cation numbers normalized to 2 S

											ACN	StDev	NCN*
Fe	0.99	0.99	0.98	0.99	0.99	0.99	1.00	1.00	0.99	0.99	0.99	0.01	1.00
Cu	0.98	0.98	0.98	0.98	0.99	0.98	0.96	0.98	0.97	0.98	0.98	0.01	1.00
Totals	1.97	1.96	1.96	1.97	1.98	1.97	1.97	1.98	1.96	1.97	1.97	0.01	2.00

Ideal Chemistry: CuFeS₂

Calculated Chemistry: CuFeS₂

Trace amounts of Zn

Instrument: Cameca SX50

Sample Voltage: 15 kV

Acceleration Current: 20 nA

Beam Size: Spot

Date of Analysis: 10/20/2005

Microprobe Calibration Data

Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
TAP	Zn	La	20	10	600	-600	ZnS
TAP	Si	Ka	20	10	600	-600	kspar-OR1
PET	S	Ka	20	10	500	-500	chalcopy
PET	Mo	La	20	10	500	-100	wulfenite
LIF	Co	Ka	20	10	500	-300	codi
LIF	Fe	Ka	20	10	500	-500	chalcopy
LIF	Cu	Ka	20	10	500	-500	chalcopy

ACN: Average Number of Cations

NCN*: Normalized Cation Numbers = ACN*2.00/1.97

StDev: Standard Deviation