

D Geoffrey Mason External Consultant

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Qualifications BMet, CEng, FIMMM, MBIM
Date of Birth 1947
Nationality British

Current Position at CWA

External Consultant.

Specific Expertise and Experience

Geoff Mason has more than 35 years' experience in metallurgical industries, spanning operations management, plant design, consultancy and economic analysis.

In addition to his management role for the economic analysis of lead, zinc and precious metals at CRU, Geoff gave technical service to the other teams, especially copper, nickel and associated by-products.

Geoff has a broad background in analysis of costs within the industries, producing detailed studies on both operating and capital costs. Related to this, Geoff has carried out evaluation performance improvement opportunities related to optimising plant performance through measurement and analysis of bottlenecks.

Geoff Mason has also assisted with numerous mineral cargo shopping disputes including nickel ore, iron ore, copper concentrate and various industrial minerals.

Zinc

- Detailed cost studies on the zinc smelting industry, with cost modelling
- Strategic review of zinc's supply, demand and future prospects (price & volume) based on technical and cost factors
- EAF dust treatment and the recovery of zinc, technical and financial analysis
- The secondary zinc industry, review of costs and producers
- Evaluation of the zinc industry in China, production and consumption
- Review of feed availability for smelter considering expansion

Lead

- Review of the lead industry's cost basis and smelting technologies for primary and secondary materials, utilising cost model
- Evaluation of the lead industry in China, production and consumption
- Future scenarios for lead demand based on alternative vehicle technologies

Copper/gold

- Copper smelting and refining costs, worldwide review and cost model
- Copper hydrometallurgy, technical appraisal and future prospects
- A strategic review of the copper smelting industry
- Design of copper electrowinning plant for by-product production of nickel leach operation
- Capital productivity of open pit copper and gold mines
- Valuation of copper smelter
- Valuation for copper refinery
- Appraisal of economics of open pit copper/gold mine
- Valuation of anode slimes
- Prospects for the Kazakh copper industry

Precious metals

- Technical and economic input into IPO for silver project
- Review of PGM supply, demand, price and cost for prospective new entrant

General

- Study of Eastern Europe and CIS non-ferrous metals' industries
- Performance improvement studies at various mine, mill and smelter operations

Summary of Previous Employment

2006

St. Barbara Consultancy Services

Metallurgist

1989 – 2006

CRU Group Ltd.

Manager of Lead, Zinc & Precious Metals Team,
former positions as Principal Consultant and
Manager of Competitive Analysis Team.

1989

Mott MacDonald

Metallurgical Consultant to for joint venture copper
electrofoil plant

1983-1989

BP Minerals International

Design Engineer & Consultant for

1980 – 1983	Teacher of Physics
1978 – 1980	IMI copper electrorefinery Plant Manager
1969 – 1978	Roan Consolidated Copper Mines Ltd. Manager of Precious Metals Plant, Zambia, formerly electrorefinery metallurgist.

Publications and Presentations:

World to run out of zinc concentrates?, American Zinc Association, 2006

Prognosis for Zinc's Fundamentals, Metal Bulletin Conference, Antwerp 2005

TC's Are Bad for Your Wealth? American Zinc Association 2004

China's Internal Zinc Market, Metal Bulletin Conference, Singapore 2001

Zinc Outlook, CIM/PDAC Toronto 2000

Is the Only Way Up? (for Zinc Metal Prices), American Zinc Association 1999

Prospects for Copper & Zinc, CIM Calgary 1999

Factors Affecting Zinc Metal Stocks, American Zinc Association 1997

Zinc and the Emerging Markets, IZA's Zinc College, 1997

Zinc in China, American Zinc Association 1996

Development of a Computerised Tankhouse Mass Balance Program, AIME Annual Conference 1987