



ESPIGÃO MANGANESE PROJECT

GROWTH THROUGH INITIATIVE

FEBRUARY - 2019



FORWARD LOOKING STATEMENT

Some statements in this presentation contain forward-looking information or forward-looking statements for the purposes of applicable securities laws. These statements include, among others, statements with respect to the Company's plans for exploration, development and exploitation of its properties and potential mineralisation. These statements address future events and conditions and, as such, involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the statements. Such risk factors include, among others, failure to obtain regulatory approvals, failure to complete anticipated transactions, the timing and success of future exploration and development activities, exploration and development risks, title matters, inability to obtain any required third party consents, operating risks and hazards, metal prices, political and economic factors, competitive factors, general economic conditions, relationships with strategic partners, governmental regulation and supervision, seasonality, technological change, industry practices and one-time events. In making the forward-looking statements, the Company has applied several material assumptions including, but not limited to, the assumptions that: (1) the proposed exploration, development and exploitation of mineral projects will proceed as planned; (2) market fundamentals will result in sustained metals and minerals prices and (3) any additional financing needed will be available on reasonable terms. The Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise except as otherwise required by applicable securities legislation.

The Company cautions that it has not completed any feasibility studies on any of its mineral properties, and no mineral reserve estimate or mineral resource estimate has been established. In particular, because the Company's production decision relating to Meridian Mineracao Jaburi S.A, manganese project is not based upon a feasibility study of mineral reserves, the economic and technical viability of the Espigão manganese project has not been established



>48% Mn PREMIUM GRADE MANGANESE OXIDE

Located in the state of Rondônia, Meridian's Espigão do Oeste Manganese project produces Brazil's highest grade manganese oxide mineral concentrate

Ongoing investments in people, modern equipment and infrastructure allows for production capacity of >45,000 tonnes of Mn oxide concentrate by year

Meridian is a dependable, fully integrated production and logistics business with an established domestic and international customer base.

Meridian has core and satellite licences totaling 188,593 hectares, hosting multiple mineral occurrences

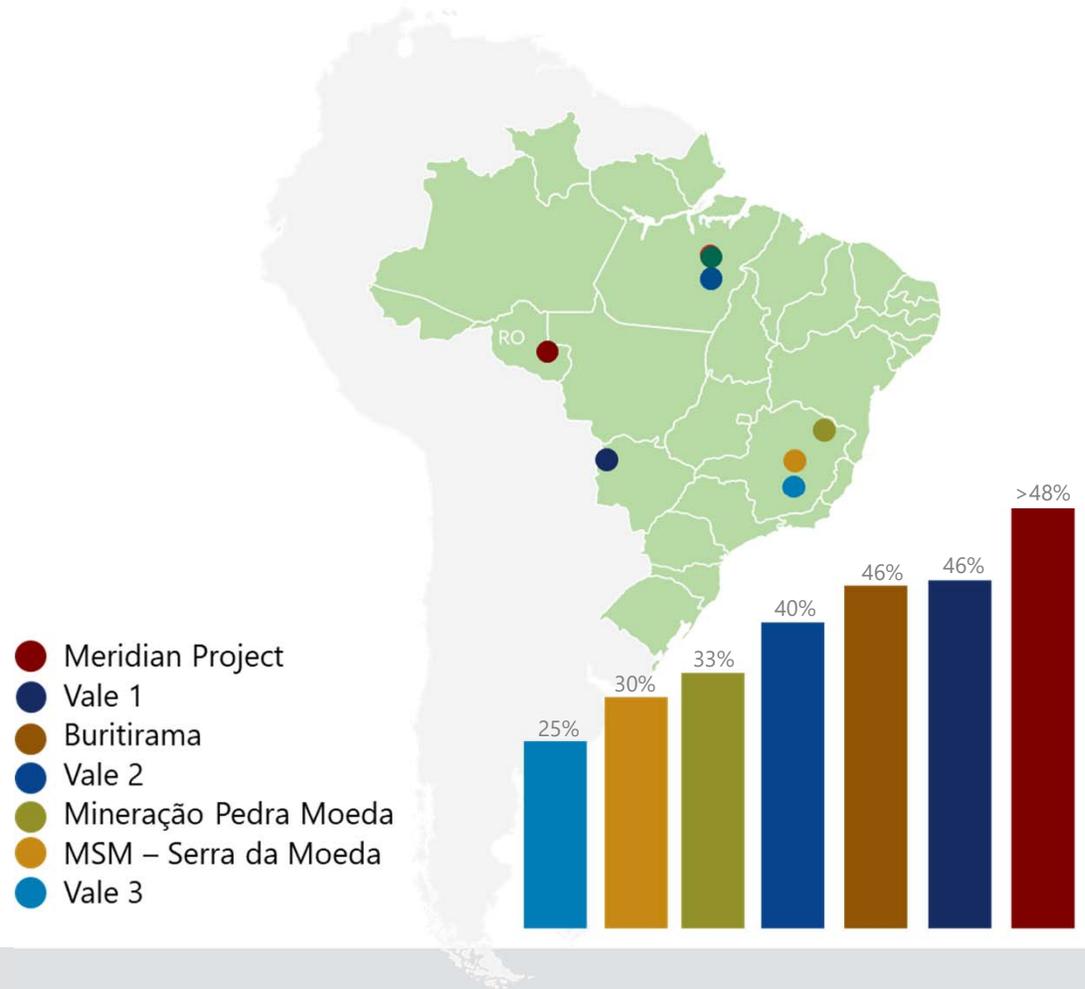
The Company is targeting growth in its manganese business using its experienced team encompassing exploration, licensing, project development, and production

PREMIUM QUALITY



PROJECT HIGHLIGHTS

- **Attractive high quality product:**
The product is highly prized by local and international ferro alloys smelters
 - ✓ >48% Mn average grade.
 - ✓ Low phosphorous content
 - ✓ High Mn : Fe ratios.
- **Simple processing technology:** manganese oxides are hosted in the colluvial and saprolite horizons. The mineralisation is freely dug, preconcentrated at the site of extraction and then processed using gravity separation. No drilling, blasting or chemical beneficiation is required
- **Favorable Tax Regime:** Rondônia state belongs to the legal Amazon region, where tax incentives bring the effective tax rate down to 15.25% for the initial 10 years
- **Locally managed:** The integrated mining and processing operation is majority operated by local residents who work with the local community



MERIDIAN

BUSINESS FUNDAMENTALS

- **OWNERSHIP:** 100% of exploration and production assets are owned by Meridian
- **PRODUCTION:** Meridian has been recently re-structured and is on target to have a stable production profile for the next three years
- **PRODUCT:** High grade with low impurities Mn concentrates. Suitable for manganese alloys and applications in the chemical battery industries
- **LOCAL MANAGEMENT:** Meridian's operations are managed and operated locally
- **OPEX:** The introduction of modern mining practices and the modification of the processing flow sheet has the company targeting OPEX at below USD 90 per tonne of concentrate
- **REGULAR CASH FLOWS:** The Company's has long term off take contracts and free to trade volumes for both domestic and/or international sales. This allows for regular monthly cash flows and opportunities to benefit from price spikes and/or positive currency exchange rates.



OUR SOCIAL LICENCE TO OPERATE

BEING PART OF THE LOCAL COMMUNITY

- **Sustainability, Training and Corporate Social Responsibility (CSR)** programs are implemented by a dedicated “local” in-house team
- **CSR programs focus on developing an open and transparent relationship** with all community stakeholders within the township of Espigão do Oeste and the surrounding rural area via a combination of one-on-one meetings, group presentations, and participation in community events
- **Exploration and extraction activities are conducted with the agreement of the landholders** that are supportive of development and receive a direct benefit through royalties and land rentals if targets proceed to production
- **Safety and environmental improvements** are continuous at Jaburi and Rio Madeira plants. The Jaburi upgraded plant is designed to be environmentally friendly, allowing for the recycling of process water
- **In-house environmental management system** monitors water quality, rainfall, and vegetation regrowth
- **Reclamation and rehabilitation programs** are simpler and lower cost than other mining operations. Mined areas are returned to owners with enhanced agricultural values.

OUR COMMUNITY



GEOLOGY AND MINERALISATION

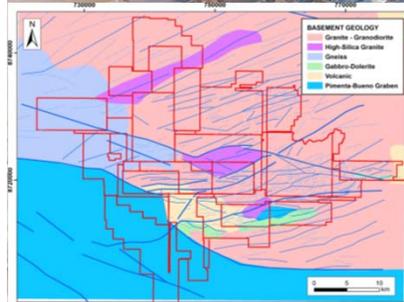
THE PROJECT HAS SEVERAL DIVISIONS:

- A high strain gneissic package to the west
- Granite to granodiorite phases to the east
- A southern volcanic to subvolcanic sequence
- Gabbro-dolerite dykes and plugs
- Sedimentary rocks of the Pimenta Bueno Graben.

KEY CHARACTERISTICS OF THE MINERALISATION

- High-quality hydrothermal manganese oxide mineralisation (vs. the more common stratiform sedimentary style of mineralisation)
- Colluvial mineralization has been dispersed at the based of the soil profile in a tropical weathering environment
- The colluvium is sourced from manganese vein systems extending downwards into the underlying saprolite and bedrock

HIGH QUALITY HYDROTHERMAL MANGANESE OXIDE



OUR SUSTAINABILITY STRATEGY

THE EXPLORATION TEAM CONTINUES TO DEFINE SIGNIFICANT MANGANESE OXIDE OCCURRENCES

A dedicated exploration team continues to perform reconnaissance mapping and pre-production evaluation of new opportunities at project, local & regional scale.

TARGETING MANGANESE OXIDES:

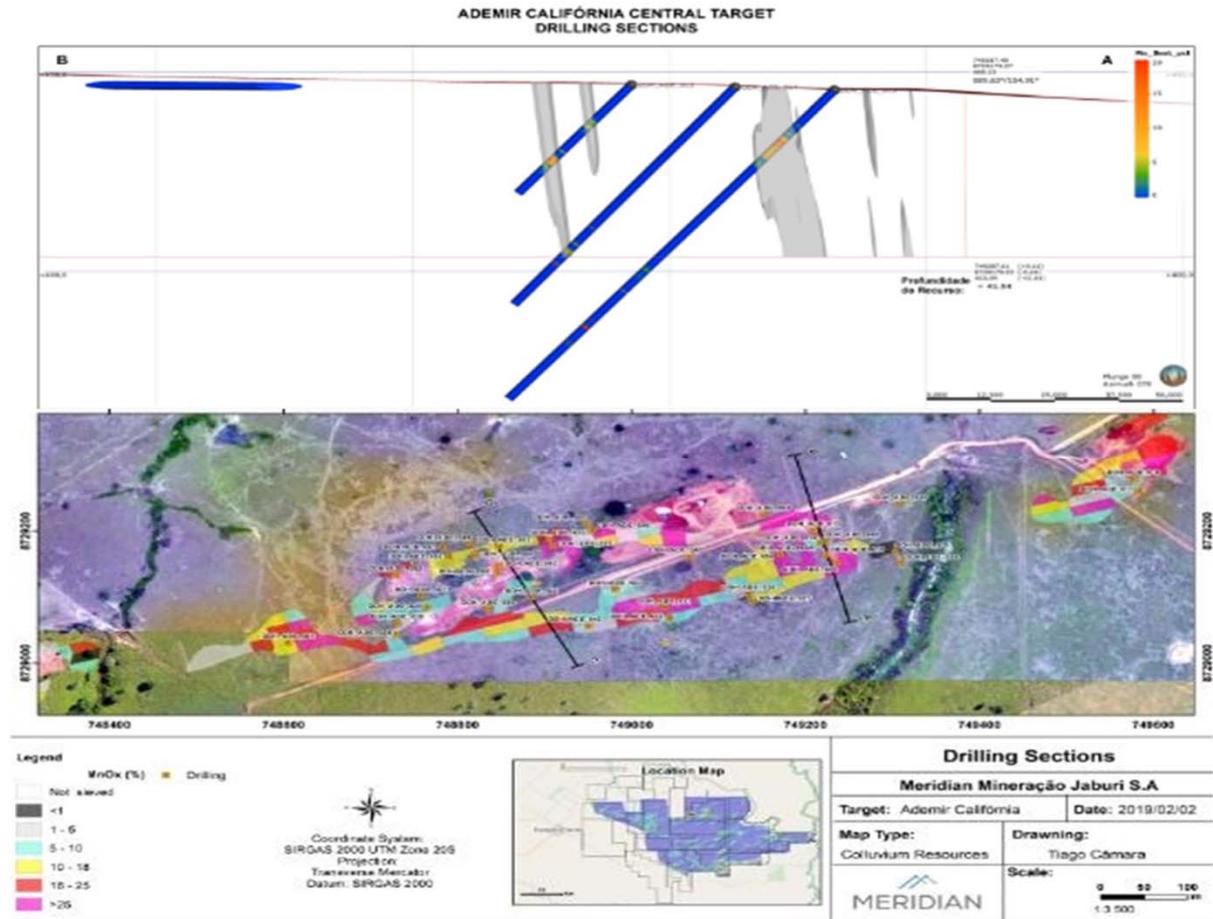
- An aerial geophysical survey defined over 200 km of prospective structural corridors that guide the ongoing field programs
- Surface sampling and drilling returned high-tenor manganese mineralisation distributed across the extent of the project area
- Further investment in exploration is required to detail the current mineral inventory and to evaluate other areas with similar potential
- This provides a broad long-term exploration footprint to extend the lifespan of the production facilities.



TRANSITIONING FROM COLLUVIAL TO SAPROLITE MINING

Colluvial hosted manganese

- Past production has been principally mined from the colluvial horizons, often only to 1 meter below the surface
- Many colluvial hosted zones remain to be mined
- Immediately below the colluvial horizon, the free digging saprolite layer of weathered rock extends typically to 20m vertical depth
- These saprolite zones are being geologically modelled and will be progressively scheduled to provide mill feed
- There are no additional requirements needed at the plants to process the saprolite hosted manganese and it is also amendable to pre-concentration via wet or dry screening processes
- The saprolite potential remains in areas where the colluvial has been exhausted



MINING IS LOW COST

COLLUVIUM & SAPROLITE MINING

- Delineation of manganese distribution by detailed grade control
- Pre-stripping & stockpiling of segregated top soil and barren overburden for later site rehabilitation
- The saprolite extends from surface typically to depths of >20m and can be freely dug.
- Supervised mining decreases dilution and increases manganese recovery
- Separated high, medium and low grade areas are mined separately and then batch pre-screen
- The land returned to owners after the rehabilitation process has enhanced agricultural values

FREE DIGGING FROM SURFACE



PRE-SCREENING

PRODUCING A MANGANESE OXIDE PRE-CONCENTRATE AT THE MINE

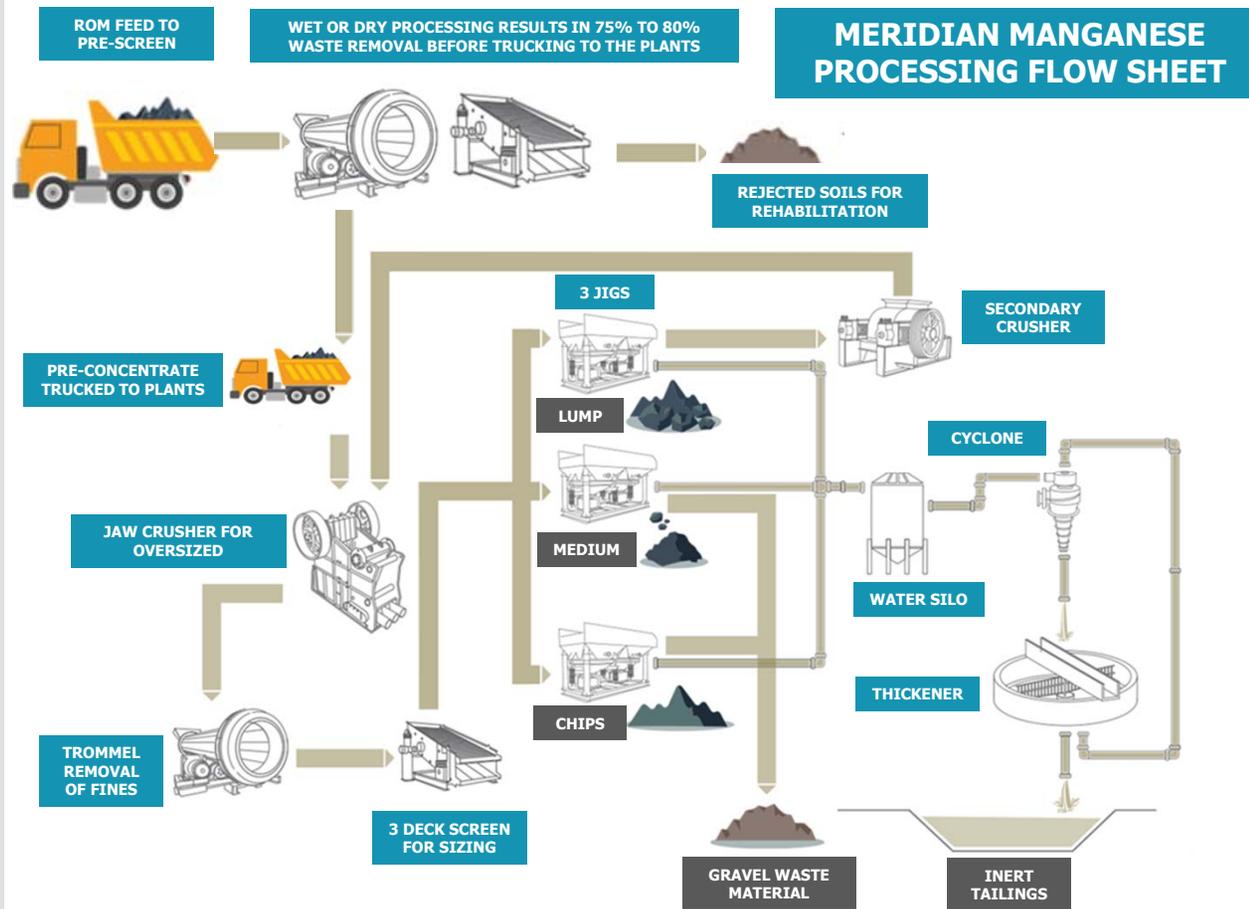
- August 2018, processing flow sheet was modified via the mobilisation of satellite screening plants
- Dry or wet pre-screening removes >75% of barren material (soil) while retaining the recoverable manganese oxide. The resulting pre-concentrate is almost DSO grade
- 40% decrease in global trucking requirement
- Higher excavator utilisation rates due to shorten trucking distance, from 10's km to 100's of metres
- Decreases in truck diesel consumption due to smaller volumes transported for final processing
- The pre-concentrated manganese achieves much higher throughputs at the plants resulting in further decreases in diesel consumption and water usage
- Rejected material (pictured) now remains adjacent to mined areas lowering the cost of rehabilitation
- Decreased truck movements on local roads increases our local community's safety.



TWO PROCESSING PLANTS

COMBINED CAPACITY IN EXCESS OF 45KT P.A.

- Jaburi and Rio Madeira can now receive a pre-concentrated material that allows for higher throughput
- The plants refine the manganese oxide by, washing, crushing any over sized, then size classifying and final upgrading by jigging
- Jaburi plant's capacity is to be increased via a minor modification
- Rio Madeira currently operating as a centralized preprocessing plant and as a back-up to Jaburi
- 1 to 5 mm size fraction yet to be fully recovered, suitable for the Chemical industry
- Due to the pre-concentration at the mine site both plants have excess capacity
- Meridian operates its plants in accordance with all regulatory and permitting requirements



MERIDIAN A DESTINATION FOR INVESTMENT

BENEFIT FROM

- **Targeted Exploration** in 2019-21
- **Processing plants** optimisation in 2019
- **Fully mobile** pre-processing equipment by 2019
- **Brazilian project** development 2019 & beyond

OPPORTUNITY TO

- **Secure equity** in a manganese production Company
- **Gain exposure** to a resurgent Brazilian mining industry
- **Capitalize on** existing investments and proven management
- **Partner with** a stabilized production asset with capacity of >45kt P.A.



**MERIDIAN
IS BUILDING A STRATEGY BASED
ON LOCAL & INTERNATIONAL
EXPERTISE SUPPLYING
DEVELOPED MARKETS AND
BUILDING A SUSTAINABLE
MINING BUSINESS IN BRAZIL**



SENIOR MANAGEMENT



GILBERT CLARK

Interim CEO and Director

Mr. Gilbert Clark has 19 years of international experience within the natural resources industry. Prior to joining Sentient Equity Partners he was a Senior Investment Advisor and Director of Sentient Asset Management Canada for The Sentient Group. His portfolio covered base, precious and industrial metals with investee companies in Europe, Greenland and South America. Prior to joining the Private Equity Industry he managed the international expansion for Queensland Gas Corporation (subsequently BG Group). Mr Clark has resource development and production experience from the Eastern Gold Fields of Western Australia. Mr Clark holds a Bachelor of Science (Geology) from Macquarie University.



ADRIAN MCARTHUR

Chief Geologist, Qualified Person

Dr. Adrian McArthur has over 20 years of experience in exploration, resource delineation and project generation roles for industrial minerals, gold and base metals. He currently leads a team of 13 geologists in a multi-commodity exploration program for Meridian which has confirmed a new style of hydrothermal manganese mineralisation and identified a number of emerging gold and tin targets. Adrian holds a B.S.c. Hons, PhD from Monash, is a Fellow of AusIMM and is the qualified person for Meridian.

Dr. McArthur is a "qualified person" within the meaning of National Instrument 43-101.



JONATHAN RICHARDS

Interim Chief Financial Officer

Mr. Jonathan Richards brings over a decade of resource-focused accounting and finance experience, including Brazil experience. He has accumulated extensive experience with TSX and Venture-listed companies, as well as numerous private companies all over the world. Jonathan holds a bachelor's degree in management studies with first-class honours from the University of Waikato, New Zealand, and is a member of the Institute of Chartered Accountants of British Columbia.



JOEL JULIO BRANDÃO

Resident Manager Espigão

Mr. Joel Julio Brandão has over 37 years of experience in the Brazilian mining industry covering project administrator, exploration, infrastructure and the operation of mines. He has worked for national and multinational companies on gold and manganese projects in the Amazon region (Mato Grosso, Pará and Rondônia). He has worked for TSX-V companies such as: Serabi gold, Electrum Capital and Alta Floresta Gold. Mr Julio Brandão graduated from the Federal UFMT-University of Mato Grosso / Cuiabá with a Bachelor of Economics. He has completed postgraduate studies at the University Gama Filho / Rio de Janeiro specialising in Project Management.

BOARD OF DIRECTORS



JOHN SABINE

DIRECTOR & CHAIRMAN OF THE BOARD

John Sabine, qualified as a solicitor in Ontario Canada, currently legal counsel to Bennett Jones LLP, advises on corporate governance, reorganizations, securities, financing & mergers & acquisitions. A principal focus of his practice is on mining finance, joint ventures and mergers & acquisitions. With transaction experience throughout the world, he is widely recognized for advising clients on complex international projects. He is ranked as a Senior Statesman, Energy: Mining by Chambers Global: The World's Leading Lawyers for Business. He has served as a director on a number of boards of directors, both public & private, as CEO of Arbor Memorial Services (TSX), & was Non-Executive Chairman of Anvil Mining Ltd. (ASX;TSX), operating copper mines in the Democratic Republic of the Congo, until acquired by Minmetals Resources Ltd. for \$1.3B. He is currently the Chairman of North American Nickel Inc. (TSX-V) & serves on the boards of Seabridge Gold Inc. (NYSE;TSX) & Barkerville Gold Mines Ltd.(TSX-V).



CHARLES RIOPEL

DIRECTOR

Charles Riopel is an accomplished senior-level executive with 20 years domestic/international investment experience in mining. He has managed over the year's both private and public investment funds. He is the founder and managing partner at Latitude 450, a private equity fund specialized in mining. Prior to this he was Senior Investment Director at Sentient Asset Management Canada for The Sentient Group. He served as Senior Investment Director Metals & Mining at the SGF from 2006 to 2012. He was appointed to the Board of Directors of Women in mining Canada in 2017 and is currently the Chair of the Corporate Governance Committee. He is also a board member of Aligo Innovation. He has served as a director and/or officer of several Canadian and international companies. He holds a Bachelor of Economics from Montreal University and a Masters in Business Administration from Laval University.



GILBERT CLARK

DIRECTOR

Gilbert Clark has 19 years of international experience within the natural resources industry. Mr. Clark is a Partner with Sentient Equity Partners. Prior to this he was a Senior Investment Advisor and Director of Sentient Asset Management Canada for The Sentient Group. His portfolio covered base and precious metals with investee companies in Europe, Greenland and South America. Prior to joining the Private Equity Industry he managed the international expansion for Queensland Gas Corporation (subsequently BG Group) for non-conventional oil and gas developments. Mr Clark has resource development and production experience from the Eastern Gold Fields of Western Australia. He has natural resource business experience in continental Europe, Eastern Europe, North America, Central America, South America, Africa, S.E. Asia, Greenland and Australia. Mr Clark holds a Bachelor of Science (Geology) from Macquarie University.



PETER WEIDMANN

DIRECTOR

Peter Weidmann has over a decade of private equity experience as a fund investor and in direct co-investments, including several years with Macquarie Bank. He started his career at KPMG and Deutsche Bank, more recently having been an Investment Director with BTV Group in Munich. Mr. Weidmann is currently a Partner with Sentient Equity Partners. He has an MBA from the University of Chicago Graduate School of Business and an M.S. in Finance and Computer Science from the University of Mannheim in Germany.



KATHERINE MACLEAN

COMPANY SECRETARY

Katherine Maclean has 9 years international experience in Company Secretary and corporate development roles in the mining and resources industry. Her experience includes due diligence, corporate governance, project management and risk assessment in Australia, the Americas and Europe. Prior to joining the Meridian Mining team, Katherine acted as Corporate Secretary for Sentient Asset Management Canada and has also worked with a variety of public and privately owned companies. Katherine holds a Bachelor of Laws from Macquarie University and is qualified as a solicitor in New South Wales.

CAPITAL STRUCTURE

- Meridian Mining Societas Europea
- Meridian Mining S.E. listed on the TSX Venture Exchange (Ticker: MNO)
- Market capitalization of CAD 22m
- 52 week range
 - CAD 0.05 -0.55
- Cash on hand 31st January USD 0.485M
- Debt USD 16.35M
- Cayman-based private equity fund Sentient Equity Partners manages approximately 88% of Meridian’s equity; and
- Historical records of our Quarterly Reports, Annual Reports and Public Filings are found on SEDAR

SHARE CAPITAL STRUCTURE	Price CAD	No.of Scurities	Total Securities
Issued and Outstanding			163,822,421
Stock Options	0.5	1,050,000	
Warrants	0.65	12,734,500	
Fully Diluted			177,606,921

