RESEARCH INDEPENDENT INVESTMENT RESEARCH

Bluejay Mining plc (AIM: JAY)

January 2022



WHO IS IIR?

Independent Investment Research, "IIR", is an independent investment research house based in Australia and the United States. IIR specialises in the analysis of high quality commissioned research for Brokers, Family Offices and Fund Managers. IIR distributes its research in Asia, United States and the Americas. IIR does not participate in any corporate or capital raising activity and therefore it does not have any inherent bias that may result from research that is linked to any corporate/ capital raising activity.

IIR was established in 2004 under Aegis Equities Research Group of companies to provide investment research to a select group of retail and wholesale clients. Since March 2010, IIR (the Aegis Equities business was sold to Morningstar) has operated independently from Aegis by former Aegis senior executives/shareholders to provide clients with unparalleled research that covers listed and unlisted managed investments, listed companies, structured products, and IPOs.

IIR takes great pride in the quality and independence of our analysis, underpinned by high caliber staff and a transparent, proven and rigorous research methodology.

INDEPENDENCE OF RESEARCH ANALYSTS

Research analysts are not directly supervised by personnel from other areas of the Firm whose interests or functions may conflict with those of the research analysts. The evaluation and appraisal of research analysts for purposes of career advancement, remuneration and promotion is structured so that non-research personnel do not exert inappropriate influence over analysts.

Supervision and reporting lines: Analysts who publish research reports are supervised by, and report to, Research Management. Research analysts do not report to, and are not supervised by, any sales personnel nor do they have dealings with Sales personnel

Evaluation and remuneration: The remuneration of research analysts is determined on the basis of a number of factors, including quality, accuracy and value of research, productivity, experience, individual reputation, and evaluations by investor clients.

INDEPENDENCE - ACTIVITIES OF ANALYSTS

IIR restricts research analysts from performing roles that could prejudice, or appear to prejudice, the independence of their research.

Pitches: Research analysts are not permitted to participate in sales pitches for corporate mandates on behalf of a Broker and are not permitted to prepare or review materials for those pitches. Pitch materials by investor clients may not contain the promise of research coverage by IIR.

No promotion of issuers' transactions: Research analysts may not be involved in promotional or marketing activities of an issuer of a relevant investment that would reasonably be construed as representing the issuer. For this reason, analysts are not permitted to attend "road show" presentations by issuers that are corporate clients of the Firm relating to offerings of securities or any other investment banking transaction from that our clients may undertake from time to time. Analysts may, however, observe road shows remotely, without asking questions, by video link or telephone in order to help ensure that they have access to the same information as their investor clients.

Widely-attended conferences: Analysts are permitted to attend and speak at widely-attended conferences at which our firm has been invited to present our views. These widely-attended conferences may include investor presentations by corporate clients of the Firm.

Other permitted activities: Analysts may be consulted by Firm sales personnel on matters such as market and industry trends, conditions and developments and the structuring, pricing and expected market reception of securities offerings or other market operations. Analysts may also carry out preliminary due diligence and vetting of issuers that may be prospective research clients of ours.

INDUCEMENTS AND INAPPROPRIATE INFLUENCES

IIR prohibits research analysts from soliciting or receiving any inducement in respect of their publication of research and restricts certain communications between research analysts and personnel from other business areas within the Firm including management, which might be perceived to result in inappropriate influence on analysts' views.

Remuneration and other benefits: IIR procedures prohibit analysts from accepting any remuneration or other benefit from an issuer or any other party in respect of the publication of research and from offering or accepting any inducement (including the selective disclosure by an issuer of material information not generally available) for the publication of favourable research. These restrictions do not preclude the acceptance of reasonable hospitality in accordance with the Firm's general policies on entertainment, gifts and corporate hospitality.

DISCLAIMER

This publication has been prepared by Independent Investment Research (Aust) Pty Limited trading as Independent Investment Research ("IIR") (ABN 11 152 172 079), an corporate authorised representative of Australian Financial Services Licensee (AFSL no. 410381. IIR has been commissioned to prepare this independent research report (the "Report") and will receive fees for its preparation. Each company specified in the Report (the "Participants") has provided IIR with information about its current activities. While the information contained in this publication has been prepared with all reasonable care from sources that IIR believes are reliable, no responsibility or liability is accepted by IIR for any errors, omissions or misstatements however caused. In the event that updated or additional information is issued by the "Participants", subsequent to this publication, IIR is under no obligation to provide further research unless commissioned to do so. Any opinions, forecasts or recommendations reflects the judgment and assumptions of IIR as at the date of publication and may change without notice. IIR and each Participant in the Report, their officers, agents and employees exclude all liability whatsoever, in negligence or otherwise, for any loss or damage relating to this document to the full extent permitted by law. This publication is not and should not be construed as, an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. Any opinion contained in the Report is unsolicited general information only. Neither IIR nor the Participants are aware that any recipient intends to rely on this Report or of the manner in which a recipient intends to use it. In preparing our information, it is not possible to take into consideration the investment objectives, financial situation or particular needs of any individual recipient. Investors should obtain individual financial advice from their investment advisor to determine whether opinions or recommendations (if any) contained in this pub

IIR, its officers, employees and its related bodies corporate have not and will not receive, whether directly or indirectly, any commission, fee, benefit or advantage, whether pecuniary or otherwise in connection with making any statements and/or recommendation (if any), contained in this Report. IIR discloses that from time to time it or its officers, employees and related bodies corporate may have an interest in the securities, directly or indirectly, which are the subject of these statements and/or recommendations (if any) and may buy or sell securities in the companies mentioned in this publication; may affect transactions which may not be consistent with the statements and/or recommendations (if any) in this publication; may have directorships in the companies mentioned in this publication; and/or may perform paid services for the companies that are the subject of such statements and/or recommendations (if any).

However, under no circumstances has IIR been influenced, either directly or indirectly, in making any statements and/or recommendations (if any) contained in this Report. The information contained in this publication must be read in conjunction with the Legal Notice that can be located at http://www.independentresearch.com.au/Public/Disclaimer.aspx.

THIS IS A COMMISSIONED RESEARCH REPORT.

The research process includes the following protocols to ensure independence is maintained at all times:

- 1) The research process has complete editorial independence from the company and this included in the contract with the company;
- 2) Our analyst has independence from the firm's management, as in, management/ sales team cannot influence the research in any way;
- 3) Our research does not provide a recommendation, in that, we do not provide a "Buy, Sell or Hold" on any stocks. This is left to the Adviser who knows their client and the individual portfolio of the client.
- 4) Our research process for valuation is usually more conservative than what is adopted in Broking firms in general sense. Our firm has a conservative bias on assumptions provided by management as compared to Broking firms.
- 5) All research mandates are settled upfront so as to remove any influence on ultimate report conclusion:
- All staff are not allowed to trade in any stock or accept stock options before, during and after (for a period of 6 weeks) the research process.

For more information regarding our services please refer to our website www.independentresearch.com.au.



Contents

Ivloving into a Pivotai Year	I
Key Points	1
Valuation Summary	2
SWOT Analysis	2
Commodity Markets	4
Mineral Sands / Ilmenite / TiO ₂	4
Base Metals	6
Platinum Group Metals	8
Company Overview	9
Strategy and Ownership	9
Projects - Dundas Ilmenite	9
Other Projects	14
Peer Comparison	18
Valuation	19
Dundas Ilmenite	19
Other Projects	21
Sum-of-the-Parts	21
Financials	22
Capital Structure	24
Risks	24
Roard and Management	24





Bluejay Mining plc (AIM: JAY)

Initiation - January 2022

Note: This report is based on information available as of 3 January 2022

Investment Profile	
Share Price as at 31 December 2021	£0.0922
Shares Outstanding	972m
Market Capitalisation	£90m
12-month Share Price Low	£0.076
12-month Share Price High	£0.160
Average daily volume	1.8m
Cash balance - 30 June 2021	£5.2m
Debt - 30 June 2021	-

Bluejay Wilning Snare Price larget	
Target price (pence)	£0.23

Board and Management
Rod McIllree - Executive Chairman
Bo Moller Stensgaard - CEO & Director
Mike Hutchinson - Director
Peter Waugh - Director
Johannus Egholm Hansen - Director

Top Shareholders	
Sandgrove Capital Management	16.0%
M&G Plc	13.6%
Rod McIllree	7.7%
HSBC Bank plc (custodian)	6.8%
Greenland Venture	1.4%
SISA Pension	1.4%
Vaekstfonden	1.4%



2022
Summer 2022
2024

Senior Analyst - Greg Maud

The investment opinion in this report is current as at the date of publication. Investors and advisers should be aware that over time the circumstances of the issuer and/or product may change which may affect our investment opinion.

MOVING INTO A PIVOTAL YEAR

Bluejay Mining plc ("Bluejay") is an exploration and development company with projects in Greenland and Finland. The company is working towards construction of the fully permitted Dundas Ilmenite Project ("Dundas") and advancing its other existing projects in Greenland and Finland. The company has secured world-class partners for its Disko-Nuussuaq ("Disko") and Enonkoski projects that will enable the company to participate in the development of these attractive assets without immediate funding obligations.

With the commissioning of Dundas, Bluejay will transform into an operating company and be able to self-fund it's share of existing and future projects. Development of any one of these projects, and especially the Disko project, could be a catalyst for the company to re-rate.

KEY POINTS

- Bluejay has received all permits needed to start production at Dundas ilmenite mine. The mine is now fully permitted for production and the company is working towards commercial production in 2024.
- Project funding discussions for Dundas are underway and well advanced. On 29 November 2021, Bluejay announced the appointment of a European Investment Bank as the lead arranger of project financing for the Dundas project. The bank will be responsible for forming a lending syndicate, coordinating lender due diligence and negotiating debt financing documentation. Based on earlier indications, it is likely that the syndicate of lenders will include the US EXIM bank and one or more European export credit agencies. Earlier in 2021 the EXIM bank signed a letter on interest for the provisional sum of approximately \$208m in debt funding for Dundas.
- The company has secured offtake for a significant portion (up to ~75%) of the ilmenite that will be produced at Dundas. The company has also identified additional ilmenite resources that it believes will allow for extended production at Dundas. Development of this project will allow Bluejay to self-fund future exploration and development work. The bulk sample produced by the company in 2019 has been successfully processed and distributed to end users for further evaluation.
- Bluejay has signed a joint venture agreement with KoBold Metals ("KoBold") to explore the Disko project. KoBold is a mineral exploration company that uses machine learning to guide exploration for new deposits. Principal investors in KoBold include Breakthrough Energy Ventures, a fund overseen by Bill Gates and whose investors include Michael Bloomberg, Jeff Bezos and Ray Dalio as well as other high-profile investors. This agreement will allow Bluejay to advance the Disko project without spending its own funds while retaining a meaningful stake. KoBold can earn a 51% interest in the Disko Project through a two-stage funding commitment. This is an exciting future development option for Bluejay.
- Bluejay has also signed an option agreement to joint venture with Rio Tinto Mining and Exploration Limited ("Rio Tinto") over the Enonkoski project. Under the JV agreement Rio Tinto may acquire up to 75% in the project by completing US\$20 million worth of expenditure. By sole funding project expenditures Rio Tinto can earn in to the project in stages. Similar to the Disko project, this arrangement will allow Bluejay to move the project forward using partner funding and still retain a meaningful stake.
- The company has also announced the conditional sale of its Black Shales project in Finland to Metal One plc for £4 million in cash and shares. Bluejay will retain exposure to the project through Metal One's shares.
- The company will receive management fees from Rio Tinto and Metal One, which should reduce the need for the company to return to the market for additional financing.
- In December 2021, Bluejay announced that the historical VAT appeal with HMRC had been finalized and that the company had received the full £1m owed.
- Our sum-of-the-parts valuation of Bluejay is US\$301m (£223m). Bluejay is currently trading at a significantly discount to this valuation. As the company moves closer to production at Dundas and advances of the Disko and Enonkoski projects we believe these 'de-risking' events will lead to a re-rating of the company.

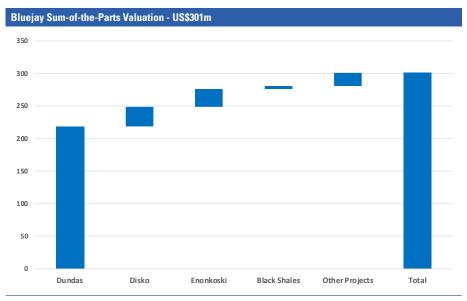
VALUATION SUMMARY

We have valued Bluejay using a sum-of-the-parts methodology.

The majority of the company's value is attributable to the Dundas Ilmenite Project. The company's Pre-Feasibility Study (PFS) for Dundas generated a project NPV_{5%} of US\$83m based on production over an 9 year life of mine and an expanded case of US\$130m over 11 years assuming the company mines a portion of the Mineral Resource.

Given the extent of Dundas' Reserves, Resources and anticipated Exploration Target, we have modelled a 30-year mine life for the operation, which is likely, but at a discount rate of 7%. Our view is that the Dundas project has a value of US\$219m.

The remaining projects in Greenland and Finland are at early stages of development and are inherently difficult to value accurately. For the Disko-Nuussuaq, Enonkoski and Black Shales projects the company has signed earn-in or sales agreements that we have used as the basis of value for these assets. We have estimated approximate values for the remaining projects in Greenland and Finland.



Based on the sum-of-the-parts valuation, we believe that the company's fair value is US\$301m (£223m), but there is certainly upside to this as projects progress and are de-risked.

SWOT ANALYSIS

Strengths

- Bluejay has projects in both Greenland and Finland, both of which are low-risk and mining-friendly jurisdictions. Mining Journal Intelligence ("MJI") publishes a World Risk Report for mining jurisdictions. Finland scores at the top of this list in terms of MJI's Investment Risk Index and Greenland is in the top half of mining jurisdictions, ahead of traditional mining heavyweights like Brazil and South Africa.
- Bluejay has secured all permits required for the Dundas Ilmenite Project. The mine is now fully permitted for production and the company is working towards commercial production in 2024. Project funding discussions are moving forward and the company has received a letter of intent from the US Export-Import Bank ("EXIM"). In addition, Bluejay has secured offtake for a significant portion (up to ~75%) of the ilmenite that will be produced.
- The mining and processing operations at Dundas are low-risk. These are simple and based on approached that are well proven elsewhere. No drilling or blasting will be required for the mining operations. Material will be mined using continuous surface miners and then concentrated using a wet gravity separation process that will use normal sea water. No crushing or chemicals are used in the process, reducing the environmental impact of the operation.
- ♦ The company has a first-mover advantage in Greenland and has some of the most prospective exploration licence areas. Since 2019, Anglo American has claimed almost 10,000 km² of exploration ground surrounding the Disko project area.

- Bluejay has a strong exposure to 'critical minerals' as defined by the US Geological Survey. These minerals, including titanium, nickel, cobalt, platinum, palladium and zinc, are expected to be in high demand going forward, with a particular drive from US and European customers to find sources from low-risk areas. The company has a portfolio of projects that are at different stages of development. This gives Bluejay a unique geographic and multi-commodity exposure.
- The company has recently signed attractive JV agreements for its Disko project (with KoBold) and Enonkoski (with Rio Tinto). These are world-class project partners that will fund the next stage of exploration at these assets while still allowing Bluejay to retain a material stake.
- Bluejay will start receiving management fees from its recently announced transactions over the Enonkoski and Black Shales projects. These fees will be the company's first source of going cash flow.

Weaknesses

Dundas has a relatively small defined onshore Mineral Reserve (67Mt) and Resource (117Mt). As a result, the company's base case development plan for the project has a short life of mine of only nine years. That said, the project has a robust NPV even for such a brief mine life. In addition, given the scale of the Resources and Exploration Target potential it is likely that the actual life of mine will be far longer. We have used 20 years for our base case.

Opportunities

- Bluejay has a JORC compliant maiden offshore Exploration Target of between 300 500Mt of ilmenite in the shallow marine area adjacent to the onshore Dundas project area. Insufficient work has been conducted to upgrade this to a defined Mineral Resource, but there is potential that over time this will allow the size of the Mineral Resource at Dundas to be materially expanded.
- ♦ The Kangerluarsuk Project consists of two 100% owned mineral exploration licences totalling 692km² located within the Karrat Group, a major Paleoproterzoic metasedimentary basin with abundant Zn-Pb-Ag ± Cu showings. Bluejay recently increased its landholdings at Kangerluarsuk five-fold owing to the potential that the company recognises within the Karrat Group for large scale base metal deposits. The project is situated only 10km north of the former Black Angel Zn-Pb-Ag mine that is acknowledged as Greenland's most profitable to date.
- In Finland, the Outokumpu and Hammashlathi projects are brownfield opportunities near historical mines. These operations were stopped due to corporate activity rather than geologic reasons. The projects are drill ready and the company is looking to monetize this asset either through own development or JV.

Threats

- ♦ The main threat to Bluejay's immediate development plans would be if the company is unable to secure financing to develop the Dundas project. Based on recent news flow this seems unlikely, but until finalized represents a risk to being able to develop the project.
- While Bluejay has a team that is experienced in working in Greenland, the high latitude of the project at ~78 degrees north carries certain inherent arctic engineering challenges and costs, including such factors as:
 - Costs of operating in such a remote environment including fly in/fly out staffing, power generation, etc.
 - Infrastructure designed for seasonal freeze-thaw cycles, fire fighting systems that use
 water, gravity separation using sea water. Surface miner productivity for mechanical
 mining of frozen sand will be lower than unconsolidated material.
 - The four month window for shipping product from Dundas and resupplying operations ahead of the next winter.
- ♦ The sale of the Black Shales project in Finland, announced on 28 July 2021, is subject to a number of conditions being satisfied. This includes certain requirements that are outside of Bluejay's sphere of influence such as Metal One raising capital and listing on the LSE AIM market. The majority of the purchase consideration that Bluejay will receive is in the form of Metal One shares rather than cash. There is a risk that this transaction will not complete.

COMMODITY MARKETS

Bluejay is fairly unique in that its project portfolio potentially covers a wide range of end usages, from TiO_2 going into paint and pigment, through to base metals, Platinum Group Elements ("PGEs") and gold.

Periodic Table Showing Bluejay's Potential Project Elements																	
1 H Hydrogen 1.0079		Bluejay Mining Project Elements Highlighted										2 He Helium 4,0026					
3	4											5	6	7	8	9	10
Li	Be											В	С	N	0	F	Ne
Lithium 6.941	Beryllium 9.0122											Boron 10.81	Carbon 12.011	Nitrogen 14.007	Oxygen 15.999	Fluorine 18.998	Neon 20.179
11	12											13	14	15	16	17	18
Na Sodium 22.990	Mg Magnesium 24.305											Al Aluminum 26.982	Si Silicon 28.086	P Phosphorus 30.974	Sulfur 32.06	Cl Chlorine 35.453	Ar Argon 39.948
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
K Potassium 39.098	Ca Calcium 40.08	Scandium 44.956	Ti Titanium 47.90	V Vanadium 50.941	Cr Chromium 51.996	Mn Manganese 54.938	Fe Iron 55.847	Co Cobalt 58.933	Ni Nickel 58.71	Cu Copper 63.546	Zn Zinc 65.38	Ga Gallium 69.72	Ge Germanium 72.59	As Arsenic 74.922	Selenium 78.96	Br Bromine 79.904	Kr Krypton 83.80
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Rubidium 85.468	Strontium 87.62	Yttrium 88.906	Zirconium 91.22	Niobium 92.906	Molybdenum 95.94	Technetium (98)	Ruthenium 101.07	Rhodium 102.91	Palladium 106.4	Silver 107.87	Cadmium 112.41	Indium 114.82	Tin 118.69	Antimony 121.75	Tellurium 127.60	lodine 126.90	Xenon 131.30
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
Cs	Ba	*La	Hf	Та	w	Re	Os	Ir	Pt	Au	Hg	TI	Pb	Bi	Po	At	Rn
Cesium 132.91	Barium 137.33	Lanthanum 138.91	Hafnium 178.49	Tantalum 180.95	Tungsten 183.85	Rhenium 186.21	Osmium 190.2	Iridium 192.22	Platinum 195.09	Gold 196.97	Mercury 200.59	Thallium 204.37	Lead 207.2	Bismuth 208.98	Polonium (209)	Astatine (210)	Radon (222)
87	88	89	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
Fr	Ra	†Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	FI	Mc	Lv	Ts	Og
Francium (223)	Radium (226)	Actinium (227)	Rutherfordium (267)	Dubnium (268)	Seaborgium (271)	Bohrium (272)	Hassium (270)	Meitnerium (276)	Darmstadtium (281)	Roentgenium (280)	Copernicium (285)	Nihonium (284)	flerovium (289)	Moscovium (288)	Livermorium (293)	Tennessine (294)	Oganesson (294)
			58	59	60	61	62	63	64	65	66	67	68	69	70	71	
*Lantl	nanide Se	eries	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Но	Er	Tm	Yb	Lu	
			Cerium 140.12	Praseodymium 140.91	Neodymium 144.24	Promethium (145)	Samarium 150.4	Europium 151.96	Gadolinium 157.25	Terbium 158.93	Dysprosium 162.50	Holmium 164.93	Erbium 167.26	Thulium 168.93	Ytterbium 173.04	Lutetium 174.97	
			90	91	92	93	94	95	96	97	98	99	100	101	102	103	
†Ac	tinide Se	ries	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	
			Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium (247)	Berkelium	Californium		Fermium	Mendelevium (250)	Nobelium (250)	Lawrencium (262)	
Thorium Protection Uranium Neptunium Puttonium Americium Carium Petrelium Pet										tial)							

Source: IIR Illustration

Bluejay is also significantly exposed to minerals that the US Geological Survey has identified as Critical Minerals. These are minerals which:

- are essential to the economic or national security of the United States;
- the supply chain of which is vulnerable to disruption; and
- serve an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economic or national security of the US.

Bluejay's Potential Ex	Bluejay's Potential Exposure to Critical Minerals									
Aluminum	Antimony	Arsenic	Barite	Beryllium						
Bismuth	Cerium	Cesium	Chromium	Cobalt						
Dysprosium	Erbium	Europium	Flourspar	Gadolinium						
Gallium	Germanium	Graphite	Hafnium	Holmium						
Indium	Iridium	Lanthanum	Lithium	Lutetium						
Magnesium	Manganese	Neodymium	Nickel	Niobium						
Palladium	Platinum	Praseodymium	Rhodium	Rubidium						
Ruthenium	Samarium	Scandium	Tantalum	Tellurium						
Terbium	Thulium	Tin	Titanium	Tungsten						
Vanadium	Ytterbium	Yttrium	Zinc	Zirconium						

Source: US Geological Survey, 2021.

MINERAL SANDS / ILMENITE / TiO₂

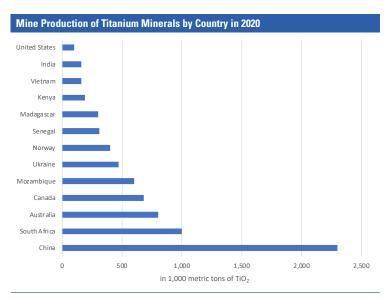
Bluejay's Dundas Project is focused on developing the Dundas Ilmenite deposit, which is a form of mineral sand. Heavy mineral sands are a class of ore deposit which is an important source of zirconium, titanium, thorium, tungsten, rare-earth elements, the industrial minerals diamond, sapphire, garnet, and occasionally precious metals or gemstones. Heavy mineral sands are placer deposits formed most usually in beach environments by concentration due to the specific gravity of the mineral grains.

The source of heavy mineral sands is in a hard rock source within the erosional areas of a river which carries its load of sediment into the ocean, where the sediments are caught up in littoral drift or longshore drift.

Ilmenite is a titanium-iron oxide mineral with the idealized formula FeTiO₃. It is a weakly magnetic black or steel-gray solid. From a commercial perspective, ilmenite is the most important ore of titanium in the form of titanium dioxide (TiO₂), which is used in paints, printing inks, fabrics, plastics, paper, sunscreen, food and cosmetics. (Source: wikipedia.com)

Supply and Demand

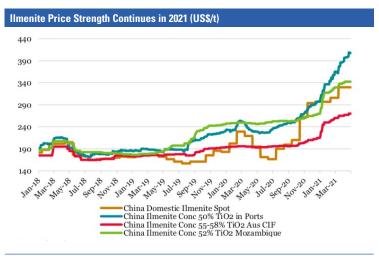
China, South Africa, Australia, Canada and Mozambique are the five largest producers of titanium-related minerals from ilmenite. Greenland isn't currently a material producer of Ilmenite.



Source: Statistica, https://www.statista.com/statistics/759972/mine-production-titanium-minerals-worldwide-by-country/

In the United States alone in 2020, titanium dioxide (TiO_2) pigment production, by four companies operating five facilities in four States, was valued at about \$3 billion. The estimated end-use distribution of TiO_2 pigment consumption was paints (including lacquers and varnishes), 60%; plastics, 20%; paper, 5%; and other, 15%. Other uses of TiO_2 included catalysts, ceramics, coated fabrics and textiles, floor coverings, printing ink, and roofing granules. (Source: US Geological Survey, Mineral Commodity Summaries, December 2021)

Mineral Sands and specifically Ilmenite prices have increase significantly over the past three years on the back of growing demand for paint and other end uses for titanium.



Source: Bloomberg

The COVID-19 pandemic has resulted in ongoing issues relating to the supply of many raw materials. This includes TiO_2 for paint production, which has contributed to an increase in end-product prices.



Source: U.S. Bureau of Labor Statistics, Producer Price Index, via Federal Reserve Bank of St. Louis

BASE METALS

Aside from the Dundas Ilmenite project, Blue's projects in Greenland and Finland are focused on base metals, most of which have seem strong demand growth primarily on the back of growing electrification of transportation as well us general economic development.

Nickel

The energy transition is due to have a dramatic structural impact on a number of metals markets, especially copper and nickel, in the next five to 10 years.

Global plug-in light duty EV sales are expected to rise to 6 million units in 2021 from 3.1 million units in 2020, and to 12.5 million units in 2026 and 21.7 million units by 2030, according to S&P Global Platts Analytics.

Stainless steel accounts for 70% of nickel demand and was 10 times larger than battery demand in 2020, however batteries are expected to become the main driver over the next decade and, despite uncertainty in terms of the battery chemistries, nickel will be a major beneficiary from the EV transition.

Overall, Macquarie believes this decade will see "by far the highest growth [in demand] ever seen in the nickel market – the requirement in new supply between 2020 and 2030 is over 2 million tonnes per year. (Source: Macquarie, October 2021)

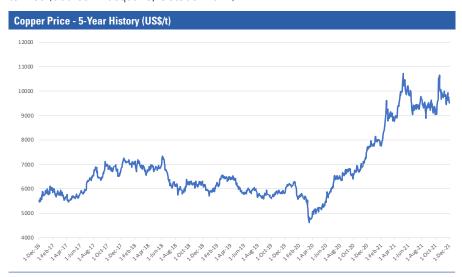


Source: https://markets.businessinsider.com/commodities

Copper

Global copper demand is expected to grow at a compounded annual growth rate of 2.4% from 2019 to 2026, primarily supported by the energy transition, which could lead to a structural deficit of 579,000 tonnes by 2026, unless new supply is established.

As electric vehicle sales increases to about 40% of vehicles by 2030 from the current 7%, copper demand from this sector is expected to double to 4.5 million tonnes from 2.25 million tonnes (Source: Macquarie, October 2021)



Source: https://markets.businessinsider.com/commodities

Lead

Lead finds its major application in lead-acid batteries, followed by pigments, ammunition, cable sheathing, and others. The pandemic continues to influence lead markets. Supply was more severely impacted than demand and mine production will not surpass pre-pandemic levels for another two years. Demand, on the other hand, has recovered strongly and will exceed 2019 consumption in 2021. The key driver for this has been replacement automotive demand, but other sectors are also recovering, although auto OEM is likely to struggle from semiconductor shortages for some time yet. Secondary supply growth will exceed primary as the glut of scrap continues to be consumed for recycling. Steady demand growth will help limit the supply-demand imbalance as the market moves into a period of sustained surpluses. (Source: Wood Mackenzie, September 2021).



Source: https://markets.businessinsider.com/commodities

Zinc

Zinc is used primarily in galvanising or coating by steel and iron industries to prevent corrosion. While global refined zinc production has ramped up over recent months compared to 2020, it has been outpaced by demand (Source: Fitch, September 2021).

The International Metals Study Group said world demand for refined zinc metal is forecast to rise by 4.3 per cent to 13.78 million tonnes this year, after falling by 3.9 per cent last year. Supply of the metal is likely to rise by 5.7 per cent to 12 Tonnes and refined zinc metal production would rise by 3.1 per cent to 14.13 Tonnes. Global supply of refined zinc metal will exceed demand by 353,000 tonnes this year. (Source: Metals Study Group forecast, July 2021).



Source: https://markets.businessinsider.com/commodities

PLATINUM GROUP METALS

Platinum Group Metals ("PGMs") will play an important role in the transition to cleaner transportation - with both platinum and palladium playing a critical role in catalytic convertors required to meet ever tightening emissions regulations for internal combustion engines. Platinum is also a key component of hydrogen fuel cells.

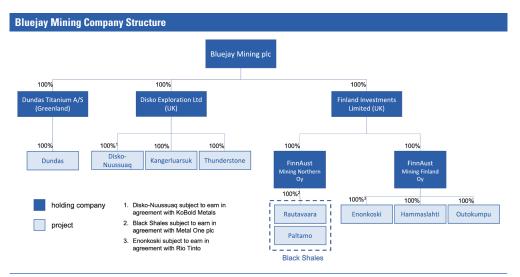
COMPANY OVERVIEW

STRATEGY AND OWNERSHIP

Bluejay is an exploration company with projects in Greenland and Finland. It is listed on the London Stock Exchange AIM Market ("JAY"), Frankfurt Stock Exchange ("S5WA") and is cross-traded on the OTCQB Market in the US.

The company's strategy is focused on the development of high-grade, large-scale resource projects from resource identification into production. Current strategic priorities are to:

- Advance the Dundas Ilmenite Project into production;
- Drive value through the development of its other existing large-scale, high-grade Disko and Kangerluarsuk projects;
- ♦ Build revenue to self-fund existing and future projects; and
- Strengthen its portfolio with additional acquisitions, providing exposure to multiple commodities.



Source: IIR analysis

The company has a number of projects in both Greenland and Finland, which are both low-risk mining jurisdictions. These projects are:

Bluejay Mining's Projects									
Project	Country	Commodities	Ownership	Status					
Dundas	Greenland	Ilmenite (TiO ₂)	100%	Development					
Disko-Nuussuaq	Greenland	Ni-Cu-Co-PGM-Au	JV	Exploration					
Kangerluarsuk	Greenland	Zn-Pb-Ag-Cu	100%	Exploration					
Thunderstone	Greenland	Au & base metals	100%	Exploration					
Enonkoski	Finland	Ni-Cu-Co-PGM	JV	Exploration					
Outokumpu	Finland	Cu-Co-Zn-Ni-Ag-Au	100%	Exploration					
Hammashlathi	Finland	Cu-Zn-Au-Ag	100%	Exploration					
Black Shales	Finland	Ni-Zn-Cu-Co	JV	Exploration					

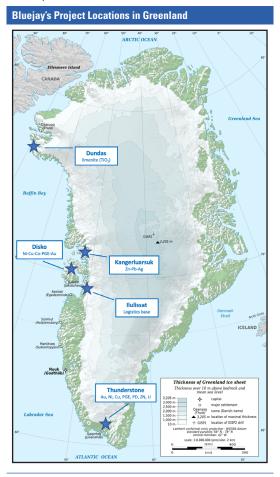
Source: IIR summary

This portfolio includes assets at various stages of development and gives Bluejay a unique geographic and multi-commodity exposure.

PROJECTS - DUNDAS ILMENITE

Greenland is an autonomous territory within the Kingdom on Denmark. It is the world's largest island and is seen as an emerging area of focus for mineral exploration and development. MJI ranks Greenland on par with known mining jurisdiction Botswana and ahead of Brazil and South Africa as a mining-friendly investment destination.

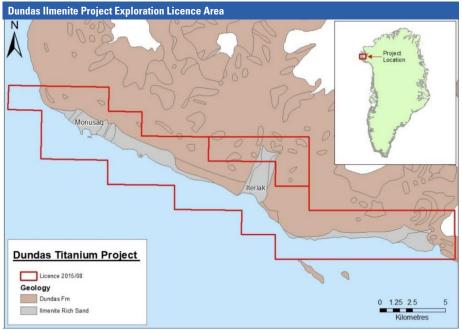
The Dundas Ilmenite project in Northwest Greenland is Bluejay's most advanced project. The company maintains a logistics hub in the town of Ilulissat that is well place to service Dundas, Disko-Nuussuaq and Kangerluarsuk. The Thunderstone project is located in far south of the country.



Project Overview

The Dundas Ilmenite Project is located on the south coast of Steensby Land peninsula in Northern Greenland. The project plans to extract ilmenite from the 'black sand' deposit the onshore raised and active dry beaches. Ilmenite is a titanium-iron oxide mineral (FeTiO₃) that is processed to produce TiO₂, commonly used as a pigment for paint, plastics and other products.

The Dundas Ilmenite Project is owned by Dundas Titanium A/S, a company registered in Greenland. Dundas Titanium A/S owns 100% of the current exploration license (number 2015/08) and has carried out all of the exploration work at the site since the project was acquired. The project is fairly close to the US and Europe providing multiple export opportunities with relatively low shipping costs.



Source: Bluejay Mining - Dundas Project, 2019.

The license covers an area which is approximately 30 km long and 2 km wide, as shown on the map above. The area is located in the Municipality of Avannaata, around 80 km South of Qaanaaq. The abandoned settlement Moriusaq is located within the license area.

In June 2021, the Dundas Exploitation and Closure Plan was approved by the Government of Greenland. This was the final Government-level approval required before construction could commence - so the project is now fully permitted.

Resource

The Dundas Ilmenite Project has a JORC Compliant Mineral Resource of 117 million tonnes at 6.1% ilmenite in-situ. The Mineral Reserve for Dundas is 67.1Mt at 7.3% ilmenite in-situ.

Dundas Ilmenite	Dundas Ilmenite Project Mineral Resource Estimate								
Classification	Location	Tonnes (kt)	>5mm (%)	> 2mm (%)	< 63um (%)	THM (%)	In-Situ TiO ₂ (%)		
Indicated	Moriusaq	88,000	27.5	36.1	4.2	27.0	3.1		
	Iterlak East	19,500	15.3	24.0	12.8	22.2	2.2		
	Iterlak West	4,800	23.3	32.4	13.8	11.9	1.0		
	Total Indicated	112,300	25.2	33.9	6.1	25.5	2.8		
Inferred	Moriusaq	5,000	15.7	23.0	5.7	34.2	4.4		
	Total Inferred	5,000	15.7	23.0	5.7	34.2	4.4		
Total Resource		117,300	24.8	33.4	6.1	25.9	2.9		

Source: Bluejay Corporate Presentation, September 2021

There is an additional JORC Compliant Maiden Offshore Exploration Target between 300-530 million tonnes, located in a shallow marine area adjacent to the onshore project area. The company believes there is a strong possibility of expansion potential.

The Geologic Survey of Denmark and Greenland ("GEUS") ilmenite tonnages liberated from the Steensby Land Sill Complex in southern Steensby Land to be 7,000Mt ilmenite - with between 500Mt to 1,100Mt ilmenite in the greater Dundas Project area alone.

Project Design

The project will consist of onshore automated continuous surface miners, a wet plant, a dry plant, a small port, a ship-loading facility, an airstrip, workforce accommodation, concentrate storage, and general utilities such as power and water supply.

- ◆ The construction period is expected to be around 18 months (two summer seasons), and whilst the feasibility study initially identified a 9 year mining operation the company expects that additional resources in the area should be capable of supporting an operation for many more years.
- ♦ The mining operation will take place on the raised beaches (containing black sand with ilmenite accumulations over widths of more than 1 km) and active dry beaches (the area seaward of the frontal dunes).
- The project has a current indicated and inferred resource for the raised beaches and active dry beaches west and east of Moriusaq of 101 million tonnes at 7.1% ilmenite in-situ.
- ♦ The expected annual production is 440,000 ton of ilmenite in concentrate.
- The mining and beneficiation process carried out in the Project will consist of three overall processes: mining, wet gravity processing and dry magnetic processing.

Mining

The mining process at Dundas is simple and will require no drilling or blasting. It will operate year round. The process entails:

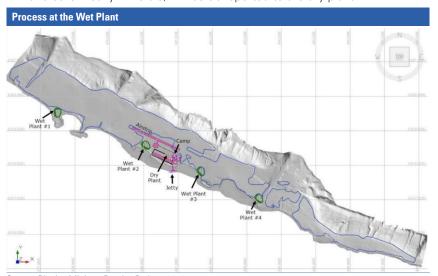
- ♦ The top-soil will be stripped off and saved for later remediation work. This will be used to re-cover mined areas once the ilmenite has been mined from the black sand and the mining voids have been back-filled with sand returned by the wet gravity separation process.
- The black sand will be mined by continuous surface miners that 'harvest' the black sand using rotating cutter-heads.
- Mined black sand will be loaded on mining trucks that will transport the sand to the wet gravity processing plant.

Wet Plant

The wet process serves as the first processing step to separate the heavy mineral sands from the remaining light minerals:

- Before entering the wet plant the mined material will be screened to remove oversize material and the material will be heated in a rotary kiln for de-icing.
- ♦ The wet plant, screens and the rotary kiln will be mobile so that they can be moved to new positions (relocation every 2-3 years) and follow the operational area for the continuous surface miners.
- ♦ At the wet plant the mined sand will be separated into two fractions through a two-step gravity separation: one fraction with 'heavy minerals' (app. 10 % of the mined volume) and one fraction with 'light minerals' (app. 90 % of the mined volume). The gravity separation is a simple washing process in which the black sand basically is washed in gravity separators. The water used for the washing will be normal seawater. No chemicals, crushing or liberation of the minerals are needed in the process.
- ↑ The sea-water used in the gravity separation will be pumped back to the sea after use. The returned sea-water will be pumped to deep water (at approximately 10 m water depth and discharge areas will be selected according to areas that already have muddy bottom conditions). The returned sea-water contains no added chemicals.
- After beneficiation the remaining 'light minerals' will be transported back to the mine cuttings and used to backfilled together with the oversize screened material. The backfilled material will then be covered with the earlier removed organic-bearing top-soil.

- The company expects there to be no discernible impact to the original environment after the final layer of topsoil is replaced and the area remediated back to its natural state.
- ♦ After beneficiation at the wet plant, the 'heavy mineral concentrate' (consisting of approximately 88% ilmenite with the remaining 12% being composed mainly of magnetite and other heavy minerals) will be transported to the dry plant.



Source: Bluejay Mining - Dundas Project, 2019.

Processing - Dry Plant

- ♦ Before entering the dry plant, the 'heavy mineral' fraction material from the wet plant will be dried and all moisture will be removed.
- ♦ The dry plant is a fixed plant that is located close to the storage and port facilities.
- ♦ Through magnetic separation by different magnets in the dry plant the heavy minerals will be refined into >99% clean 'premium ilmenite product', a 'standard ilmenite product' and a rejected non-valuable heavy mineral fraction (magnetite, amphiboles and pyroxene).

Storage and Shipping

- ♦ The ilmenite products will be stored in a large storage facility at the mining site.
- During the ice-free shipping window (June-October) the material will be shipped by bulk carriers to an international, all-year around open water, storage location or directly to customers. A rock-filled steel piled berth and ship-loading facilities will be part of the project infrastructure to be built.
- At the planned production volume of some 440,000 tpa of refined product, the shipping will include approximately 10-12 return trips with vessels of the type 42,000 DWT Supramax or similar. In addition to that, approximately 4 ships will supply the operation with fuel and other supplies during the shipping window.
- The Ilmenite products from the Project will be sold on long-term agreements to the international market.

Beside the mining and processing facilities, accommodation, office, medical & safety and workshop facilities will be built as part of the infrastructure at the mine.

Continuous environmental monitoring will be carried out during the entire mining period.

Offtake Agreement

In December 2020, Bluejay announced that it had signed an offtake agreement for up to 340,000 tpa (i.e. over 75%) of planned annual production with a large, long established Asian conglomerate with global interests in metals and mining.

This is a significant milestone for Bluejay as it secures a customer for the majority of future production from Dundas and helps to de-risk the commercial aspects of the project. Highlights of the agreement are:

- The agreement will be for a minimum of 250,000 tpa and a maximum of 340,000 tpa.
- For an initial period of five years from start of commercial production at Dundas and can be renewed every 12 months.
- Pricing for product will be determined at the time of acceptance, referenced to independent industry data for ilmenite, less a handling fee.

In December 2021, Bluejay announced the completion of processing of the bulk sample dispatched to Canada from Dundas in September 2019. The pilot plant was placed on care and maintenance in March last year following the outbreak of COVID-19. The plant was restarted, and processing recommenced earlier this year. The final bulk parcels of output will undergo further separation by the company's distribution partner and be sampled by key-end customers. The aim of this is to consolidate and potentially extend the existing distribution agreement to cover the entire expected annual output of Dundas ilmenite concentrate.

The pilot plant, which is in the process of being decommissioned, produced material that exceeded expected specifications for commercial production at Dundas. In addition, the results of the design of the wet plant circuit de-risk the production-scale processing plant at Dundas and gives the company confidence that large volumes of consistent and high-quality ilmenite concentrate can be produced at Dundas.

Project Financing

On 29 November 2021, Bluejay announced the appointment of a European Investment Bank as the lead arranger of project financing for the Dundas Ilmenite Project. The bank will be responsible for forming a lending syndicate, coordinating lender due diligence and negotiating debt financing documentation. Based on earlier indications, it is likely that the syndicate of lenders will include the US EXIM bank and one or more European export credit agencies. In 2021 the EXIM bank signed a letter on interest for the provisional sum of approximately \$208m in debt funding for Dundas.

Dundas Next Steps

Development of the Dundas Ilmenite Project is important for Bluejay as it will be the first producing asset in the group and be a source of cash generation that the company will be able to use to help fund future project development. IIR's estimate of the timing of key next steps for the project include:

- ♦ Commence pre-construction activities at Dundas summer 2022.
- Complete project financing 2022.
- ♦ Project construction 2023 and 2024.
- ♦ First commercial production 2024.

OTHER PROJECTS

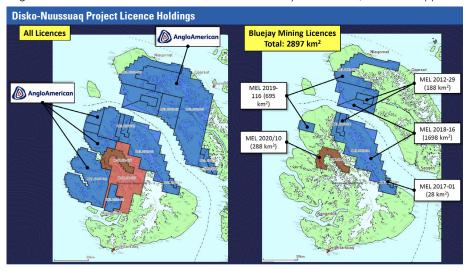
Greenland

Disko-Nuussuaq

Bluejay believes that the Disko-Nuussuaq Project ("Disko Project") areas have the potential to host mineralisation similar to the world's largest nickel/copper sulphide mine Norilsk-Talnakh ('Norilsk') in Siberia. The project area is prospective for Ni-Cu-Co-PGE, which is of particular interest given the growing demand for battery materials.

The project area covers 2,776km² over five different exploration licences on Disko Island and Nuussauq Peninsula. Bluejay has a first mover advantage in the region and was the only licence holder in the area until 2019. It is now surrounded by 11,000km² of newly staked exploration ground, mostly held by mining majors including Anglo American. The nearby town of Ilulissat serves as the logistical hub for the project.

The area has been explored for over 30 years by companies including Cominco and Falconbridge which identified multiple primary drill targets. The geological model has been confirmed by a large boulder found on the licence area that was assayed at 7% Ni, 3% Cu & 2ppm PGE.



Source: Bluejay Mining Disko-Nuussuaq Project presentation, 2020.

Since 2017, the company has conducted aerial surveys and soil sampling campaigns to build a detailed understanding of the licence areas. It has also reprocessed and revaluated historical data sets from the area. Bluejay plans to build on this understanding of the Disko Project and specific geological targets in order to prove up the resource potential. Multiple occurrences of nickel and copper sulphide bearing boulders have been identified throughout licence holdings. Two primary areas now being targeted with >20 large-scale drill ready targets having been identified on the licence holdings at the Disko Project.

On 9 August 2021, Bluejay announced that it has signed a joint venture agreement with KoBold Metals ("KoBold") to explore the Disko Project. KoBold is a mineral exploration company that uses machine learning to guide exploration for new deposits with a focus on critical materials required for electric vehicles. Principal investors in KoBold include Breakthrough Energy Ventures, a fund overseen by Bill Gates and whose investors include Michael Bloomberg, Jeff Bezos and Ray Dalio as well as other high-profile investors.

This agreement allows Bluejay to advance the Disko Project while retaining a meaningful stake. Under the agreement KoBold can earn 51% of the Disko Project through a two-stage commitment:

- Stage 1: Advanced geological and geophysical evaluation of the Disko Project area to refine drill targets with US\$3.4m sole-funded by KoBold by 31 December 2021.
- ♦ Stage 2: Sole funding of either US\$11.6m in drilling expenditure or 15 pre-agreed drill holes with the Disko licence area by 31 December 2024.

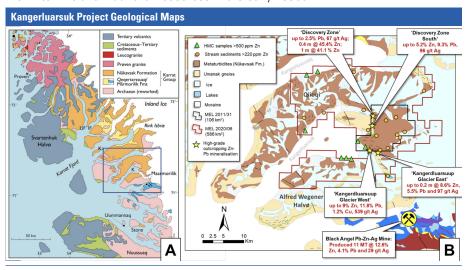
Bluejay will continue to manage field operations until 2024.

Kangerluarsuk

Located 225km north of Ilulissat, the company's Kangerluarsuk project consists of two 100% owned exploration licences totalling 692 km² within the Karrat Group in western Greenland. These areas are located only 10km from the former Black Angel mine that produced 11 Tonnes

at 12.6% Zn, 4.1% Pb and 29 g/t Ag between 1973 - 1990 when it was owned by Comico and Boliden.

This area contains a strong cluster of stream sediment Zn anomalies and was prospected by Rio Tinto Zinc and Platinova Resources in the early 1990s.



Source: Bluejay Mining Kangerluarsuk Project Teaser, 2021.

Bluejay has identified multiple high priority drill targets that were detected by electromagnetic surveys that are coincident with the strongest surface geochemical anomalies. Bluejay's exploration target at Kangerluarsuk is one or more high-grade, large tonnage, sedimentary-hosted Zn-Pb-Ag \pm Cu deposits. Similar geological environments have yielded some of the world's more valuable base metal occurrences including deposits within the Selwyn Basin, Yukon and at Rammelsberg, Germany.

Thunderstone

Bluejay's Thunderstone Project is an early-stage greenfield project located in southern Greenland. The area is relatively easily accessed through Narsarsuaq or the new airport under construction at Qaqortoq. Thunderstone has a land package of over 2,500km², where there has been no previous commercial exploration. The company believes that it has the potential to host Au, Ni, Cu, PGE, Pb, Zn and U. The area is located immediately southeast of the Nanortalik Gold Belt, that includes the former Nalunaq gold mine, which produced over 350,000oz of gold at a grade of 15 g/t.

The company completed its maiden field program over the summer of 2020. This included regional screening through stream sediment sampling and following up on remote sensing targets and existing geochemical anomalies for Au and base metals. The company believes that Thunderstone is likely to be an extension to an existing known Au belt.

Finland

Finland has a long mining tradition and is a stable, low-risk, pro-mining geography. MJI's Investment Risk Index (2020 edition) scores Finland as being one of the top jurisdictions globally for mining investment. The country includes a number of former and active mining districts and is supported by good availability of geological data. As a member of the EU, Finland is also strategically located with easy access to European markets and demands high environmental, social and governance standards.

Bluejay in one of the largest area holders in East Finland and was an early mover in establishing a position in this area - having acquired these license before the company changed names from FinnAust to Bluejay.



Source: Bluejay Mining presentation, March 2021.

Bluejay's multi-element base metal exploration projects cost little to maintain and the company continues to assess the best ways in which to realise value.

Enonkoski

Previously known as the Kelkka Nickel-Copper Project, this includes the former producing nickel-copper mine which produced an estimated 6.7Mt at an average grade of 0.8% nickel between 1984 - 1994. Bluejay has confirmed extensions and repeats of high-grade nickel, copper and PGE mineralisation 2km south east of the old Enonkoski Mine. The project area covers more than 2,300 hectares.

In November 2020, Bluejay signed an option to joint venture agreement with Rio Tinto over the Enonkoski project. Under the JV agreement Rio Tinto may acquire up to 75% in the project by completing US\$20 million worth of expenditure. By sole funding project expenditures Rio Tinto can earn in to the project in stages:

- Stage One: 51% ownership by spending US\$5m by November 2023
- Stage Two: 65% ownership by spending a further US\$5m by November 2025
- Stage Three: 75% ownership by spending a further US\$10m by November 2029

As part of Bluejay's JV agreement with Rio Tinto, the company settled historical royalty arrangements with Magnus Minerals Limited over the Enonkoski project in late 2020 to ensure that the project was unencumbered.

In early 2021, the JV commenced its field programme for the year that included relogging and assaying historical core, new interpretation of previous survey data, detailed ground magnetic surveys of two near mine targets and a drill programme targeting 3,000m to test identified geophysical targets.

Initial results seem to have been encouraging as the JV announced a continuation of the drilling campaign in late September.

Outokumpu

The Outokumpu Copper Project covers the majority of the Outokumpu Copper Belt, which hosted the Outokumpu Copper Mine which produced 57Mt at 3.1% Cu (as well as polymetallic credits) between 1908 - 1988. The company holds licenses surrounding several former high-grade mines where there is significant historical data.

Bluejay has been taking a more modern look at this data and through this it has established new set of drill targets, which the company believes has good potential of hosting high grade copper (with credits from relatively high Co, Zn, Au, Ni and Ag) along strike and immediately adjacent to the former mine.

The project is drill ready and the company is looking to monetize this asset either through own development or JV.

Hammashlathi

Bluejay's Hammashlathi Project is an advanced brownfield site that demonstrates high-grade VMS mineralisation. The company's licenses cover the entire prospective belt that includes the former producing open-pit and underground mine. This operation produced >10Mt at 1.16% Cu, 1.55% Zn, 0.59g/t Au and 5.2 g/t Ag while it was in operation from 1971 - 1986, when a corporate decision halted mining rather than depletion of the ore body. The project area covers 3,946 hectares.

Extensions to the mined orebody have been demonstrated by recent drilling and the company has identified several near-mine geophysical targets. The company believes this area to be particularly prospective for Cu.

The project is drill ready and the company is looking to monetize this asset either through own development or JV.

Black Shales

The Black Shales Project is a Ni-Zn-Cu-Co exploration project. In July 2021, Bluejay signed a binding term sheet with battery metals-focussed Metal One plc to partially divest its interest in the non-core Paltamo and Rautavaara projects (together known as the Black Shales assets) in return for £4 million in cash and shares. The transaction is subject to a range of further requirements including due diligence, negotiation of full transaction documentation and Metal One being listed on the LSE AIM market.

Bluejay will receive a management fee equivalent to 10% of approved project expenditure at Black Shales and will appoint the technical director to the board of Metals One plc. This potential sale, if it proceeds, will allow Bluejay to focus on progressing its remaining Enonkoski, Outokumpu and Hammashlathi projects in Finland while receiving ongoing exposure to the Black Shales project through the shares in Metal One that the company will receive.

A work programme will be commencing in the near future and will be funded by Metal One.

PEER COMPARISON

Given its rather unique combination of projects and geographic locations, it is difficult to find peers that are directly comparable to Bluejay. We have singled out a number of ilmenite producers as comparison for Dundas and base metals development companies for comparison with Bluejay's other assets.

Ilmenite

Iluka - is an international mineral sands company focused on exploration, development, mining, processing and marketing of mineral sands products.

Iluka is a leading producer of zircon and the high grade titanium dioxide feedstocks rutile and synthetic rutile. Iluka also has an emerging portfolio in rare earth elements.

The company is headquartered in Perth, Australia and has mining and processing operations are located in Australia and Sierra Leone as well as projects in Australia, Sierra Leone and Sri Lanka and a globally integrated marketing and distribution network.

Rio Tinto - operates three TiO₂-producing sites:

- Rio Tinto Fer et Titane in Quebec, Canada the largest ilmenite deposit in the world.
- ♦ Richards Bay Minerals in Kwazulu-Natal, South Africa focused on production of rutile, zircon, titania slag and TiO₂.
- QIT Madagascar Minerals (QMM) ilmenite mine near Fort Dauphin in south-eastern Madagascar. QMM is a joint venture between Rio Tinto (80%) and the government of Madagascar (20%).

PYX Resources - is a major global producer of zircon listed on the Australian National Stock Exchange (NSX: PYX). PYX is the 2nd largest zircon producer globally. The company has 263m tonnes of JORC compliant resources and 10.5m tonnes of contained zircon.

The company's key tenements are located in Central Kalimantan, Indonesia.

- ♦ Mandiri has been producing zircon since 2015 and is a large-scale operation.
- Tisma is a fully licensed mineral sands asset consisting of a concession area of 1,500 hectares located in Central Kalimantan Province, Indonesia.

PYX has a current market cap of A\$698m.

Tronox Holdings plc - is a vertically integrated mining and inorganic chemical business. The company mines and processes titanium ore, zircon and other minerals, and manufactures titanium dioxide pigments. The companies mining operations are in South Africa, Brazil and Australia, with processing sites in South Africa, Brazil, USA, Australia, China, the Netherlands, UK, France and Saudi Arabia.

Tronox is listed on the New York Stock Exchange (NYSE: TROX) and has a current market cap of US\$3.4bn.

Kenmare Resources plc - operates the Moma Titanium Minerals Mine, located on the northern coast of Mozambique that has been in commercial operation since 2009. The company produces approximately 7% of the world's titanium feedstocks. Kenmare's mineral resource base at Moma is sufficient to support production at current rates for more than 100 years and provides opportunities for further mine expansions in the future to meet increasing demand for these products.

Kenmare is listed on the LSE (KMR.L) and has a current market cap of £496m.

Base Metals & Other Projects

There are many more early stage base metals and clean energy metals exploration companies. These are difficult to compare given the early exploration stage of many projects and the lack of detailed information about the projects. A selection of these is shown below for comparison.

Base Metals Market Comparables								
Company	Exchange	Symbol	Flagship Asset	Status	Metals	Country	Market Cap (US\$m)	
Greenland Minerals & Energy	ASX	GGG	Kvanefjeld	On hold	Rare Earth	Greenland	83.4	
Group Ten Metals	TSX-V	PGE	Stillwater West	Exploration	PGMs	USA	63.0	
Kodiak Copper	TSX-V	KDK	MPD	Exploration	Cu	Canada	51.1	
Palladium One	TSX-V	PDM	LK Project	Exploration	PGM, Ni, Cu	Finland	45.9	
Fireweed Zinc	TSX-V	PWZ	Macmillan Pass	Exploration	Zn, Pb, Ag	Canada	45.2	
Quaterra Resources	TSX-V	QTA	Yerington	Exploration	Cu	USA	41.2	
Nickel Creek Platinum	TSX	NCP	Nickel Shaw	Exploration	Ni	Canada	35.0	
Sama Resources	TSX-V	SME	Samapleu	Exploration	Ni, Cu, Co, PGM	Ivory Coast	32.8	
Libero Copper	TSX-V	LBC	Mocoa	Exploration	Cu, Mb	Colombia	20.1	

Source: IIR analysis, as at 8 December 2021.

AEX Gold - was founded in 2017 as an exploration company with a focus on locating high-grade gold deposits in Greenland. The company owns seven licences in South Greenland covering an area of 4,090 km², which are prospective for gold and other strategic minerals. Their primary asset is the past-producing Nalunaq gold mine, which AEX is in the process of redeveloping. By comparison, Bluejay offers a broader exposure to high-quality projects in over several geographies.

VALUATION

We've used a sum-of-the-parts approach to valuing Bluejay.

DUNDAS ILMENITE

The Dundas Ilmenite Project is sufficiently advanced - and has enough published information - that we developed a simple discounted cash flow valuation model. The company's Pre-Feasibility Study results published in 2019 estimates the project value to be:

Dundas PFS Financial Summary								
	Life of Mine	NPV _{5%}	IRR	Reserves & Resources				
Base Case	9 years	US\$83.1m	32.8%	Reserves only				
Expanded Case	11 years	US\$130.7m	34.0%	Reserves and some Resource				

Source: Bluejay Corporate Presentation, September 2021.

The capital costs for the project are US\$245m from the feasibility study:

Dundas Project Capex Breakdown	
	US\$m
Mining	24
Processing	58
Infrastructure, Services, G&A	61
Indirect & Historical Capitalized Costs	102
Total	245

Source: Bluejay Corporate Presentation, September 2021.

The operating cost assumptions are based on:

Dundas Project Opex Breakdown (US\$)			
	Cost per tonne of ROM US\$/t	Cost per tonne of Ilmenite US\$/t	
Mining	2.63	44.45	
Processing	1.82	30.80	
Infrastructure, Services, G&A	2.23	37.56	
Total	6.68	112.81	

Source: Bluejay Corporate Presentation, September 2021.

Scenarios and Sensitivities

We ran a number of scenarios through the valuation model to better understand the impact these could have on the value of Dundas. The results are summarised below.

Dundas Project Valuation Under Various Scenarios				
	Life of Mine	Discount Rate (%)	NPV US\$m	IRR
Base Case - company reported	9 years	5	83	33%
Expanded Case - company reported	11 years	5	131	34%
IIR Low WACC Case	30 years	5	315	29%
IIR Base Case, 7% WACC	30 years	7	219	29%
10% Higher Ilmenite Price	30 years	7	298	37%
25% Capex Overrun	30 years	7	184	22%
25% Opex Overrun	30 years	7	122	19%
25% Capex and Opex Overrun	30 years	7	84	13%

Source: Bluejay Mining, Corporate Presentation, September 2021 and IIR Analysis

- The company provided Base Case and Expanded case are included as reference points from the PFS.
- The project has a JORC Compliant Minerals Reserve of 67Mt, and a Mineral Resource of 117Mt tonnes at 6.1% ilmenite in-situ. There is also a JORC Compliant Maiden Offshore Exploration Target between 300-530 million tonnes. While this has not been sufficiently delineated to be included as either a Reserve or Resource, it is likely that there is sufficient high-grade material to enable the Dundas operation to continue significantly longer than has been included in the company's PFS. As such, we have modelled an "IIR Base Case" based on a 30-year life or mine. This is likely still conservative given the size of the exploration target.
- Our view is that a discount rate of 5% is on the low side for a project in Greenland. To understand the sensitivity to discount rate, we ran a scenario where we increased this to 7%, which we feel would be more appropriate and is what we have used for our base case. The resulting NPV_{7%} is US\$219m.

- ♦ If the base case scenario is run on the "high price" line (increase of \$10/t of Ilmenite over the project life) given in the PFS the NPV_{7%} increases to US\$298m, which demonstrates the sensitivity of the project to movement in prices.
- We ran several scenarios to understand what the impact would be of potential capex and opex overruns:
 - ♦ For a 25% overrun in project capital costs the NPV_{7%} would decline to US\$184m.
 - ♦ For a 25% overrun in operating costs the NPV_{7%} would decline to US\$122m, showing the projects sensitivity to operating costs.
 - ♦ For an overrun of 25% in both capex and opex the project value declines to an NPV_{7%} of US\$84m.

The valuation analysis shows the leverage that the Dundas project has to the upside scenarios, while also demonstrating the projects resilience to downside scenarios. Even with a higher WACC of 7% and 25% overruns in both capex and opex the project is still NPV positive.

OTHER PROJECTS

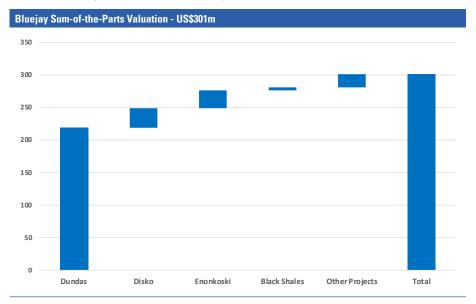
Bluejay's other projects are at an early stage of development and are therefore difficult to value with much accuracy. There is insufficient information available on these projects to allow a meaningful comparative valuation with other early stage exploration projects.

Instead, the approach we've taken to estimate the potential value of some of these projects is to look at the earn-in values that Bluejay's partners have been willing to commit to:

- Disko-Nuussuaq: Under the partnership agreement KoBold can earn 51% of the Disko Project through a two-stage commitment that would cost them US\$15m in total. This implies a value of approximately US\$30m for 100% of the project. The actual project has the potential to be worth significantly more, but given the early stage of development this is the value that KoBold has placed on earning in.
- ♦ Enonkoski: Under the earn-in agreement Rio Tinto may acquire up to 75% in the project by completing US\$20m of expenditure. This implies a project value of approximately US\$27m for 100%.
- Black Shales: The transaction with Metal One plc suggests a project value of US\$5m (£4m).
- Other Projects: Combined estimated value of the Kangerluarsuk, Thunderstone, Outokumpu and Hammashlathi projects of US\$20m.

SUM-OF-THE-PARTS

Our sum-of-the-parts valuation summary is shown below:



Source: IIR analysis.

FINANCIALS

Bluejay's most recent financial results are for the half-year ended 30 June 2021.

Consolidated Statement of Comprehensive Income		
£	30 Jun 2021 unaudited	30 Jun 2020 unaudited
Revenue	-	-
Administrative expenses	(1,399,314)	(1,158,204)
Other gains/(losses)	(566)	19,523
Foreign exchange	32,450	(27,730)
Operating loss	(1,367,430)	(1,166,411)
Net finance income/(expense)	(1,507)	4,506
Loss before taxation	(1,368,937)	(1,161,905)
Income tax expense	-	-
Loss for the period	(1,368,937)	(1,161,905)
Other comprehensive income		
Items that may be reclassified to profit or loss		
Currency translation differences	(1,039,220)	871,308
Total comprehensive loss for the period	(2,408,157)	(290,597)
Earnings per share from continuing operations attributable to the equity owners of the parent		
Basic and diluted earnings per share (pence per share)	(0.14)p	(0.12)p

To date Bluejay has not been earning operational income due to the project stage of its assets. Going forward, the income generated from operational management fees is expected to be meaningful starting in 2022 from the Disko, Enonkoski and Black Shales projects.

The calculation of earnings per share is based on a retained loss of £1,368,937 for the six months ended 30 June 2021 and the weighted average number of shares in issue for that period, being 971,629,460.

Consolidated Balance Sheet	20. I 2004	24 D 2022
£	30 Jun 2021 unaudited	31 Dec 2020 audited
ASSETS		
Non-current assets		
Property, plant and equipment	2,036,740	2,556,911
Intangible assets	26,595,200	26,768,227
	28,631,940	29,325,138
Current assets		
Financial assets at fair value through profit or loss	-	100,000
Trade and other receivables	1,133,220	1,503,896
Cash and cash equivalents	5,246,915	5,942,848
	6,380,135	7,546,744
Total assets	35,012,075	36,871,882
LIABILITIES		
Non-current liabilities		
Deferred tax liabilities	496,045	496,045
	496,045	496,045
Current liabilities		
Lease liabilities	20,896	62,220
Trade and other payables	1,113,498	1,179,694
	1,134,394	1,241,914
Total liabilities	1,630,439	1,737,959

Consolidated Balance Sheet			
£	30 Jun 2021 unaudited	31 Dec 2020 audited	
Net assets	33,381,636	35,133,923	
Capital and reserves attributable to equity holders of the company			
Share capital	7,484,232	7,484,232	
Share premium	55,620,034	55,620,034	
Other reserves	(6,604,069)	(6,220,719)	
Retained losses	(23,118,561)	(21,749,624)	
Total equity	33,381,636	35,133,923	

Bluejay's cash balance at the end of the half-year was £5.2m compared with £6m at the end of the last full year. This amount excludes the £1m return of cash due to be received from HMRC. Of this amount £300,000 has been refunded with the balance expected in due course.

Intangible assets comprise exploration and evaluation costs and goodwill.

Consolidated Cash Flow Statement		
£	6 months to 30 June 2021 unaudited	6 months to 30 Jun 2020 unaudited
Cash flows from operating activities		
Loss before taxation	(1,368,937)	(1,161,905)
Adjustments for:		
Depreciation	249,252	293,953
Impairments	-	14,299
Loss on sale of property, plant and equipment	32,979	-
Share based payments	655,870	-
Other non-cash adjustments	-	4,340
Decrease in trade and other receivables	389,098	121,731
Increase/(decrease) in trade and other payables	342,663	(1,461,880)
Net cash generated from / (used in) operations	300,925	(2,189,462)
Cash flows from investing activities		
Purchase of property, plant and equipment	(10,836)	(233,713)
Proceeds from sale of property, plant and equipment	150,330	-
Interest received	1,546	1,896
Purchase of intangible assets	(1,095,841)	(841,078)
Net cash flows from investing activities	(954,801)	(1,072,895)
Cash flows from financing activities		
Repayment of borrowings	(41,324)	(40,104)
Net cash flows from financing activities	(41,324)	(40,104)
Net decrease in cash and cash equivalents	(695,200)	(3,302,461)
Cash and cash equivalents at beginning of period	5,942,848	10,314,701
Exchange gains on cash and cash equivalent	(733)	1,817
Cash and cash equivalents at end of period	5,246,915	7,014,057

On 28 July 2021, Bluejay announced that it had signed a binding term sheet and entered into a conditional agreement for the sale of its Paltamo and Rautavaara projects (together known as the Black Shales project) in Finland to Metals One plc for a combination of cash and shares totalling £4 million. The consideration is split into £275,000 cash and £3,725,000 payable in shares.

CAPITAL STRUCTURE

Bluejay has a fairly simple capital structure at this stage, but that will develop as the company moves forward with it's projects. The company has a primary listing on LSE AIM and a secondary listing on Frankfurt Stock Exchange. It has been cross-traded on the OTCQB Market since September 2020.

The company has 972 million issued shares. Bluejay also has approximately 22m staff options with exercise prices between 10 - 20 pence that may be exercised at some point.

The company has no long-term debt facility in place at this stage.

On 15 February 2021, Bluejay announced that it had received a Letter of Interest from the Export-Import Bank of the United States ("EXIM") for the provisional sum of US\$208 million in debt funding for the Dundas Ilmenite project. The company has conditionally appointed a leading European investment bank to lead the process of raising the project funding needed for construction at Dundas.

RISKS

- Bluejay's activities expose it to a variety of financial risks: market risk (foreign currency risk, price risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. None of these risks are hedged. Risk management is carried out by the London based management team under policies approved by the Board of Directors.
- ♦ The company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the Euro, Danish Krone and the British Pound. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations. Bluejay negotiates all material contracts for activities in relation to its subsidiaries in either British Pounds, Euros, USD or Danish Krone. The company does not hedge against the risks of fluctuations in exchange rates.
- ♦ Bluejay is not exposed to commodity price risk as a result of its operations, which are still in the exploration phase.
- Credit risk arises from cash and cash equivalents as well as outstanding receivables. Management does not expect any losses from non-performance of these receivables. The amount of exposure to any individual counter party is subject to a limit, which is assessed by the Board. The company considers the credit ratings of banks in which it holds funds in order to reduce exposure to credit risk. In keeping with similar sized mineral exploration groups, Bluejay's continued future operations depend on the ability to raise sufficient working capital through the issue of equity share capital or debt. The Directors are reasonably confident that adequate funding will be forthcoming with which to finance operations. Controls over expenditure are carefully managed. With exception to deferred taxation, financial liabilities are all due within one year.
- Bluejay's objectives when managing capital are to safeguard the company's ability to continue as a going concern, to enable the company to continue its exploration and evaluation activities, and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, Bluejay may adjust the issue of shares or sell assets to reduce debts. At 31 December 2020 the company had no borrowings and defines capital based on the total equity of the company. (Source: Bluejay Mining plc final results, 2021).

BOARD AND MANAGEMENT

Rod McIllree - Executive Chairman

Mr McIllree is a corporate geologist. He is a graduate of Kalgoorlie School of Mine and spent decades specialising in the de-risking of operations in remote frontier jurisdictions. Mr McIllree has worked in Greenland since 2005. He was the founding member of a number of mining ventures including Medusa Mining, Kingsrose Mining and Bluejay.

Dr. Bo Møller Stensgaard - Managing Director, CEO

Dr Stensgaard is a preeminent Danish geologist with extensive geological knowledge and operational experience in Greenland. He was previously a senior research scientist at the Danish state survey and has advised multiple European federal and commercial entities in the field of commodity development.

Mike Hutchinson - Non-Executive Director

Mr Huchinson began his career at Metallgesellschaft Ltd where he worked for 25 years, ultimately becoming the Managing Director in 1985. Metallgesellschaft Ltd was a metal trading subsidiary of one of Germany's largest industrial conglomerates. Additionally, Mr Hutchinson was Director between 1986 - 2008 of the world's largest market for industrial metals trading, the London Metals Exchange ("LME"). Since then he has held several notable board and management roles, including Chairman of Metalloyd Ltd, a major supplier of steel and raw materials to traders, distributors and end-users. He was also Chairman of Wogen Ltd, a specialty metals trading house.

Peter Waugh - Non-Executive Director

Mr Waugh is an experienced technical director and consultant with more than 30 years' experience in the global titanium dioxide industry, including 24 years with Tioxide Group, followed by Huntsman Pigments. Mr Waugh's experience includes pigment plant management as well as leading teams in the delivery of global strategic improvement plans.

Johannus Egeholm Hansen - Non-Executive Director

Mr Hansen is a Faroese/Danish national with over 30 years' experience in operations, engineering, banking, equipment supply and large construction projects, including airport construction where he planned the development of three airports in Greenland. He was also Senior Vice President of the FLSmidth group, and CEO/Country Head of FLSmidth Indonesia, working mainly with mining projects. Mr Hansen was also responsible for the investment in three biomass power plants while at Copenhagen Infrastructure Partners.

Thomas Levin - COO, FinnAust Mining Finland Oy

Mr Levin is a Finnish geologist with more than 15 years of experience in exploration and project management. He graduated from Åbo Akademi University in 2003 and holds a M.Sc. degree in geology and mineralogy. After graduating he worked as a researcher at the university before joining the geo-consulting company AB Scandinavian Geopool Ltd as project manager. In early 2010, Mr Levin joined Magnus Minerals Oy and Western Areas LTD joint venture team, forming the base of what today is FinnAust Mining Finland Oy, a company which is part of the Bluejay group that manages the Finnish assets. During his more than 9 years with the group, Mr Levin has held various positions and was appointed COO (Finland) in February 2019.

Hans Jensen - Managing Director, Dundas Titanium A/S

Mr Jensen has more than 30 years of experience managing and operating in Greenland and has undertaken a variety of large logistical and supply chain operations, as well as international exploration. Mr Jensen has previously held senior roles in the largest Greenlandic transportation and logistics companies such as Royal Arctic Line A/S and Leonhard Nilsen & Sonner A/S where he was Marketing Manager & Vice President in charge of Projects and Transportation. Mr Hensen also held a role as CEO in the largest Facility Service company in Greenland, ISS. He is experienced in permitting regulations required by the various Ministries of Greenland for these types of activities.

Eric Sondergaard - COO, Bluejay Mining plc

Mr Sondergaard is a graduate of the University of Calgary in Canada, and is a registered Professional Geoscientist (P.Geo). He has over a decade of on-ground exploration and operational experience in challenging conditions and remote locations. Mr Sondergaard managed the exploration team that uncovered the large Kvanefjeld Rare Earth project in Greenland. He has experience in permitting regulations required by the various Ministries in Greenland, and has served as a primary regulatory contact for a number of years. Mr Sondergaard also has a broad spectrum of oilfield experience across North America, ranging from production/optimization, exploration, geosteering, modelling and natural fracture characterization.

Kevin Sheil - Corporate Development & Strategy, Bluejay Mining plc

Mr Sheil is a capital markets veteran with over 30 years' experience across a number of sectors. He previously held positions at the London Stock Exchange, corporate broking with HSBC, Credit Lyonnais and Barclays. Mr Sheil was a sector specialist at Credit Suisse and at Citi. He was also Head of Multi-Product Sales at Citi followed by over nine years as a Long-Short Equity Fund Manager.

Olga Solovieva - GIS & Database Manager

Ms Solovieva is a geologist and GIS specialist with significant practical experience both in office and field environments. She has a strong background in handling, processing and visualization of geological and spatial data for the mineral and hydrocarbon industries.

Peter Davies - Project Manager for Dundas Ilmenite

Mr Davies has been appointed as Dundas Project Manager. He is a mining engineer with over 45 years of international experience in the mining and mineral processing industries and has extensive experience in mineral sands and titanium dioxide pigment operations.



Independent Investment Research LLC Independent Investment Research (Aust.) Pty Limited

DENVER OFFICE 200 Quebec Street Suite 200 Denver Colorado 80230 USA

Denver Colorado 80230 USA Phone: +1 720 355 0446

NEW YORK OFFICE Phone: +1 917 336 0818

SYDNEY OFFICE Level 1, 350 George Street Sydney NSW 2000 Phone: +61 2 8001 6693 Main Fax: +61 2 8072 2170 ABN 11 152 172 079

MELBOURNE OFFICE Level 7, 20–22 Albert Road South Melbourne VIC 3205 Phone: +61 3 8678 1766 Main Fax: +61 3 8678 1826

MAILING ADDRESS PO Box H297 Australia Square NSW 1215