

R.731

Company: Comalco Ltd.

Aim: Scout testing for further information on which to base credressing program.

Sample: 761736 which is handpicked wriggilite from old mine waste and prospecting costfans.

Source: Sample was supplied by P.W. Askins of Comalco who selected it from the Shepherd and Murphy mine area at Moina.

Method:

1. Crush to pass 12.7 mm ($\frac{1}{2}$ ") screen, mix well then riffle out about 1 kg. Screen this 1 kg on 1 mm and use oversize for heavy liquid separation at density 2.95 t/m³.
2. On material not used for H/L
 - a crush to all pass 3.17 mm ($\frac{1}{8}$ ")
 - b riffle out an assay head sample and 1 kg lots for scout tests.
3. Pulverize head sample, riffle into 3 parts
 - a assay one part for Ca, Mg, Fe, SiO₂, Ti, Al, F, CO₂, S, Sn, Zn, Pb, Cu, Bi, Mo, Sb, W, L.O.I., Insol., (Au & Ag; AAS)
 - b another part will be sent Comalco for analysis
 - c reserve third part for possible analysis by AMDEL should Comalco request it.
4. Scout tests. Grind to 95% passing 600 μ m for series A, 95% passing 150 μ m for series B and 95% passing 38 μ m for series C.
 - a do magnetic separations on Series A, B & C and assay M/A & N for F, Sn, W, S, Fe.
 - b do tabling on series B & C (& A or perhaps jig) and assay G, M & T for F, Sn, W, and Davis tube.
 - c do sulphide froth flotation on series B & C and perhaps table flotation on series A coarse fraction. Assay sulphide products for S, Fe, Zn, Pb, Cu, Bi, Mo, Sb, F and Davis tube and on tailings do non sulphide flotation using oleic acid, sulphonated castor oil and tannic acid as principal reagents. Assay products for F, Sn, W, and Davis tube.

(H.K. Wellington)
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