Baffinland Iron Mines LP
Mary River Expansion Stage 3

Definitive Study Report

Section 10 – Business Systems

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10. Executive Summary

BIM strives to implement and use the existing best in class business systems to ease and improve it operation.

10.1 Existing Business Systems

Currently BIM set up business systems and has been using these systems to operate, budget, maintain and forecast for the 4.2 Mtpa trucking operations.

10.2 Operations & Mining

10.2.1 Mine Planning

Currently the mine operation team uses “MineSight” software as the mine planning platform.

This is a software that allows mine planning team to use raw data from drillholes, blastholes and other sources to derive 2D & 3D models essential to mine design and planning.

The system allows for cut design and reserve calculations combined with scheduling, optimization, equipment planning, and haulage tools leading to a complete short-to-long-term planning schedules.

10.2.2 Operations Monitoring

PI system is used for operation monitoring with the assistance of other sub-systems example teletrac (fleet management system), Rival solution (road roughness), Factory Talk (OPC server for crushers), 920i Interchange (Rice Lake Scale Interface) feed into relevant information into the PI system which acts as data collector and visualization software.

Other systems used by operation for monitoring includes DeltaV distributed control system for generators, KepWare (OPC server for generator Scada).

See table 1 for current BIM systems and applications)

10.3 Finance and Accounting

The primary finance and accounting system is SAP. The SAP is a fully installed version including the project module.

10.3.1 Long Term Business Planning

Supporting collaborative decision-making across the business by integrating processes for sales, inventory, and operations with demand-driven business planning. By balancing demand with supply and maximizing product availability.

10.3.2 Financial Planning and Analysis

Functionality for financial planning and analysis in SAP software helps adjust plans and allocate resources to accommodate changes and align performance with strategy. The software provides the necessary means to define and cascade strategy, model cost drivers, improve financial forecasting, and report on and analyze massive amounts of transactional and operational data. With maximum cross-functional insight, managers can streamline

budgeting processes, capture growth opportunities, short-circuit predicted variances against key performance indicators, and create a customized business flow to achieve the goals set. The end result is increased profitability and a closer match of tactics with organizational vision.

10.3.3 Accounting and Financial Close

Streamline the recording of accounting data for multiple companies, currencies, charts of accounts, reporting standards, and industry requirements with SAP software for accounting and financial close. Efficiently close books on time, and create financial statements at the entity and corporate levels for Financial Reporting Standards. Gain real-time financial insight based on a single source of truth of detailed information.

10.3.4 Treasury Management

SAP software enables cash, liquidity, and risk management as well as integrated financial reporting. Treasury managers can improve the management of every activity associated with cash, payments, liquidity, risk, and compliance. By simplifying working capital, risk management, and compliance, treasury managers can gain complete transparency into and control over interrelated activities and automate critical processes. They can also better understand the risks of those activities and how to mitigate them. Control over these complex demands enables treasury departments to ensure adequate liquidity to drive growth and innovation, while preventing exposure to the growing financial risks of the world market.

To increase Inuit content in the Project – support Sustainable Development department with training and community work ready programs, tours, recruitment campaigns and partnership with the Baffinland Community Liaison Officers in each community.

10.3.5 Governance, Risk and Compliance for Finance

Improve business performance and decrease the cost and effort of managing governance, risk, and compliance (GRC) processes with GRC solutions from SAP. Automate GRC processes using best practices and a scalable enterprise platform. By streamlining and automating processes, your organization can anticipate and manage risk events, reduce compliance violations, and extend GRC programs into value-adding business activities.

10.4 Procurement

10.4.1 Operational Purchasing

Solutions from SAP helps BIM to manage the procurement of direct material, indirect materials and services. By using functionality for self-service procurement, catalog management, plan-driven procurement, services procurement, and order collaboration, companies can effectively manage spending across the organization for all spend categories. Intuitive and familiar user interfaces for shopping cart and catalog streamlines the purchase of goods and services and improves user adoption. Furthermore, sourcing requirements from external sources, such as MRP, plant maintenance and project systems, can streamline source determination, increase operational efficiency, and improve compliance. Plan-driven procurement allows customers to bring more diverse spend under management for better

contract compliance, increased cost savings, and better visibility for strategic sourcing - buyers can negotiate for and capture significant savings during sourcing and contract cycles. Once goods and services are acquired, integration with invoice management solutions further improves invoice processing and working capital management.

10.4.2 Supplier Management

Managing of external sourcing processes using cloud-based supplier management solutions from SAP that seamlessly integrate with your core business management application. Drive significant sourcing savings using a first-class supplier management platform and a global business network. Collaborate more efficiently with suppliers with our integrated, cloud-based solutions.

10.4.3 Invoice and Payables Management

Simplify processes for collecting and checking invoices, verifying them against preconfigured business rules, and handling exceptions with SAP solutions for invoice and payables management. Our software automates data extraction and streamlines invoice management, helping to eliminate data entry errors and duplicate invoices. You can record and manage accounts payable data, support standard payment methods, and adapt payment formats to country-specific rules and regulations.

10.4.4 Procurement Analytics

Improving BIM's position in the market and bottom line with procurement analytics solutions from SAP. With SAP software, you can:

- Obtain real-time insights into supplier spend, evaluations and scores, and contracts.
- Use embedded analytics in transactional processing.
- Monitor critical business situations through real-time key performance indicators.
- Spot gaps in suppliers' performance and act immediately to prevent the loss of business opportunities as well as drive customer loyalty.

10.5 Asset Operations and Maintenance

Many organizations struggle with excessive downtime, low return on assets, and wasted time and resources that drive up maintenance costs. Excessive downtime is often caused by ineffective maintenance procedures, inefficient information retrieval, unavailable parts, wrong spare parts in inventory, service delays, and maintenance service PO processing.

Overcoming these challenges requires having the right systems and processes in place. Asset operations and maintenance encompass a series of steps required to assure that an asset will retain, or be restored, to a state in which it can perform its designated function.

10.5.1 Asset Strategy and Performance

Analyze criticality of assets and optimize maintenance strategies. Improve reliability by using standard methodologies for lowering risks, maintenance cost, downtime, and energy consumption with asset strategy and performance solutions from SAP. Reduce bottlenecks

and prevent recurrence of incidents. Hold consistent asset performance reviews, monitor asset performance, and optimize improvement plans across the asset lifecycle. Reduce outages and resolution time by updating asset strategy and performance from preventive to condition-based maintenance.

10.5.2 Maintenance Planning and Scheduling

Planning and scheduling of maintenance task planning, cost control, and budgeting. Maintenance organizations can use SAP software to plan work and find the right person who can use appropriate tools and resources to execute maintenance activities. Our software handles unplanned work requests and incomplete information, moving it to planned maintenance status. Maintenance organizations can measure planning by comparing planned hours versus booked hours on jobs. Maintenance staff gains a full view of asset status to mitigate breakdowns using our software, which integrates documentation for job execution and safety. The result? Companies can reduce maintenance costs, while synchronizing labor, material, equipment, and schedules.

10.5.3 Maintenance Execution

Optimal equipment reliability, repair reduction, and worker safety. Optimal asset maintenance involves proactive - preventive or condition-based - maintenance activities, which help minimize equipment breakdowns. SAP software supports maintenance planning, clear procedure development, visible resource availability, and access to relevant information. Staff can use our software to process integrated work clearances and work permits. On any device, remote workers can access, transfer, complete, and manage assigned work orders. Our software helps asset managers and staff increase equipment reliability and improve asset usage as well as safer maintenance processes.

10.6 Health and Safety

10.6.1 Environment, Health and Safety

Reduce environment, health, and safety risks to help ensure safety and business continuity. Organizations can mitigate environment, health, and safety risks by performing thorough risk assessments, measuring and reporting emissions, designing effective controls, and communicating safe work practices. Testing these controls, capturing incidents, and learning from events support intelligent change and continuous improvement.

Applications/Software	Technology
1. SAP	1. Radio System
2. E-Mail (Exchange 2007)	2. Fuel Management System
3. PI system	3. Generator SCADA System
4. KPI system	4. Truck Weigh Scale System
5. SysAid	5. Lorex Camera System
6. FMS	6. point to point for network
7. Sharepoint	7. Wi-Fi system
8. VPN	8. Telecommunication
9. Firewall	9. Mitel Phone System
10. Software licensing (MS office, email, Firewall, SAP, etc..)	10. Network Infrastructure
11. Tape backups (Symantec backup exec)	11. Rruff system
12. Minitab	12. VIMS system
13. Antivirus (Symantec End Point)	13. IHL system
14. MS Office Suite	14. Microwave Communication
15. Rruf	15. Vincard
16. Jpro	16. BIM FTP
17. Intelex	17. SAP
18. VIMS	18. Active Directory
19. Solar Winds	19. Exchange
20. IHL	20. SQL
21. Kofax	21. Teletrac GPS
	22. PI system
	23. PLC Network
	24. Honeywell Camera System

Table 1