

# VRG

Valuation Research Group



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## Mining Industry Credential Presentation

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**Valuation Research Group (VRG) was created in 1995.** It provides **quality valuations and value-related services** for the U.S. and international business communities. Our global network consisting of over 1,000 professionals, has an established reputation for providing **expert and independent opinions of value** for business enterprises, intangible assets, real estate, and personal property. Collectively, our professionals have served clients in more than 60 countries.

Multinational engagements are managed locally by a single point of contact and executed by professionals located in the respective countries. Our valuation specialists have intimate knowledge of local economies, languages, cultures, and legislative frameworks. We understand U.S. GAAP requirements, as well as the tax and financial reporting requirements specific to a particular country. Our professionals have superior management skills, providing clients with deliverables within the required time frames.



## Major Services

### Transaction-Related Services

- Services to support mergers, acquisitions and divestitures
- Solvency opinions
- Fairness opinions
- Capital adequacy opinions

### Portfolio Valuations

- Illiquid investment valuations
- ASC 820 compliance
- Valuations for transactional purposes

### Services for Financial Reporting

- ASC 820 – fair value
- ASC 350/360 – impairment
- ASC 805 – business combinations
- ASC 718 – stock-based comp
- Valuations for fresh start accounting

## Professionals

Our highly skilled senior professionals participate in all phases of assignments from initial client discussions through final recommendations. Our professionals average more than 22 years of experience. Most have backgrounds in accounting, economics, finance and statistics, and hold advanced certifications, including CFA, CPA, MAI and ASA.

## Clients

The breadth of our client base is substantial; our clients range in size from large corporations to smaller, privately-held organizations. In addition, we have long-standing relationships with investment banking firms, private equity firms, law firms, accounting firms, and commercial lenders in the United States and abroad.

### Tangible and Intangible Asset Valuations


- Fixed assets used as collateral
- Insurable values
- Real estate
- Machinery & equipment
- Intellectual property
- Goodwill

### Tax-Related Services

- Transfer pricing studies
- Valuations for allocation of purchase cost
- Cost segregation
- Valuation for ad valorem tax
- Gift and estate tax services
- Multinational corporate tax
- Section 409A – cheap stock

VRG's team of valuation professionals has tangible asset valuation expertise across the mining spectrum from open mining to underground mining companies. We have provided valuation and appraisal services for mining clients in the following areas:

<b>Appraisals</b>	<b>Mines</b>
<ul style="list-style-type: none"><li>• Mining machinery &amp; equipment appraisal</li><li>• Real estate appraisal</li></ul>	<ul style="list-style-type: none"><li>• Quarries</li><li>• Primary metals</li><li>• Coal</li><li>• Open mining-underground</li></ul>
<b>Valuations</b>	<b>Mineral Economics</b>
<ul style="list-style-type: none"><li>• Impairment models</li><li>• Valuations for investment purposes</li><li>• IFRS</li><li>• Intangible assets</li><li>• Mining &amp; quarry valuations for mergers &amp; acquisitions</li><li>• Litigation support</li></ul>	<ul style="list-style-type: none"><li>• Reserve estimations</li><li>• Environmental studies</li></ul>



VRG's team can deliver geological and environmental consulting services across a full range of professional services to the natural resource industry throughout the U.S. and internationally, including:

- Acquisitions & divestitures
- Appraisals
- Environmental
- Geology
- Litigation support
- Mineral economics

Work is routinely performed in the coal, petroleum, metals, and industrial mineral sectors.

The mining industry is one of the most dynamic industries the world has known, characterized by its resiliency and its ability to adapt to constant change, all the while providing the raw materials that have built contemporary society. We are proud to be a part of this industry and to make our contribution to its wellbeing.

To accomplish this, our partners continually evaluate the mining industry's needs and strive to expand and adapt services to meet these needs. What began as a group of exploration and mining geologists more than 35 years ago has evolved into a full-service consulting platform that incorporates a broad spectrum of disciplines into its practice.

Country	Company	Mine	Project
<b>Argentina</b>	Odorizzi Porifidi	Quarry (Porphyry)	Italian company. The first project was the appraisal of machinery and equipment and a real estate appraisal of the different quarries in the Argentine Patagonia and central processing plant. The second project was the reserves estimation and a business valuation for a possible sale of the company.
<b>Australia</b>	Centrex Metal		Centrex Metal was an ASX listed company developing a mine and deep sea port in SA. Leadenhall was engaged to value the options for accounting purposes
	County Coal	Coal	Financial modelling of proposed coal terminal
	Goldcorp		Detailed review of valuations prepared for investment purposes
	Lithium Australia	Lithium	Lithium Australia Ltd is an ASX listed company. Leadenhall was engaged to prepare a valuation of performance rights issued to the directors and management and performance option rights that had already been converted into shares.
	Newcrest		Detailed review of valuations prepared for investment purposes
	Newmont		Detailed review of valuations prepared for investment purposes
	Palandin		Detailed review of valuations prepared for investment purposes

Country	Company	Mine	Project
<b>Australia</b> (continued)	Phoenix Copper	Copper	Phoenix Copper is an ASX listed mineral exploration and mining company. Leadenhall was engaged to value the performance shares and employee stock options
	Ramelius	Gold	Ramelius is a diversified gold exploration and mining company. Leadenhall assisted Ramelius develop a WACC and review their impairment model for their December 2013 accounts and has continued to work with them.
	Spencer Resources	Copper-Gold	Independent expert's report including valuation of Iron Oxide Copper Gold project
	Wah Nam International Holdings Limited	Iron Ore	Valuation for circular reference
<b>Brazil</b>	Contril-Extração e Mineração	Granite	
	Mineração Capa Branca	Limestone	
	Pedreira Santa Isabel	Granite	
	Sulcatarinense Mineração	Granite	



Country	Company	Mine	Project
<b>China</b>	AsiaPhos Limited	Phosphate	Valuation for IPO
	China Daye Non-Ferrous Metals Mining Limited	Copper	Valuation of mining rights for circular reference
	China Zhongsheng Resources Holdings Limited	Iron Ore	Competent person report for IPO
<b>Colombia</b>	AngloGold Ashanti	Gold	Real Estate Appraisal
	Calina	Limestone and Dolomite	M&E Appraisal
	Explomin	Drilling Services	M&E Appraisal
	Goldstone	Gold	Real Estate Appraisal
	Gran Colombia Gold	Gold and Silver	M&E Appraisal
	Mineros S.A.	Gold	Real Estate Appraisal

Country	Company	Mine	Project
India	Ballasore Alloys Ltd.	Chrome Ore Mines & Ferro Alloy Manufacturing	Valuation for financial reporting and management review purpose
	Binani Cement Ltd.	Cement, Limestone	Valuation of fixed assets for IFRS 1 purpose, Valuation of mines and estimation of asset retirement obligation of limestone mines for financial reporting and under IRFS, Financial advisory services for valuation of mineral reserves for banking purposes
	Dalmia Cements (Bharat) Ltd.		Valuation of mines and minerals, fixed assets & intangible assets for financial reporting purposes
	Hindustan Copper Ltd.	Copper	Valuation of all assets including mines, smelters, townships, dams of Hindustan Copper Ltd. For the Governments of India's Disinvestment Programme
	Hindustan Zinc Ltd.	Zinc Mines	Valuation of all fixed assets including mines, mineral reserves, industrial assets, smelters, residential townships spread across 14 states on behalf of Disinvestment Ministry, Government of India for Disinvestment Purpose
	JSW Steel Ltd.	Coal Mines	Valuation advisor for the proposed acquisition of Coal Mines of Bharat Coking Ltd. By JSW Energy
	Kudremukh Iron Ore Company Ltd.		Valuation of fixed assets including mining equipment, plant & machinery, steel structures and spares of KIOCL Ltd.

Country	Company	Mine	Project
<b>India</b> (continued)	Manganese Ore (India) Ltd.		Valuation of assets of Manganese Ore – India's largest Manganese producing company – for Government of India's Disinvestment Programme
	Ministry of Coal	Coal Mines	Valuation of coal blocks/mines for the Schedule II and Schedule III coal blocks which have been auctioned by Nominated Authority of Government of India
	Sagar Cements	Limestone Mines	Valuation for Sagar Cements and Amareshwari Cement to determine share swap ratio for merger purpose
	Sree Metaliks Ltd.	Iron Ore Mines	Valuation of equity shares for internal review purposes
	Stemcor Holding Ltd.	Iron Ore Mines	Financial advisory services for providing Fairness Opinion/Valuation of iron ore mines and associated facilities of Stemcore India for a proposed transaction
<b>Indonesia</b>	Geo Energy Resources Limited	Iron Ore	Valuation for IPO
	NH Ceramics Ltd	Coal	Valuation for circular reference
<b>Kazakhstan</b>	MIE Holdings	Petroleum	Valuation for circular reference

Country	Company	Mine	Project
<b>Malaysia</b>	CNMC Goldmine Limited	Gold	Valuation for IPO
	Prosperity International Holdings (H.K.) Limited	Iron Ore	Valuation for circular reference
<b>Mexico</b>	Compañía Minera Autlan	Iron Alloys	IFRS
	Gold Corp	Gold and Silver	IFRS
<b>Peru</b>	MMG Limited	Copper	Valuation for circular reference
<b>South Africa</b>	Auger Mining South Africa	Coal	Auger Mining is a wholly owned subsidiary of Weslo with the purpose of providing contract surface coal augering services. VRC was engaged by Mr. Paul Bryant to review valuation assumptions and methodologies used in determining the fair market value of the Africa Mining South Africa Ltd. capital stock.

Country	Company	Mine	Project
Spain	Matsa (a Mubadala & Trafigura Company)	Ore processing plant producing copper, zinc and lead concentrates with significant quantities of silver.	Asset Tagging / Floor-to-Book Reconciliation/ Valuation for insurance purposes.
UK	CD Capital	Global natural resources and mining fund	Valued all of their investments on a quarterly, half yearly and annual basis in respect of a series of funds.
USA	Alliance Resource Partners, L.P.	Coal	Alliance Resource mines coal in eleven underground coal mining complexes located in the Illinois Basin and the Central/Northern Appalachia regions. VRC was engaged by Alliance to determine the fair market value of certain assets including coal producing sites, coal reserves and favorable sales contracts.
	CF Industries	Fertilizer/Chemical	CF Industries transforms natural gas into nitrogen which is used to produce fertilizer. VRC was engaged by CF Industries to look at control premiums in the fertilizer and related industries as part of CF's internal analysis of goodwill impairment.
	EP Minerals, LLC	Diatomaceous Earth, Perlite, and Clay	EP Minerals provides industry minerals and is the worldwide leader in diatomaceous earth, perlite, and clay which are used for various purposes. VRC was engaged by EP Minerals to establish the enterprise value and total equity of the company.

Country	Company	Mine	Project
USA (continued)	Fairmount Minerals	Industrial Sand	Fairmount Minerals mines industrial sand which is used for construction, metal casting, glass, landscaping and for many other purposes. VRC was engaged to render a solvency opinion to the Board of Directors of FML Holdings, Inc. and the company's wholly owned subsidiary Fairmount Minerals, Ltd.
	IMC Global Inc.	Potash, Fertilizer	IMC Global was a mining and production company. VRC was engaged by IMC Global, Freeport-McMoRan Inc., FMRP Inc. and Freeport-McMoRan Sulphur Inc. to render a solvency opinion to comply with certain conditions to the agreement and plan of merger between Freeport-McMoRan Inc. and IMC Global Inc.
	International Coal Group, Inc.	Coal	International Coal Group produces coal in the northern and central Appalachian regions. VRC was engaged by International Coal to provide an estimate of fair value of a certain derivative(s) embedded in the ICG issued 4.0 percent convertible notes due 2017 for financial planning purposes.
	Oldcastle Materials	Cement, Asphalt	Oldcastle produces cement, ready-mix cement, aggregates and asphalt. VRC was engaged by Oldcastle to value the products plants and reserves in Indiana and Ohio.
	Natural Resource Partners	Coal	Natural Resource leases properties to coal producers, mainly in Appalachia. VRC was engaged by Natural Resource to provide services in relation to its acquisition of VantaCore Partners LP. VantaCore operates three hard rock quarries, six sand and gravel processing facilities, two asphalt plants and a marine terminal.

Country	Company	Mine	Project
USA (continued)	Natural Resource Partners	Coal	VRC was engaged for another project to determine cash flows associated with coal reserves and contract-related intangible assets in support of financial and tax reporting requirements.
	Searles Valley Minerals	Boric Acid, Sodium Carbonate, Sodium Sulfate, Borax, Salt	Searles Valley is a chemical and fertilizer mining company. It serves industrial and agricultural industries. VRC was engaged by Searles to value three owned facilities located in Trona, California.
	The Doe Run Company	Lead Ore	The Doe Run Company is primarily involved in the entire lead products process, from mining to milling to smelting and refining. VRC was engaged by Doe Run to analyze certain tracts of the Herculaneum real estate owned by Doe Run. VRC valued the market value of the property by type and investigated the highest and best use of the property.
	United Coal Company	Coal	United Coal produces coking and steam coal located in the Central Appalachian region. VRC was engaged by United Coal to render its opinion as to the fair value per share of the common stock of the company.
	U.S. Aggregates	Cement, Asphalt	U.S. Aggregates produces cement, ready-mix cement, aggregates and asphalt. VRC was engaged by U.S. Aggregates to render our opinion of the value-in-use, orderly liquidation and forced liquidation of the personal and real property of Cox Rock Products and Cox Transport Corporation.
	U.S. Salt LLC	Salt	U.S. Salt manufactures salt. VRC was engaged by U.S. Salt to render our opinion of the fair market value of the total equity of the company.







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