PO Box 605 Broken Hill, New South Wales 2880 M: 0400 015 214 W: 08 8088 8163 E: gazzasteyn@gmail.com W: gazzasteyn.com.au

### **PROFESSIONAL SUMMARY**

As a seasoned Mining Engineer with a Master's degree and Fellow status with the Australian Institute of Mining and Metallurgy (FAusIMM), I bring over three decades of operational and technical expertise to the mining industry. My career encompasses roles in hard rock underground (24 years) and surface mining (6 years) across Australia, Africa, and the Solomon Islands with leading companies like BHP, South32, Glencore, De Beers, and Anglo-American. I've managed diverse commodities, including gold, copper, lead, zinc, silver, manganese, bauxite, and diamonds, through various mining methodologies, including Sublevel and Blast Hole Stoping, Block Caving, Cut-and-Fill, Board-and-Pillar, Narrow Breast and Steep Stoping (Underhand, Shrinkage-Overhand, Remnant extraction), Open Pit and Open Cut (dozer stripping and truck and shovel pre-stripping).

My passions lie in leadership, innovation and technology, systems and process improvement, and influencing behaviours to maximise productivity. I excel in leading operational teams, mine planning systems, scheduling (Deswik), and project management. I also possess phenomenal abilities in optimising Microsoft Excel to analyse data and enhance business processes.

Since starting in the Australian mining sector in 2009, I've held roles as a Senior Mining Engineer, Technical Services Superintendent, Production Superintendent, and Acting Mine Manager. I started my career from the working face in operational roles as a Certificated Blasting Ticket Holder in charge of Stoping and Development operations, and a Shiftboss (15 years). My focus remains on high performance, productivity, innovation, and personal growth while advocating for safety and higher standards.

#### **CAREER HISTORY**

## Feb 2019 to Present: PERILYA, BROKEN HILL, NSW, AUSTRALIA Position: Senior Scheduling Engineer Long-Term Planning

Managing the delivery of short, medium and long-term schedules by processing mine designs using Deswik CAD, IS, SO, and Sched, and Maptek Vulcan Envisage. Also responsible for End-of-Month (EOM) processing and reporting. Reports to a Technical Services Manager.

- **Projects** Redeveloped Stope Optimisation & Resource Reporting Models using Deswik.
- Developed broader spectrum feature attributes in Maptek Vulcan, Datamine, and Deswik to
  optimise identifying a wider variety of design activity intentions from design engineers,
  providing more choices to specify stope, development, stripping, rehabilitation, and fill types.
- Redeveloped Month End Reports, GM Reports, Scheduling Reports, Daily Reports, and Operational Dashboards in Excel to automate workflows and optimise timely deliveries.
- From first principles developed an integrated TKM process in incompatible scheduling software, with capabilities to automatically track and report tonnages across all planning ranges.
- Transitioning to Datamine in 2019, I cleaned up and transitioned the mine scheduling data, and rebuilt and enhanced the mining model.

# Aug 2017 to Feb 2019: PERILYA, BROKEN HILL SOUTH MINE, NSW, AUSTRALIA Position: Senior Scheduling Engineer

Managed the delivery of short-and-medium-term operational schedules and rolling operational plans, incl. the optimisation of mining and exploration activities. One direct report.

Also managed delivery of daily reports and chairing/scribing at daily operations meetings.

- I also delivered weekly and monthly three-month-forecasts to operational teams.
- Projects Optimised the short-term scheduling process to improve stakeholder engagement.
   Also redeveloped Excel spreadsheets for scheduling and production, drill and blast, development, and backfilling dashboards and integrated these into the Datamine software and a Microsoft Access database (ProdFX).

Jul 2016 to Aug 2017: GAP YEAR, MANDURAH, WA, AUSTRALIA Career break.

## Jun 2015 to Jun 2016: WORSLEY ALUMINA, BODDINGTON, WA, AUSTRALIA Position: Vacuum Drilling Supervisor

As an engineer with previous operational supervisory experience, I accepted an assignment as a Vacuum Drilling Supervisor to commission grade control drilling operations for two drill rigs with four direct reports. During this time, I also served as a Certified Trainer and Assessor while developing training tools and facilitating training and assessing operator competence.

- Responsible for Geological Vacuum Drilling operations across the Worsley operations.
- Commissioned operations, established training programs, and assessed competencies.
- More than doubled first season drilling targets, surpassing goals with an excellent safety record.

# May 2014 to Jun 2015: WORSLEY ALUMINA, BODDINGTON, WA, AUSTRALIA Position: Senior Scheduling Engineer

In charge of medium-term (2-year budget) and short-term (3-month forecasts) schedules, including a stacking and reclaiming plan. Employed RPM Global's OPMS, HAULSIM, & XACT.

- Project Developed an automated stacking and reclaiming planning process in Microsoft Excel linked to PLC switch locations in a Sequel Server Database.
- Project Established RPM Global's OPMS (Open Pit Metals Solution) and HAULSIM.

# Mar 2013 to Feb 2014: ST BARBARA, GOLD RIDGE, SOLOMON ISLANDS Position: Technical Services Superintendent

Managed the fulltime delivery of short-and-medium-term mine designs and schedules, drill and blast plans, budgets, waste management plan, traffic management plan, and survey activities.

- Also served five months rotating as Acting Mine Manager and Production Superintendent.
- **Projects** Developed and implemented a short-term planning and compliance control process, a blasting consumables database, and a waste dump and site traffic management plan.

# Mar 2011 to Mar 2013: GLENCORE, MOUNT ISA MINES, QLD, AU Position: Senior Mine Planning Engineer

Managed the quality delivery of short-term stope and development designs from four engineers at a Sublevel Stoping operation, incl. administering a medium-and-long-term design database.

Project – Realised value and project managed an underground workshop conversion into a
fresh air base during firing times that returned an NPV of AU\$138M.

# Feb 2009 to Mar 2011: BHP, GEMCO, NT, AUSTRALIA Position: Senior Mining Engineer / Technical Lead

I led a Survey team and managed the delivery of short-and-medium-term mine designs, schedules, forecasts, drill and blast plans, compliance, risk and quality controls, monthly reconciliations, administration of contractors and consultants, and deliverables for ground control, tailings, and water management plans, incl. project management activities while also relieving direct reports. Four direct reports in a short, and medium-term planner, and two surveyors, excl. the consultants.

Project - Developed and implemented plan compliance controls and completed a Six Sigma
and Lean Green Belt project to increase directly fed ore and reduce rehandling costs. Also
sourced a best-fit pit-to-port short-term planning solution (XACT) for the site.

## May 2007 to Feb 2009: BHP, HOTAZEL MINES, SOUTH AFRICA Position: Mine Planning Superintendent

Managed the establishment and upkeep of mine planning processes and systems for an underground Board-and-Pillar and Open Pit with four direct reports. I also managed resource optimisation, strategic planning, mine design, modelling, and scheduling. Reported to MRM Mngr.

 Project - Justified and commissioned in-house Mine Planning Departments for two mines, incl. selecting and implementing the scheduling software, developing new mining models, and recruiting and training personnel. This project proved a saving of ZAR\_8M/year.

# Jun 2000 to May 2007: DE BEERS, FINSCH MINE, SOUTH AFRICA Position: Production Supervisor, Superintendent and Short-Term Planner

Served as a Production Supervisor for 3 years and 6 months, Short-Term Planner for 1 year and 6 months, Automation Control Room Supervisor for 1 year and 6 months, and Acting Construction, Production, Shaft and Ground Handling (Crushing and Conveying) Superintendent for 5 months.

# Dec 1989 to Jun 2000: ANGLO-AMERICAN / ANGLOGOLD, SOUTH AFRICA Position: Production Supervisor and Mining Engineer

Served as a Production Supervisor for 6.5 years, while also completing studies in Mining Engineering. My duties included functioning as a Certificated Stoping, Development and Logistics Miner with a Shotfirer and Shaftsman Certificate.

- Managed teams up to 130 people as a Production Supervisor for 4 years.
- **Project** Identified and executed a solution that returned a production section to full production, by increasing ledging operations to expedite unlocking face lengths for stoping.

### **EDUCATION**

- Dec 2020 Southern Cross University, Queensland, Australia
   Master of Engineering Management (MEM/MEng) GPA=5.0
- Jan 1999 University of Johannesburg, South Africa
   National Higher Diploma in Metalliferous Mining \*
  - \* Assessed: Australian Bachelor's Degree (BEng) Equivalent Documentation avail.

### **CERTIFICATIONS**

- Planned in 2025: Certificate of Competency for a Registered Mine Manager.
- Feb 2021 Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM).
- Nov 2017 RIIERR601D Establish & Maintain Mine Emergency Preparedness & Response.
- Nov 2012 MINE7033 Resources Sector Risk Management (University of Queensland).
- Dec 2011 TAE40110 Certificate IV in Training and Assessment.
- Oct 2011 RII30109 Certificate 3 in Surface Extraction Operations (S123/G189).
- Mar 2011 RII20209 Certificate 2 in Surface Extraction Operations.
- 1992-1999 Blasting, Shaftsman, and Mine Overseers Certificates completed in South Africa.

#### **SOFTWARE EXPERIENCE**

(exp=expert, adv=advanced, int=intermediate, nov=novice, bas=basic)

• 1995-2024 **Microsoft Office** - Word (*Exp*), **Excel** (*Exp/Power User*), PowerPoint (*Exp*), Outlook (*Exp*), Projects (*Adv*), Visio (*Adv*)

- 2007-2024 **Mine Scheduling Deswik CAD, IS, SO & Sched** (*Exp*), Datamine StudioUG, EPS (*Exp*), XPAC (*Exp*), XACT (*Int*), OPM (*Adv*)
- 2004-2024 Mine Design Deswik CAD (Int), Maptek Vulcan Envisage (Adv)
- 2014-2016 **SAP** Purchasing (*Adv*), Maintenance (*Adv*), Event Reporting (*Adv*)

### **ACCOMPLISHMENTS**

- 2023 Redeveloped Stope Optimisation & Resource Reporting Models using Deswik.
- 2020 to 2022 Developed broader spectrum feature attributes in Datamine, and Deswik to optimise identifying a wider variety of design activity intentions from design engineers.
- 2020 Thesis completed on Remote work to attract skilled professionals to Broken Hill.
- 2019, 2020 Developed and implemented enhanced LOM Models for three operations.
- 2018 to 2024 Redeveloped Month End Reports, GM Reports, Scheduling Reports, Daily Reports, and Operational Dashboards in Excel to automate workflows and optimise deliveries.
- 2018 Overhaul of short-term system to create a shared value proposition for stakeholders.
- 2016 Trained, assessed and led vacuum drilling crews at South32 through the commissioning of grade control drilling operations to more than doubling expected targets in the first season.
- 2015 Development and implementation of an automated stacking and reclaiming planning and reconciliation Excel tool, with enhanced quality controls and a 90% reduction in effort.
- 2013 Notable turnaround of production performance that exceeded a twelve-month rolling average for five successive months while leading a team as the Acting Mine Manager and Production Superintendent, with praises from the General Manager and COO.
- **2011, 2012** Justified and Project Managed an underground workshop conversion into a fresh air base during firing times with an investment of AU\$10M and an NPV of AU\$140M.
- **2009** Commendation awarded by BHP's Melbourne based Group Auditing Services (GAS) for establishing a best-in-class plan compliance measuring and reporting process.

### **STRENGTHS**

- Ground-level operational experience that adorns me with **natural abilities to communicate technical matters at an operational level** and that helps me develop supporting systems.
- Superior safety and production performance through extensive experience as a visible leader who encourages behavioural-based safety principles in an enabling environment, sustained by an empowering, accountable and goal-focused team management system.
- Praised software skills and abilities, capable of anything in Microsoft Excel, underpinned by clarity to apply innovative solutions to any type or form of data.
- **Project management (PM)** skills and abilities in Lean and Six Sigma (Green Belt), capital and operating cost projects through all the project phases. PM at Masters' Degree level.
- Mature business systems and process management (BPM) skills and abilities that benefits
  optimising organisational systems, processes, standards and procedures, through adopting
  various processes, incl. PM principles, e.g. design, model, execute, monitor, and optimise.
- Inexhaustible **continuous improvement and operational optimisation** skills and abilities, fuelled by innate creativity and enhanced by extensive operational and technical experiences.
- Advanced leadership skills and abilities cultivated over more than two decades.

#### **OTHER INTERESTS**

- Website Developer and Host. (Volunteer admin for non-profit website).
- Body building and walking.
- Miners Lamp Collector & Enthusiast. (Maintains Website & Facebook Group)
- Poetry writer.