Final

Costerfield Operation, Victoria, Australia, NI 43-101 Technical Report

Costerfield_2026-NI 43-101, Victoria, Australia

Alkane Resources Limited

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Date of Report: 11 September 2026

Effective Date: 30 June 2026

SRK Consulting (Australasia) Pty Ltd ▪ PLI035 ▪ 11 September 2026

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Prepared for: Alkane Resources
Effective Date: 30 June 2026
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Costerfield NI 43-101

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Effective Date: 30 June 2026

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Important Notice

This report was prepared as a National Instrument 43-101 Technical Report for Alkane Resources Limited (Alkane) by SRK Consulting (Australasia) Pty Ltd (SRK). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in SRK's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, including without limitation, those sources listed in Section 3 - Reliance on Other Experts, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Alkane subject to the terms and conditions of its contract with SRK and relevant securities legislation. The contract permits Alkane to file this report as a Technical Report with Canadian securities regulatory authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. SRK accepts no responsibility with respect to the opinions of those experts listed in Section 3 - Reliance on Other Experts nor determinations made by the Company with respect its obligation to file this Technical Report, or subsequent technical reports, nor any determinations as to the materiality of a mineral project to Alkane, and SRK is under no obligation to update this Technical Report, except as may be agreed to between Alkane and SRK by contract from time to time. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

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1 Summary

The Costerfield Property (The Property), wholly owned by Alkane Resources Limited (Alkane Resources or Alkane) is located within the Costerfield mining district, approximately 10 km northeast of the town of Heathcote, Victoria. The Property's mining and processing facilities include an underground mine and a conventional flotation processing plant, including a gravity circuit (Brunswick Processing Plant) with a current capacity of approximately 150,000 tpa of feed.

Alkane Resources is a publicly listed company trading on the Toronto Stock Exchange (TSX) and Australian Stock Exchange (ASX) under the symbol ALK, with the head office at Level 4, 66 Kings Park Road, West Perth, WA 6005.

SRK Consulting (Australasia) Pty Ltd (SRK) was commissioned by Alkane to provide Qualified Persons (QPs) to undertake personal inspections of the Property, complete detailed reviews of the work completed by Alkane personnel and take QP responsibility for the 2026 Technical Report and any associated public disclosure. SRK's QPs have independently reviewed the work completed by Alkane Resources and take responsibility for all sections of this Technical Report.

The Mineral Resource and Mineral Reserve Statement reported herein was prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) *Definition Standards* (CIM, 2014), *Mineral Exploration Best Practice Guidelines* (CIM, 2018) and *Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines* (CIM, 2019).

During 2025/2026, at Costerfield, Alkane drilled a total of 136.5 km of exploration diamond. Drilling focused on the following areas:

- Brunswick South
- True Blue
- Kendal
- Sub King Cobra.

In addition to drilling, 1,353 m of on-vein development was completed predominantly on the Shepherd and Kendal orebodies. Rock chip samples used in mine grade control were also included in the geological database and used in the Mineral Resources estimation process to improve Mineral Resources classification in areas accessed by development.

Drill core was logged and sampled by Costerfield geologists, who also performed mine sampling. All samples were submitted to On Site Laboratory Services (On Site) in Bendigo, Victoria, Australia for sample preparation and assay. Site geological and metallurgical personnel have implemented a quality assurance/quality control (QA/QC) process that includes the regular submission of site specific and externally sourced standard reference materials, duplicates and blanks with drill and face samples submitted for assay. Site-specific standard reference materials were both produced and certified by ORE Research & Exploration Pty Ltd (OREAS). OREAS is an Australian consultancy who specialises in laboratory quality control systems. The acQuire Geoscientific Information Management (GIM) system was used to store and validate all geological data used for the Mineral Resource Estimate. A two-dimensional (2D) accumulation estimation method was used for all models. This method is considered most applicable for the narrow veins of Costerfield. The Datamine Studio RM platform supports 2D accumulation estimation and was used to complete the Mineral Resource Estimation. Validated drilling and mine sampling data were imported into

Datamine and composited to full intersection width. Gold accumulation (Au-Accumulation), antimony accumulation (Sb-Accumulation) (accumulation = vein true width × vein grade) and true vein width were estimated into a 2D block model for each lode using ordinary kriging interpolation in zones of high data density, and inverse distance in a limited number of Inferred exploration areas. Gold and antimony grades were back calculated using the estimated accumulated data and true vein width.

Where vein true widths are less than 1.2 m, vein grades were diluted to a minimum mining width of 1.2 m using dilution grades of zero g/t gold and zero percent antimony for host lithologies. Where vein true widths are greater than or equal to 1.2 m grades were not diluted.

Mineral Resources were reported above a cut-off of 3.0 g/t gold equivalent (AuEq) which was determined using Costerfield's July 2025–February 2026 production costs, and using a gold price of US$4,000/oz and an antimony price of US$26,000/t. Cut-off grade is expressed as AuEq to allow for the inclusion and expression of the secondary metal (Sb) in terms of the primary metal (Au). AuEq is calculated using the formula AuEq = Au + (Sb × 2.05) where Sb is expressed as a percentage, and Au is in grams per tonne, both based on 1.2 m diluted grades.

Table 1.1: Mineral Resources at Costerfield, inclusive of Mineral Reserves as at 30 June 2026

Category	Inventory (kt)	Gold grade (g/t)	Antimony grade (%)	Contained gold (koz)	Contained antimony
Measured (Underground)	423	10.0	3.2	136	13.7
Measured (Stockpile)	49	3.7	0.6	6	0.3
Indicated	1,521	5.0	1.8	245	28.0
Measured + Indicated	**1,993**	**6.0**	**2.1**	**387**	**42.0**
Inferred	969	3.6	1.3	111	12.9

Notes:

1 The Mineral Resource is estimated as at 30 June 2026 with depletion through to this date.

2 The Mineral Resource is stated according to CIM guidelines and includes Mineral Reserves.

3 Tonnes are rounded to the nearest thousand; contained gold (oz) is rounded to the nearest thousand; contained antimony (t) is rounded to nearest hundred.

4 Totals may appear different from the sum of their components due to rounding.

5 3.0 g/t AuEq cut-off grade over a minimum mining width of 1.2 m is applied where AuEq is calculated using the formula: AuEq = Au g/t + 2.05 × Sb %.

6 The AuEq factor of 2.05 is calculated at a gold price of US$4,000/oz, an antimony price of US$26,400/t, and recoveries of 90% for Au and 89% for Sb.

7 Veins were diluted to a minimum mining width of 1.2 m before applying the cut-off grade and peripheral mineralisation far from current development was excluded to comply with the reasonable prospects for eventual economic extraction (RPEEE) criteria.

8 The Stockpile Mineral Resource is estimated based upon surveyed volumes supplemented by production data.

9 Geological modelling, sample compositing and Mineral Resource Estimation for updated models was performed by Joshua Greene, MAusIMM CP(Geo); Daniel Miszczuk, MAusIMM; Katherine Barta, MAusIMM, all employees of Alkane Resources.

10 The Mineral Resource Estimate was prepared under the supervision of, and verified by, Cael Gniel MAIG RPGeo (Mineral Resource Estimation), an employee of SRK. Mr Gniel fulfills the requirements to be a Qualified Person for the purposes of NI 43-101, and is the Qualified Person under NI 43-101 for the Mineral Resource.

The Measured and Indicated categories of Mineral Resource were used to update the mine plan using predominantly a long-hole stoping mining method with cemented rock fill. A sustaining cut-off grade of 4.4 g/t AuEq was determined from Costerfield's July 2025–February 2026 production costs, and a minimum stoping width of 1.5 m was used, with planned and unplanned dilution at zero grade for both Au and Sb. An incremental cut-off grade of 2.5 g/t AuEq was applied where incremental mining conditions were met. AuEq grade for the Mineral Reserve is calculated using commodity prices of A$3,100/oz for Au, and A$22,000/t Sb. AuEq is calculated using the formula AuEq= Au + (Sb × 1.61) where Sb is in % and Au is in grams per tonne. Financial viability of Proven and Probable Mineral Reserves was demonstrated at metal prices of A$3,100/oz Au and A$22,000/t Sb.

Table 1.2: Mineral Reserves at Costerfield as at 30 June 2026

Category	Tonnage (kt)	Gold grade (g/t)	Antimony grade (%)	Contained gold (koz)	Contained antimony (kt)
Proven Underground	220	7.4	1.7	52	3.7
Proven Stockpile	49	3.7	0.6	6	0.3
Proven Total	**270**	**6.7**	**1.5**	**58**	**4.0**
Probable Underground	690	5.1	1.6	112	10.9
Total Proven and Probable	**960**	**5.5**	**1.6**	**170**	**15.0**

Notes:

[1] The Mineral Reserve is estimated as at 30 June 2026, and depleted for production through to 30 June 2026.

[2] Tonnes are rounded to the nearest thousand; contained gold (oz) is rounded to the nearest thousand; contained antimony (t) is rounded to nearest hundred.

[3] Totals may appear different from the sum of their components due to rounding.

[4] Lodes have been diluted to a minimum mining width of 1.5 m for stoping and 2.0 m for ore development.

[5] A sustaining cut-off grade of 4.4 g/t AuEq is applied. An incremental cut-off grade of 2.5 g/t AuEq is applied where mining rates do not meet mill capacity and the life of the mine is not extended.

[6] Commodity prices applied are a gold price of US$3,100/oz, antimony price of US$22,000/t and exchange rate US$:A$ of 0.71.

[7] AuEq is calculated using the formula: AuEq = Au g/t + 1.61 × Sb %.

[8] The Mineral Reserve is a subset, a Measured and Indicated only schedule, of a Life of Mine (LoM) plan that includes mining of Measured, Indicated and Inferred Resources.

[9] The Mineral Reserve Estimate was prepared by Vaughn Goyne, AAusIMM, who is a full-time employee of Alkane Resources. The Mineral Reserve Estimate was independently verified by Robert Urie, FAusIMM(CP), who is a full-time employee of SRK. Robert Urie fulfills the requirements to be a Qualified Person for the purposes of NI 43-101, and is the Qualified Person under NI 43-101 for the Mineral Reserve.

The net increase of 1,866 oz Au in Proven and Probable Mineral Reserves for 2026, relative to 2024, consists of the addition of 62,903 oz Au added by Mineral Resource conversion across the Costerfield Operation and a total of 61,037 oz Au depleted or sterilised from the 2024 Mineral Reserves through mining production or mining re-evaluation in 2026. The 3,855 t Sb net increase in Proven and Probable Mineral Reserves consists of 5,860 t Sb added by Mineral Resources conversion across the Costerfield Operation and 2,005 t Sb depleted or sterilised from the 2024 Mineral Reserves through mining production or mining re-evaluation in 2026.

2 Introduction

SRK has overseen the preparation of this Costerfield Property Technical Report. The report demonstrates the viability of continued mining and processing operations at the Property and was largely compiled by Alkane Resources personnel.

The Costerfield Property is located within the Costerfield mining district, approximately 10 km northeast of the town of Heathcote, Victoria. The Property's Augusta Mine has been operational since 2006 and has been the sole ore source for the Brunswick Processing Plant, with multiple zones – Augusta (from 2006), Cuffley (from 2013), Brunswick (from 2018), Youle (from 2019), and Shepherd (from 2021) – constituting ore sources. The exploration and resource definition drilling and mining of the Youle and Shepherd deposits has extended the current mine life of the Costerfield Operation, with mining of the Youle Deposit commencing in 2019.

The Costerfield Property mining and processing facilities are contained within Mining Licence MIN4644 and comprise the following:

- An underground mine with production from the Youle and Shepherd lodes.
- A conventional flotation processing plant (Brunswick Processing Plant) with a current capacity of approximately 150,000 tpa of feed.
- Mine and mill infrastructure, including office buildings, workshops, core shed and equipment.

On 5 August 2025, Mandalay Resources Corporation underwent a merger with Alkane Resources. Trading as Mandalay Resources Costerfield Operations Pty Ltd, the Costerfield Operation is now managed by Alkane Resources. Alkane Resources is a publicly listed company trading on the TSX and ASX under the symbol ALK, with the head office at Level 4, 66 Kings Park Road, West Perth, WA 6005.

2.1 Terms of Reference

SRK was commissioned by Alkane Resources to provide QPs to undertake personal inspections of the Property, complete detailed reviews of the work completed by Alkane personnel and take QP responsibility for the 2026 Technical Report and any associated public disclosure. SRK QPs have independently reviewed the work completed by Alkane Resources and take responsibility for all sections of this Technical Report, with some reliance placed on external experts to the extent permitted under the Canadian National Instrument 43-101 (NI 43-101).

The Mineral Resource and Mineral Reserve Statement reported herein was _prepared in accordance with the CIM *Definition Standards* (CIM, 2014), *Mineral Exploration Best Practice Guidelines* (CIM, 2018) and *Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines* (CIM, 2019).

This Technical Report has been prepared in accordance with NI43-101 and Form 43-101 F1.

The Technical Report was assembled in Melbourne and Perth during the months of June to September 2026.

2.2 Effective Date

This report is dated 11 September 2026 and has an effective date of 30 June 2026.

This date coincides with the following:

- Depletion due to mining up to 30 June 2026.
- Survey of stockpiled ore that was mined and awaiting processing as of 30 June 2026.

All relevant diamond drill hole samples (available as of 17 June 2026) and underground face samples (available as of 1 June 2026) in the Costerfield Property were used to inform the Mineral Resource Estimate.

2.3 Qualified Persons

Cael Gniel: SRK Senior Consultant, BSc (Geosciences and Chemistry), MAIG, RPGeo (Mineral Resource Estimation), conducted a personal inspection of the Property in January 2026. He is independent of Alkane Resources, however, has had prior involvement with the Property during 2012–2018 when he was employed by Mandalay Resources. By virtue of his education, membership to a recognised professional association and relevant work experience, he is an independent QP as defined by NI 43-101.

Robert Urie: SRK Principal Consultant, BEng (Mining Engineering), GCert (Applied Finance), FAusIMM(CP) reviewed all aspects of the estimation of the Mineral Reserve and associated information. He conducted a personal inspection of the Property in March 2026. By virtue of his education, membership to a recognised professional association and relevant work experience, he is an independent QP as defined by NI 43-101.

Carla Kaboth: Core Resources Principal Process Engineer, BEng Hons (Mineral Processing), FAusIMM(CP), RPEQ, undertook a review of the mineral processing and metallurgical testing, recovery methods and infrastructure aspects of the project. She conducted a personal inspection of the Property in March 2026. By virtue of her education, membership to a recognised professional association and relevant work experience, she is an independent QP as defined by NI 43-101.

2.4 Acknowledgements

SRK would like to acknowledge the support and collaboration provided by Alkane Resources personnel during the completion of this project. In particular SRK would like to thank the following people:

- Joshua Greene: Mineral Resource Estimation, and geological modelling
- Dan Miszczuk: Mineral Resource Estimation, and geological modelling
- Katherine Barta: Mineral Resource Estimation, and geological modelling
- Vaughn Goyne: Ore Reserve, scheduling, and mine design
- Dylan Goldhahn: Engineering and economic oversight
- Bronwyn Loechel: Mineral processing and metallurgical testwork
- Megan Kay: Sample QA/QC and analysis
- Robyn Wilson: Geological technical report writing.

3 Reliance on Other Experts

SRK has relied on Alkane's marketing consultant, Andrew Greville (WEMCO) to inform the antimony market studies in Chapter 19.1, Antimony.

4 Property Description and Location

4.1 Property Location

The Costerfield Property is located within the Costerfield mining district of Central Victoria, approximately 10 km northeast of the town of Heathcote and 50 km east of the city of Bendigo (Figure 4.1).

The Property encompasses the underground infrastructure supporting the Augusta, Cuffley, Brunswick, Youle and Shepherd deposits; The Augusta Mine site, the Brunswick Processing Plant; Splitters Creek Evaporation Facility; Brunswick, Brunswick West and Bombay Tailings Storage Facilities (TSFs) and associated infrastructure.

Augusta, which houses the main offices for the Costerfield Project is located at latitude of 36°52’ 27” south and longitude 144 47’ 38” east. The Costerfield Property includes the Augusta, Cuffley, Brunswick, Youle and Shepherd deposits (Figure 4.2).

The deposits are accessed via portals at Augusta and Brunswick. Ore haulage to the run of mine (ROM) takes place through the Brunswick portal, which opened in November 2020.

Figure 4.1: Costerfield Property location map

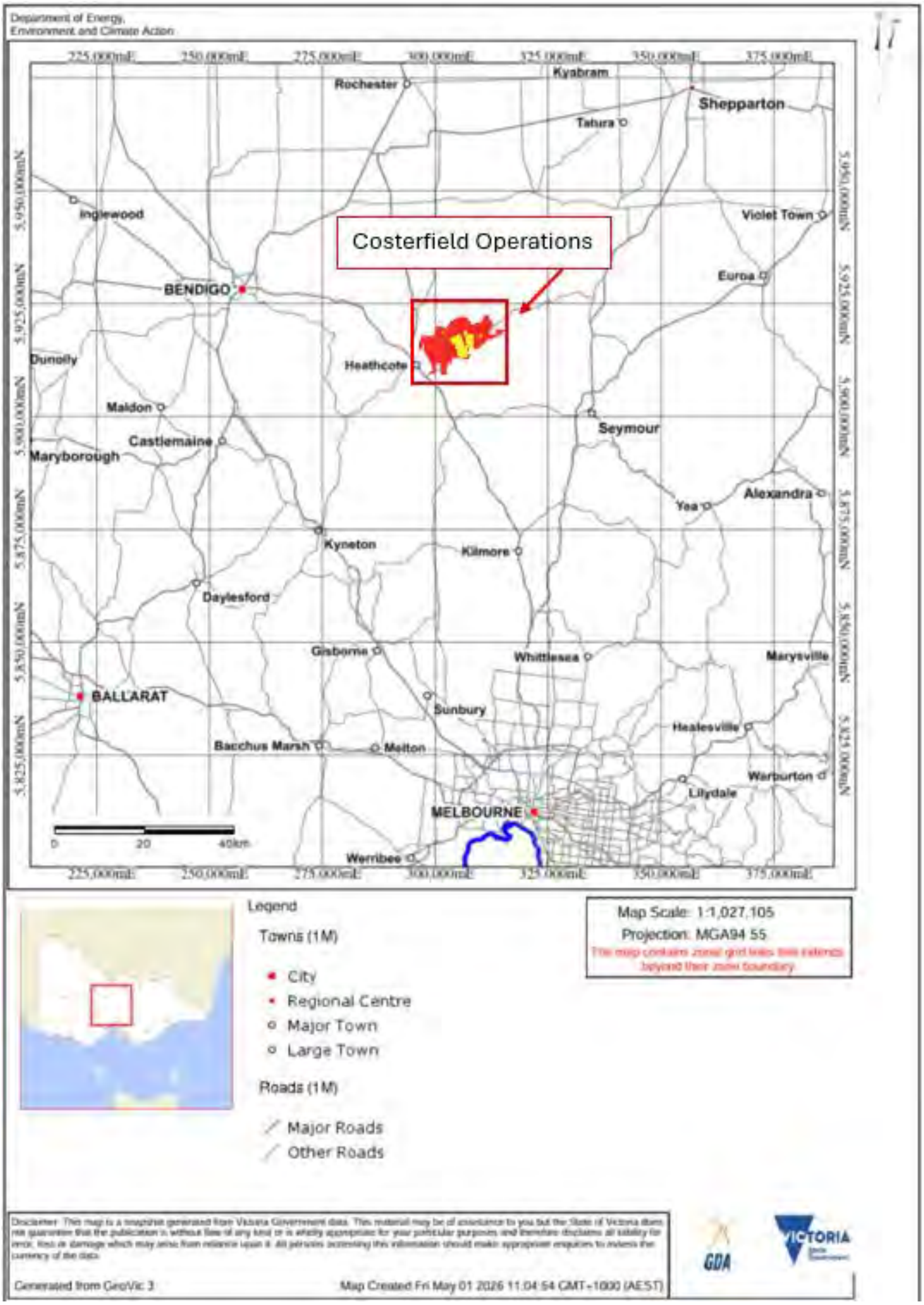
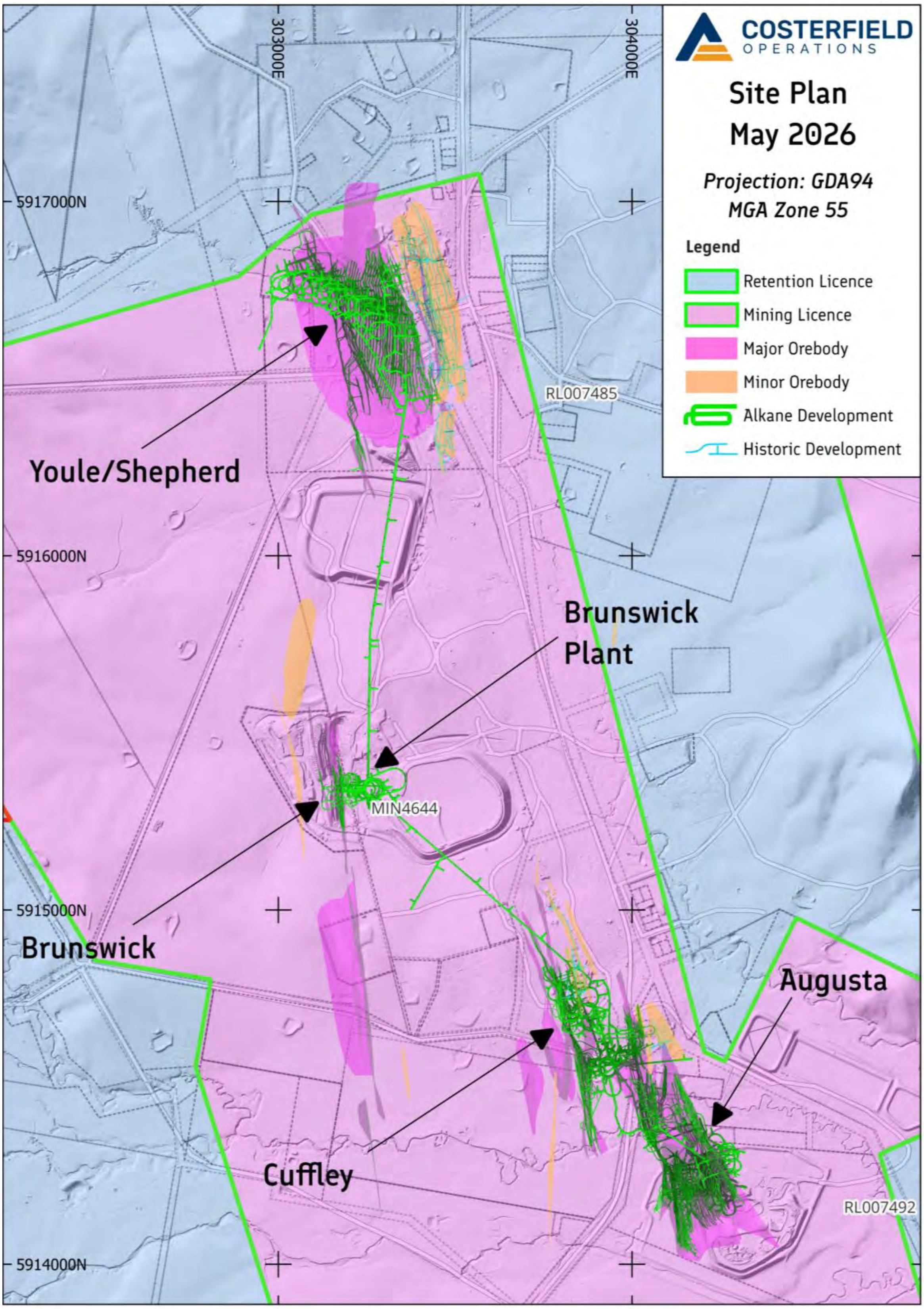


Figure 4.2: Costerfield Property deposits showing underground workings



4.2 Land Tenure

Tenure information for the Costerfield Property has been detailed in Table 4.1. Information has been provided for the two Mining Licences (MLs), five Exploration Licences (ELs), one Retention Licence (RL), one Mining Licence under application (MLA) and one Exploration Licence under application (ELA).

Table 4.1: Property tenement package details

Licence	Name	Status	Company	Area	Grant date	Expiry date
MIN4644	Costerfield	Pending Renewal	Mandalay Resources Costerfield Operations Pty Ltd	1,219.3 ha	25/02/1986	30/06/2026
MIN5567	Splitters Creek	Granted	Mandalay Resources Costerfield Operations Pty Ltd	30.0 ha	21/02/2013	20/02/2033
MIN008841	True Blue	Application	Mandalay Resources Costerfield Operations Pty Ltd	259.9 ha	Application	Application
RL007485	Costerfield	Granted	Mandalay Resources Costerfield Operations Pty Ltd	3,170.4 ha	07/08/2025	06/08/2035
EL5432	Peels Track	Granted	Mandalay Resources Costerfield Operations Pty Ltd	2.0 graticules	23/08/2012	22/08/2027
EL5519	Antimony Creek South	Granted	Mandalay Resources Costerfield Operations Pty Ltd	2.0 graticules	28/05/2015	27/05/2028
EL006842	Costerfield West	Granted	Mandalay Resources Costerfield Operations Pty Ltd	29.0 graticules	29/09/2022	28/09/2027
EL006847	Costerfield East	Granted	Mandalay Resources Costerfield Operations Pty Ltd	35.0 graticules	29/09/2022	28/09/2027
EL008320	Costerfield	Granted	Mandalay Resources Costerfield Operations Pty Ltd	3.0 graticules	11/10/2023	10/10/2028
EL008964	Moormbool West	Application	Mandalay Resources Costerfield Operations Pty Ltd	28.0 graticules	Application	Application

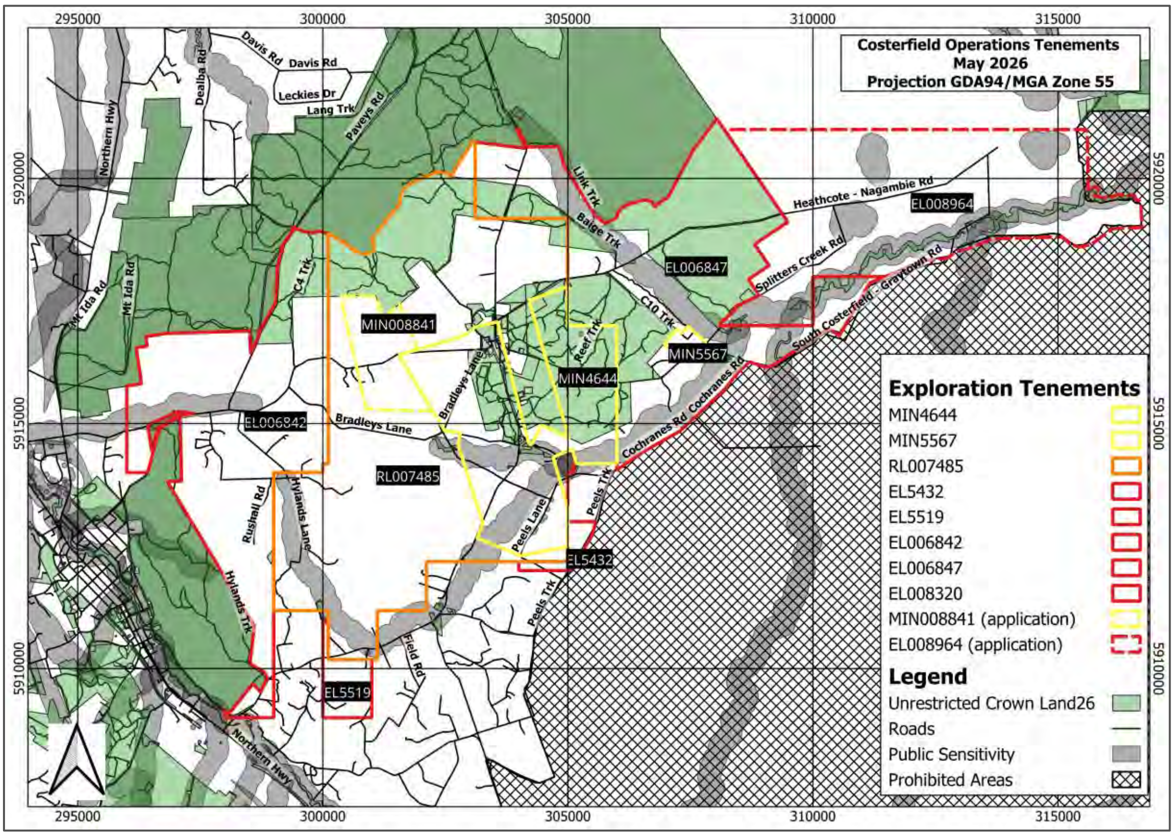
Notes:

[1] 1 graticule is equivalent to 1 km^2.

[2] Mandalay Resources Costerfield Operations Pty Ltd is a wholly owned subsidiary of Alkane Resources.

Alkane Resources manages the Costerfield Property and holds a 100% interest in licences MIN4644, MIN5567, EL5432, EL5519, EL006842, EL006847, EL008320 and RL007485. See Figure 4.3.

Figure 4.3: Alkane Resources ML and EL tenement boundaries



Tenement MIN4644 was due to expire on 30 June 2026' however, a renewal application was lodged on 25 February 2026, and operations continue unaffected until such time the minister approves the application as per the *Mineral Resources (Sustainable Development) Act 1990* (MRSD Act 1990).

On 8 August 2025, RL007485 was granted by The Department of Energy, Environment and Climate Action (DEECA) for a term of 10 years. This licence replaced the land formerly held under EL3310.

On 8 November 2025, MLA MIN008841 was lodged to cover an area of 259.9 ha over the True Blue deposit area that lies to the northwest and adjoins the existing held MIN4644.

On 17 April 2026, ELA EL008964 was lodged to cover an area of 28 graticular sections to the northeast of the existing tenement EL006847, encompassing an area known as Moormbool West with little known geological data.

Both applications (MIN008841 and EL008964) are currently listed as received on the Resource Rights Allocation and Management (RRAM) portal managed by DEECA (Figure 4.3).

4.3 Underlying Agreements

The sustainable and responsible development of Mineral Resources in Victoria is regulated by the State Government of Victoria through the MRSD Act 1990, administered by the DEECA, and requires that negotiation of access and/or compensation agreements with landowners affected by the Work Plans is undertaken between the mining licence applicant and the relevant landowner prior to an ML being granted or renewed.

In accordance with this obligation, Alkane Resources has compensation agreements in place for land allotments owned by third-party landowners that are situated within the boundaries of the ML MIN4644.

Alkane Resources owns the land that contains the ML MIN5567 and, as such, no compensation agreements are required, nor are they in place.

Exploration activities conducted on private land under work plans or low impact exploration activities also require compensation agreements with landowner for access and undertaking works on all other licences (ELs and RLs).

Crown land covered within exploration licences EL006842, EL006847 and RL007485 are compliant with Native Title obligations through the signing on of Alkane Resources to the Taungurung Land Use Activity Agreement (LUAA), schedule 4 for the ELs, and a class A negotiation agreement which complies with the provisions of section 51 of the *Traditional Owner Settlement Act 2010* (Vic) and Schedule 3 or the Taungurung Lands and Waters Council LUAA for the RL.

4.4 Environmental Liability

The current bond for both MLs MIN4644 and MIN5567 is A$12,427,000 and has been fully funded.

In March 2025, a bond calculation review for MIN5567 was completed, and the value of the rehabilitation policy increased by A$1,469,000 to a total of A$2,244,000.

A bond calculation review for MIN4644 was conducted in December 2024, increasing the bond by A$1,456,000 to a total of A$10,183,000.

There are five additional bonds of A$10,000 each, held by the DEECA for RL007485, EL5432, EL5519, EL006842 and EL006847, and one held by VicRoads for licences where pipelines cross the road.

Rehabilitation is being undertaken progressively at the Costerfield Operation, with the environmental bond only being reduced when rehabilitation of an area or site has been deemed successful by DEECA. This rehabilitation bond is based on the assumption that all rehabilitation is undertaken by an independent third party. Therefore, various project management and equipment mobilisation costs are incorporated into the rehabilitation bond liability calculation. In practice, rehabilitation costs may be less if Alkane Resources chooses to use internal resources to complete the rehabilitation.

Other than the rehabilitation bond, the project is not subject to any other environmental liabilities. Table 4.2 presents the breakdown of the liability costs from the recent bond review.

Table 4.2: Total rehabilitation bond liability as of 1 July 2026

Area	A$
Total rehabilitation liability – mine site (MIN4644)	10,183,000
Total rehabilitation liability – Splitters Creek Evaporation Facility (MIN5567)	2,244,000
Total rehabilitation liability – Costerfield Operations	**12,427,000**

4.5 Royalty

Royalties apply to the production of antimony and gold and are payable to the Victorian State Government through DEECA. Royalties apply at a rate of 2.75% on the revenue realised from the sale of antimony and gold produced, less the selling costs. A royalty exemption applies on the first 2,500 oz Au produced each year.

There are no royalty agreements in place with previous owners.

Additional royalties are payable to the Victorian State Government through DEECA at a rate of A$0.87/t if waste rock or tailings are sold or provided to any third parties, since they are deemed to be quarry products.

4.6 Taxes

Alkane Resources reports that, as at 1 July 2026, no tax loss has been carried forward.

Income Tax on Australian company profits is currently set at 30%.

4.7 Legislation and Permitting

Alkane Resources operates under an approved Work Plan in accordance with Section 39 of the MRSD Act 1990. Work Plan Variations (WPVs) are required when there are significant changes from the Work Plan and it is deemed that the works will have a material impact on the environment and/or community. Various WPVs have been approved by DEECA and are registered against the licence.

Mining Licence MIN4644 includes a series of specific conditions that must be met which become the controlling conditions upon which all associated WPVs are filed with the regulatory authority.

Apart from the primary mining legislation, which consists of the MRSD Act 1990, operations on MIN4644 remain subject to the additional following legislation and regulations, for which all appropriate permits and approvals have been obtained.

Legislation:

- *Environment Protection Act 1970*
- *Planning and Environment Act 1987*
- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Flora and Fauna Guarantee Act 1988*

- *Catchment and Land Protection Act 1994*
- *Archaeological and Aboriginal Relics Preservation Act 1972*
- *Heritage Act 1995*
- *Forests Act 1958*
- *Dangerous Goods Act 1985*
- *Drugs, Poisons and Controlled Substances Act 1981*
- *Public Health and Wellbeing Act 2008*
- *Water Act 1989*
- *Crown Land (Reserves) Act 1978*
- *Radiation Act 2005*
- *Conservation, Forests and Lands Act 1987*
- *Wildlife Act 1975.*

Regulations:

- Dangerous Goods (Explosives) Regulations 2011
- Dangerous Goods (Storage and Handling) Regulations 2000
- Dangerous Goods (HCDG) Regulations 2005
- Drugs, Poisons and Controlled Substances (Commonwealth Standard) Regulations 2011
- Mineral Resources Development Regulations 2002.

To the best of the QP’s knowledge, there is no other significant factor or risk that may affect access, title, or the right or ability to perform work on the Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access to the Costerfield Operation is via the sealed Heathcote–Nagambie Road which is accessed off the Northern Highway to the south of Heathcote. The Northern Highway links Central and North-Central Victoria with Melbourne.

The Augusta Mine site is accessed off the Heathcote–Nagambie Road via McNichols Lane, which comprises a sealed/gravel road that continues for approximately 1.5 km to the Augusta site offices.

The Brunswick Processing Plant and Brunswick Portal are located on the western side of the Heathcote–Nagambie Road, approximately 1 km further north from the McNichols Lane turnoff. The Brunswick site offices are accessed by a gravel road that is approximately 600 m long.

5.2 Land Use

Land use surrounding the Costerfield Property is mainly small-scale farming, consisting of grazing on cleared land, bordered by areas of lightly timbered Box-Ironbark forest. The majority of the undulating land and alluvial flats are privately held freehold land.

The surrounding forest is largely rocky, rugged hill country administered by DEECA as State Forest. The Puckapunyal Military Area is located on the eastern boundary of the Costerfield Property.

The Augusta Mine site is located on privately held land, while the Brunswick Deposit, Processing Plant and Portal are located on unrestricted Crown land.

The Cuffley Deposit is located beneath unrestricted Crown land that consists of sparse woodland, with numerous abandoned shafts and workings along the historical Alison and New Alison mineralised zone.

The Youle and Shepherd deposits are accessed from the Youle Access off the Brunswick Incline and are located under unrestricted Crown and privately held land.

5.3 Topography

The topography of the Costerfield Property area consists of relatively flat to undulating terrain with elevated areas to the south and west sloping down to a relatively flat plain to the north and east.

The area ranges in elevation from approximately 160 m above sea level (ASL) in the east along Wappentake Creek, to 288 m ASL in the northwest. The low-lying areas are typically floodplains.

5.4 Climate

The climate of central Victoria is 'Mediterranean' in nature and consists of hot, dry summers followed by cool and wet winters. The weather is amendable to year-round mining operations; however, occasional significant high rainfall events may restrict surface construction activity for a small number of days.

Annual rainfall in the area is approximately 500–600 mm, with the majority occurring between April and October. The annual pan evaporation is between 1,300 and 1,400 mm. The temperature ranges from -2°C in winter (May–August) to +40°C in summer (November–February). Monthly average temperature and rainfall data are from Redesdale, the nearest weather recording station to the Costerfield Property.

5.5 Infrastructure and Local Resources

The nearest significant population to the Costerfield Property is Bendigo, located 50 km to the west-northwest, with a population of approximately 100,000 people. The Costerfield Property is a residential operation with personnel residing throughout central Victoria as well as Melbourne. Local infrastructure and services are available in Heathcote.

5.5.1 Augusta Mine

The Augusta Mine site consists of a bunded area that includes site offices, underground portal, workshop facilities, a waste rock storage area, settling ponds, a mine dam, change house facilities and a laydown area. Augusta has operated as an underground mine since the commencement of operations in 2006. The Cuffley, Brunswick, Youle and Shepherd operations use the infrastructure associated with the current Augusta operations (Figure 5.1).

On 28 July 2018, the first ore was extracted from the Brunswick Deposit and was initially accessed via an incline ramp from the Augusta Mine and later via the Brunswick portal. In December 2019, the first ore was extracted from the Youle Deposit which was accessed from the Brunswick Incline. The Shepherd Deposit is accessed from the lower Youle Decline with production of first ore taking place in October 2021.

Figure 5.1: Augusta Mine site with box cut, Augusta Portal (foreground), workshop, offices and holding dams

5.5.2 Brunswick Complex

The Brunswick Complex consists of the Brunswick Processing Plant, ROM pad, underground portal, site offices, core shed, core farm, tailings storage facilities, and the Brunswick Open Pit as shown in Figure 5.2. In November 2020, the Brunswick Portal opened and is now the primary access for deposits and ore haulage.

During 2024/2025, a new TSF was constructed at the Brunswick Complex. The Brunswick West TSF began operation in June 2025 and is currently the sole active TSF.

The Brunswick Processing Plant consists of a 150,000 tpa gravity-flotation gold-antimony processing plant. The plant produces an antimony-gold concentrate that is trucked to the Port of Melbourne, 130 km to the south, where it is transferred onto ships for export to foreign smelters.

Process water for the Brunswick Processing Plant is sourced from the process water circuit, which consists of rainfall harvested from the three tailings dams as well as run off collected from the Brunswick processing site. The Augusta Mine re-uses groundwater that has been dewatered from the underground workings.

Potable water is trucked in from Heathcote, while grey water is stored in tanks and sewage is captured in sewage tanks before being trucked off site by a local contractor.

Figure 5.2: Aerial view of the Brunswick Complex with Brunswick Portal (middle of image), Brunswick Processing Plant, offices and tailings storage facilities

5.5.3 Power Supply

The Costerfield Property has a current agreement with Powercor Australia for a 3.227 MVA supply, which is required to be maintained at a power factor of not less than 0.95. There is a single point of connect from the distribution network which is connected at the Augusta Mine site to Substation 1. All site power requirements are supplied via this location, including the underground operations and the Brunswick Processing Plant. The site also has a 750 KVAR power factor correction bank.

In addition, the Costerfield Property has just under 1 MVA of diesel power generation which can be automatically synchronised to connect to all the infrastructure in the event the power demand increases above the 3.277 MVA, which can be provided by Powercor. During periods of high demand on the Victorian electrical network, Alkane Resources or Powercor can activate this power source to decrease the burden on the distribution network and assist with the state’s grid power supply.

5.5.4 Evaporation and Tailings Facilities

The Splitters Creek Evaporation Facility (Figure 5.3) evaporates groundwater extracted from the operations to maintain dewatering rates from the underground workings (see also Section 20.1.2).

The Brunswick TSF was operational between June 2015 and December 2018, and from November 2020 to July 2022. At the Bombay TSF, a 2.5 m wall lift for another 140,000 m^3 of storage was completed in 2022 and final deposition took place in May 2025. The Brunswick West TSF was constructed and commissioned for use in June 2025. Both the Brunswick West and Bombay TSFs were used during the reporting period, with the Brunswick West TSF being the sole active storage facility since its commencement. Evaporation facilities remain unchanged throughout the reporting period.

Figure 5.3: Ariel view of the Splitters Creek Evaporation Facility

6 History

Beginning with the initial discovery of the Costerfield Reef in the 1860s, several companies have developed and mined antimony and gold deposits within the Costerfield Property.

Significant exploration of the Costerfield Property using modern exploration techniques did not occur until 1966.

6.1 Ownership and Exploration Work

This section describes the work carried out by different owners of the operation over time.

Table 6.1 provides details of the historical drilling statistics completed by each company at the Costerfield Property since 1966.

Table 6.1: Drilling statistics for the Costerfield Property since 1966

Company	Year	Diamond core (m)	Percussion/auger (m)
Mid-East Minerals Limited	1966–1971	3,676	
Metals Investment Holdings Limited	1971	1,760	
Victoria Mines Department	1975–1981	3,213	
Federation Resources NL	1983–2000		2,398
Australian Gold Development NL/Planet Resources JV	1987–1988		1,349
Australian Gold Development NL	1987–1997	1,564	10,251
AGD Operations Pty Ltd	2001–2009	23,300	
Mandalay Resources Corporation	2009–2025	458,021	18,318
Alkane Resources (Trading as Mandalay Resources Costerfield Operations)	2025–2026	90,975	

6.1.1 Mid-East Minerals NL (1968–1971)

From 1968 to 1969, the price of antimony rapidly rose from US$0.45/lb to US$1.70/lb. This encouraged Mid-East Minerals NL (MEM) to acquire large areas of ground around Costerfield.

Between 1969 and 1971, MEM conducted large-scale geochemical, geophysical, and diamond drilling programs. These were conducted across the south Costerfield area encompassing Alison Mine and south towards Margaret's Lode, including both the Cuffley Lode and the Augusta Mine areas. Diamond drilling for MEM was most successful at Brunswick Mine. However, decreasing antimony prices in 1971 caused MEM to abandon the project.

6.1.2 Metal Investment Holdings Limited (1971)

A series of diamond drill holes were completed by Metals Investment Holdings Limited in 1971. Most drilling occurred to the north of the Alison Mine, with the exact locations of the drill holes unknown. Two drill holes were situated to the north of the Tait's Mine (north of Augusta), of which minimal information remains.

6.1.3 Victorian Mines Department (1975–1981)

A series of diamond drill holes were completed by the Victorian Mines Department in the late 1970s. Most drilling occurred to the south of the Brunswick Mine. However, two drill holes (M31 and M32), were drilled approximately 150 m to the south of the South Costerfield Shaft in the Augusta Mine area and intersected a high-grade reef. This reef was interpreted as the East Reef, which was mined as part of the South Costerfield Mine.

6.1.4 Federation Resources NL

Federation Resources NL undertook several campaigns of exploration in the Costerfield Property area but focused on the Browns-Robinsons prospects to the east of the Alison Mine. The exploration conducted identified a gold target with no evidence of antimony.

Federation Resources NL conducted desktop studies on the area above the Augusta Mine, noting the anomalous results of the soil geochemistry programs conducted by The Victorian Mines Department and MEM; however, no drilling was conducted at this location.

6.1.5 Australian Gold Development NL/Planet Resources JV (1987–1988)

Australian Gold Development NL conducted a short reverse circulation (RC) drilling program in 1987, in conjunction with its joint venture (JV) partner Planet Resources. This drilling consisted of a total of 21 drill holes for 1,235 m across the broader Costerfield Property area. Gold was assayed via Atomic Absorption Spectrometry (AAS), which compromised antimony grades. The drilling was completed using a tri-cone bit, which could have led to downhole contamination.

6.1.6 Australian Gold Development NL (1987–1997)

From 1987 to 1997, Australian Gold Development NL undertook several programs of exploration and mining activities predominantly focused around the Brunswick Mine. A series of RC drill holes were drilled during 1997, testing for shallow oxide gold potential to the north of the Alison Mine. Several occurrences of yellow antimony sulfides were noted but these were not followed up on.

6.1.7 AGD Operations Pty Ltd (2001–2009)

In 2001, AGD Operations Pty Ltd (AGD – formerly Australian Gold Development NL) and Deepgreen Minerals Corporation Ltd entered into an agreement to form a JV to explore the Costerfield Property tenements. The agreed starting target was the zone now known as the Augusta Mine.

In its 8 years of ownership, AGD undertook multiple drilling programs focused on the definition, extension, and infill of what is now known to be the Augusta deposit. In total, roughly 150 diamond drill holes comprising more than 12,555 m were undertaken around the Augusta deposit, discovering and defining the W lode, E lode, C lode and N lode.

In Q1 2006, development of the Augusta Decline commenced and by the end of Q2 2006 all the surface infrastructure had been completed together with open cut mining of the E and C lodes. Decline development commenced during June 2006 with underground in production by the end of Q3 2006.

By 2009, AGD had successfully developed down to 1,070 mRL (9 level) of the Augusta Mine.

6.1.8 Mandalay Resources Corporation (2013–2025)

On 5 August 2025, Mandalay Resources Corporation underwent a merger with Alkane Resources. Trading as Mandalay Resources Costerfield Operations Pty Ltd, the Costerfield Operation is now managed by Alkane Resources.

Between 7 September 2013 and 5 August 2025, Mandalay Resources Corporation undertook more than 2,800 diamond core drill holes for 458,021 m along with 18,318 m of percussion/auger drilling. Exploration advances over the 12 years of operation included the discovery and subsequent mining of the Youle and Shepherd deposits along with additional resources discovered around the Augusta, Cuffley and Brunswick deposits. Discovery of the True Blue Resource was made in 2024 and Brunswick South in 2025. Mandalay Resources Corporation mined in excess of 2000 kt of ore across multiple orebodies and completed over 21,110 m of capital development and 58,268 m of operating development underground.

6.2 Historical Resource and Reserve Estimates

Mandalay Resources has reported Mineral Resources and Mineral Reserves for the Costerfield Property from 2010 onwards. A record of the annual Mineral Resources and Mineral Reserves over this period has been provided in Table 6.2 and Table 6.3, respectively.

Technical Reports for each of the historical estimates are available for download from SEDAR+ by reference to their effective dates. The historical estimates are considered relevant for historical understanding of the development of the Costerfield Property. They were reliable at the time of reporting as they followed similar processes of sampling, assaying, interpretation and estimation as are currently in use. The historical estimates use the same resource categories as the current estimate. The current estimate is summarised in Section 1 of this Technical Report.

A QP is not classifying the historical estimates as current Mineral Resources or Mineral Reserves and the issuer is not treating the historical estimates as current Mineral Resources or Mineral Reserves.

Table 6.2: Historical Mineral Resources – Costerfield Property

Effective date	US$/ oz Au	US$/ t Sb	Cut-off grade (AuEq g/t)	Measured Resource					Indicated Resource					Inferred Resource				
				Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)	Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)	Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)
01/03/2010	1,000	6,000		67.2	16.9	10.0	36.4	6,749	189.6	9.6	4.6	58.4	8,683	245.7	7.8	4.2	61.5	10,202
31/12/2011	1,600	12,000	4.6	158.4	12.9	7.8	65.5	12,291	202.4	7.3	3.7	47.7	7,502	375.0	12.7	5.6	152.9	21,183
31/12/2012	1,600	12,500	4.7	167.0	8.0	4.9	42.7	8,202	367.0	10.0	3.5	117.9	12,912	610.0	7.1	3.2	139.8	19,490
31/12/2013	1,400	12,000	3.9	191.4	8.4	4.3	51.5	8,157	606.0	9.6	4.0	186.4	24,237	570.0	7.4	3.7	135.3	21,342
31/12/2014	1,400	12,000	3.8	213	9.8	4.5	67	9,600	786	6.9	3.3	175	26,300	519.0	5.3	2.6	89.0	13,700
31/12/2015	1,400	11,000	3.8	247	12.1	4.6	96	11,000	798	7.6	3.4	194	27,000	491	4.3	2.0	68.0	9,700
31/12/2016	1,400	10,000	3.5	286	9.5	4	88	11,400	812	5.9	2.5	155	20,600	611	5.5	1.5	108.0	9000
31/12/2017	1,400	10,000	3.5	290	9.2	4.2	86	12,100	971	5.7	2.5	177	23,900	379	6.6	1.1	80.0	4,000
31/12/2018	1,400	10,000	3.5	245	8.5	4.0	67	9,800	1073	8.2	2.9	283	31,000	497	8.0	1.9	128	9,500
31/12/2019	1,500	10,000	3.5	283	9.6	4.5	87	12,700	830	9.6	2.9	256	24,000	533	6.8	1.7	117	9,000
31/12/2020	1,700	8,000	3.0	360	14.1	5.7	164	20,600	798	8.5	2.4	218	18,800	473	5.8	1.3	89	6,000
31/12/2021	1,700	8,500	3.0	449	15.4	5.0	216	21,800	938	8.6	1.9	259	17,500	532	6.7	1.3	144	6,700
31/12/2023	1,900	12,000	5.0	417	15.9	4.1	203	16,300	548	7.2	2.3	127	12,500	286	7.0	1.8	64	5,100
31/12/2024	2,500	19,000	4.3	455	13.6	3.6	188	15,100	741	5.5	2.0	132	15,000	538	7.5	1.8	130	9,700

Table 6.3: Historical Mineral Reserves – Costerfield Property

Effective date	US$/ oz Au	US$/ t Sb	Cut-off grade (AuEq g/t)	Proven Reserves					Probable Reserves					Total Reserves				
				Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)	Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)	Tonnes (kt)	Au (g/t)	Sb (%)	Au ounces (koz)	Sb (t)
01/03/2010	1,000	6,000		20.1	16.9	9.7	10.9	1,953	45.4	11.4	5.8	16.7	2,636	65.6	13.1	7.0	27.6	4,588
31/12/2011	1,600	12,000	4.6	41.9	13.2	7.9	17.7	3,300	46.5	6.4	4.0	9.6	1,860	88.4	9.6	5.8	27.3	5,160
31/12/2012	1,600	12,500	4.7	48.1	11.0	6.5	17.0	3,128	130.0	8.1	3.2	33.9	4,161	178.2	8.9	4.1	50.9	7,289
31/12/2013	1,200	10,000	5.0	71.0	8.3	4.4	18.9	3,124	350.0	9.4	3.4	106.0	11,900	421.0	9.2	3.6	124.9	15,024
31/12/2014	1,200	10,000	5.0	98.0	10.4	4.5	32.0	4,400	333.0	7.4	3.3	80.0	11,200	431.0	8.1	3.6	112.0	15,600
31/12/2015	1,200	9,000	4.0	125	12.0	3.9	48.0	5,500	366	8.2	3.7	97.0	13,400	491	9.2	3.9	145.0	18,900
31/12/2016	1,200	8,000	4.0	184	8.1	3.5	48	6,400	434	5.7	2.6	80.0	11,100	619	6.5	2.8	128.0	17,501
31/12/2017	1,200	8,500	4.0	152	7.3	3.5	36	5,300	470	5.7	2.5	86.0	12,000	622	6.1	2.8	122.0	17,200
31/12/2018	1,200	8,500	4.0	76	8.4	4.0	20	3100	461	10.8	3.1	160.0	14,200	537	10.4	3.2	180.0	17,200
31/12/2019	1,300	7,000	4.0	114	9.5	4.8	35	5,400	360	14.6	3.4	169	12,400	474	13.4	3.8	204	17,800
31/12/2020	1,500	7,000	4.0	222	15.26	5.7	110	12,800	394	11.5	2.3	145	9,000	616	12.8	3.5	255	21,700
31/12/2021	1,500	7,500	3.8	308	15.9	4.3	150	13,100	460	10.9	1.4	162	6,500	769	12.6	2.5	312	19,600
31/12/2023	1,800	11,500	6.0	359	12.4	2.2	136	7,300	200	8.1	1.5	52	3,000	559	10.5	1.9	188	10,600
31/12/2024	2,100	16,000	5.6	350	11.4	2.1	113	6,500	253	5.9	1.7	48	4,300	640	8.7	1.8	168	11,000

6.3 Historical Production

The operation of the Costerfield Property was taken over by Alkane Resources in August 2025. The Costerfield property has operated from 2006, with a short 3-month period of closure during 2008/2009. Prior to Mandalay Resources' ownership in 2009, approximately 95,000 t had been extracted to produce 25,000 oz Au and 4,200 t Sb.

A record of mine production history for the Costerfield Property has been provided in Table 6.4.

Table 6.4: Costerfield Property mining production history

Year	Inventory (kt)	Gold grade (g/t)	Antimony grade (%)	Gold metal ounces (koz)	Antimony metal (t)
2010	50.7	7.4	4.2	12.0	2,140
2011	72.0	7.3	3.7	16.8	2,637
2012	96.3	8.3	4.3	25.6	4,166
2013	129.6	9.1	4.2	37.7	5,418
2014	167.1	9.1	3.8	48.8	6,345
2015	153.6	11.2	4.2	55.6	6,484
2016	158.4	9.6	3.4	49.0	5,407
2017	140.6	8.2	3.3	37.1	4,612
2018	151.6	5.7	2.4	27.6	3,572
2019	137.5	5.2	2.6	23.0	3,538
2020	164.2	12.1	4.5	64.0	7,394
2021	173.7	11.0	3.5	61.3	6,087
2022	132.3	12.3	2.7	52.3	3,602
2023	128.8	9.4	2.0	38.9	2,606
2024	146.1	11.0	1.7	51.5	2,428
2025	139.7	8.7	0.8	39.2	1,043
2026HY	78.4	8.7	1.2	21.8	962

7 Geological Setting and Mineralisation

7.1 Regional Geology

The Costerfield Property gold-antimony mineralisation zone is located at the northern end of the Darraweit Guim Province in the Western portion of the Melbourne Zone. In the Heathcote area of the Melbourne Zone, the Murrindindi Supergroup within the Darraweit Guim Province encompasses a very thick sequence of Siluro-Devonian marine sediments, which consist predominantly of siltstone, mudstone, and turbidite sequences (Figure 7.1).

The western boundary of the Darraweit Guim Province is demarcated by the Cambrian Heathcote Volcanic Belt and north-trending Mt William Fault, a major structural terrain boundary which separates the Bendigo Zone from the Melbourne Zone.

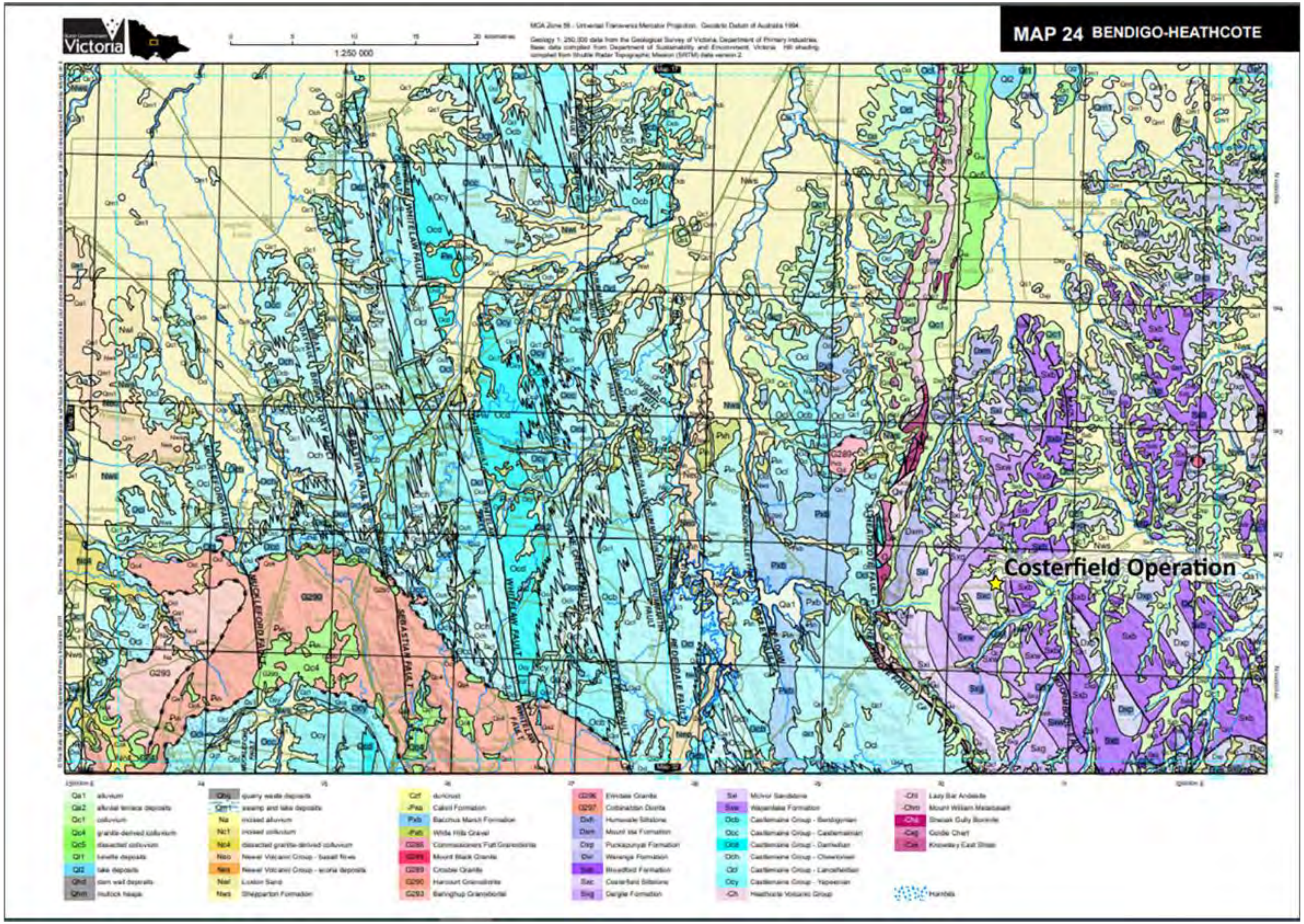
The Lower Silurian Costerfield Siltstone is the oldest unit in the Heathcote area and is conformably overlain by the Wappentake Formation (sandstone/siltstone), the Dargile Formation (mudstone), the McIvor Sandstone and the Mount Ida Formation (sandstone/mudstone).

The Melbourne Zone sedimentary sequence has been deformed into a series of large-scale domal folds, which tend to be upright, open folds with large wavelength curvilinear structures. The major north-trending sub-parallel folds in the Darraweit Guim Province include, from west to east:

- the Mount Ida Syncline
- the Costerfield Dome/Anticline
- the Black Cat and Graytown anticlines
- the Rifle Range Syncline.

The folds have been truncated by significant offsets along two major north-trending faults: the Moormbool and Black Cat faults. The Moormbool Fault has truncated the eastern limb of the Costerfield Anticline, resulting in an asymmetric dome structure. The Moormbool Fault is a major structural boundary separating two structural subdomains in the Melbourne Zone. West of the Moormbool Fault is the Siluro-Devonian sedimentary sequence, hosting the gold-antimony lodes. The thick, predominantly Devonian Broadford Formation sequence occurs to the east of the fault and contains minor gold-dominant mineralisation

Figure 7.1: Geological map of the Bendigo/Heathcote region



Source: Welch et al. (2011)

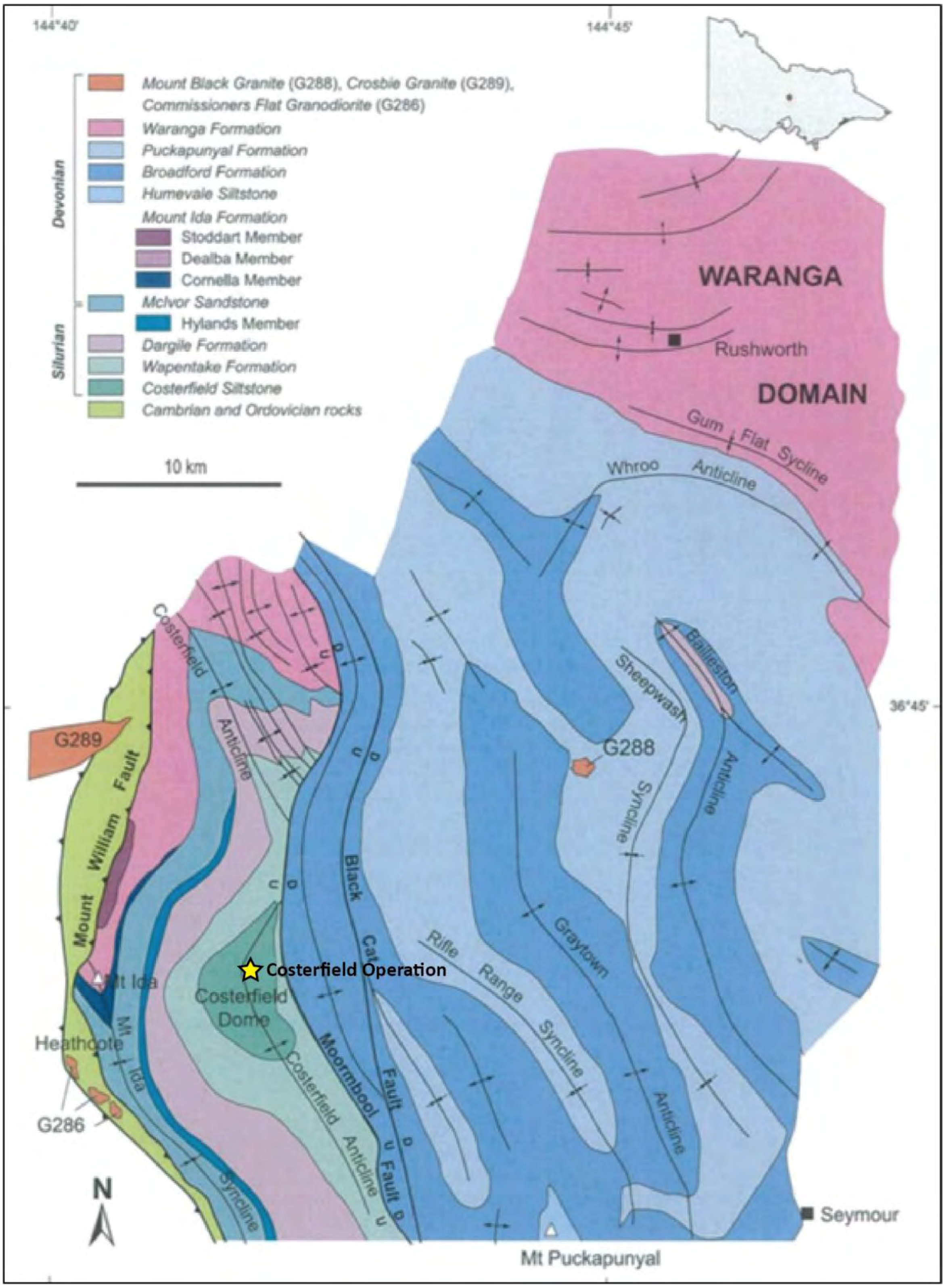
7.2 Property Geology

The Costerfield Property gold-antimony mineralisation is located in the Costerfield Dome, which contains poorly exposed Lower Silurian Costerfield Siltstone at its core (Figure 7.2). Within the Costerfield Property, four north-northwest trending zones of mineralisation have been identified, which comprise from west to east:

- Antimony Creek Zone, approximately 6.5 km southwest of Costerfield, on the outer western flank of the Costerfield Dome.
- Western Zone, approximately 1.5 km west of Costerfield, on the western flank of the Costerfield Dome and includes the True Blue and West Costerfield.
- Costerfield Zone, near the crest of the dome, centred on the Costerfield township and hosting the major producing mines and deposits.
- Robinsons Zone, 2 km east of Costerfield.

The Costerfield Property quartz veins of the Costerfield Zone are controlled by north-northwest trending faults and fractures located predominantly on the western flank of the Costerfield Anticline. The host rocks are the Silurian Costerfield Formation siltstones and mudstones which are estimated to be between 450 m and 550 m thick and are the oldest exposed rocks in the local area.

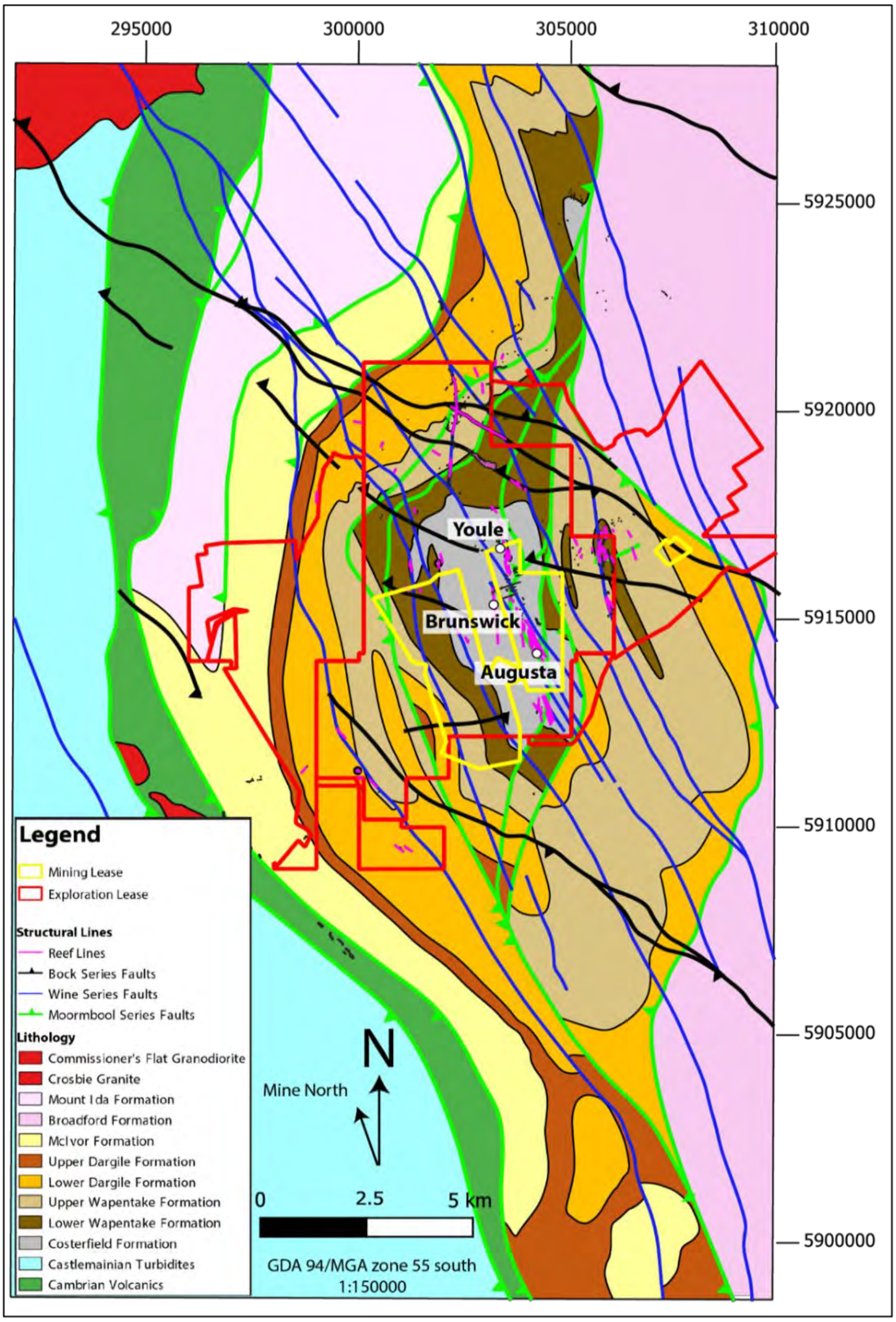
Figure 7.2: Geological map of the Heathcote/Colbinabbin/Nagambie region



Source: Modified from VandenBerg et al. (2000)

Locally, the sedimentary succession of the Costerfield Property has been deformed into a broad anticlinal dome structure with numerous cross-cutting reverse thrust faults. This domal structure is thought to have resulted from two separate tectonic events, the first producing shortening in an east–west direction (folding and thrust faulting) and the second producing north–south shortening (gentle warping and mild folding). The anticlinal hinge zone of the Costerfield Anticline has been thrust over its eastern limb by the north–south trending King Cobra Fault Zone (Figure 7.3).

Figure 7.3: Regional geology and the Costerfield Property geology



7.3 Property Stratigraphy

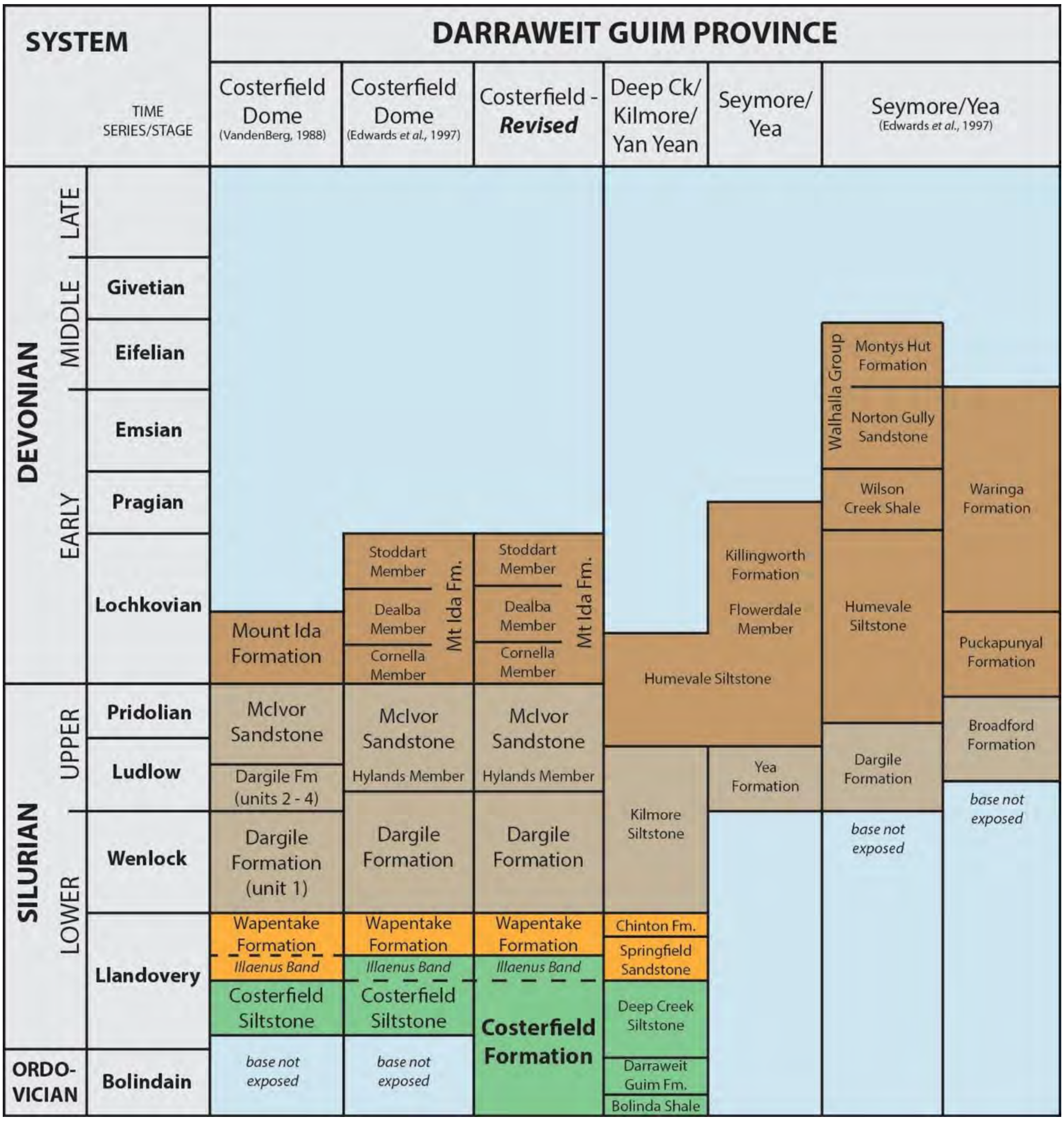
Stratigraphic investigations focused around the Augusta workings within the South Costerfield area, have found many previously unrecognised stratigraphic units and structural features. Sub-surface stratigraphic mapping from drill hole data has indicated that the local host of the mineralisation, the Costerfield Formation, is far more stratigraphically complex than previous investigations have documented.

7.3.1 The Darraweit Guim Province

The oldest outcropping strata documented in the region is the Costerfield Formation and is believed to be Lower Silurian in age (Sandford and Holloway, 2006). The Costerfield Formation, in the Costerfield area, is overlain by muddy siltstones and sandstones of the Lower Silurian aged Wappentake Formation and the Dargile Formation. Upper Silurian sedimentation is recorded in coarser siliciclastic successions of the McIvor Sandstone which is then finally overlain by the early-Devonian Mt Ida Formation. The Mt Ida Formation records the final phase of sedimentation in the greater Heathcote region.

The overall stratigraphic thickness of the Darraweit Guim Province is unknown; however, estimates of the true stratigraphic thickness are in the range of 6–7 km, all of which occurred without any significant depositional hiatus (Figure 7.4).

Figure 7.4: Regional stratigraphy of the Darraweit Guim Province, by locality



Source: Modified from Edwards et al. (1998)

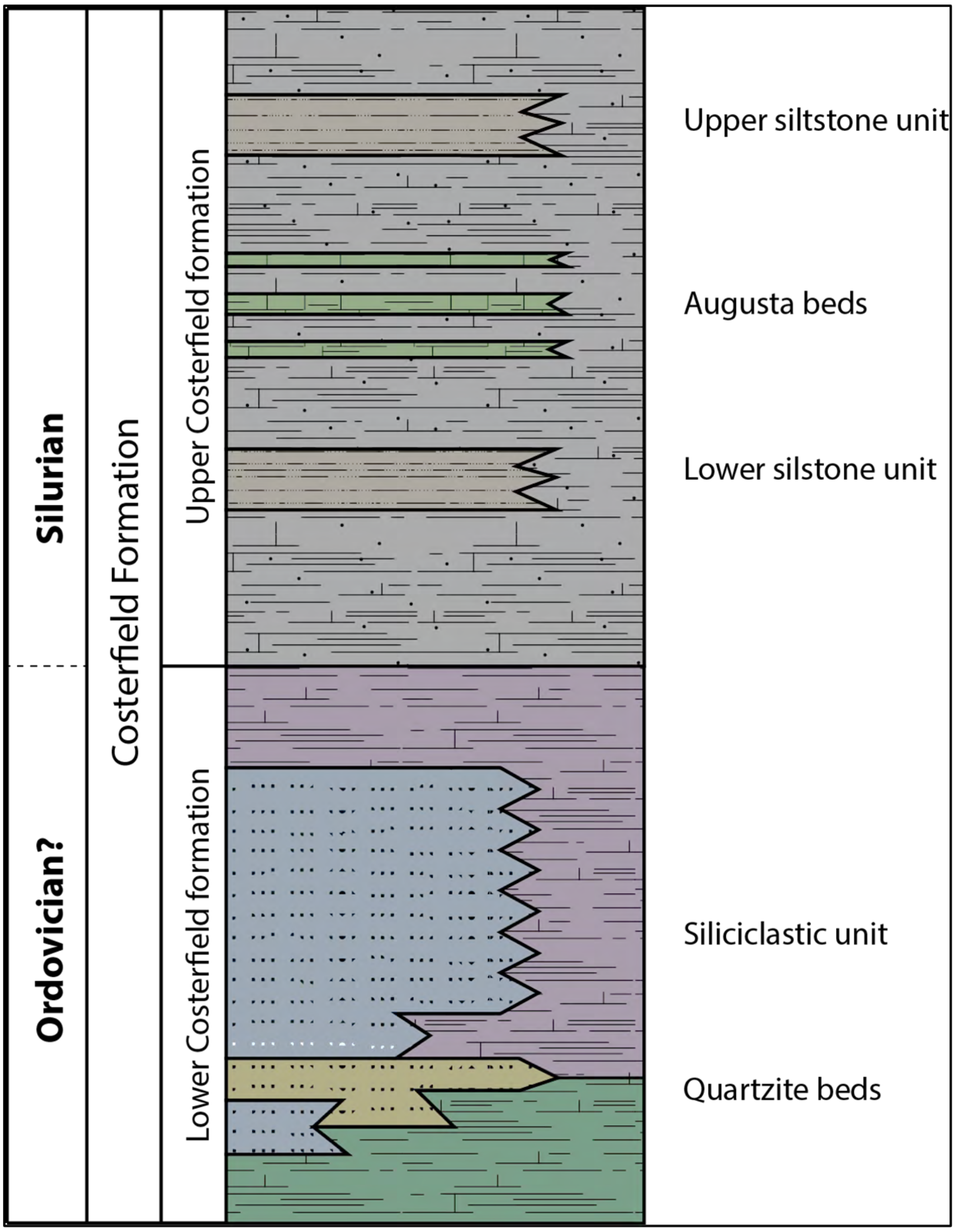
7.3.2 The Costerfield Formation

and siltstones featuring heavy bioturbation. The ‘Formation’ nomenclature of Talent (1965), has been adopted for use within this report instead of the later re-assigned name of ‘Costerfield Siltstone’, as re-defined by VandenBerg (1988), since the formation consists of predominantly mudstone lithologies, with siltstones and sandstones representing the lesser constituents as relatively thin interbedded occurrences. It is recommended that the ‘Siltstone’ nomenclature be abandoned since it has become a misleading term, inferring that the unit is composed of siltstone dominant lithologies when this is not the case.

The Costerfield Formation is dominated by weakly bedded mudstones and silty mudstones with some lesser siltstone and sandstone constituents. The formation is informally divided into lower and upper portions based on a significant lithological change midway through the succession. Estimates of the true stratigraphic thickness of the formation are made difficult due to significant faulting in the area; however, it is estimated to be in the range of 450–550 m in thickness, with the lower and upper portions of the formation being around 200 m and 300 m thick, respectively.

Informal lithostratigraphic units of the Lower Costerfield Formation are named the Siliciclastic unit and Quartzite beds, while the lithostratigraphic units of the Upper Costerfield Formation are named the Lower siltstone unit, Augusta beds and the Upper siltstone unit (Figure 7.5).

Figure 7.5: Stratigraphy of the Costerfield Formation, illustrating the relative positions of the newly defined informal stratigraphic unit



7.4 Property Structural Geology

At the regional scale, the Costerfield vein system is hosted in the apical portion of a large, north-trending structural dome (the Costerfield Dome). Sandstone-dominant lithologies make up the bulk of the dome except for where the current erosion level has exposed the core, where the fine-grained Costerfield Siltstone and the bulk of mineralisation is found.

Drilling, seismic data and mining at Costerfield has shown the Costerfield Dome to be an antiformal thrust stack, with the Costerfield Siltstone exhibiting extensive shortening and repeated duplexing – key marker beds can be encountered several times in single drill holes due to the extensive structural repetition over early bedding-parallel laminated quartz faults. Within the thrust stack occur folds of varying wavelengths and amplitudes; the most important folds for the development of the deposit appear to be large-scale (hundreds of meters), north–south striking with east vergence. Almost all large, mined Costerfield lodes can be demonstrated to occupy, or exist close to, the axes of this generation of folds. Folds at Costerfield tend to be asymmetric, with shallow western limbs and steeply dipping eastern limbs.

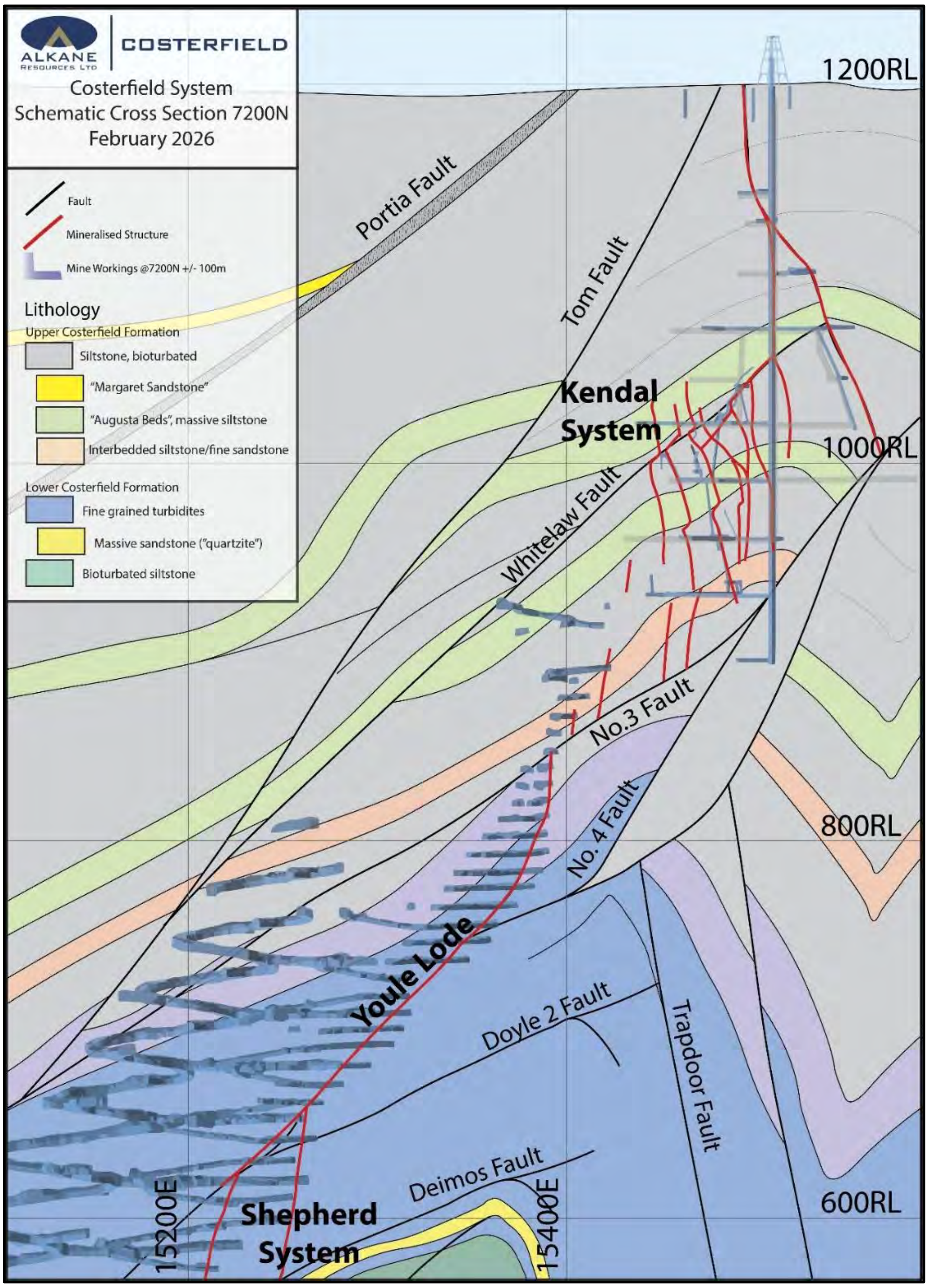
Mineralisation at Costerfield is currently thought to be predominantly structurally controlled. Subvertical veining which represents the most typical mineralisation at Costerfield normally exploits fabrics associated with the hinges of the aforementioned folds, either axial cleavage or faulting as the major control. Cleavage associated with these folds is often subtly developed but of great importance in much of the deposit, particularly around and below the historical Costerfield mine (active between 1861 and 1938) where the mined ore veins have developed as a sheeted vertical set along a wide zone of axial fabric.

All faults are observed to be brittle structures. The planes of the large-scale Adder and King Cobra faults often contain a 1–2 m zone of fault gouge, with several metres of heavily fractured and sheared rock particularly in the hangingwall. Often the veins anastomose along these zones of structural preparation. Vein dips are observed to be mostly vertical, although deviations to around 70° east and west dipping are relatively common. Another high-order control on mineralisation are the large west-dipping thrusts that cut through the dome. The most important of these structures (King Cobra and Adder Faults) show apparent thrust offsets of 300–400 m based on marker beds offsets. Mineralised veins are either truncated by or propagate into these faults, and, in one case (Youle Lode), the west-dipping faults can host significant mineralisation. Interaction zones between fold axes and west-dipping thrusts are therefore considered to control the emplacement of mineralisation at Costerfield.

The Costerfield lodes are often intersected by bedding-parallel laminated quartz filled faults, which are among the earliest structures present and have a clear syn-mineralisation relationship. Underground, subvertical quartz-stibnite veins can sometimes be seen to ‘bend’ into these sub-horizontal faults and appear to be offset up to tens of metres horizontally over them. In addition, it is common to observe stibnite mineralisation developed along the apparent offset. Late post-mineralisation movement is sometimes observed along these structures. High-grade zones (but generally not the overall extent) of each deposit are commonly observed to be compartmentalised vertically by these faults. This is best observed within the Shepherd veins. High-grade zones within lodes are commonly observed to plunge steeply to the north which, to a degree, appears to be related to the interaction between the fabrics of north–south, large-scale folding with a less significant northeast–southwest set which develops localised zones of dilation.

Northwest and northeast striking cross faults have been identified in both open-pit and underground workings and do have some control on high-grade zone development implying pre to syn-mineralisation timing. They are usually vertical to steeply west dipping and intersect the lode at angles of around 15–30°. The development of these faults appears to be linked to a change from east–west compression of the dome to a later northeast–southwest oriented compressional event. Some of these structures are likely to be earlier linking faults that have been reactivated as post-mineralisation movement is commonly observed.

Figure 7.6: Cross section 7200N through the Costerfield – Kendal/Youle/Shepherd System



7.5 Property Mineralisation

The Costerfield Property lies within a broad gold-antimony province mainly confined to the Siluro-Devonian Melbourne Zone of Victoria. The narrow quartz-stibnite-gold veins of the Melbourne Zone are mesothermal to orogenic in nature and are a product of a 380–370 Ma tectonic event. Gold in Central Victoria is believed to have been derived from the Cambrian greenstones that underlie the entire province at depth; however, the origin of the associated antimony has been less studied. Significant portions of the local area are obscured by alluvium and colluvium deposits, which have been washed over the surrounding flood plains by braided streams flowing east off the uplifted Heathcote Fault Zone. Some of this alluvial material has been worked for gold but workings are small-scale and limited in extent. Most of the previously mined hard rock deposits were found either outcropping or discovered by trenching within a few metres of the surface.

The mineralised structures in the Costerfield Property, which typically dip steeply east or west (Augusta, Brunswick, Kendal, Shepherd), or moderately west (Youle) are likely to be related to the formation of the Costerfield Dome and the subsequent development of the Moormbool Fault. The main reef system(s) appear to be developed in proximity to the axial planar region of the Costerfield Dome or hosted in reactivated west-dipping thrust faults.

The economic mineralisation at the Costerfield Property occurs in a north–south corridor that includes the Costerfield, Brunswick and Augusta zones. The moderately west to steeply-dipping quartz-stibnite-gold veins have thicknesses ranging from several millimetres to 1 metre, and extend over a strike of at least four kilometres. The vein systems are centred in the core of the doubly-plunging Costerfield Anticline and are hosted by unmetamorphosed (anchizone) Costerfield siltstones. Individual veins can persist for up to 800 m along-strike and 300 m down-dip. Each deposit on the Costerfield Property consists of multiple lodes that are within close proximity to each other.

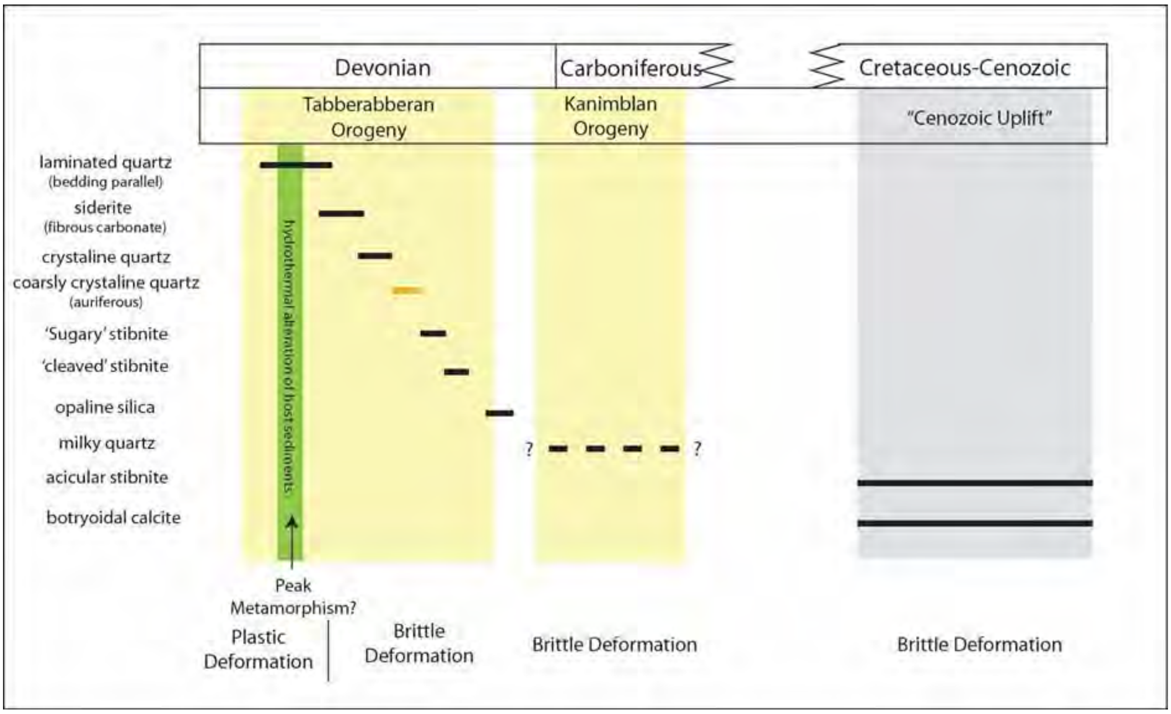
The mineralogy of the vein contents and mineral proportions differ from vein to vein throughout the Augusta, Cuffley, Brunswick, Youle and Shepherd lodes. However, the texture and chronological order of each vein/mineral generation remains remarkably consistent across all lodes.

A diagrammatic illustration of the paragenesis of the Augusta and Cuffley deposits is illustrated in Figure 7.7. The overall paragenetic sequence is ordered as follows:

- laminated quartz
- fibrous carbonate (siderite and ankerite)
- crystalline quartz (rhombic quartz)
- stibnite
- opaline quartz
- milky quartz.

Acicular stibnite and botryoidal calcite are not generally associated with the main quartz-stibnite vein structures, and are therefore regarded as post-mineralisation mineralogical occurrences, most likely associated with meteoric events.

Figure 7.7: Paragenetic history and vein genesis of the Costerfield region



The Costerfield Property lodes are typically anastomosing, *en echelon* style, narrow-vein systems, which dip from 25–70° west to 70–90° east. Mineralised shoots are observed to plunge to the north when structurally controlled and south when bedding controlled.

The mineralisation occurs as single lodes and vein stockworks associated with brittle fault zones. These bedding and cleavage parallel faults that influence the lode structures range from sharp breaks of less than 1 mm to dilated shears up 3 m wide that locally contain fault gouge, quartz, carbonate and stibnite.

Cross faults, such as those seen offsetting other Costerfield Property lodes, have been identified in both open-pit and underground workings.

7.6 Deposit Mineralisation

There are two main types of mineralised lodes found on the Costerfield Property. Typically, they consist of stibnite dominant lodes and gold only lodes. The stibnite dominant lodes vary from massive stibnite with microscopic gold to quartz-stibnite, with minor visible gold, pyrite, and arsenopyrite. The stibnite is clearly seen to replace quartz, and gold can also be hosted by quartz. Costerfield's gold-only veins typically consist of single-generation quartz-carbonate matrix (Figure 7.9) hosting free gold, usually sub-millimetre grains but rarely up to 3–4 mm across with minor pyrite and arsenopyrite. The best grades in gold-only veins often are associated with antimony-bearing sulfosalts such as tetrahedrite, bournonite and boulangerite. Depth of emplacement appears to be the major control on the abundance of stibnite; the gold-only vein systems are generally found below the level of or at the base of stibnite-bearing lodes. Systems considered 'gold only' include the bulk of the Shepherd veins (the southwestern portion of Shepherd contains some significant stibnite), and the Sub-King Cobra Fault West veins.

A variety of accessory minerals are associated with the mineralisation, including pyrite, arsenopyrite, aurostibite, pyrrhotite, muscovite, sphalerite and galena within the vein. Wallrock alteration minerals are predominantly pyrite, arsenopyrite and ferroan carbonate spotting, surrounded by a broader, visually cryptic halo of muscovite replacing phengite. Small crystals of barite and bournonite are often seen in chlorite-coated joints near the lodes.

Figure 7.8: Typical Youle vein in 837 level on cross section 6,955N

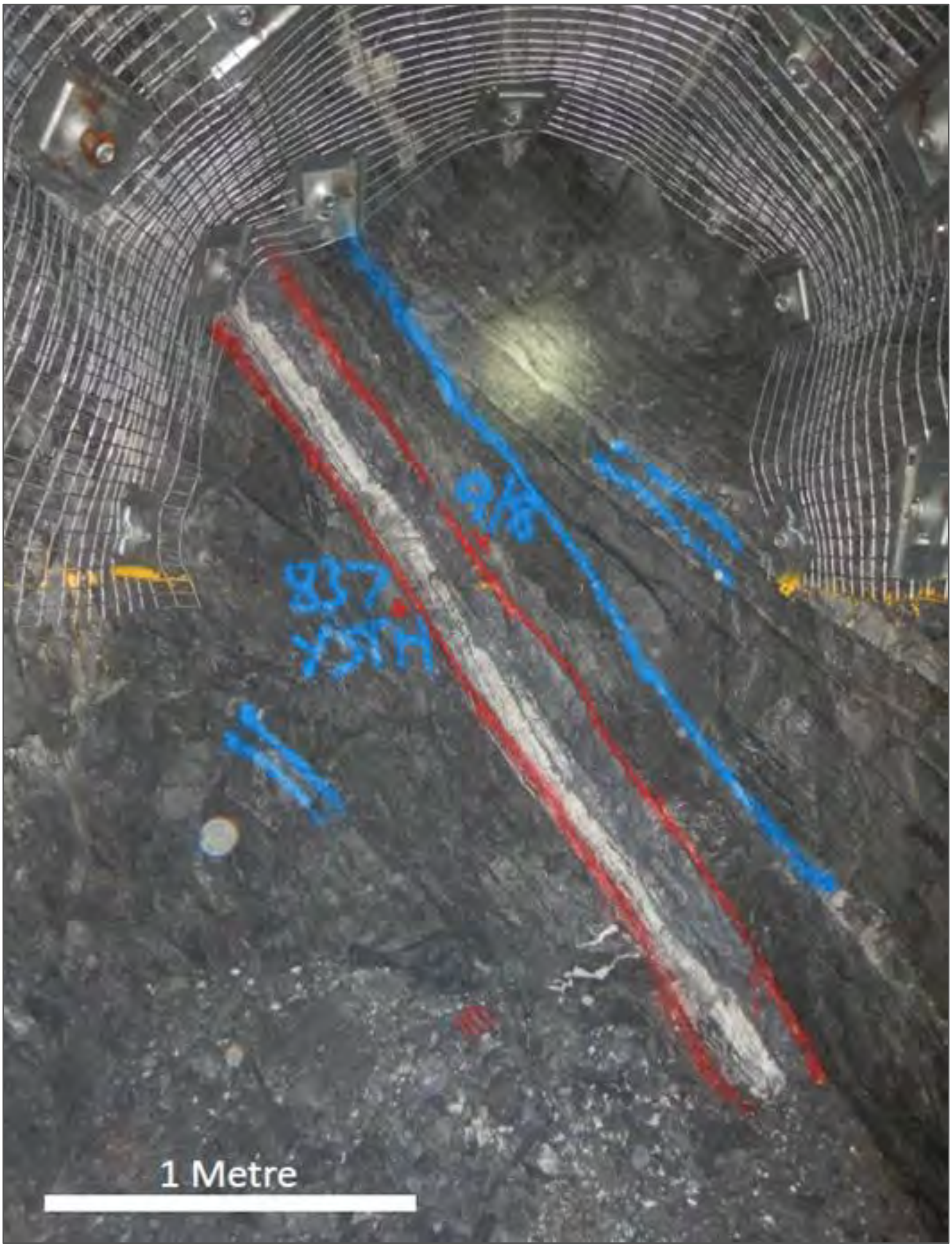
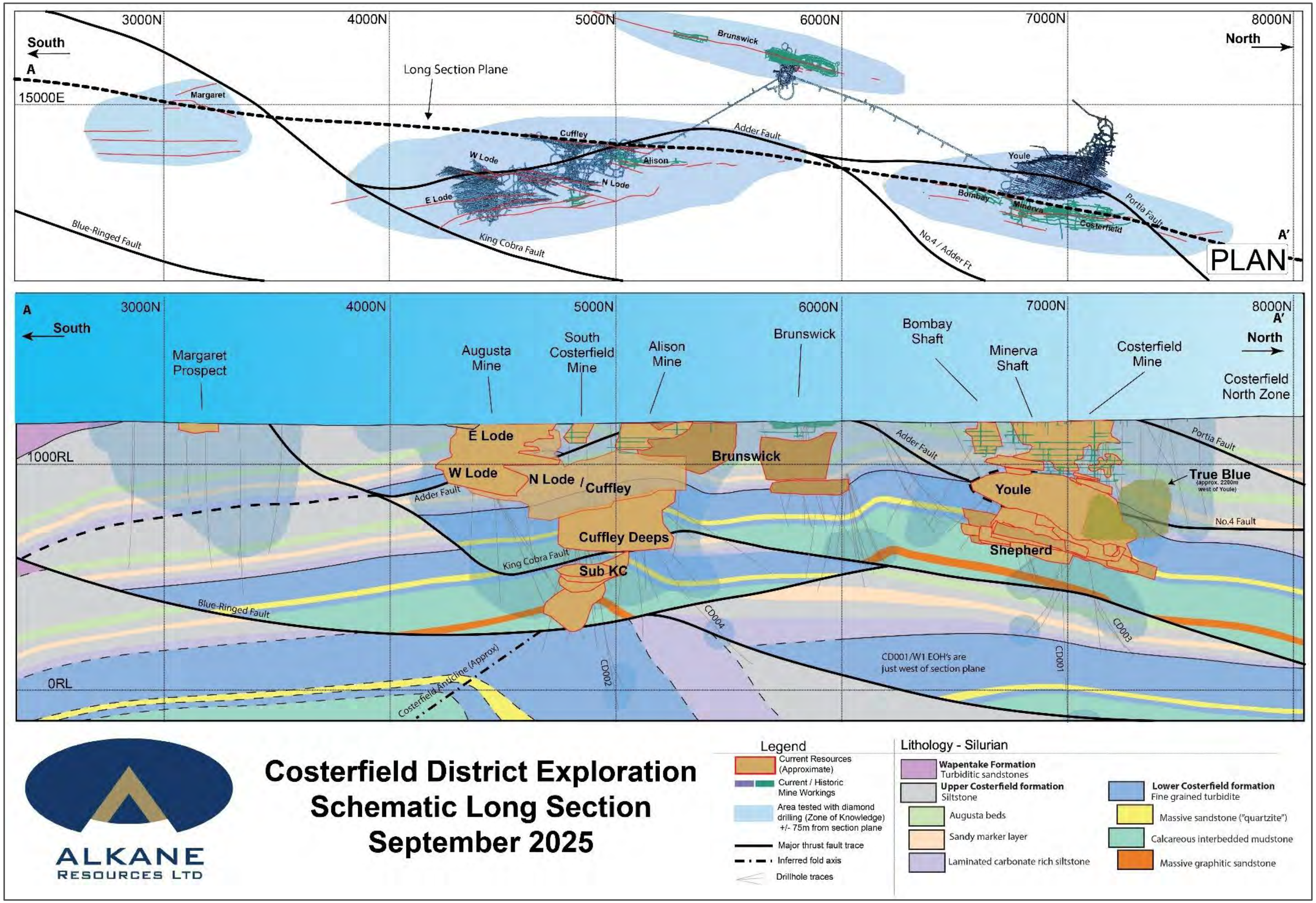


Figure 7.9: A well-developed Shepherd gold-only vein in the 600 lode face, Youle 617 Level at 7014N looking south

Figure 7.10: Schematic long section and plan view of the Augusta, Cuffley, Brunswick and Youle lodes



8 Deposit Types

Narrow vein, antimony-gold and gold-only lodes are the targeted deposit styles at the Costerfield Property. Economic lode material consists of either a ‘typical’ gold-bearing quartz and carbonate with massive stibnite (for example, the Augusta C, D, and E Lodes, N Lode, Cuffley and Youle), or gold-only quartz and carbonate veining as seen in the Shepherd system.

The mineralised shoots are understood to be structurally controlled, typically by the intersection of the lodes with major cross-cutting, gouge filled fault structures and shears. Notable west to northwest dipping thrust faults typically bound the mineralisation packages at the Costerfield Property but can become significantly mineralised themselves along the fault planes. Shallower and dominantly west dipping thrust faults, typically at very low angles or even parallel to bedding with a laminated quartz component, link between the larger order thrust faults. The link faults can also offset the vertical lode structures up to 50 m in an east–west sense. This structural framework leads to the subvertical, north–south extensional veining seen in the Augusta, Brunswick, Kendal and Shepherd systems, along with the moderately west-dipping fault reactivated deposit at Youle.

Exploration efforts at the Costerfield Property are focused on identifying further such mineralised extensional zones through an understanding of this litho-structural setting.

9 Exploration

The exploration work that led to the discovery of the Augusta, Cuffley, Brunswick, Youle, Shepherd and True Blue deposits has included predominantly diamond drilling of interpreted geological targets complimented by geological mapping, and geophysical and geochemical analysis. Geochemical exploratory methods have proven to be applicable in detecting gold-antimony mineralisation.

9.1 Costeans/Trenching

Previous owners have undertaken trenching at the Costerfield Property; however, records of these exploration activities were inconsistent and have not been relied upon for quantitative means.

9.2 Petrophysical Analysis

n 2006, AGD submitted 22 whole-rock and mineralised samples from all known deposits around the Costerfield Property for testing by Systems Exploration (NSW) Pty Ltd. The aim of the work was to determine the petrophysical properties of the mineralisation and identify the most effective geophysical exploration methods that could be used at the project to detect similar styles of mineralisation. The breakdown of the 22 samples submitted is:

- thirteen mineralised samples sourced from Augusta, Margaret, Antimony Creek, Costerfield, Bombay, Alison and Brunswick
- two weathered mineralised samples sourced from Augusta
- seven unmineralised samples.

The following petrophysical measurements were completed:

- mass properties
- dry bulk density
- apparent porosity
- grain density
- wet bulk density
- inductive properties:
- magnetic susceptibility
- diamagnetic susceptibility
- electromagnetic conductivity
- galvanic properties:
- galvanic resistivity
- chargeability.

Although measurable differences in the physical properties of the mineralised and non-mineralised material at the Costerfield Property was identified, the contrast proved to be marginal at best, and it was deemed unlikely that these differences would deliver clear geophysical signatures.

The only field geophysical techniques recommended for trialling were ground-based magnetics, ground-based gravity and induced polarisation (IP) profiling.

9.3 Geophysics

Several programs of geophysical surveys have been completed at the Costerfield Property.

9.3.1 Ground Geophysics

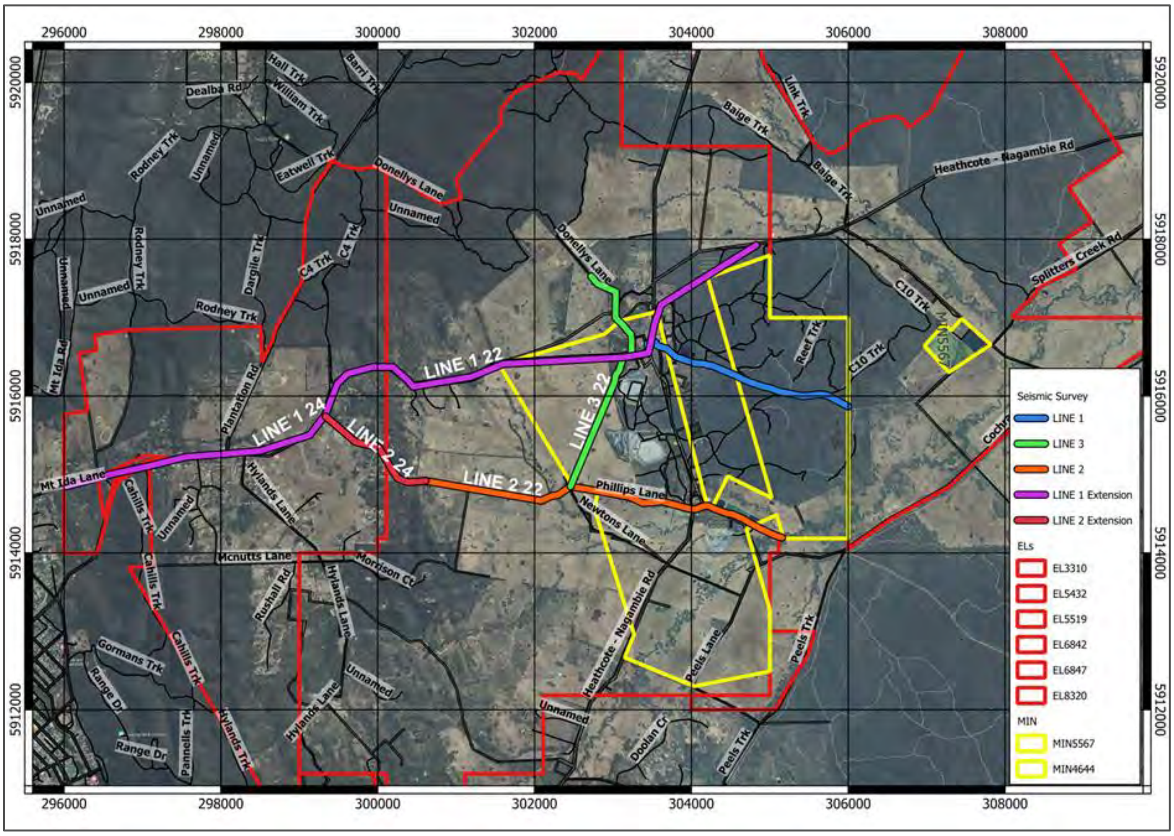
Seismic Survey (2022 and 2024)

Based on the results of the petrophysical testing, a limited program of ground-based magnetics, gravity, and IP profiling, with optimal measurement parameters, was carried out across the Augusta Deposit.

In early 2022, HiSeis Pty Ltd was commissioned to acquire, process, and interpret three 2D seismic lines at Costerfield. An additional two 2D seismic lines, spanning a planned 15 km, were later commissioned in 2024 to explore the northern portion of the tenement holdings from west to east crossing the True Blue and southern Bocks Reef prospects. A smaller 2 km line was also completed in the 2024 survey to connect the lines completed in 2022 to the new line in 2024 (Figure 9.1).

Pre-stack depth migration seismic sections were produced along with a suite of attributes applied to enhance the acoustic signal. The general objectives set for the project were to (1) image the gross geological architecture down to 2 km depth, (2) help ground-truthing of the three-dimensional (3D) district-scale model, and (3) assist with targeting by informing deep drilling campaigns.

Figure 9.1: Seismic lines at Costerfield Property



Gravity Survey (2025/2026)

Based on the success of previous geophysical testing, a large gravity survey was undertaken on the Costerfield Property by Fender Geophysics Pty Ltd (Fender) between November 2025 and January 2026. Spacing of the gravity stations varied with closer spaced readings occurring around known deposits and wider step outs on far field tenement packages.

A total of 2,111 readings were collected during the program. Data processing was completed by Fender and additional re-processing and data validation were completed by Merlin Geophysics Pty Ltd and Fractore Structural Geophysics. Interpretation of the entire dataset is ongoing as well as further processing of the data.

9.3.2 Airborne Geophysics

A low-level detailed airborne magnetic and radiometric survey was undertaken in 2008 by AGD over its tenements, including both Augusta and Costerfield. The airborne survey was conducted on east–west lines spaced 50 m apart, with a terrain clearance of approximately 50 m. Survey details are included in a logistics report prepared by UTS Geophysics Pty Ltd (UTS, 2008).

Magnetic data were recorded at 0.1 second intervals and radiometric data were recorded at 1 second intervals. Additional processing was undertaken by Greenfields Geophysics.

The interpretation of the radiometric and magnetic data resulted in the generation of regional lineament trends across the tenements, which assisted in interpreting the local buried structures.

9.4 Geochemistry

Geochemical exploration has been undertaken extensively at the Costerfield Property.

9.4.1 Mobile Metal Ion

A trial Mobile Metal Ion analytical techniques was completed on samples collected from traverses across the Augusta Lodes in 2005.

The trial included two geophysical traverse lines across the Augusta Deposit, with 5 m spaced soil samples and submitted to Genalysis Laboratory Services for Mobile Metal Ion analysis of gold, arsenic, mercury, molybdenum, and antimony via Inductively Coupled Plasma (ICP).

While the other elements showed no correlation to the underlying mineralisation, the gold and antimony results appeared to show a broad anomaly across the mineralisation, indicating that the technique could be useful for regional exploration.

9.4.2 Soil Geochemistry

In October 2017, a soil geochemistry program was conducted at Brunswick South to verify historical sample lines along the southern strike of the Brunswick Lode. A mechanical handheld auger was used to take 28 samples over two traverse lines at an average depth of 720 mm. This program successfully verified the historical assay data and demonstrated a possible strike extension to the Brunswick Lode.

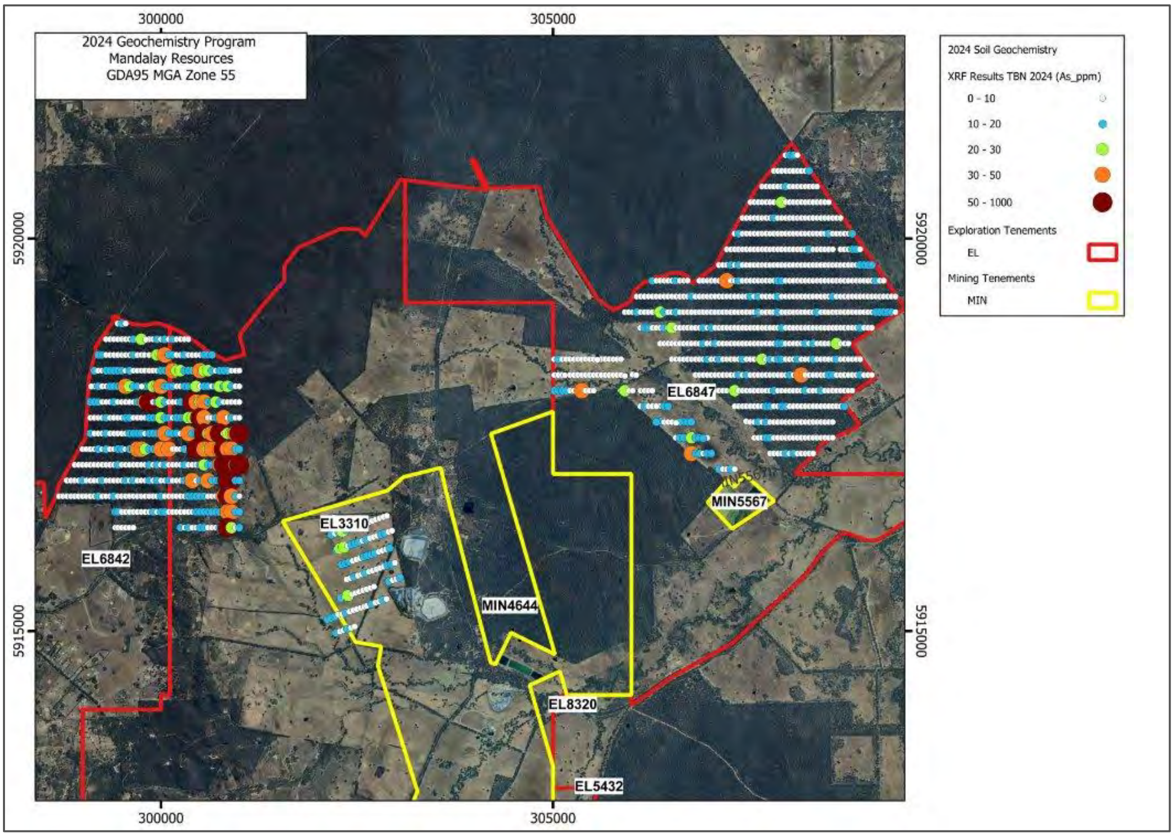
In September 2021, a soil geochemistry campaign was conducted to cover the areas south of True Blue and the eastern corridor (Brown and Robinson Prospects). A mechanical handheld auger was used to take 854 samples over 200 m spaced traverse lines with samples spaced at 50 m intervals.

In 2023, soil geochemistry was undertaken to cover the areas north of MIN4644. This sampling encompassed the Bocks Reef and Damper Gully prospects. A mechanical handheld auger was used to take 384 samples with geochemical traverses spaced over 200 m lines and samples spaced at 50 m intervals (Figure 9.2).

Samples were first analysed using portable X-Ray Fluorescence (XRF) and followed up by aqua regia digest ICP Mass Spectrometry (ICP-MS) analysis. The work aimed at producing a large surface geochemical dataset and aiding target generation along known mineralised corridors.

Throughout 2024, soil sampling was undertaken in three areas across the tenement. Between Youle/Brunswick and West Costerfield, North of the True Blue Prospect (across EL6842 and EL3310), and over the eastern extent of EL6847. A total of 1,081 samples were collected using a mechanical handheld auger on a 50 m sample spacing over 200 m spaced lines.

Figure 9.2: 2024 soil sampling campaign, including anomalous XRF results



9.4.3 Bedrock Chemistry – Auger and Aircore Drilling

The effectiveness of bedrock geochemistry was demonstrated by MEM in 1968–1970, when a grid south of the South Costerfield/Tait's Shafts was sampled. What is now known as the Augusta Deposit was highlighted by the resultant anomalies.

Although MEM drilled three shallow diamond drill holes, which ranged from 22 m to 57 m, to test the anomalies and intersected stibnite stringers, they did not proceed any further. Both conventional surface soil and drilled-bedrock samples were collected to compare techniques; although the surface samples were anomalous and cheaper to collect, the drilled-bedrock samples defined the lodes more precisely.

A geochemical aircore drilling program was carried out during March 2010 to test the zone between Augusta South and the Margaret Mine, south of the operating Augusta Mine. The three east–west traverses were completed across cleared grazing paddocks, south of Tobin's Lane, Costerfield. A total of 104 aircore drill holes were drilled for a cumulative total of 547 m, with the average drill hole depth being 5.2 m. The identified antimony halo was subdued in areas where the high-grade lode was greater than 50 m below the top of bedrock, considered to infer that either a low-grade lode existed at shallow depth or a high-grade lode existed at depth.

From December 2011, Mandalay Resources engaged Starwest Drilling Pty Ltd (Starwest) to undertake the Augusta East Auger drilling program. A total of 2,615 auger drill holes were drilled for

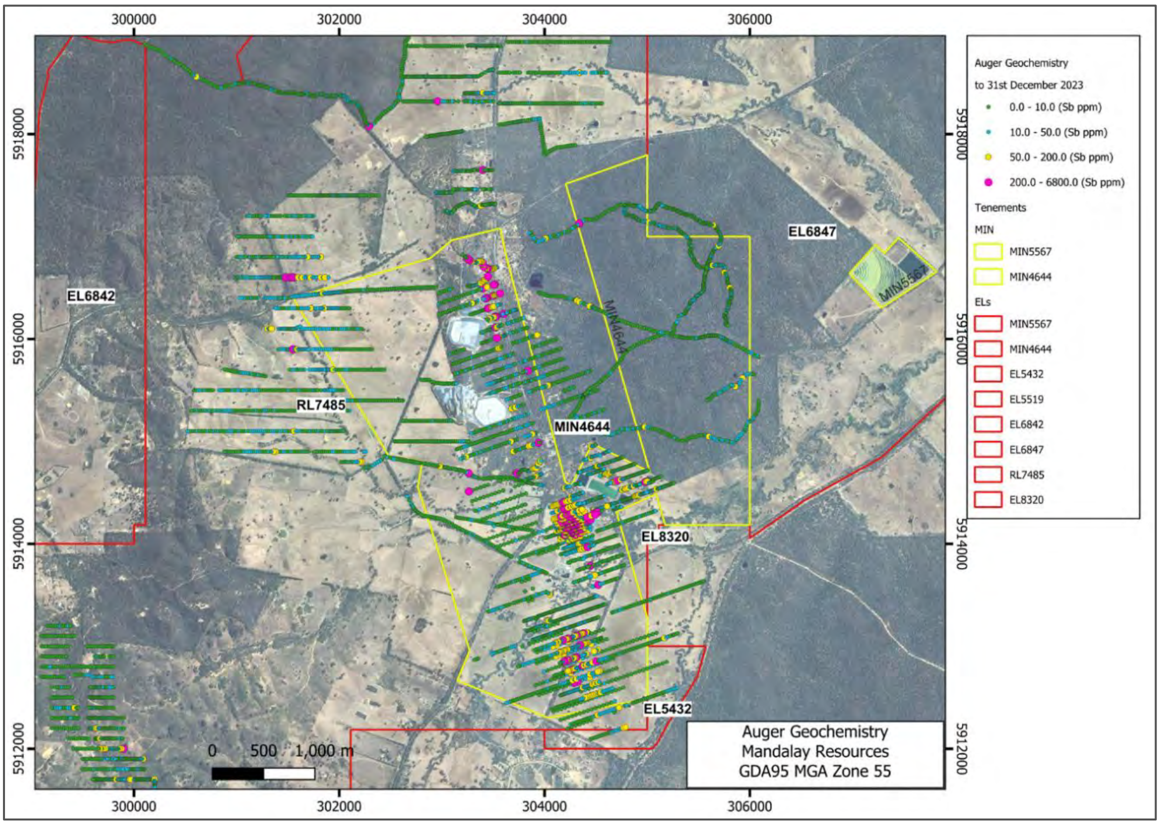
7,295.6 m between December 2011 and June 2012. The survey revealed three anomalous zones (Figure 9.3).

A total of 1,375 auger drill holes were then drilled by Mandalay Resources from 15 April 2014 to June 2014 for 3,906 m. Drill holes were completed on exploration licences EL3310 and EL5432 and mining licence MIN4644 covering six of the prospect areas comprising Augusta (124 holes), Cuffley (76 holes), Brunswick (247 holes), West Costerfield (336 holes) and Margaret's Reef (536 holes).

The program was designed to understand the relationship between bedrock geochemistry, soil sampling and known gold-antimony deposits. This program revealed a previously unknown mineralisation 500 m south of the Brunswick Pit extending the orebody along with a broad anomaly over the West Costerfield sample area.

The Margaret's Reef auger drilling extended a previous program and tightened the spacing to 10 m over previously identified anomalous results for greater definition. The discontinuous nature of anomalism indicated a structurally complicated vein system at the Margaret's Reef prospect.

Figure 9.3: Auger drilling geochemistry results for antimony



9.5 Aerial Programming Survey

AGD commissioned Quarry Survey Solutions of Healesville and United Photo and Graphic Services Pty Ltd of Melbourne to organise and complete aerial photogrammetry of the Costerfield Property tenement package and the Augusta Mine Site in 2005.

A high-level photogrammetry survey was completed in November 2005 at 24,000 ft. This was followed by a low-level photo survey over the Augusta Mine Site in January 2006 at 8,000 ft.

A second low-level photo survey was completed in April 2006 at a height of 4,000 ft, at the time of maximum surface excavation, prior to the commencement of backfilling of the E Lode Pit.

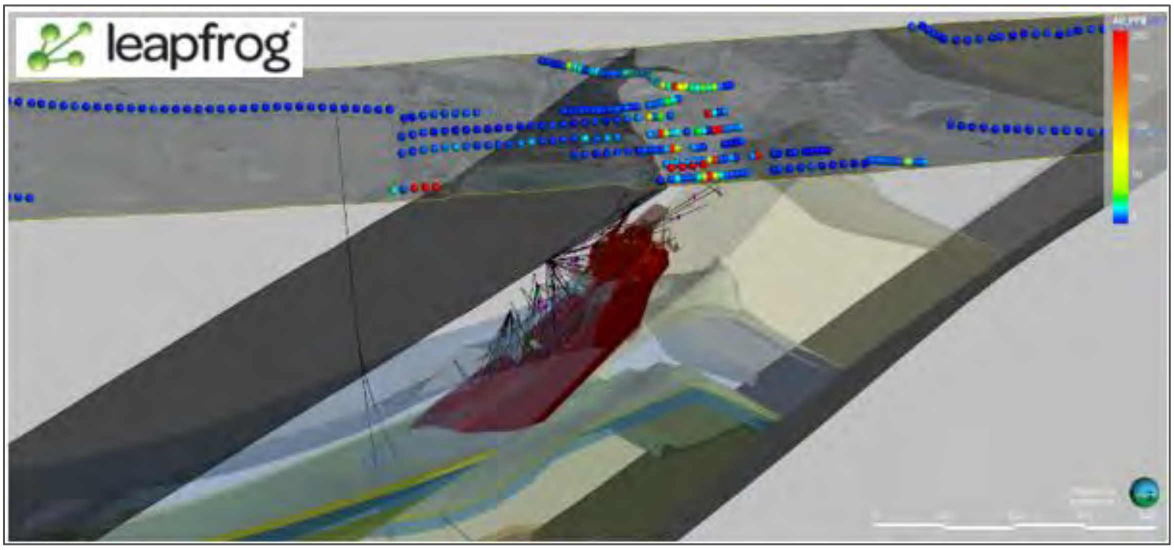
The various photo surveys were subsequently used to generate a digital terrain model and a referenced ortho-photographic scan of the Costerfield central mine area. This area essentially extended from Costerfield South to the Margaret's Reef area, thereby encompassing most of ML MIN4644.

In 2019, Mandalay Resources engaged AAM Group to carry out a detailed Light Detection and Ranging (LiDAR) aerial survey over a 175 km^2 area, covering the entire tenement package. This survey generated a highly accurate and detailed photographic model of the surface with accuracy to +/- 10 cm. The survey had a two-fold benefit for both the Mandalay Resources Future Ore project and the Youle in-rush risk assessment. The LiDAR survey provided an accurate topographical surface that assisted the company to undertake flood simulation studies in order to plan for any 100-year flooding events at the Costerfield Property.

9.6 Surface Mapping and 3D Geological Modelling

The Mandalay Resources Future Ore project was undertaken from 2018 to 2022, with the collection of surface geological information from traverse mapping and continued refinement of a comprehensive regional 3D model using Leapfrog Geo (Figure 9.4).

Figure 9.4: Perspective view to the north northeast: Leapfrog Geo geological model of the Youle orebody



Traverse mapping and compilation of geological data onto comprehensive geological maps of the Costerfield Property has been completed since 2018 and remains an ongoing priority in understanding the gold-antimony system.

10 Drilling

Drilling at the Costerfield Property is undertaken in line with industry best practices, including the following:

- Drilling is undertaken by reputable drilling contractors, with modern drilling equipment.
- The accurate location of Alkane Resources drill hole collars by differential Global Positioning Survey (GPS) or theodolite surveying methods, either by external surveyors or Alkane Resources surveyors.
- Measurement of downhole surveys at 30 m intervals.
- Transporting of diamond core in stacked core trays and secured in a dedicated facility

10.1 Historical Reverse Circulation Drilling (1994–1996)

Between 15 December 1994 and 31 October 1996, reverse circulation (RC) drilling was undertaken by Luhrs Holdings Pty Ltd, contracted to AGD. 196 drill holes were drilled to test the vertical and lateral extent of sulfide and secondary oxides and to define ore zones between Brunswick and main shear lines, with focus on the Bombay, Kendal and Minerva reef systems.

The drill holes were completed using an Edson-branded rig and a 43/4 “ hole size. The drilling was completed at declinations between 45° and 70° and totalled 8,411 m (average of ~43 m per drill hole), drilled transversely to the dominant shear direction.

10.2 Mandalay Resources and Alkane Resources (2009 to Present)

On 1 December 2009, Mandalay Resources took over the Costerfield Operation from AGD and continued with exploration across MIN4644 and exploration tenements. On 5 August 2025, Mandalay Resources underwent a merger with Alkane Resources.

A summary of drilling completed by Alkane Resources from 2009 to 2026 is outlined in Table 10.1.

Table 10.1: Drill hole summary

Year	Diamond core (m)	Percussion/auger (m)
2009	458.9	547.0
2010	4,032.0	Nil
2011	13,515.0	Nil
2012	18,581.4	7,295.6
2013	24,329.0	3,838.0
2014	20,817.0	3,906.0
2015	18,439.0	2,732.0
2016	32,995.0	Nil
2017	27,827.0	Nil
2018	34,656.0	Nil

Year	Diamond core (m)	Percussion/auger (m)
2019	9,556.0	Nil
2020	29,080.0	Nil
2021	36,255.0	Nil
2022	40,453.0	Nil
2023	42,518.0	Nil
2024	59,029.0	Nil
2025/2026	136,451.0	Nil
Total	**548,992.3**	**18,318.6**

10.2.1 2009 to 2010

Drilling from 1 July 2009 to 30 June 2010 mainly consisted of drilling along-strike and down-dip from the existing Augusta Resource, along with drilling undertaken on the True Blue and Hirds Reef prospects. In total, 458.9 m of diamond drilling was undertaken.

In addition, 547 m of bedrock geochemistry aircore drilling was completed within MIN4644 at Augusta South.

Augusta drilling during from 1 July 2009 to 30 June 2010 concentrated on the definition of the W Lode resource. Four drill holes tested the depth extent of W Lode, while another six drill holes were designed as infill drill holes to test mineralised shoots and gather geotechnical data.

10.2.2 2010 to 2011

Exploration from 1 July 2010 to 30 June 2011 was undertaken on two projects: the Augusta Deeps Project and the Brownfields Exploration Project. The Augusta Deeps project was undertaken with the view to extending the existing Augusta Resource to depth.

Augusta drilling concentrated on the infill and extension beneath Augusta to further define the Resource below 1,000 mRL. In total, 10,622.7 m of drilling was completed beneath the Augusta Mine workings and resulted in the definition of further Indicated and Inferred Mineral Resources. The initial emphasis of the Brownfields Project was to identify sources of ore within 1 km of the Augusta Decline.

10.2.3 2011 to 2012

Exploration from 1 July 2011 to 30 June 2012 was undertaken on four projects: the Augusta Deeps drilling project (W Lode and N Main Lode), the Alison/Cuffley drilling project, the Brownfields/Target Testing drilling project and the Target Generation/Bedrock Geochemistry auger drilling project.

In total, 18,581.4 m of diamond drilling and 7,295.6 m of auger drilling were undertaken over the four projects. All drilling was carried out by Starwest using one LM75 diamond drill rig, two LM90 diamond rigs, one Kempe underground diamond drill rig and a modified Gemco 210B track-mounted auger rig.

Augusta Deeps

Drilling of the Augusta Deposit from 1 July 2011 to 30 December 2012 was undertaken with the view to extend the W Lode, E Lode and N Main Lode Inferred and Indicated Mineral Resource, and give confidence in the structural continuity of W Lode and N Main Lode.

A total of 78 drill holes were drilled from surface and underground, totalling 16,170.4 m of drilling.

Cuffley

The Alison/Cuffley drilling project was designed to infill drill a portion of the lode and upgrade it to the Indicated Resource category, and to extend the limits of the lode in the Inferred Resource category.

The Cuffley Lode resource drilling program began in July 2011 with the Augusta Deeps (AD) series of drill holes, following the MB007 discovery. As a follow-up program, four drill holes were drilled (AD001–ADD004). AD004 intersected the fault blank and AD003 appeared to have only intersected the Alison Lode above the Adder Fault in the vicinity of some old stopes. From drill hole AD005 onwards, the drilling strategy involved drilling at least two drill holes on each mine grid cross section at an approximate spacing of 80–100 m. Drill holes were drilled on both west–east and east–west orientations, depending on the site logistics.

One deep drill hole, AD022, on the 5,025N cross section intersected the Cuffley Lode at 700 mRL, 490 m below the surface, with results of 1.04 m at 59.7 g/t Au, 0.37% Sb returned. This drill hole provided confidence in the depth continuity of the lode to Inferred Resource category.

A portion of the drilling in 2011–2012 was infill drilling, 100 m below the Alison Shaft 5 level, at a spacing of 40 m, to define the lode to Indicated Resource category where the planned access decline was expected to first intersect the lode.

10.2.4 2012 to 2013 – Cuffley Lode Drilling

From 1 July 2012 to 30 June 2013, Mandalay Resources drilled 24,329 m of diamond drilling, targeting the Cuffley Lode from surface. These drill holes focused on infill drilling the central, high-grade portion of the Cuffley Lode in order to convert a portion of the Inferred Mineral Resources to the Indicated category.

10.2.5 2014 – Cuffley and N Lode Drilling

In 2014, the focus was on finalising the Cuffley and Augusta Resource Drilling. The goals achieved included the following:

- Expanding the existing Inferred Resource of the Cuffley Lode, both along-strike and at depth.
- Increasing the confidence of the central portion of the Cuffley Lode to aid mine development and stoping of the Cuffley Lode.
- Expanding the existing Inferred Resource of the Augusta Deposit, specifically targeting N Lode along-strike from the existing N Lode development.
- Infill and extension of the Cuffley resource to the north and south along with Cuffley Shallows in between the Flat Fault and the Adder Fault.

In total, 20,817 m of diamond drilling and 3,906 m of auger drilling was undertaken. A total of 5,735 m was drilled for the purposes of target testing, 9,390 m for resource expansion and resource conversions, and 5,692 m for resource infill drilling.

All drilling activity was conducted by Starwest using two Boart Longyear LM90s, one Boart Longyear LM75, one pneumatic Kempe U2 rig and a modified Gemco 210B Track-mounted Auger.

10.2.6 2015 – Cuffley, N Lode, Cuffley Deeps and Sub King Cobra Drilling

Drilling in 2015 was focused on extending the Cuffley and Augusta Resources, both along-strike and at depth. The expansion of the Cuffley resource included the commencement of drilling in the Cuffley Deeps and Sub King Cobra regions. The goals achieved included the following:

- Expanding the existing Inferred Resource of the Cuffley Lode along-strike and defining a resource below the Cuffley Lode at depth.
- Commencement of drilling at depth below the Cuffley Deposit into the Cuffley Deeps and Sub King Cobra areas.
- Increased the confidence of the central portion of the Cuffley Lode to aid mine development and stoping.
- Expanding the existing Inferred Resource of the Augusta Deposit, specifically targeting N Lode along-strike from the existing N Lode development.
- Infill and extension of the Cuffley resource to the north and south along with Cuffley Shallows in between the Flat Fault and the Adder Fault.
- Follow-up RC drilling at West Costerfield to test the geochemical anomaly identified in 2014 by the Auger Bedrock drilling program.

In total, 18,439 m of diamond drilling and 2,732 m of RC drilling was undertaken. The majority of drilling was conducted by Starwest using two Boart Longyear LM90s, one Boart Longyear LM75 and one pneumatic Kempe U2 rig. The RC drilling was conducted by Blacklaws Drilling Pty Ltd using a Hanjin surface rig.

10.2.7 2016 – Cuffley Deeps, Cuffley South, M Lode, New Lode, Sub King Cobra, Margaret and Brunswick Drilling

Exploration from January to December 2016 was focused on extending and upgrading the Cuffley and Augusta Resources to extend the LoM plan, replace the mined portion of the Mineral Resource and explore near-mine targets in close proximity to existing underground infrastructure.

The expansion of the Cuffley resource included the continuation of drilling in the Cuffley Deeps, Cuffley South and Sub King Cobra regions, along with the addition of new target areas. The goals achieved included the following:

- Expanding the existing Inferred Resource in the Cuffley Lode, and further defining the Cuffley Deeps and Sub King Cobra resources below the Cuffley Lode at depth.
- Infill and exploration drilling of the Cuffley Deeps and Sub King Cobra areas, leading to a resource expansion in Cuffley Deeps and an Inferred Resource at the Sub King Cobra area.

- Infill drilling of Cuffley Deeps delineated further prospective zones and a new ore system, namely Mid Lode (M Lode) located between the Cuffley line of lode and N Lode.
- Further development on the Cuffley Lode informed the understanding of, and increased confidence in, the Cuffley Deeps Deposit at depth and along-strike.
- Infill and extension of the Cuffley resource to the north and south along with Cuffley Shallows in between the Flat Fault and the Adder Fault.
- Recommencement of drilling on Brunswick and further testing of the deposit to the south and at depth.
- Brownfields drilling on the Margaret Reef identified the Margaret East mineralisation.

In total, 32,995 m of diamond drilling was undertaken. All drilling activity was conducted by Starwest using four Boart Longyear LM90s, one Boart Longyear LM75 and one pneumatic Kempe U2 rig.

10.2.8 2017 – Brunswick, K Lode and N Lode

Exploration from January to December 2017 was focused on extending and upgrading the Brunswick resource with the aim to convert as much to reserve as possible. The focus in the second half of 2017 was also on extending the resource around Cuffley and Augusta to extend the LoM plan, replace the mined portion of the Mineral Resource and explore near-mine targets in close proximity to existing underground infrastructure. The goals achieved included the following:

- Expanding and increasing the existing Indicated Resource of the Brunswick Lode, and further definition and testing of Brunswick at depth and Brunswick South.
- Expanding the geological knowledge of and resource in the near-mine environment, in particular the extension and infill of the K Lode and N Lode splays, including N Lode East in the Augusta system.
- Definition and grade increase of C Lode.

In total, 26,403 m of diamond drilling was undertaken. All drilling activity was conducted by Starwest using four Boart Longyear LM90s, one Boart Longyear LM75 and one pneumatic Kempe U2 rig.

10.2.9 2018 – Youle and Brunswick

Exploration from January to December 2018 was predominantly focused on extending, defining, and upgrading the Youle Mineral Resource. A total of 20,847 m was devoted to resource expansion and conversion drilling, with the remaining 13,809 m invested in target generation.

Additionally, the focus for the second half of 2018 was on increasing the resource around Brunswick and Augusta to extend the LoM, replace the mined portion of the Mineral Resource and explore near-mine targets in close proximity to existing underground infrastructure. The goals achieved included the following:

- Defining the Youle Lode, a west-dipping, high-grade orebody, identified as a continuation of Kendal-style mineralisation.
- Delineating an Indicated Resource around Youle, which could be integrated into the LoM plan.

- Completing further definition and testing of Brunswick at depth.
- Expanding the geological knowledge of and resources in the near-mine environment. This included the extension and infill of Cuffley North Lode (1,272 m), D Lode (240 m) and Cuffley line drilling (335 m).
- Brownfields drilling was also undertaken at Augusta East (1,479 m) looking for the southern extension of the Augusta Deposit, and Mountain Creek (1,253 m) testing to the south of the Brunswick Deposit.

In total, 34,656 m of diamond drilling was undertaken. All drilling activity was conducted by Starwest using five Boart Longyear LM90s, one Boart Longyear LM75 and one pneumatic Kempe U2 rig.

10.2.10 2019 – Youle and Brunswick

Drilling from January to December 2019 was predominantly focused on extending, defining, and upgrading the Youle Resource. This drilling involved both infill and extensional drilling, designed to delineate the high-grade Youle zone to the north and define mineralisation near current and planned development. A total of 3,863 m was devoted to resource expansion and resource conversion drilling, with the remaining 5,693 m designed for target generation. The main focus of the target generation drilling was the close proximity to the Youle Resource, in particular, the northern extension of Youle and the McDonald's Prospect to the north.

In May 2019, Mandalay Resources kicked off the Costerfield Property deep drilling program, targeting below the Youle orebody. One parent drill hole and wedge were drilled as part of this program totalling 2,510 m.

With the commencement of mining on the Youle Lode, underground resource definition drilling continued at Youle together with the extensional drilling of production areas to be mined in the next 6–12 months. Further confirmation of capital development was undertaken through grade control drilling in order to provide confidence in the grade, location of veining, geotechnical performance and viability of the mineralisation ahead of mining.

As Mandalay Resources continued with the Youle expansion program, it also commenced deep target testing of the Costerfield line of lode with the view to testing and understanding the gold enrichment environment. This drilling program provided additional context for previous deep high-grade gold intercepts at Augusta.

In 2019, the goals achieved included the following:

- Expanding and increasing the existing Indicated Resource of the Youle Lode.
- Regional target generation by conducting extensive surface mapping, drill hole database integration, soil geochemistry and evaluation of geophysical data. This work aided the generation of a 3D Leapfrog Geo integrated structural and geological model of the Costerfield Property region.
- Expanding the orebody knowledge and resource tonnage in the near mine environment, in particular, the extension and infill of the Brunswick mineralised system.

In total, 9,556.0 m of diamond drilling was undertaken. All drilling activity was conducted by Starwest using five Boart Longyear LM90s, one Boart Longyear LM75, one pneumatic Kempe U2 rig and one LM30 rig.

10.2.11 2020 – Youle, Brunswick, Minerva, Browns/Robinsons, True Blue, Damper Gully, Costerfield Deeps and Minerva Testing

Exploration drilling during 2020 was predominantly focused on extending, defining, and upgrading the Youle Resource. It involved both infill and extensional drilling designed to delineate the high-grade Youle zone to the north, south, down-plunge, and above the orebody in areas of historical mining, adjacent to current and planned development.

The focus of target generation was near the Youle Resource, in particular, the northern extension and at depth. Throughout 2020, 29,080 m of diamond drilling was undertaken. The goals achieved included the following:

- Continued extensional drilling at depth, north and south of Youle, allowing the definition of a high-grade gold domain at depth, as well as another emerging high-grade plunge extension to the north at depth.
- Expansion of the existing Indicated Mineral Resource of the Youle Lode.
- Drilling above Youle to investigate instances of veining that were not extracted during the historical mining at the Costerfield Property, suggesting the potential for further undiscovered mineralisation around the historical workings that could be accessed from the Youle infrastructure.
- A series of regional diamond testing programs (Browns, Robinsons, Damper Gully and True Blue prospects) were designed and executed with the intent of testing the potential around the Costerfield Property that could add to the life of the operation.
- Expansion of the Youle orebody knowledge and resource tonnage in the near-mine environment.

A four drill hole program testing the line of lode was completed for 1,977 m and provided additional geological context for the previously intersected deep high-grade intercepts at Augusta. Underground resource definition drilling continued at Youle, together with extensional drilling of production areas to be mined in the next 6–12 months.

A series of regional diamond drilling programs were executed in Browns/Robinsons (6,123 m), True Blue (695 m) and Damper Gully (561 m). Near-mine drilling, designed to test areas immediately adjacent to the current mining operations that could add to the LoM plan, included Kendell Upper (4,579 m), Youle Growth, Youle North, Youle South extension drilling (13,990 m), and Minerva Testing (1,253 m).

In addition, Brunswick KR Panel definition drilling (315 m) was undertaken in an attempt to define mineralisation in the KR panel below the existing Brunswick mine workings.

10.2.12 2021 – Youle Plunge, Shepherd, Brunswick, Margaret Deeps, Browns and Cuffley Deeps

In total, 36.2 km of exploration drilling was completed during 2021 at Costerfield. The majority (26.4 km) of this drilling focused on the mineralisation at the Youle and newly identified Shepherd orebodies. The following was achieved:

- Down-plunge northern extension of the Youle orebody was realised, along with the identification of a new series of gold-rich veins intersecting the footwall (FW) of Youle early in the year (Shepherd zone).
- The Shepherd zone was then tested and expanded, resolving into several discrete veins. A considerable amount of material was brought into the reserve, with scope to continue expansion drilling into 2022.
- A significant portion of the down-dip central portion of Youle with sparse drilling (the 'Youle Bight') was infilled and converted to resource.
- A deep hole (Shepherd Deeps, CD003) was drilled from underground at Youle, aimed to locate a significant down-dip continuation of the Shepherd veining in the hangingwall (HW) of the King Cobra Fault as delineated by the earlier CD001 deep testing hole.
- An attempt to infill and upgrade, the Cuffley Deeps mineralisation panel was made, with no material change to the sub-economic mineralisation.
- Surface drill testing of the Fox Fault and associated mineralisation known from historical Cuffley Deeps drilling, immediately down-dip of Cuffley Deeps.
- Down-dip testing of the Brunswick system, between the Rooster and Adder faults, was initiated.
- Continued testing of several different targets at Browns Prospect. The deep Swallowtail thrust fault target was found to be mineralised in several drill holes, although narrow and of moderate grade. The Bogong vein testing was completed early in the year with mixed results, and earned a follow-up program to extend the highest-grade portion identified in the previous program. The final drill hole of the Browns Bogong follow-up program resulted in the highest grade intercept on the lode system to date.

Deep drilling at the Margaret Prospect was undertaken to test a newly generated model of the area suggesting the zone of mineralisation at depth had not been adequately tested with previous drilling.

10.2.13 2022 to 2023 – Youle, Shepherd, True Blue, Browns/Robinsons, Taits North, Margaret East, McDonald's, West Costerfield and Blocks Reef

During the period January 2022 to December 2023, a total of 82,171 m of drilling was completed on the Costerfield Property, comprising infill and extensional drilling near current and planned development, near-mine target generation, and regional diamond testing programs. The following was achieved during the previous 2 years:

- Diamond drilling underneath the Youle orebody resolved the Shepherd Zone into five distinct veins. Drilling determined grade continuity through Shepherd and extended veining along strike and down-dip.

- Drilling continued on the Shepherd resource aimed at extending the Shepherd resource with near-mine targets such as Shepherd below quartzite.
- Three additional wedges were drilled on CD003 in the continuation of the Costerfield Deeps drilling program and another deep hole (Shepherd Deeps, CD004) was drilled to test for subvertical 'Shepherd Style' splays and cover a wide east–west corridor at the northern end of the Augusta Mine area, below the northernmost extent of the Cuffley Lode.
- Down-dip testing of the Brunswick system, between the Rooster and Adder faults, has continued.
- Continued testing at the Robinsons Prospect designed to test potential westward offset and strike extensions of the Robinsons line of lode.
- Deep drilling at the Margaret Prospect has continued to test a newly generated model of the area, suggesting the zone of mineralisation at depth had not been adequately tested with previous drilling.
- Further deep drilling at the True Blue Prospect to test under the flat lying west structures to the west of known mineralisation.
- Testing at the historical Taits North Prospect to test the continuity of strike from the previously mined N Lode, E Lode and D Lode.

10.2.14 2024 – Youle, Shepherd, Brunswick, Cuffley Deeps, Cuffley West, Cuffley North, Sub King Cobra, Robinsons, True Blue and Bocks Reef

Drilling undertaken on the Costerfield Property for the period 1 January to 31 December 2024 saw a total of 59,029 m completed. Of these, 39,684 m were drilled from underground drill platforms targeting near mine opportunities along with extensional and developmental definition, while the remaining 19,345 m were drilled from surface locations.

- Targets around the Cuffley Deposit, Brunswick Deposit and the historical Alison Mine were tested for depth and strike extensions in areas of little geologic knowledge.
- One additional drill hole and wedge on the Robinsons Prospect was undertaken to test the major fluid pathways and locate the Costerfield Formation below the deposit.
- Continued and ongoing drilling around the True Blue resource to increase strike and depth extent.
- Second pass drill testing of the Bocks Reef Prospect, in the far north of the tenement holdings, was undertaken to determine if mineralisation continued along strike to the north.

10.2.15 2025 to 2026 – Youle, Shepherd, Brunswick South, Sub King Cobra, True Blue, Alison, Kendal, Augusta and Cuffley

Drilling undertaken on the Costerfield Property for the period 1 January 2025 to 30 June 2026 totalled 136,451 m, comprising operational expenditure drilling together with extensive underground and surface programs targeting near-mine opportunities, resource growth, extensional positions, and developmental definition.

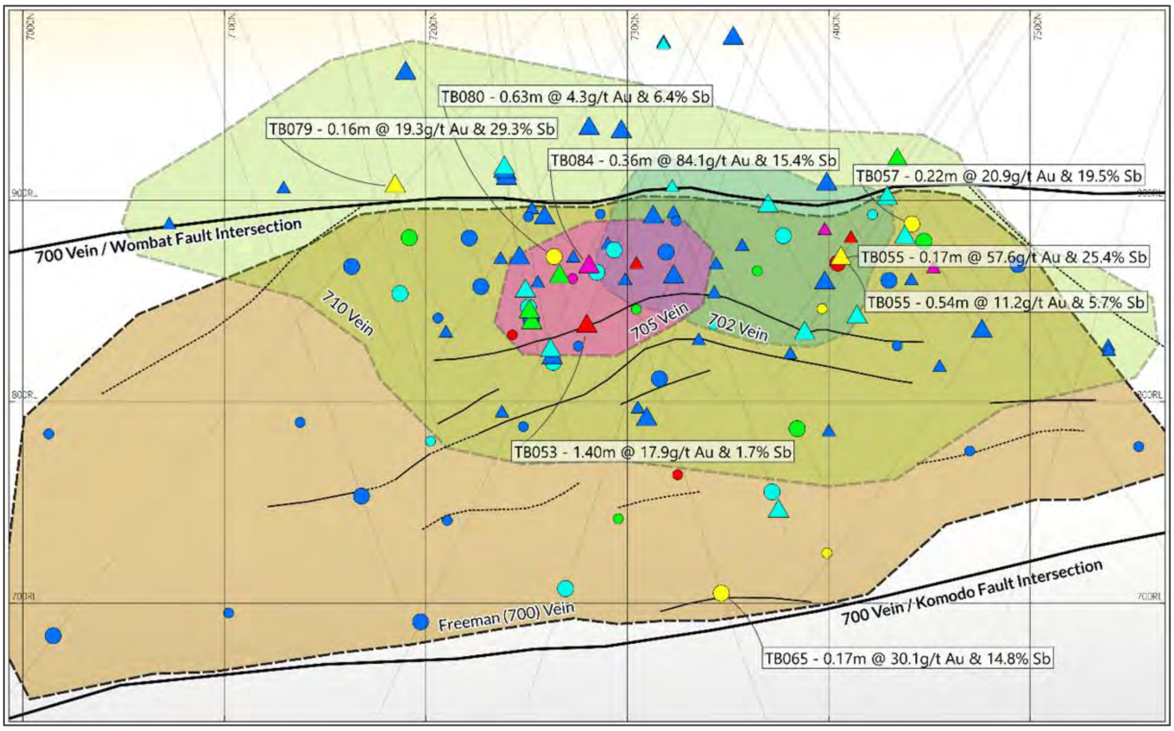
- Brunswick South was the focus for drilling within the period, with continuous infill and extensional drilling aimed at expanding the mineralised footprint, converting material from

Inferred to Indicated, and improving confidence in areas targeted for reserve updates and LoM planning.

- Sub King Cobra drilling targeted resource growth, with holes designed to test strike and depth extensions of the system, particularly the 420 Vein, to evaluate potential expansion of the resource envelope. Kendal drilling consisted of inferred and infill programs, with the majority of metres allocated to infill drilling that returned strong results and improved confidence in vein continuity.
- True Blue drilling comprised both infill and resource-growth programs, continuing to test strike and depth continuity of the mineralised structures and refine the True Blue model.
- Kendal drilling focused primarily on infill, supported by limited inferred drilling. Strong results improved confidence in vein continuity and supported future reserve-conversion potential.
- Cuffley, Alison, Augusta, Shepherd and Youle drilling programs were smaller in scale and collectively targeted infill, production support, and resource-growth testing in areas of limited geological knowledge. Cuffley drilling returned strong infill results, Alison and Augusta drilling tested depth and strike extensions in sparsely drilled areas. Shepherd and Youle drilling were largely production-support, with minimal resource-growth work undertaken.

Significant intercepts recovered for the Freeman Lode at True Blue and the 320 Vein at Brunswick South have been presented in longitudinal projection view in Figure 10.1 and Figure 10.2. The Kendal/Youle/Shepherd system is presented in cross sectional view in Figure 10.3.

Figure 10.1: Longitudinal section of the Freeman Lode at True Blue, with results labelled with hole ID



Notes: Results of grade above 6 g/t AuEq when diluted to 1.8 m are also annotated with estimated true width and grade.

Figure 10.2: Longitudinal section of the Brunswick South 320 vein drilling, with results labelled with hole ID

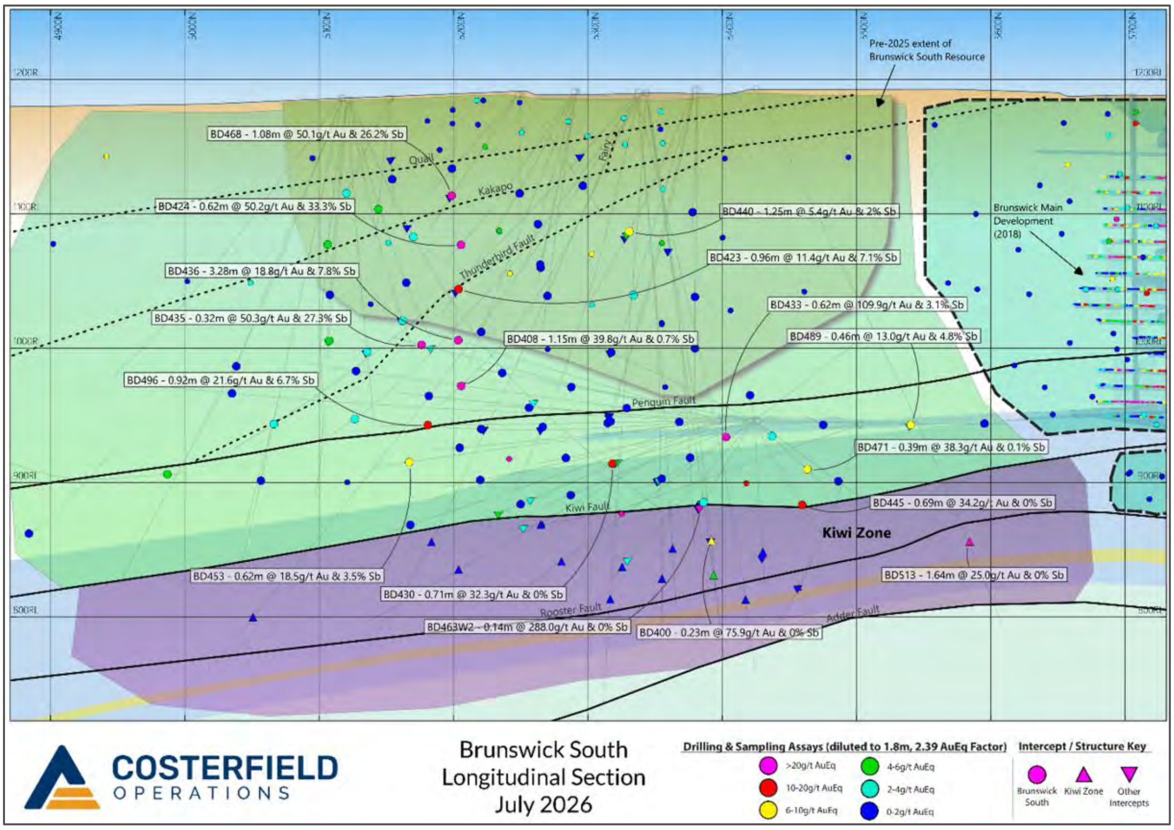
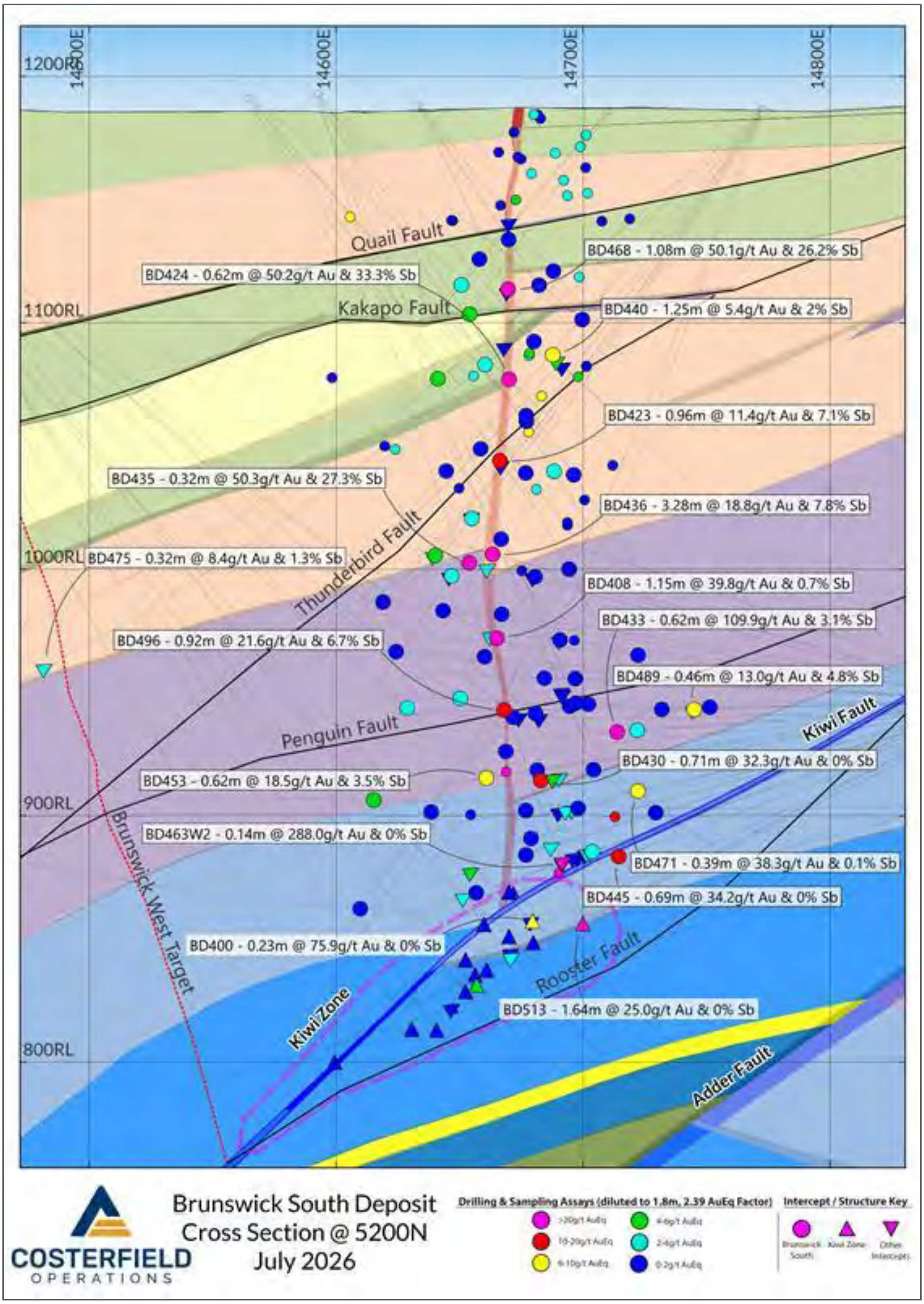


Figure 10.3: Cross section, looking north, of the Brunswick South system illustrating the structural and mineralised architecture of the deposit



Notes: The section is schematic and designed to illustrate the geometry of the Brunswick South mineralised system at 5200N, showing the relationships between major controlling faults, vein positions, and significant drill intercepts.

10.3 Drilling Methods

The Augusta Deposit has been subject to ongoing development and diamond drilling since the commencement of mining operations in 2006. The current Mineral Resource Estimates are completed using all historical drilling and then depleted for areas already mined.

he Augusta Deposit has been subject to continuous development and diamond drilling since mining operations commenced in 2006. Current Mineral Resource Estimates incorporate all historical drilling data and are depleted for areas already mined.

Between 2006 and 2011, several drilling contractors provided both surface and underground drilling services at the Costerfield Property. To ensure consistent performance and drilling quality, Starwest was appointed as the preferred drilling services supplier in 2011 and has remained the primary contractor on site since.

As drilling demand increased, Deepcore Drilling Pty Ltd (Deepcore) was engaged in July 2022 to undertake all large-diameter underground drilling, while Starwest continued to deliver surface drilling and underground LTK48 work. This division of responsibilities has enabled both contractors to focus on their respective strengths and maintain high-quality, efficient drilling outcomes.

During the reporting period, the surface drilling fleet expanded significantly with the introduction of Deepcore's 24/7 surface rigs. Rig 15 commenced operations in August 2025, followed by Rig 24 in March 2026. An additional Starwest surface rig was mobilised in April 2026. Combined with the existing fleet, this resulted in six surface rigs operating across the property, supported by four underground rigs delivering resource definition, extensional, and large-diameter drilling.

Deepcore's 24/7 surface operations use purpose-built sound retention sheds designed to minimise noise impacts on nearby residents, farming properties, and on-site personnel. These insulated enclosures house the drill rig, power pack, and ancillary equipment, significantly reducing acoustic emissions, particularly during night-shift operations. Engineered ventilation and safe-access points allow for efficient operation and maintenance without compromising sound attenuation. The use of these sheds has enabled continuous drilling while ensuring compliance with environmental noise guidelines and supporting responsible, community-focused operations.

Prior to 2011, a range of drill hole sizes and drilling methods were used, including HQ2, HQ3, NQ2, LTK60, LTK48 diamond core sizes, and 5”1/8 to 5”5/8 RC hammers. Details for some of these early drill holes were not consistently recorded; however, as most of this drilling is located in areas now depleted by mining, any associated risk is considered low.

Since 2011, most underground diamond drilling has been completed using an LM90 drill rig in HQ2 or NQ2 sized diamond drill holes. Underground grade control drilling has been undertaken using either a Kempe or Diamec drill rig, producing LTK48-sized diamond core. These drill holes have provided both structural information and detailed grade control data.

In 2019, an LM30 drill rig drilling BQ™TK was used underground for additional grade control drilling. This rig is no longer in use, with all production drilling now performed by the Diamec and, on rare occasions, the LM90.

Surface drilling has been undertaken using HQ2 and NQ2 sized core barrels, with HQ3 used in zones of poor ground conditions or where additional noise reduction was required.

10.4 Collar Surveys

Between the late 1990s and 2001, the majority of drill holes appear to have been located using a GPS survey instrument, while drill hole collar locations prior to the 1990s were usually sighted by tape and compass. Where possible, historical drill holes were surveyed in 2005 by Adrian Cummins & Associates, but this was not always possible.

Collars surveyed after 2001 have been recorded in the acQuire drill hole database as being surveyed, while unsurveyed/unknown drill holes have been recorded as being surveyed by either GPS or an unknown method, and have been given an accuracy of within 1 m.

In 2006, drill hole collars began being surveyed using the Costerfield Property Mine Grid, and were surveyed either by Alkane Resources surveyors or by GWB Survey Pty Ltd. In addition, between 2006 and 2011, Adrian Cummins & Associates provided surveying of both underground and surface collar locations.

Currently, initial collar locations are sighted and pegged using a handheld GPS, with drilling azimuths set out by compass. Drill holes are then surveyed by Alkane Resources surveyors on completion. In some instances, drill hole collar data are modified to account for known and quantified survey error within the mine. Since 2024, a Trimble RTK-GPS has been used to obtain more accurate (<50 cm accuracy) surface collar coordinates if there has been delays in a Alkane Resources Surveyor being able to get to the site.

10.5 Downhole Surveys

Between 2001 and 2023, downhole surveys were completed using electronic single-shot or film single-shot magnetic survey tools. Prior to 2001, survey information exists for most drill holes; however, the specific survey methods and records are no longer available.

From 2011 onward, an electronic single-shot tool was used exclusively. A check survey was collected at 15 m to confirm collar alignment, followed by surveys at 30 m intervals downhole. Where ground conditions prevented surveying, measurements were taken once suitable conditions were re-encountered.

With the implementation of IMDEXHUB-IQ, the REFLEX EZ-TRAC tool replaced the REFLEX EZ-SHOT system. EZ-TRAC enabled direct digital integration with IMDEXHUB-IQ and supported multishot capability, which became standard practice for end-of-hole (EOH) surveys from 2021 onward. Multishot surveys were collected at 3 m intervals unless magnetic interference or ground conditions prevented reliable readings.

Throughout 2024, the Axis Champ Gyro and late the DeviGyro (2026) were introduced alongside the magnetic tools with to progressively phase out magnetic survey methods by 2025. Magnetic tools were found to be unreliable in areas affected by underground workings or local magnetic field variability, resulting in inconsistent azimuth measurements.

To validate the transition, both magnetic and gyro surveys were collected on the same drill holes across multiple rigs. The comparative data demonstrated that the two methods produced consistent results within acceptable error limits. Given the improved reliability and the elimination of magnetic interference risk, the gyro system was adopted as the primary downhole survey method.

10.5.1 Current Survey Procedures (2015–2026)

1. Drill holes with dips between +30° and -30°:
   - Surveyed using the Axis Champ Gyro in continuous reference mode.
   - The azimuth aligner provides the surface reference.
   - Survey shots collected at:
     - 15 m
     - 30 m
     - Every 30 m thereafter
     - 3 m EOH multishot
2. Drill holes outside the +30° to -30° dip range:
   - Surveyed using the gyro in north-seeking mode.
   - Survey shots collected every 12 m to EOH.
3. Diamec rigs:
   - Use a DeviGyro system that does not operate in north-seeking mode.
   - All Diamec holes are surveyed in continuous reference mode.

The evolution from magnetic single-shot tools to gyro-based systems has significantly improved downhole survey accuracy and reliability. The current methodology mitigates magnetic interference and provides consistent azimuth control across all drilling platforms.

10.6 Data Management

Prior to 2016, Alkane Resources Costerfield Operation geological data were stored within a Microsoft Access database, subject to daily backups on the network file system.

In November 2016, Alkane Resources Exploration purchased the GIM software acQuire, due to the high rate of data collection occurring at the Costerfield Property.

The installation of acQuire improved the overall efficiency of the data collection and handling systems, and the improved data integrity by minimising the likelihood of human error.

In 2021, the IMDEXHUB-IQ system for recording, storing and transferring downhole survey measurements was implemented on site. This system removed the need for transcription of surveys between the tool and the database. Axis Connect is used for the Axis Champ Gyro and includes in built QA/QC tools.

In 2024, a recalculation of True North was undertaken using multiple test bed shots. The magnetic variation resulted in a correction from 18.4° to 17.63° when converting True North to Mine Grid North.

10.7 Logging Procedures

The following information only relates to drilling completed after 1 January 2010 and below 1,000 mRL in the Augusta and Cuffley deposits. Details of the full procedures are captured in the internal Standard Operating Procedure *EXG_EXP_3007_PRC_Diamond Drilling Core Logging Procedure.*

All diamond drill core is geologically logged at the core preparation facility located at the Brunswick Complex. Core is initially brought to the facility by either the drill crews at the end of shift or by field technicians who work in the core preparation facility. Core is generally stored on pallets while waiting for processing.

Field technicians initially orientate all core using the orientation line provided by the drill crews through the use of an electronic core orientation device during drilling. The orientation line is transferred down along the length of the core run, where possible. If no orientation is recorded by the drill crews, the core is simply rotated to a consistent alignment of bedding or cleavage, with no orientation mark made on the core.

Downhole depths are marked on the core at 1 m intervals using a tape measure, taking into account core loss and any over-drill. If core loss is encountered, a block is placed in the zone of core loss and the core loss is recorded.

Rock quality designation (RQD) was either collected on the core or with the assistance of machine learning from photography with IMDEX Datarock system. RQD data were collected corresponding to drill runs and include the from-depth, to-depth, run length in metres, the recovered length in metres, the recovery as a percentage, the length of recovered core greater than or equal to 10 cm, and the number of fractures. From this data, an RQD value is calculated. These data are logged directly into acQuire via a Toughbook computer and stored on the company server. From December 2025, Datarock's machine learning derived RQD was introduced and trialled alongside technician RQD data capture before full adoption in April 2026.

After depth marks are placed on the core, site geologists log the lithology, structural data, geotechnical data (if applicable) and mark the sampling intervals, all of which is then uploaded directly to the acQuire database.

All measurements of structural features, such as bedding, cleavage, faults, and shears, are collected using an orientated core, a wrap-around protractor for measuring beta angles and a standard protractor for measuring alpha angles. If no orientation line is available, only alpha measurements are collected. Measurements are recorded directly into the acQuire database via a logging computer and are also scribed onto the core using a wax pencil.

After geological logging has been completed and the core marked up, all core trays are photographed before sampling. Once sampling is completed, the trays are placed on pallets and moved to the permanent core storage area.

10.8 Drilling Pattern and Quality

10.8.1 Augusta

Surface drilling, targeting depth extensions of the Augusta Deposit, is generally conducted on 100 m sections along-strike, with intersections spaced at 80–100 m in the dip plane. Infill drilling is generally conducted from underground at a spacing of approximately 40 m × 30 m in the dip plane.

10.8.2 Cuffley

Initial drilling of the Cuffley Lode was intended to be done in a dice-five pattern on an approximate 50 m × 50 m offset grid. This pattern started with AD001 through to, and including, AD004; however, in order to aid interpretation, the drill spacing was expanded to a 100 m grid based on mine grid northings, with 50–80 m between drill holes on each section. This change of drill pattern enabled the interpretation to be completed on mine northing sections.

Infill drilling between the 820 mRL and 1,020 mRL used a dice-five pattern to maximise information in the strike direction. This infill drilling was conducted on a nominal 30 m (RL) × 40 m (northing) grid.

10.8.3 Brunswick

Drilling post 2010 has been conducted by defining and infilling the existing Inferred Resource, based on the updated fault interpretation. Extension within the PK fault panel used an initial dice-five pattern, which was then infilled using daughter wedge drill holes.

The KR fault panel was also drilled using a dice-five pattern with an approximate spacing of 40 m.

10.8.4 Brunswick South

A typical dice-five drilling pattern was used at Brunswick South, consistent with standard practice for establishing adequate hole spacing for resource definition. Initial drilling was completed on broad 100 m centres to define the structural framework and confirm mineralisation continuity across the Brunswick South corridor. This spacing was subsequently reduced to approximately 80 m for Inferred classification, with further infill drilling completed at no greater than 40 m spacing to support Indicated conversion. In structurally complex areas, most notably along the Rooster Fault, which locally carries significant grade and exhibits variable vein geometry, drill spacing was further tightened to ensure sufficient data density for modelling vein continuity, grade distribution, and structural controls that may influence resource classification and continuity.

10.8.5 Youle/Shepherd

Drilling was completed on an initial spacing of approximately 100 m to define the extent of the mineralisation and determine an Inferred Resource. The infill drill hole spacing accomplished was approximately 40–50 m, using a combination of parent and daughter wedge drill holes. Several drill holes were twinned by daughter wedge drill holes in order to obtain metallurgical samples and duplicates of several high-grade gold zones.

A combination of west–east and east–west drill holes were used to test both west-dipping and subvertical mineralisation; however, the dominant drill hole orientation in the infill program at Youle was drilled west–east.

Youle and Shepherd underground drilling was completed to provide increased geological confidence ahead of mining, and for near-mine exploration along-strike and down-dip of the lodes.

10.8.6 True Blue

Drilling on True Blue was completed at an initial spacing of 80–100 m to confirm structural and grade continuity, with additional infill drilling undertaken at no greater than 40 m spacing. Drill spacing was tightened in structurally complex areas where faulting, veining geometry, or grade variability required increased density to ensure continuity and confidence in the resource model.

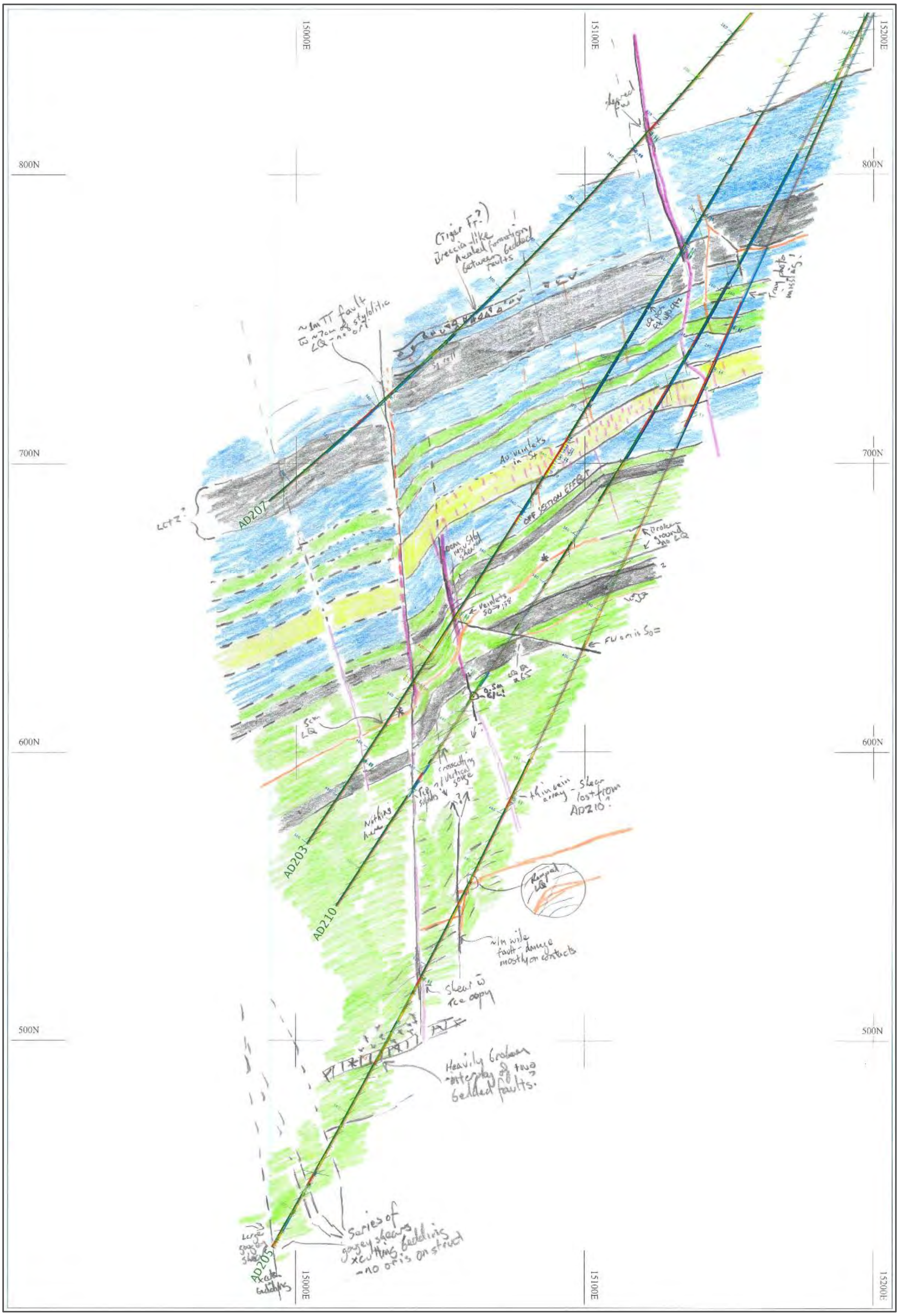
10.8.7 Kendal

A typical dice-five drilling pattern was used at Kendal to provide adequate hole distribution for resource definition. Drill spacing was generally maintained at less than 40 m; however, spacing was frequently reduced in areas of structural complexity where multiple veins, variable vein orientations, and fault interactions influenced grade continuity. The Kendal system comprises several closely spaced, structurally controlled veins, and this complexity required tighter drill density to accurately model vein geometry, confirm grade distribution, and support reliable resource classification.

10.9 Interpretation of Drilling Results

Drilling results are initially interpreted on paper cross sections, which are then scanned and geo-referenced in the mine planning software packages Surpac, Leapfrog Geo and Datamine Studio RM. The scanned sections are then used to generate wireframes (Figure 10.4). Mappable stratigraphic units have been represented by various colours, while faults and mineralised lodes have been marked with heavy black lines.

Figure 10.4: Example cross section of the Cuffley Deposit, post drilling with hole correlations and geological interpretation



Alkane Resources implemented the use of Leapfrog Geo to assist in the structural, geological and geochemical interpretation of drill hole data and surface mapping in 3D space.

10.10 Factors that could Materially Impact the Accuracy of the Results

The factor that has the greatest potential to materially impact the accuracy of drilling results is the core recovery. Historically, this was an issue for all methods of drilling in the Augusta area. Alkane Resources has employed methods of drilling and associated procedures to ensure the highest recovery of sample possible. Where sample recovery is poor (typically >0.1 m core loss, or when there is clear textual evidence), a repeat drill hole is completed by drilling a daughter wedge drill hole.

Information gained from drilling by previous operators has been used in resource estimation of the Augusta and Brunswick deposits; however, as much of the historically drilled area has now had additional data from, and been depleted by, mining, the risk associated with these historical holes is considered minimal.

Surveys of the collar location and downhole surveying methods applied at the Costerfield Property follow industry best practice.

11 Sample Preparation, Analyses, and Security

11.1 Sampling Techniques

Samples were routinely collected and analysed from diamond drill core and channel samples from the ore development drive faces.

Sample weights for samples collected in the 1 January 2025 to 30 June 2026 period are summarised in Table 11.1, comparing the two primary sample methods for diamond drill core and underground face rock chips.

Table 11.1: Summary of sample weights for testing 1 January 2025 to 30 June 2026

	Diamond drill hole samples	Underground channel samples	All samples
Count	34,547	1,149	35,696
Mean (kg)	1.57	1.68	1.60
Standard deviation (kg)	0.99	0.79	0.98
Minimum (kg)	0.13	0.16	0.13
Maximum (kg)	6.68	5.58	6.68

Historical RC drilling undertaken between January 1995 and October 1996 has been verified and included in the Mineral Resource estimation database. Sample weights recorded for the RC drilling are summarised in Table 11.2.

Table 11.2: Summary of RC drilling sample weights

	RC drill hole samples
Count	1,372
Mean (kg)	4.39
Standard deviation (kg)	1.29
Minimum (kg)	0.59
Maximum (kg)	9.47

Notes: Only samples that had a weight recorded were included in the analysis.

11.1.1 Diamond Core Sampling

The mineralisation style at the Costerfield Property is well understood and the geological controls on mineralisation well established. Sampling intervals were based on geological characteristics and marked on the diamond drill core by Alkane Resources geologists. Mineralisation is always clearly visible and therefore, systematic sampling of complete drill holes is not required.

The general rules that were followed in the selection of sample intervals were:

- All known lode structures and stibnite-bearing veins were sampled.
- Intersections of stockwork veins, laminated quartz veins or massive quartz veins were routinely sampled.

- Waste samples were collected from either side of the mineralised vein to determine the grade of the waste material immediately adjacent to the mineralisation. These waste samples ranged from 0.3 m to 1 m in downhole length.
- Siltstone was sampled where disseminated arsenopyrite was observed.
- Fault gouge zones were sampled at the discretion of the geologist.
- Diamond core sampling intervals were standardised wherever possible and ranged from 0.1 m to 1 m in length.
- Samples were cut close to, and honouring, definitive lithological and mineralisation contacts.

An Alkane Resources exploration field technician undertook the sampling of the diamond drill core in accordance with Alkane's standard operating procedure. To obtain consistent samples for analysis and retention, the diamond drill core was sampled perpendicular to the core axis and then cut in half (where half core sampling was completed) lengthways with an Almonte automated diamond saw. Where visible gold was noted for intersections in the Shepherd orebody, whole core samples were taken.

11.1.2 RC Drilling Sampling

Information on the sample collection undertaken during the historical RC drilling campaign is limited:

- Rock chip samples were collected from the RC drilling program at nominal 1 m intervals.
- Samples in the database and their downhole intervals were cross-checked with original log sheets.
- 'Recovery' on the log sheets was crossed out with 'Recovered weight in Kg' written above, with samples ranging from 5 kg to 40 kg. This was not recorded for every drill hole. Only samples with a sample weight recorded, and above 1 kg, were considered to have satisfactory recovery and were included in the estimation (see Table 11.2 statistics).

11.1.3 Underground Channel Sampling

Ore drive face channel samples (face samples) were collected by Alkane Resources geologists with related data captured on portable handheld computers (iPad). The Rock Mapper digital capture software was used with the following method:

- Sample locations were determined so that the sample was collected perpendicular to the dip of the mineralisation, from the FW to the HW.
- The face size and sample lengths were measured.
- Each sample was collected as a channel sample using a geological hammer and placed into a pre-numbered sample bag with a unique ID.
- Where there were two or more mineralised structures in the face, samples were also taken of the intervening waste.
- Sample lengths ranged from 5 cm to 1 m across the mineralisation and typically weighed between 1 kg and 3 kg.

- The face was labelled with the heading, dated, and photographed into Rock Mapper.
- The area of lode and waste was drawn onto the photograph in Rock Mapper.
- Key features were sketched digitally directly onto the Rock Mapper software and sampling and structural data were recorded.
- On completion, data from the Rock Mapper files were automatically uploaded to the drill hole database.
- A record of the face photographs, annotations, and sampling files was saved on the Alkane Resources server.
- The location and orientation of the face was derived using the distance from survey marks and the survey pickup of the drive using Surpac and Rock Mapper to produce a georeferenced face photograph.
- The coordinates, orientation and dip of the channel were derived from the georeferenced face photograph using Rock Mapper with the resulting data stored in the drill hole database.
- The face photograph and channel data were validated against the survey pickup.
- A digital mesh derived from photogrammetry by Rock Mapper had the drive photograph overlayed and was then displayed in Leapfrog for validation against the channel sample.

Occasional wall channel samples are also taken at the Costerfield Property and follow the same process as above.

11.2 Data Spacing and Distribution

Within the Augusta, Cuffley, Brunswick, Youle, Shepherd, Kendal and True Blue deposits, the distance between drill hole intercepts was approximately 40 m × 40 m. This is reduced in areas of structural complexity.

Within the Kendal Upper area, which is defined primarily with historical RC drilling, the distance between the drill hole intercepts was approximately ~30 m along strike from and east–west fanning of ~15–20 m.

Underground channel samples were taken every 1.8–5 m along development drives on ore, with level spacing 7–10 m dependent on the lode dip.

11.3 Assaying Laboratories

Routine assaying of the diamond drill core and face samples was completed by On Site in Bendigo, who is independent of Alkane Resources and holds current ISO/IEC 17025 accreditation.

Alkane Resources dispatched samples to On Site after which On Site's assay laboratory personnel completed sample preparation and chemical analysis. Results were returned to Alkane Resources staff, who validated and loaded the assay data into the relevant databases.

ALS Global Brisbane, SGS Kalgoorlie and Bureau Veritas Perth have been used to verify the accuracy of assays completed by On Site through the completion of quarterly umpire check analyses of selected samples (Section 11.8).

RC drilling samples were assayed by ALS Bendigo, who was independent of Alkane Resources.

11.4 Sample Preparation

The following sample preparation activities were undertaken by Alkane Resources staff for both diamond drill core and underground channel samples:

- Sample information and characteristics were measured, logged, recorded in the acQuire database and assigned a unique sample ID.
- Sample material was placed into a calico bag previously marked with the unique sample ID.
- Calico bags were loaded into plastic bags such that the plastic bags weighed less than 10 kg.
- An assay submission sheet was generated and placed into the plastic bag.
- Plastic bags containing samples were sealed with a metal or plastic tie and transported to On Site in Bendigo via private courier or Alkane Resources staff. From February 2026, this changed and On Site Laboratories now collects the samples directly from Costerfield.

The following sample preparation activities were undertaken by On Site staff:

- Samples were received and checked for labelling, missing samples, etc. against the submission sheet.
- If the sample batch matched the submission sheet, sample metadata were entered into On Site's Laboratory Information Management System (LIMS). In the event that discrepancies were noted, Alkane Resources was contacted by On Site to resolve the discrepancy prior to further work commencing. Records of all discrepancies and corrective actions taken are recorded by the Alkane database administrator.
- A job number was assigned, and worksheets and sample bags were prepared.
- Samples were placed in an oven and dried overnight at 106°C.
- Samples were weighed and recorded.
- The entire dried sample was crushed using a Rocklabs Smart BOYD Crusher RSD Combo with a jaw closed side setting of 2 mm.
- If the dried sample weight was less than 3 kg, the entire sample was retained for pulverisation. If the dried sample weight was greater than 3 kg, the sample was spilt to 3 kg using the rotary splitter that is incorporated in the BOYD crusher.
- Rejects from splits greater than 3 kg were retained as coarse rejects in labelled calico bags and returned to Alkane Resources.
- The 3 kg sample was then pulverised in an Essa LM5 Pulverising Mill to 90% passing 75 µm.

For fire assay and base metal samples:

- The 3 kg pulverised samples were then subsampled to take a master ~200 g pulp split for assay by a manual scooping procedure across the full width and depth of the mill bowl and loaded sequentially into labelled pulp packets.

For photon assay (PA):

- The ~3 kg pulverised samples were then subsampled to fill a ~280 g photon assay jar by a manual scooping procedure across the full width and depth of the mill bowl.

For all methods:

- For every 21 primary samples, a sample was randomly selected by LIMS and a duplicate 200 g split for fire assay (FA) or second jar for PA was submitted for analysis using the same analytical procedure as the primary sample.
- The remaining pulp was returned to its sample bag and then returned to Alkane Resources for retention following the completion of assay.

Data regarding the percentage of sample passing <75 µm was provided by On Site for the period between 1 January 2025 and 30 June 2026. The target is 90% passing and this was achieved with the mean for this subset of data sitting at 91.14%.

RC drilling:

For all methods:

- A number of samples were received damp and required drying prior to testwork. This was conducted under low heat to avoid oxidation of sulfides.
- Riffled splits of the drill chip samples were taken and blended thoroughly to form approximately equal weight composites.
- Samples of composite were ground in a laboratory rod mill for specified times. The products were sized, and the data obtained used to establish the grind time required to produce a nominal 80% passing size of 106 microns.

For FA:

- Splits of composite were taken and submitted for gold assay.

11.5 Sample Analysis

Diamond drill core and face/wall channel samples were routinely assayed by On Site for gold, antimony, arsenic, and iron.

11.5.1 Gold Analysis

Gold grades for the January 2025 to June 2026 period were determined by either fire FA with an AAS finish or using the Chrysos PA technology.

Quarterly umpire checks of these results also used both the fire assay with AAS finish and photon analysis (separate sample sets). Overrange FA Au (>100 g/t) also used a gravimetric finish in these umpire labs.

RC drilling: Gold assays were completed using the PM209 analytical method which involves a 50 g FA with an AAS finish.

11.5.2 Antimony Analysis

On Site has considerable experience in the analysis of high-grade antimony samples typical of the Costerfield Property and other regional operations, and it follows a proprietary assaying method that has been developed to report ore-grade level antimony values. On Site uses an Aqua Regia style preparation to negate analytical technique issues encountered with antimony chloride precipitation and is finished with an Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES – low-level detection limit) or an AAS finish (>0.6% Sb).

Umpire laboratory checks of quarterly antimony results were undertaken by fusion digestion with an XRF finish. The use of an XRF finish negated the issues associated with dissolution and chloride precipitation and are considered by Alkane and the QP to be the most reliable.

RC drilling: Antimony assays were predominantly completed using a pressed powder XRF finish (XRF14) analytical method.

11.5.3 Arsenic and Iron Analysis

Arsenic and iron were prepared as above with aqua regia digestion and an AAS or ICP-OES finish.

11.6 Laboratory Reviews

Alkane Resources personnel have conducted periodic visits to the On Site facility in Bendigo and met monthly with the laboratory managers to review laboratory performance.

Tours of the laboratory were normally completed in the presence of On Site's Laboratory Manager, Mr Wendell Goyne, or owner, Mr Garry Goyne. Notes and minutes from laboratory visits and meetings with laboratory staff have been maintained as records on the Alkane Resources server.

11.7 Assay Quality Assurance/Quality Control

The following sections relate to the QA/QC samples submitted and returned to Alkane Resources between 1 January 2025 and 30 June 2026.

A detailed review of the QA/QC from previous drilling programs can be found within the previously issued NI 43-101 Technical Reports. For the relevant report years covering specific areas of the operation, refer to Section 10, Drilling.

A detailed review of the QA/QC from historical RC drilling programs can also be found in Section 11.7.6.

11.7.1 Certified Reference Material Results

In total, four project-specific type certified reference materials (CRMs) (MR22, MR23, OREAS290, and OREAS292) were produced from Costerfield Property ore and four commercial CRMs were inserted into dispatches during 1 January 2025 to 30 June 2026 to monitor the performance of assay quality and accuracy (Table 11.3).

The homogenisation, analysis and certification of these CRMs was performed and/or coordinated by OREAS and Geostats Pty Ltd (Table 11.3).

Table 11.3: Certified reference materials and certified assay methods

CRM name	Material source	Certifying laboratory	Au method 1	Au method 2	Sb method 1	Sb method 2
MR22	Costerfield	OREAS	Fire assay	–	Aqua regia/ICP	Fusion/XRF
MR23	Costerfield	OREAS	Fire assay	–	Aqua regia/ICP	Fusion/XRF
OREAS239b	Commercial	OREAS	Fire assay	Photon assay	–	–
OREAS243	Commercial	OREAS	Fire assay	Photon assay	–	–
OREAS247	Commercial	OREAS	Fire assay	Photon assay	4AD/ICP	–
OREAS249	Commercial (Costerfield)	OREAS	Fire assay	Photon assay	4AD/ICP	–
OREAS290	Commercial (Costerfield)	OREAS	Fire assay	–	4AD or AR /ICP	Fusion/ICP
OREAS292	Commercial (Costerfield)	OREAS	Fire assay	–	4AD or AR /ICP	Fusion/ICP

Notes: Sb for OREAS CRMs denoted as '–' are below the routine analysis sensitivity and not used for quality control.

At least one CRM was submitted with every batch of diamond core samples and typically at a rate of 1 standard per 25 samples. CRMs were submitted at a similar rate in the underground face/wall channel sample batches, which typically included two different CRMs per batch.

An assay result for a CRM was considered acceptable when the returned assay fell within three standard deviations of the CRM certification grade. Outside this range, the CRM assay was considered to have failed and all significant mineralised samples within the batch were re-assayed. In this context, significant grades were defined on a case-by-case basis by Alkane's resource geologist as mineralised samples that may have a material impact on future resource estimates. All actions or outcomes were recorded as comments in the QA/QC register.

The assay results for the reporting period are presented in Table 11.4 for gold by FA, Table 11.5 for gold by PA, and Table 11.6 for antimony. There were no accepted >3 standard deviation failures for the period.

Table 11.4: Routine certified reference material results for gold by fire assay

CRM – Au (FA)	Number submitted	Mean Au (FA) value g/t	% Mean bias	Au (FA) std. dev.	% Rel. std. dev.	Au (FA) cert. value g/t	Au (FA) cert. std. dev.
MR22	124	79.91	-1.3	2.09	2.6	80.94	3.22
MR23	311	21.47	-1.6	0.33	1.5	21.81	0.49
OREAS243	7	12.49	0.8	0.28	2.2	12.39	0.31
OREAS247	80	42.42	-1.3	0.88	2.1	42.96	0.90
OREAS249	15	22.25	0.5	0.39	1.8	22.15	0.81
OREAS290	1,723	2.08	-2.0	0.05	2.4	2.12	0.07
OREAS292	352	11.06	0.0	0.20	1.8	11.06	0.35

Table 11.5: Routine certified reference material results for gold by photon assay

CRM – Au (PA)	Number submitted	Mean Au (PA) value g/t	% Mean bias	Au (PA) std. dev.	% Rel. std. dev.	Au (PA) cert. value g/t	Au (PA) cert. std. dev.
OREAS243	240	12.52	-0.53	0.22	1.8	12.59	0.24
OREAS247	87	43.73	-0.09	0.77	1.8	43.77	0.88
OREAS249	9	22.92	-1.75	0.46	2.0	23.33	0.49

Table 11.6: Routine certified reference material results for antimony

CRM – Sb	Number submitted	Mean value Sb %	% Mean bias	Sb std. dev.	% Rel. std. dev.	Sb cert. value	Sb cert. std. dev.
MR22	135	43.75	-1.5	0.60	1.4	44.42	0.80
MR23	400	18.62	-0.8	0.28	1.5	18.76	0.57
OREAS243	7	0.01	0.0	0.00	0.0	0.01	0.18
OREAS247	272	0.31	-6.8	0.01	3.3	0.33	0.01
OREAS249	15	8.05	-1.2	0.26	3.2	8.15	0.41
OREAS290	1,723	0.75	0.7	0.02	2.7	0.75	0.03
OREAS292	390	4.66	1.3	0.06	1.3	4.60	0.24

11.7.2 Certified Reference Material Results Discussion

The routine analysis undertaken by On Site is deemed to be performing well based on the results observed for the CRMs used 1 January 2025 to 30 June 2026. Some minor and conservative biases were observed in the following CRMs relative to the certified values:

A low bias in fire assays is noted in the later period of high-grade gold, MR22 (80.94 g/t, Figure 11.1), through 1 January 2025 to 30 June 2026, with a mean bias of -1.3% and a high-grade antimony (44.42% Sb) with a consistent low bias (-1.5% bias). The CRM is being investigated and cross-checked.

A low bias in fire assays is also noted for medium-grade gold, MR23 (21.81 g/t, Figure 11.2), through 1 January 2025 to 30 June 2026, with a mean bias of -1.6% and an antimony value of 18.76% Sb with a minor low bias (-0.8% bias). The CRM is being investigated and cross-checked.

A low bias occurred in one CRM below 1% Sb, OREAS247 (-6.8% bias), which is being further investigated. This CRM, however, is not usually despatched alone or solely relied upon for QA/QC purposes. It is usually joined by a higher-grade CRM in ore-grade analysis for visible stibnite or applied to zones where the level of observed stibnite is trace and not material to economic grades.

Figure 11.1 MR22 gold by fire assay certified reference material control plot

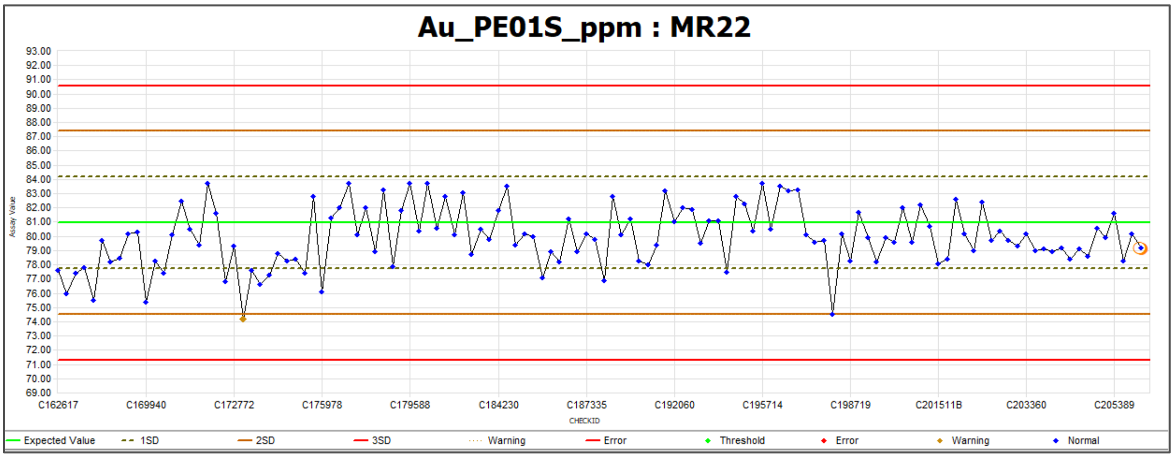


Figure 11.2 MR22 gold by fire assay certified reference material control plot

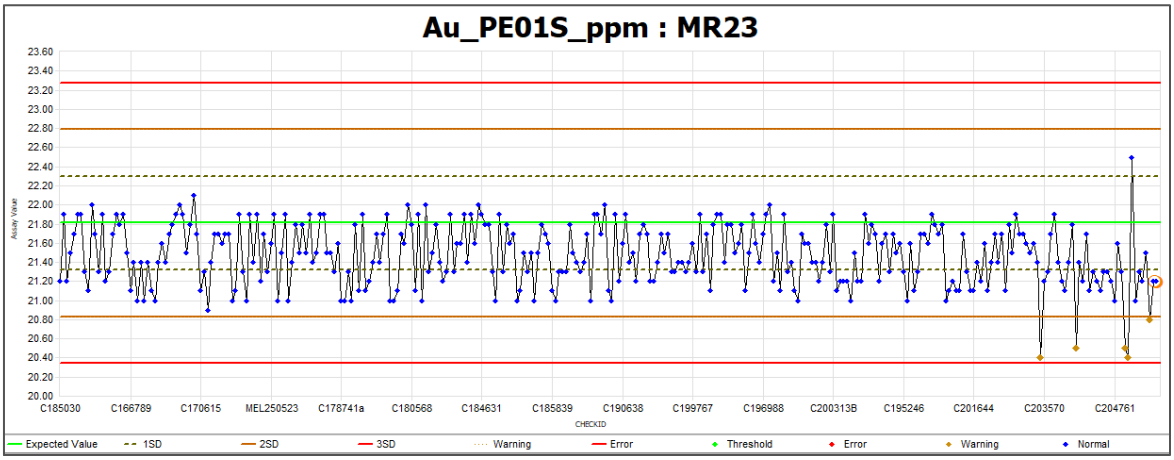
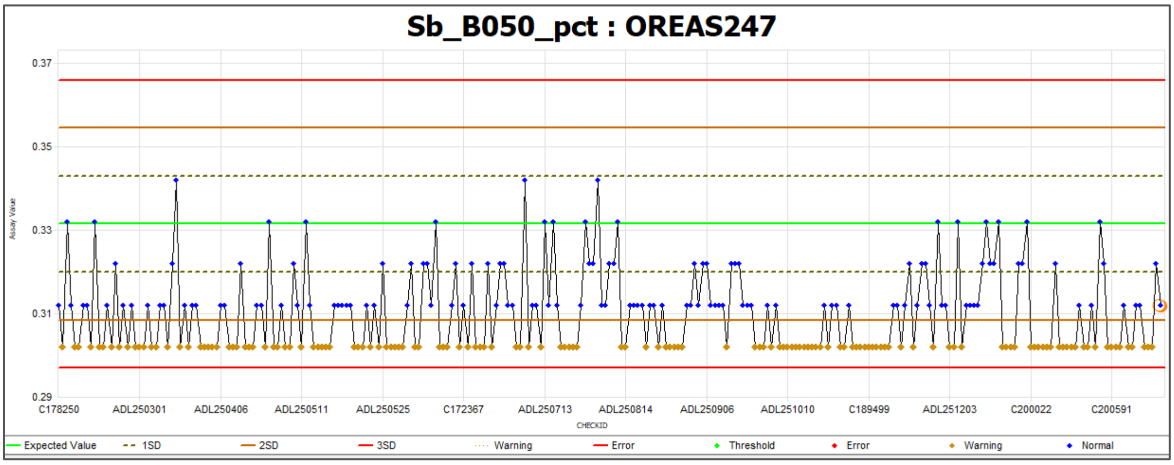


Figure 11.4: OREAS247 antimony by AAS certified reference material control plot



11.7.3 Blanks

Alkane Resources submitted uncrushed samples of basalt as blank material sourced from Geostats Pty Ltd into assay sample lots, at a rate of 1 in every 30 samples, to test for contamination during sample preparation. Additionally, quartz washes were added after every high-grade sample to prevent contamination from gold. Quartz washes were not assayed unless contamination was detected in the batch and additional information was required.

The failure threshold for gold and antimony is 0.10 g/t, which was chosen since it represents ten times the detection limit of 0.01 g/t for AAS.

Blanks had a 99.97% passing rate for gold and antimony. There was one failure for antimony. It was investigated, and it appeared to have been contaminated by the sample preceding it. Results were repeated and the contamination was confirmed. It was interpreted to be localised due to carryover from the previous high Sb sample and not material to following samples. Results were accepted and the issue raised during routine monthly lab QA/QC reviews.

11.7.4 Pulp Duplicates

A total of 1,152 results for pulp duplicated FA, 461 for PA and 583 for antimony. The duplicates were assayed as separate aliquots from the same sample pulp from both exploration drill core samples and mine face/wall channel samples. The summary of results for each can be found in Table 11.7 (a lower threshold representing ten times detection limit of 0.1 g/t Au or 0.1% Sb has been applied).

Table 11.7: Pulp duplicate statistics

	Fire assay		**Gold (photon assay)**		**Antimony**	
	Original	**Duplicate**	**Original**	**Duplicate**	**Original**	**Duplicate**
Number of samples	1,152	1,152	461	461	583	583
Mean	3.42	3.41	60.93	60.63	8.42	8.39
Maximum	166	163.5	992	1,030	62.3	62.6
Minimum	0.11	0.11	0.11	0.11	0.11	0.11
Population standard deviation	11.86	11.82	128.49	129.34	12.12	12.06
CV	3.47	3.47	2.11	2.13	1.44	1.44
Bias	0.292%		0.49%		0.356%	
Correlation coefficient	1.0		1.0		1.0	
Percentage of samples <10% relative paired difference	**91.6**		**76.6**		**99.5**	

Notes: CV – coefficient of variation.
Statistics for primary duplicates >0.1 g/t Au or %.

Scatter plots of the pulp duplicate results have been presented in Figure 11.2, Figure 11.3 and Figure 11.4 and display good correlation between the original and duplicate assays in either gold or antimony.

Figure 11.2: Scatter plot of On Site gold fire assay pulp duplicates (g/t)

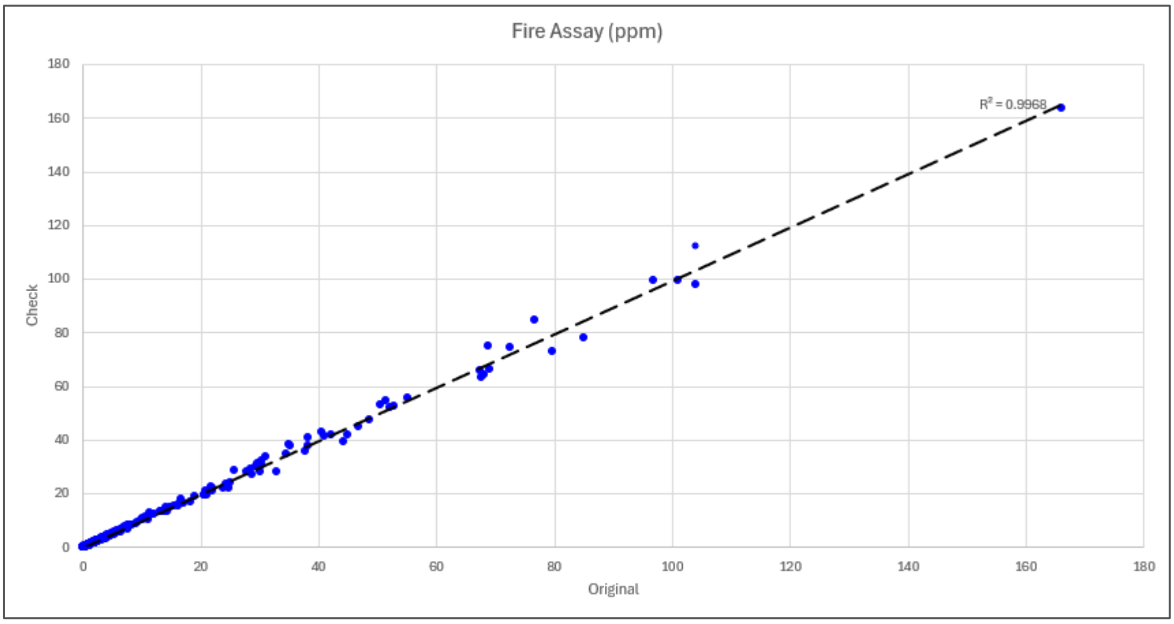


Figure 11.3: Scatter plot of On Site gold photon assay pulp duplicates (g/t)

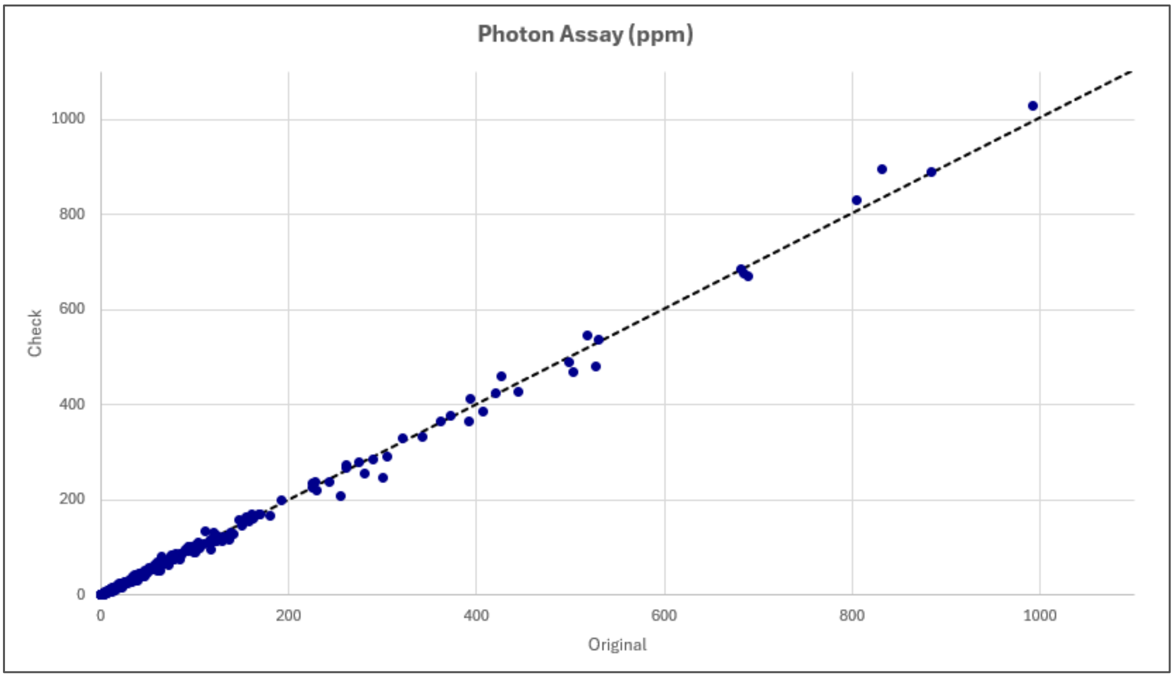
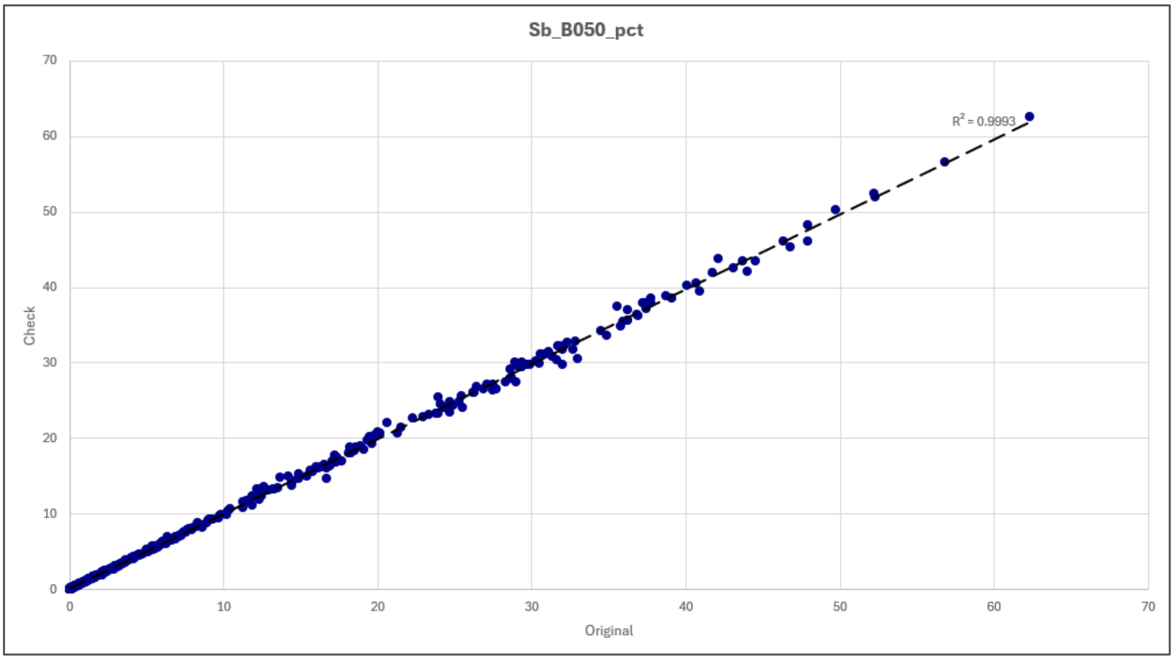


Figure 11.4 Scatter plot of On Site antimony duplicates (%)



11.7.5 Photon Assay gold versus Other Methods

From 1 January to 30 September 2025, a selection of samples routinely analysed by PA at On Site laboratory was re-analysed by FA to assess agreement between the two methods. A total of 19 paired results were available for comparison. Although the dataset is relatively small, the results demonstrate good overall agreement between PA and FA and support the reliability of PA for routine analysis.

Table 11.7: Photon assay versus fire assay

Description	On Site PA	On Site FA
Number of samples	19	19
Mean	26.20	25.17
Maximum	95.20	88.20
Minimum	0.72	0.79
Pop std dev	28.17	26.99
CV	1.07	1.07
Bias	3.93%	
Correlation Coefficient	1.00	
Percent of samples <20% RPD	94.74	
Percent of samples <35% RPD	100.00	

Notes: RPD – relatively paired difference.

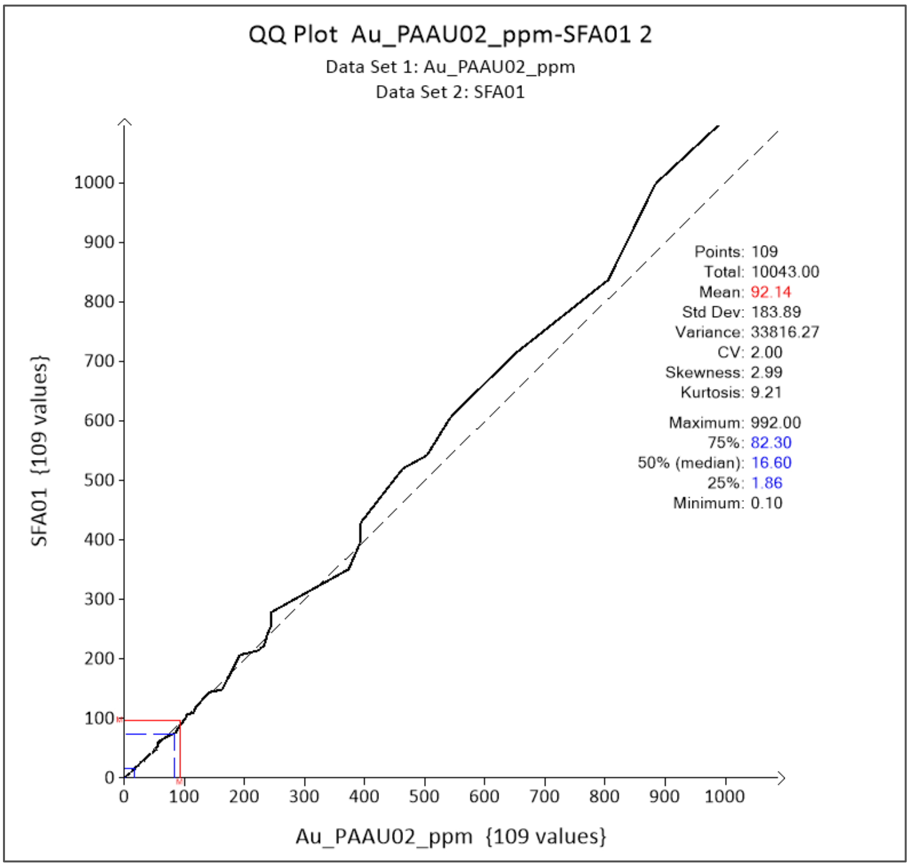
Summary of On Site PA gold results versus On Site fire assay gold results. Three samples were excluded from this comparison as they did not have primary PA gold results.

All face samples collected between September and November 2025 that were routinely analysed by PA (PAAU02) were re-assayed using screen fire assay (SFA01) to compare the two analytical methods using the same sample population. A total of 127 paired results were available for comparison. Pairs for which either method returned an Au result below 0.1 ppm, equivalent to 10 times the detection limit of 0.01 ppm Au, were excluded from the statistical analysis to reduce the high relative variability associated with near-zero results. This left 109 paired results for analysis.

Table 11.8: Photon assay versus screen fire assay

Description	On Site PA	On Site SFA
Number of samples	109	109
Mean	92.14	96.48
Maximum	992.00	1,100.00
Minimum	0.10	0.10
Pop std dev	183.89	200.32
CV	1.996	2.076
Bias	-4.71%	
Correlation Coefficient	0.9945	
Percent of samples <20% RPD	89.91	
Percent of samples <35% RPD	98.17	

Figure 11.5: QQ plot PAUU02 versus SFA01



PA showed strong agreement with SFA across the sample population, with most paired results falling within acceptable RPD limits and a high correlation between methods. Although the full dataset returned a negative mean bias, the Q-Q plot in Figure 11.5 showed that SFA and PA results were broadly consistent up to approximately 225 g/t Au, above which the relationship began to diverge. When the dataset was filtered to samples below 225 g/t Au, representing 90% of the sample population, PA showed a mean positive bias of 3.08% relative to SFA. This is consistent with the earlier PA versus FA comparison, which identified a positive PA bias of 3.93%.

11.7.6 1994–1995 Reverse circulation and diamond drilling QA/QC

The 1994–1995 dominantly RC drill holes BD001 to BD200 included field duplicates, laboratory duplicates, blanks, and samples labelled as CRMs. Upon further investigation, it was found the CRMs in use consisted of retained pulp material from 1 m intervals from previously drilled RC holes. These materials do not have independently certified values and cannot be used to reliably assess analytical accuracy. There were also clear discrepancies in the grades for the same CRM sample IDs, suggesting these were likely handled as pulp duplicates rather than consistent CRMs, but this cannot be confirmed.

A check-assay project was run in 1995 on G102 and XRF14, with G102 demonstrated to be reporting low. A set of samples was selected from previous sample pulps and these were submitted to three commercial assay laboratories: ALS Bendigo, Analabs Adelaide/Brisbane and SGS Perth.

The purpose was to check for potential underestimation of antimony assays indicated by a previous comparison undertaken by sending some samples to Analabs. The study confirmed that the ALS antimony assays, determined using the AAS technique (G102) were consistently low and significantly underestimate the actual antinomy content. Only samples that were assayed using XRF14 were in all Kendal mineral estimates. The check samples did show some differences between Analabs and SGS but these differences are small compared with the underestimation of the antimony grade.

11.8 Umpire Check-Assay Program

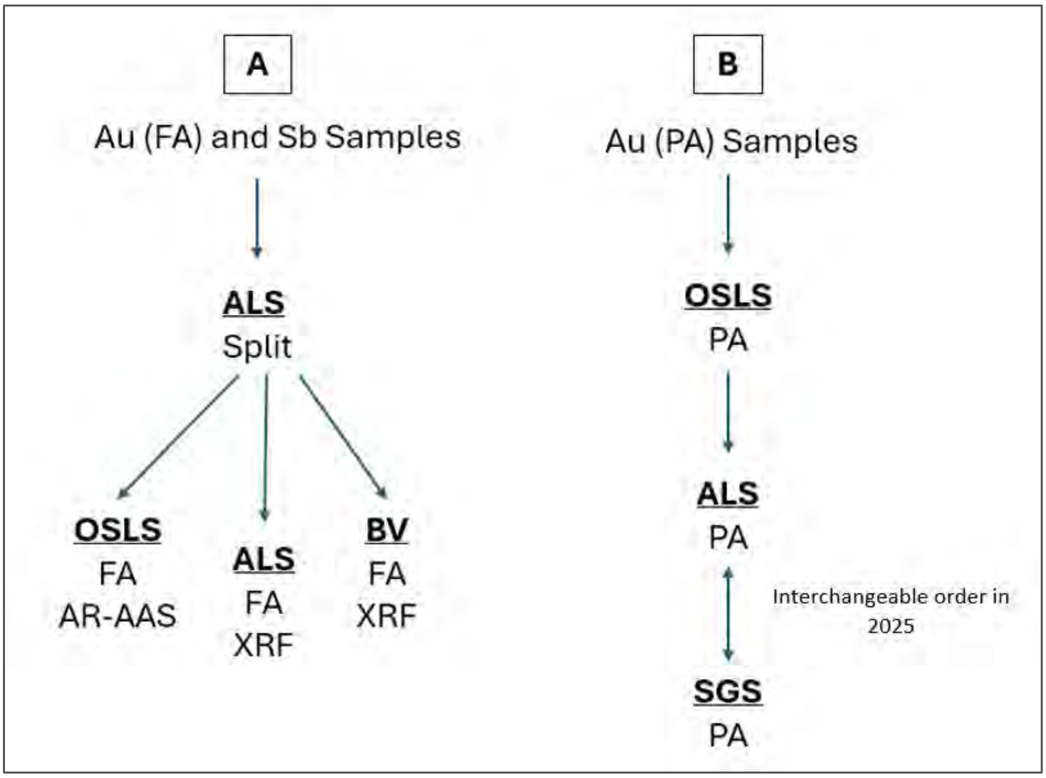
Quarterly pulp umpire laboratory check-assay programs were conducted for the reporting period, 1 January 2025 to 30 June 2026. Routine pulp samples were assayed by On Site in Bendigo before selected pulp samples were dispatched to ALS Brisbane, ALS Perth, SGS Perth and BV Perth for re-analysis of gold and antimony. Results from the check-assay have been summarised in Section 11.8.1 for the primary results and Section 11.8.2 for the alternative laboratories' CRM data.

As illustrated in Figure 11.6, check-assay programs included two main streams of testing.

Stream A had primary samples for FA and antimony analysis sent back to On Site umpire labs ALS Global and Bureau Veritas after rotary splitting at ALS Global.

Stream B had primary samples for PA analysis sent to ALS Global and SGS.

Figure 11.6 (A) Regular gold by fire assay and antimony by XRF analysis, and (B) Standalone photon assay only stream



11.8.1 Umpire Check-Assay Program – Pulp Samples

A total of 169 primary samples were re-analysed across all check-assay streams for the 1 October 2024 to 30 September 2025 period. Samples are selected at random, with the mean of samples selected targeted to be closely matching the mean of samples for the quarter under review.

From the results by the external laboratories, in the FA and antimony datasets, 19 CRMs and four primary samples were removed due to failed or anomalous testwork. From the PA dataset, no CRMs or primary samples were removed. One primary sample was deemed as a potential swap and removed from analysis based on the On Site original assay result compared to the assay result of On Site, ALS and BV check-assays.

The comparison of the results against the check-assay results are outlined in:

- Table 11.8: Gold by FA
- Table 11.9: Gold by PA
- Table 11.10: Gold by FA below 20 g/t
- Table 11.11: Antimony analysis.

Table 11.8: Gold by fire assay

Description	On Site	Check	ALS umpire	BV umpire
Number of samples	49	49	49	49
Mean	11.50	11.34	11.97	11.33
Maximum	172.00	171.00	156.5	160.43
Minimum	0.12	0.13	0.14	0.13
Population standard deviation	29.04	28.75	28.17	27.61
CV	2.53	2.54	2.35	2.44
Bias	1.38%		-2.94%	0.06%
Correlation coefficient	1.00		0.99	1.00
Percent of samples <20% RPD	94.12		86.84	92.11
Percent of samples <35% RPD	97.06		86.84	94.74

Notes: Summary of On Site original, On Site duplicate, ALS, BV, and SGS umpire check statistics.

Table 11.9: Gold by photon assay

Description	On Site original	On Site duplicate	ALS umpire	SGS umpire
Number of samples	101	101	101	101
Mean	52.60	53.01	53.69	54.53
Maximum	408.00	395.00	423.00	425.00
Minimum	0.11	0.08	0.08	0.06
Population standard deviation	89.47	89.68	92.74	93.29
CV	1.70	1.69	1.73	1.71
Bias	-0.78%		-2.07%	-2.86%
Correlation coefficient	1.00		1.00	1.00
Percent of samples <20% RPD	97.83		98.90	98.91
Percent of samples <35% RPD	100.00		98.90	100.00

Notes: Summary of On Site original, On Site duplicate, ALS, and SGS umpire check statistics.

Table 11.10: Low-level gold (<20 g/t) by fire assay

Description	On Site original	On Site duplicate	ALS umpire	BV umpire
Number of samples	42	42	42	42
Mean	2.40	2.33	2.64	2.49
Maximum	18.80	19.80	17.40	18.70
Minimum	0.12	0.13	0.14	0.13
Population standard deviation	3.54	3.55	4.01	3.87
CV	1.48	1.52	1.52	1.55
Bias	2.75%		-13.12%	-6.87%
Correlation coefficient	0.99		0.95	0.97

Description	On Site original	On Site duplicate	ALS umpire	BV umpire
Percent of samples <20% RPD	90.63		84.38	91.18
Percent of samples <35% RPD	93.75		84.38	94.12

Notes: Summary of On Site original, On Site duplicate, ALS, and BV low-level gold umpire check statistics.

Table 11.11: Antimony

Description	On Site original	On Site duplicate	ALS umpire	BV umpire
Number of samples	64	64	64	64
Mean	7.13	7.12	7.13	7.07
Maximum	56.10	53.40	55.3	55.4
Minimum	0.17	0.13	0.255	0.165
Pop standard deviation	14.34	11.61	11.52	11.53
CV	1.44	1.63	1.62	1.63
Bias	0.12%		2.53%	0.79%
Correlation Coefficient	1.00		1.00	1.00
Percent of samples <20% RPD	98.41		85.71	82.54
Percent of samples <35% RPD	98.41		96.83	96.83

Notes: Summary of On Site original versus On Site duplicate, ALS, and BV umpire check statistics.

11.8.2 Umpire Check-Assay Program – Certified Reference Materials

A total of 198 CRMs were submitted during this process, divided between the four participating laboratories. Table 11.12 details the results of this study for FA and antimony, while Table 11.13 details the PA results.

Table 11.12: Results for certified reference materials submitted to participating laboratories for umpire checks

Standard ID	Lab	Number submitted	Average Au value g/t	Average Sb value %	Au (FA) cert value g/t	Sb cert value %
MR22		24	79.35	43.95	80.94	44.42
	ALS	8	76.98	44.15	80.94	44.42
	BV	8	80.33	44.29	80.94	44.42
	OSLS	8	80.74	43.40	80.94	44.42
MR23		24	21.79	18.64	21.81	18.76
	ALS	8	21.56	18.53	21.81	18.76
	BV	8	22.23	18.74	21.81	18.76
	OSLS	8	21.59	18.64	21.81	18.76
OREAS243		6	12.48	-	12.39	-
	ALS	2	12.75	-	12.39	-
	BV	2	12.55	-	12.39	-

	OSLS	2	12.15	-	12.39	-
OREAS247		24	42.33	0.35	42.96	0.33
	ALS	8	42.26	0.33	42.96	0.33
	BV	8	42.73	0.34	42.96	0.33
	OSLS	8	41.99	0.31	42.96	0.33
OREAS290		24	2.13	0.84	2.12	0.80
	ALS	8	2.16	0.83	2.12	0.80
	BV	8	2.13	0.84	2.12	0.80
	OSLS	8	2.09	0.77	2.12	0.80
OREAS292		24	11.03	4.71	11.06	4.60
	ALS	8	10.95	4.63	11.06	4.60
	BV	8	11.05	4.85	11.06	4.60
	OSLS	8	11.09	4.65	11.06	4.60

Table 11.13: Photon assay results for the certified reference materials submitted to participating umpire check-assay laboratories

Standard ID	Lab	Number submitted	Average Au (PA) value g/t	Au (PA) cert value g/t	Au (PA) SD
OREAS239b		24	3.66	3.70	0.12
	ALS	8	3.60	3.70	0.12
	OSLS	8	3.70	3.70	0.12
	SGS	8	3.68	3.70	0.12
OREAS243		24	12.36	12.59	0.24
	ALS	8	12.26	12.59	0.24
	OSLS	8	12.30	12.59	0.24
	SGS	8	12.53	12.59	0.24
OREAS247		24	43.27	43.77	0.88
	ALS	8	43.17	43.77	0.88
	OSLS	8	43.04	43.77	0.88
	SGS	8	43.60	43.77	0.88

Notes: OSLS – On Site Laboratory Services; SD – standard deviation.

11.8.3 Umpire Check-Assay Discussion

The umpire check-assay results demonstrate good agreement between the On Site laboratory and the participating umpire laboratories for both gold and antimony. Gold FA and PA results show strong correlation and low bias, supporting the reliability of the routine assay data.

For antimony, check-assay results confirm the reliability of the routine assays for mineralised and ore-grade samples with acceptable bias and acceptable interlab RPD performance.

11.9 Sample Transport and Security

The Brunswick and Augusta sites are securely gated, with video surveillance and time stamped swipe card access. This included areas used for storage and collection of drill and face samples.

All sample bags that contained sampled material were placed in heavy duty plastic bags, along with the sample submission sheet. The plastic bags were sealed with a metal twisting wire or heavy-duty plastic cable ties. This process was applied to both underground channel samples and diamond drill core samples.

Samples were delivered in 2025 by a private contractor and in 2026 by On Site staff or directly by Alkane Resources staff on a daily basis to On Site in Bendigo, where they were accepted by On Site laboratory personnel.

Returned material sample pulps from the On Site laboratory remained in a secure On Site warehouse with a scheduled return to Alkane Resources for storage in secured and monitored shipping containers, wrapped in plastic.

11.10 Qualified Person's Opinion

The QP notes that only minor issues relating to CRM and check-assay performance have been identified during review of the assay QA/QC results. The QP considers that the assay QA/QC results demonstrate acceptable precision and accuracy for use in the Mineral Resource Estimation.

12 Data Verification

In fulfillment of the NI43-101 requirements, SRK Geologist and QP Cael Gniel completed an inspection of the Property on 21 January 2026. In addition to the site visit, the QP has previously worked as an exploration, mine and resource geologist at Costerfield from 2012 to 2018. The Property inspection focused on a review of the geological setting and mineralisation style, as well as the processes and procedures in place to ensure that they are at an acceptable standard for inclusion in a Mineral Resource Estimate.

The QP completed/reviewed the following activities during or immediately following the Property inspection:

- Source data validation checks for 5% of the drill holes completed within the 12 months since the last Mineral Resource Estimate, with a focus on verifying the gold and antimony assays.
- Locational data storage and management processes, including:
  - collar and downhole survey methods, storage and data entry processes
- Drill core logging and sampling processes, including:
  - core processing procedures from initial mark-up through to sample selection and sampling
  - inspection and verification of some current resource definition holes and their integration into the geological model
- Storage and security of the core processing facility.
- Chain of custody process for core samples to the laboratory.
- Assay data accuracy, precision and data management process, including:
  - sampling and analytical protocols in place
  - QA/QC reports and raw results
  - underground inspection to review face mapping and sampling processes
- Discussion of the geological interpretation and key changes since the previous Mineral Resource Estimate.
- Discussion regarding the movement of stockpiles and the impacts on reconciliation.

The following observations have been made from the property inspection and subsequent data checks:

- Source data checks of the assays revealed no errors for the 5% of the samples checked.
- No issues were identified in the core logging procedures and subsequent integration of new data into the geological model.
- The chain of custody protocols in place at the time of the visit were adequate.

The QP considers that the qualitative and quantitative geological data used to inform the Costerfield Property Mineral Resource Estimates have been collected, validated and stored in line with industry best practice as defined in the CIM *Mineral Exploration Best Practice Guidelines* (CIM, 2018) and the CIM *Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines* (CIM, 2019). The QP considers that the data are suitable for use in the estimation of Mineral Resources.

13 Mineral Processing and Metallurgical Testing

13.1 Metallurgical Testing

Metallurgical testwork uses a standard characterisation flowsheet which is unchanged to allow for a comparative assessment of each deposit. Over the years, extensive metallurgical testwork has been undertaken on samples taken from the Augusta deposit from 2004, the Cuffley deposit from 2012, the Brunswick deposit from 2016, the Youle deposit from 2018, the Shepherd deposit in 2022 and the Brunswick South deposit in 2026. Historical operating data now validate the testwork from most of these deposits, with the exception of Brunswick South. Brunswick South has structural continuity with the Brunswick deposit but no grade continuity and is considered geologically similar to Brunswick.

When required, mill feed blend characterisation and metallurgical tests are undertaken by Alkane Resources in order to verify the expected behaviour of new domains, lithology types, lodes, or deposits. The following reputable, accredited, and appropriately experienced metallurgical laboratories have been involved with various aspects of the original metallurgical evaluation and ongoing testwork:

- ALS Metallurgy (previously Metcon Laboratories) – New South Wales
- Amdel Mineral Services Laboratory (now Bureau Veritas Minerals) – South Australia
- Australian Minmet Metallurgical Laboratories (AMML) – New South Wales.

The Brunswick Processing Plant has been operated by Mandalay Resources since late 2009, with several years of operating data on the Cuffley/Augusta ore blend, on the Brunswick ore from Q3 2018, the Youle underground ore from late Q3 2019, and the Shepherd orebody from Q1 2022. In 2025, Alkane Resources and Mandalay Resources merged, continuing under the name Alkane Resources.

A blend of the Youle and Shepherd deposits now provides the predominant feed to the plant. As a result, the metallurgical testwork for most deposits has been replaced by actual plant performance. The use of comprehensive historical operating data is a more accurate basis upon which to forecast future metallurgical behaviour when processing similar ores.

Production for the financial year (FY) 2026/2027 will be predominantly sourced from Youle (over 50%) and Augusta/Cuffley, with minor contributions from Brunswick, Kendal, Alison and Brunswick South.

Kendal is a sub-domain of the Youle lode and sits above the main Youle Lode, representing the mineralisation offset below the no. 3 fault. It was part of the first Youle material mined in 2020 and 2021. Therefore, it is considered to have similar metallurgical performance to the main Youle ores and does not require separate metallurgical testing. Alison is a continuation of the Cuffley deposit underneath the historical workings and has been mined and processed before under the Cuffley designation, therefore separate metallurgical testwork is also not required for this zone.

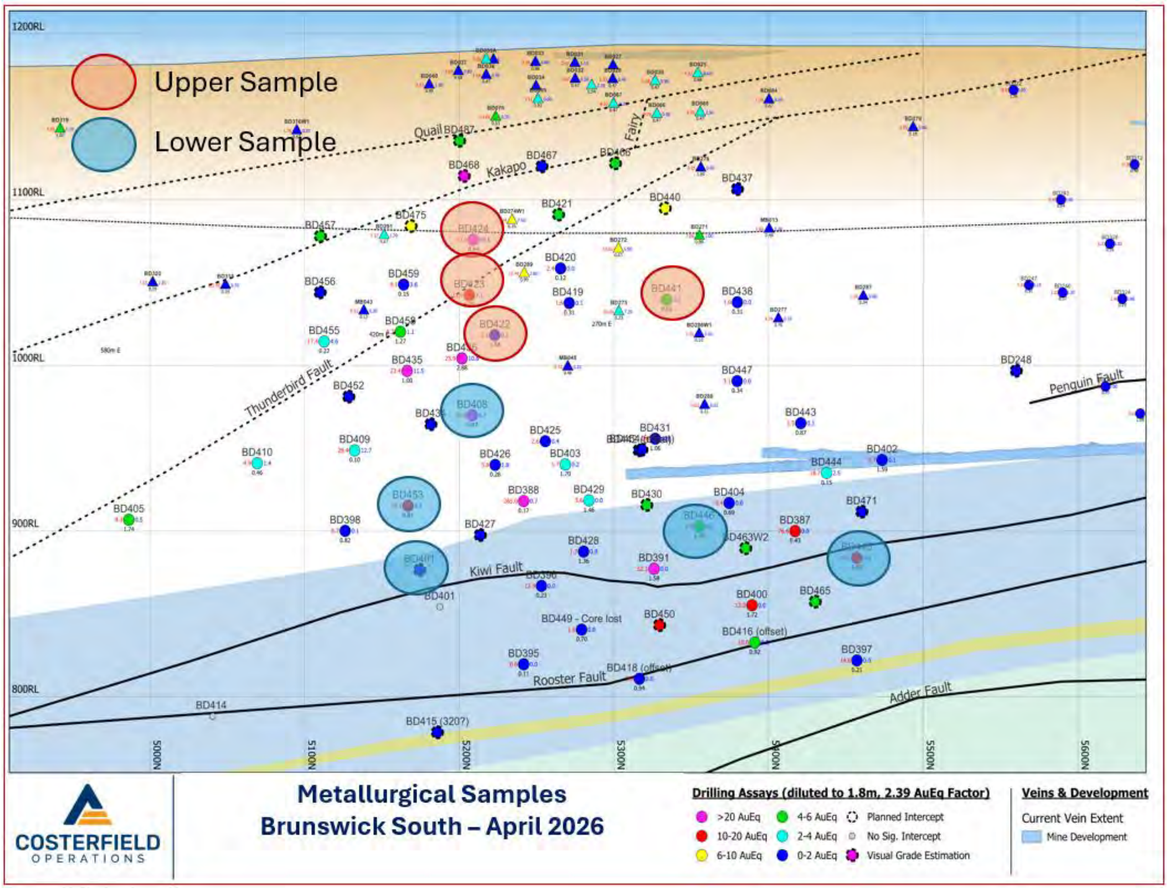
The plant data allow antimony and gold recovery relationships to be developed and used to forecast future recoveries as well as forecasting plant throughput capacity.

13.1.1 Metallurgical Testwork Recovery

A summary of metallurgical characterisation testwork is provided in Table 13.1. This testwork remains valid. Testing of the Brunswick Main ores had indicated a decrease in gravity gold recovery, flotation antimony and gold recovery and flotation kinetics. The full extent of the recovery impacts of the Brunswick ores are now understood after processing this ore as part of the overall feed blend between 2018 and 2020. The Brunswick ores had been largely depleted by the end of 2020; only small parcels have been processed since.

Samples from Brunswick South, and designated Brunswick Upper and Brunswick Lower, were selected for metallurgical testing at AMML in 2026. Figure 13.1 illustrates the location of these samples in long section.

Figure 13.1: Brunswick South sample locations



Historical testwork results are presented in Table 13.1, along with the most recent Brunswick South testwork. Gravity gold recoveries for Brunswick Upper and Brunswick Lower were 68% and 45%, respectively, with overall gold recoveries of 95% and 92%, respectively. Overall gold recovery is lower than in the Youle and Shepherd samples, and similar to Brunswick Kiwi. Arsenic levels are elevated at 0.12–0.22% in feed, again similar to Brunswick Kiwi, which suggests some arsenopyrite associated gold that is not being recovered in flotation.

Table 13.1: Historical metallurgical testwork

Variable	Brunswick Main	Brunswick Kiwi	Cuffley LG 0358-1	Cuffley HG M2569	Youle low grade	Youle high grade	Shepherd	Brunswick S Upper	Brunswick S Lower
BBMWi	12.9	14.3	16.0	16.0	16.1	15.2	18.6	14.0	14.9
Feed Au g/t	8.65	11.9	9	17.7	4.89	13	7.98	2.83	7.77
Feed Sb %	3.31	3.88	3	7.98	2.56	5.1	0.12	1.31	1.08
Feed As %	0.5	0.13	0.12	0.07	0.02	0.03	0.03	0.12	0.22
Concentrate As %	3.2	0.87	0.98	0.002	0.22	0.25	0.42	1.36[2]	2.21
Gravity Au Rec. %	22.1–25.5	30	41	54	43	57	71	68[2]	45
Recovery Au %	87.1	93.7	98	95	96	97	99	95[2]	92
Recovery Sb %	98.3	99	99	95	99	99	N/A[1]	98[2]	96

Notes:

[1] The Sb head grade of this sample at 0.12% Sb is not representative of ore grade and was far too low to make saleable Sb concentrate grade.

[2] P_{80} of 75 µm data presented for this sample due to poor reconciliation between assay and calculated Au head assays at a P_{80} of 53 µm.

As Brunswick South samples have shown similar lower overall gold recovery to the Brunswick Main and Brunswick Kiwi samples, it is considered that plant performance for Brunswick South will be similar to previously processed Brunswick ores.

Although both Brunswick South samples produced elevated arsenic grades in the antimony-gold concentrate, this is not considered to be an issue for saleability or payability of the product. In the current off-take agreement, there are no arsenic penalties below 0.5% in the concentrate. Arsenic grades between 0.5% and 2.0% incur a penalty of US$2/t concentrate for each 0.1% above 0.5%. This increases to US$2.5/t between 2.0% arsenic and 3.0% but it remains saleable. As a gold/antimony concentrate, it is not subject to the same arsenic grade importation limits that some base metal concentrates are imposed with. With proper management, the penalty element payments can be minimised and are not a risk to the ongoing operation.

The overall gold and antimony recoveries for the Brunswick South samples are relatively insensitive to a grind size between a P_{80} of 38 µm and 75 µm. The gravity gold recovery has increased in the LoM forecast to 65% to account for process improvements and the continued processing of Youle and Shepherd ores, along with the higher gravity recovery from Brunswick South compared to the Brunswick Main and Kiwi samples.

The Shepherd Bond Ball Mill Work Index (BBMWi) test returned a higher value of 18.6 kWh/t, compared against Youle values of 16.1 kWh/t for the low-grade sample and 15.2 kWh/t for the high-grade sample. During actual operations, the Shepherd ore throughput has not been limited by ore hardness.

The Brunswick South Upper and Brunswick South Lower BBMWi values were 14.0 kWh/t and 14.9 KWh/t, respectively, which is very similar to the Brunswick Kiwi value of 14.3 kWh/t. Therefore, it is considered that higher throughput rates could be achieved from Brunswick South ores relative to Youle and Shepherd, if desired.

The FY 2026/2027 forecast is for approximately 83,000 dry metric tonnes (dmt) of Youle ore, 42,000 dmt of Augusta/Cuffley remnant ore, and the remainder from Brunswick, Kendal, Alison and Brunswick South. Brunswick and Brunswick South will continue to represent a very small percentage of the feed, at less than 10%. The metallurgical testwork and historical performance of the Youle zone is of most importance in the short term, along with the Augusta/Cuffley lodes, all of which have been successfully processed before.

Over the longer-term LoM, Brunswick and Brunswick South will represent approximately 25% of the mill feed.

13.2 Ore Blend Effect on Throughput and Recovery Forecasts

From January 2014, Cuffley ores were processed in a blend with Augusta ores. Prior to this, only Augusta ore was processed. The Cuffley ores and remaining Augusta ores were depleted by January 2020, replaced gradually by Brunswick ore. The proportion of Brunswick ores reduced significantly from the beginning of 2020. Since this time, Youle and Shepherd have dominated the feed blend.

The historical blend ratios of Augusta, Cuffley, Brunswick, Youle and Shepherd ores and the proposed forward LoM blend are summarised below:

- 2014: 44% Augusta and 56% Cuffley
- 2015: 42% Augusta and 58% Cuffley
- 2016: 52% Augusta and 48% Cuffley
- 2017: 64% Augusta and 36% Cuffley
- 2018: 72% Augusta, 21% Cuffley and 7% Brunswick (Brunswick from Q3)
- 2019: 38% Augusta, 5% Cuffley, 47% Brunswick and 10% Youle
- 2020: 14% Brunswick and 86% Youle
- 2021: 1% Brunswick and 99% Youle
- 2022: 0.5% Shepherd and 99.5% Youle
- 2023: 39% Shepherd and 61% Youle
- 2024: 100% Shepherd/Youle
- 2025 to June 2026: 51.0% Youle, 43.6% Shepherd,1.7% Cuffley, 2.2% Brunswick and 1.5% Kendal
- LoM: 27% Augusta/Cuffley, 22% Youle, 19% Kendal, 19% Brunswick South, 6% Brunswick and 6% Alison.

It is noted that during 2019 there was a deterioration in metallurgical performance, particularly for gold recovery. This was due to the introduction of Brunswick ore as the dominant component of the mill feed blend.

The processing plant last treated significant Brunswick ore in 2020, approximately 14% for that year, which was prior to most of the recent plant improvements. There have been a few changes in operating strategy which will likely improve the gold and antimony recovery from Brunswick ores compared to previous campaigns, including:

- Redirection of the CavTube Cleaner column concentrate in March 2025 to cleaner tail or cleaner concentrate for upgrading to produce a combined final concentrate.
- Regular use of a StackCell as a rougher or recleaner to provide additional residence time and upgrading capacity.
- Installation of an alternative centrifugal gravity separator in the gold room to treat table tails and recover additional fine gold in Q3 2026 (January 2026).
- Additional dosing points of copper sulfate added to activate other sulfide minerals to decrease gold losses to tails from Q2 2024, in addition to the lead nitrate already used to activate stibnite.
- Renegotiation of concentrate terms with the target antimony concentrate grade dropping from 51.5% Sb to 45% Sb in Q1 2024. In 2025, terms were negotiated again for the 2026 calendar year, with a concentrate grade target of 40% Sb. This allows additional antimony, plus sulfide associated and slow floating free gold to be recovered to the antimony concentrate.

The plant feed will be dominated in the short term by the Youle and Kendal lodes, which are considered metallurgically equivalent. Remnant material from Augusta/Cuffley will continue to be fed, along with ore from the Alison lode. Brunswick and Brunswick South will be blended into the mill feed at approximately 25% of the LoM production.

As metallurgical testwork has demonstrated lower overall gold recoveries from Brunswick South ore, similar to previous Brunswick ore tested, separate algorithms have been developed to cater for Brunswick/Brunswick South ores and other ore zones.

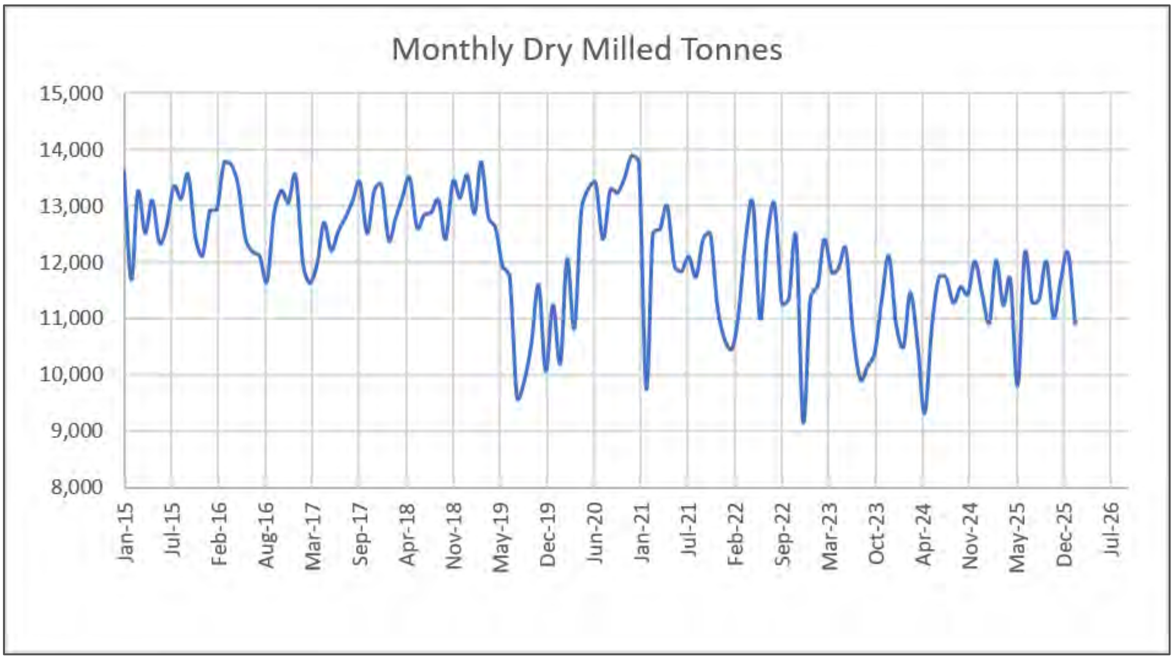
Brunswick algorithms have been based on the period March 2019 to October 2019 where Brunswick ore provided a significant proportion of the mill feed. Although it is probable that plant improvements will result in improved performance over baseline 2019 recoveries, the magnitude of the improvement cannot be quantified until Brunswick or Brunswick South material is treated again in quantity. Brunswick algorithms are therefore considered somewhat conservative.

Algorithms for the other lodes have been developed based on operating data from January 2022 to February 2026, which encompasses periods where Youle and Shepherd ores are predominant.

13.3 Throughput

Historical throughput is considered to be the best indicator of future forecast throughput when processing similar ores. Through ongoing optimisation and relatively minor, low capital cost debottlenecking projects, the capacity of the Brunswick Concentrator has been increased to the current capacity which can consistently exceed 10,000 t/month and has regularly approached 12,000 t/month. Annual production data from 2015 to 2026 demonstrate this rate can be consistently achieved as presented in Figure 13.2.

Figure 13.2: Historical Brunswick Processing Plant throughput – 2014 to 2025



With mining production rates marginally exceeding processing throughput in recent years, there is currently approximately 11,000 t stored on the ROM pad. A conscious decision has been made to maintain a crushed ore stockpile (COS) that will provide a comfortable buffer for any disruption to mining and allow for more stable mill operations. Budgeted mine production is just above mill throughput for 2026.

The mill capacity still exceeds the forecast LoM production rate of approximately 11,000 t/month. The forecast processing rates are therefore considered to be justified and are well supported by historical production. No other changes are expected that would impact the scheduled throughput such as increasing ore hardness or a reduction to the target grind size P_{80} of 53 µm. At this rate, the plant will be operating marginally below maximum capacity. This provides potential modest production upside if mining production rates increase.

13.4 Metallurgical Recovery

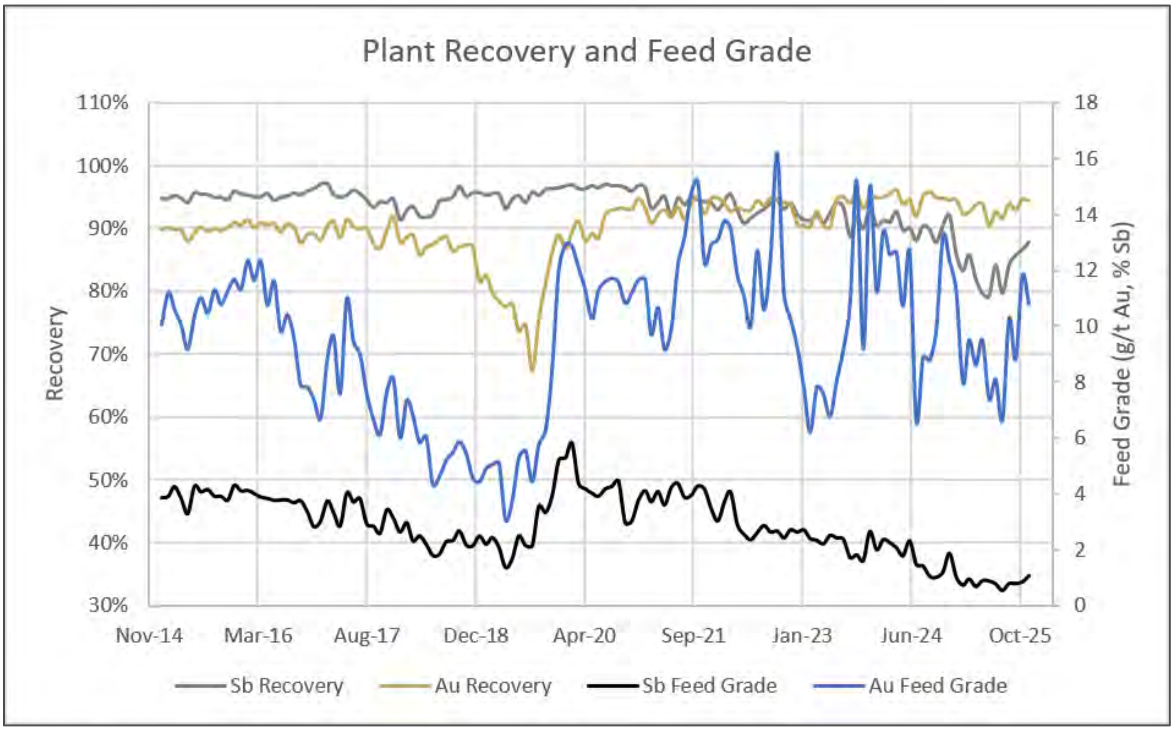
There is a relationship between the plant feed head grade and the recovery for both gold and antimony. This is a common occurrence across flotation type concentrators as it is a function of having a relatively constant tail grade. Over the years, the Costerfield Operation has shown these relationships to be generally robust and effective in predicting both the antimony and total gold recovery.

Forecast antimony and gold recoveries used for LoM planning, budgeting and economic modelling are based on historical feed grades and metallurgical recovery relationships developed using historical production data. This is the best method of forecasting recovery when processing a similar feed blend. These algorithms are updated annually. The latest update uses the recovery data between January 2022 and February 2026 for non-Brunswick ores.

A period of lower gold recovery is illustrated in Figure 13.3. This deterioration was a direct result of introducing the Brunswick underground ore into the feed blend. The subsequent improvement was due to the depletion of Brunswick ores and the introduction of Youle into the mill feed blend, particularly from mid-2020 (see Figure 13.2). The Brunswick ore had a lower gold feed grade, lower gravity recovery, and presented further challenges to the gold recovery due to the gold mineral associations, including those with arsenopyrite, and slower flotation kinetics.

Reconciled plant recoveries for Q2 2026 (October 2025 to December 2025 inclusive) were 86.77% and 93.94% for antimony and gold, respectively, reflecting the lower antimony head grade treated compared to historical ores. Gold recoveries have been consistently above 90% from 2020 since the introduction of Youle and Shepherd ores.

Figure 13.3: Antimony and gold grade versus recovery trends – January 2015 to December 2025



13.4.1 Antimony Recovery

The antimony recovery forecast is based on algorithms using the relationship between the antimony feed grade and metallurgical recovery using historical operating data. The most recent algorithm for non-Brunswick ores incorporates daily plant operating data from January 2022 to February 2026. The antimony recovery algorithms used for mine planning, and process budgeting and forecasting are provided for non-Brunswick zones and Brunswick zones.

The antimony recovery equation for the non-Brunswick zones is a hybrid logistic and logarithmic function that was modelled using Solver. It is capped at 99% to cater for high-grade blocks in the geological model.

$$y = \frac{L}{1+e^{-k(x)}} + c^{*}ln(x)$$

y = Sb recovery

Cap at 99%

where x = head grade

L =	*86.3833*
k =	*5.47267*
c =	*6.60925*

The antimony recovery equation for the Brunswick zone is a logistic function that was modelled using Solver. No cap is needed for a logistic-only model as it plateaus at high grades.

$$y = \frac{L}{1+e^{-k(x-x_0)}} + c$$

y = Sb recovery

where x = head grade

L =	*26.84671*
k =	*4.091693*
x0 =	*0.773807*
c =	*68.51877*

Recent historical antimony recoveries for the LoM were:

- 2016 actual Sb recovery = 95.4% at a 3.7% Sb feed grade
- 2017 actual Sb recovery = 95.3% at a 3.3% Sb feed grade
- 2018 actual Sb recovery = 93.8% at a 2.3% Sb feed grade
- 2019 actual Sb recovery = 95.3% at a 3.9% Sb feed grade
- 2020 actual Sb recovery = 96% at a 3.03% Sb feed grade
- 2021 actual Sb recovery = 94.6% at a 3.97% Sb feed grade
- 2022 Sb recovery = 94.1% at a 2.95% Sb feed grade
- 2023 Sb Recovery = 92.1% at a 2.3% Sb feed grade
- 2024 Sb Recovery = 90.8 % at a 1.73% Sb feed grade
- 2025 Sb Recovery = 84.3 % at a 0.84% Sb feed grade.

Antimony head grades have been trending downwards over time. In 2022, the concentrate grade produced was 53% Sb, and in 2023, the grade produced was 51.5% Sb. A reduction to 45% Sb was incorporated into 2024 operations, and to 40% Sb in 2025 after the completion of concentrate sale contract negotiations. A flotation concentrate grade of 40% Sb is incorporated in the LoM plan. The operating aim going forward is to maximise recovery from the CavTubes while ensuring that the concentrate grade stays above 40% as this is the minimum grade in the concentrate offtake agreements. A StackCell can be used as a secondary cleaner during times of low antimony head grade to ensure payables are met. The forward forecast concentrate grade is 40% Sb and remains the budgeted target.

There is a high degree of confidence in the relationship and the associated antimony recovery algorithm across a range of feed grades. It is supported by historical operating data and metallurgical testwork. It provides the most reliable method of estimating the antimony recovery at variable head grades assuming a constant final antimony concentrate grade of 40%, the value used in the forward LoM plan.

13.4.2 Gold Recovery

The gold in feed reports to the gravity gold concentrate and to the flotation concentrate, together making up the overall gold recovery. Historically, the total gold recovery has been relatively consistent and independent of gravity recovery, i.e. the gold not recovered initially through the gravity circuit is recovered through flotation. Therefore, the difference in the calculated gravity gold recovery and overall recovery is apportioned to the flotation circuit.

It was determined that the most appropriate time period for the updated algorithm would be from January 2022 to February 2026 when treating predominantly Youle and Shepherd ores.

The gold recovery equation for the non-Brunswick zones is a logistic function that was modelled using Solver. No cap is needed for a logistic-only model as it plateaus at high grades.

$$y = \frac{L}{1+e^{-k(x)}} + c$$

L	*22.1649*
k	*0.3446*
c	*72.5835*

y = Au recovery and x = head grade in g/t

The gold recovery equation for the Brunswick zones is a logarithmic function, which is capped at 95%.

The updated relationship is presented below:

y = 7.0065*ln(x) + 64.811	*a*	*7.0065*
y = a*ln(x) + c	*c*	*64.811*
Cap at 95%		

y = Au recovery and x = head grade in g/t

The gold recovery data used to develop the non-Brunswick algorithms for LoM recovery forecasting are provided below:

- January 2022 to February 2026
- Total gold recovery 93.5%
- Gravity recovery 63.5%
- 10.5 g/t Au head grade.

The gravity gold recovery shows a level of variability and has increased from 40–55% Au (absolute) to 60–70% Au (absolute). This gravity gold increase has occurred through plant recovery improvements and from the introduction of Shepherd ore into the feed blend. A nominal gravity gold recovery factor of 65% is used for forecasting purposes as the operating data variability complicates the application of a more sophisticated gravity gold recovery relationship. It is supported by recent operating data and verified by metallurgical testwork. It provides the most reliable method of estimating the gold recovery at variable head grades, particularly when gravity gold is involved.

13.4.3 Circuit Upgrades

Some upgrades have been made to improve throughput rate, gravity and flotation recovery since the last NI 43-101 report:

- An additional conveyor and tunnel feeder system, with new mill feed chute to accommodate this change, have been installed and are now operational.
- An alternative centrifugal gravity separator bowl has been purchased and installed with the premise of recovering finer gold.
- The StackCells can be run as roughers or recleaners to provide either additional flotation residence time or upgrade the flotation concentrate as required. The separate concentrate from the column cells is now combined with the main flotation concentrate to provide one saleable antimony concentrate product.

In addition, ongoing sustaining capital initiatives are in place to maintain plant and infrastructure in good working order.

14 Mineral Resource Estimates

Gold and antimony grades, and lode thicknesses were estimated using the 2D accumulation estimation method for all lodes. This method has been discussed in Bertoli et al. (2003), and is considered by the QP to be more suitable for modelling narrow vein systems than conventional 3D block grade estimation due to its ability to more accurately model thin tabular geometry. The 2D accumulation method has remained the preferred Mineral Resource Estimation methodology for the Costerfield Property lodes since 2008 (AMC, 2008) and is often called a seam-model estimation method.

The 2D accumulation method requires that gold and antimony grades be multiplied by the true thickness of the intersection to generate variables referred to as accumulations or accumulated grades, measured in gram-metres or percent-metres. This method assigns weights to composites of different lengths during estimation. Estimated gold and antimony block grades are then back calculated from the estimated accumulated block grade by dividing by the estimated true vein thickness.

For this 2026 Mineral Resource update only, those lode models that feature new drilling, face sampling and assay data and/or revised geological interpretation have been re-estimated. The focus of mining, exploration and hence the estimations during 2025 and 2026 were:

- Augusta: N and P Lodes (40 and 50 series models)
- Cuffley (200 series models)
- Brunswick (300 series models)
- Sub King Cobra (400 series models)
- Youle and Kendal (500 series models)
- Shepherd (600 series models)
- True Blue (700 series models).

Cut-off grade, AuEq factor, (RPEEE assessment, and sterilisation were updated on all current and historical models.

14.1 Diamond Drill Hole and Underground Face Sample Statistics

The resource estimation was undertaken on full-length composites of vein intercepts with no residuals for both face samples and drill hole samples. In wide vein areas, mid zones were routinely sampled between vein material, with any unsampled zones given a waste value equal to one-tenth detection limit.

Unweighted statistics for the full-length composited gold grades, antimony grades, and true thickness for Brunswick South (320), Shepherd East (600), Kendal (501) and True Blue (700) are presented in Table 14.1. These models represent the dominant focus of mining and exploration for the year.

Table 14.1: Full-length composited face and diamond drilling sample statistics – uncapped

Lode	Zone	Type	Variable	No. of Composites	Min	Max	Mean	CV
Brunswick South	320	Drill hole	AU	111	0.01	265	13.23	2.26
			SB		0.001	33.28	2.37	2.22
			TRUETHK		0.074	3.77	0.6	1.05
Kendal	501	Drill hole	AU	72	0.001	151	14.92	1.82
			SB		0.001	50.5	9.31	1.26
			TRUETHK		0.066	1.78	0.45	0.97
		Face sample	AU	45	0.15	650	46.65	2.21
			SB		0.03	66.4	23.96	0.88
			TRUETHK		0.03	1.39	0.29	1.05
Shepherd East	600	Drill hole	AU	194	0.001	829.47	38.31	2.56
			SB		0.001	52.38	1.87	3.6
			TRUETHK		0.019	2.51	0.34	1.11
		Face sample	AU	1355	0.001	1,830.00	78.95	1.69
			SB		0.001	64.2	7.37	2.03
			TRUETHK		0.005	2.51	0.3	0.98
True Blue	700	Drill hole	AU	48	0.001	115	12.75	1.81
			SB		0.001	25.4	5.49	1.22
			TRUETHK		0.075	3.48	0.42	1.37

The data shown in Table 14.1 indicate that the unweighted average gold and antimony grades are higher within the face sample data than the drill holes. This is attributed to the following factors:

1. Face sample data are collected representatively within ore drives; however, these ore drives exist only in areas of the deposit that are deemed economically viable. Therefore, the average grade of these samples is higher than that of the drilling data which include intercepts within areas that are sub-economic.
2. Separation between face samples can be as little as a production cut of 1.8 m versus the ~40 m indicated spacing for drilling, leading to highly clustered data in economic areas.
3. Drill core is sampled at an angle perpendicular to the long axis of the core rather than along the boundary of the targeted vein. The sample is taken so that the entire vein is within the sample, and therefore, there is commonly a wedge of waste rock that is included with the lode sample. During face sampling, the material is only collected within the vein boundary. This difference in sampling manifests as proportional lower average grades and higher average widths within drill data when compared to face sample data.

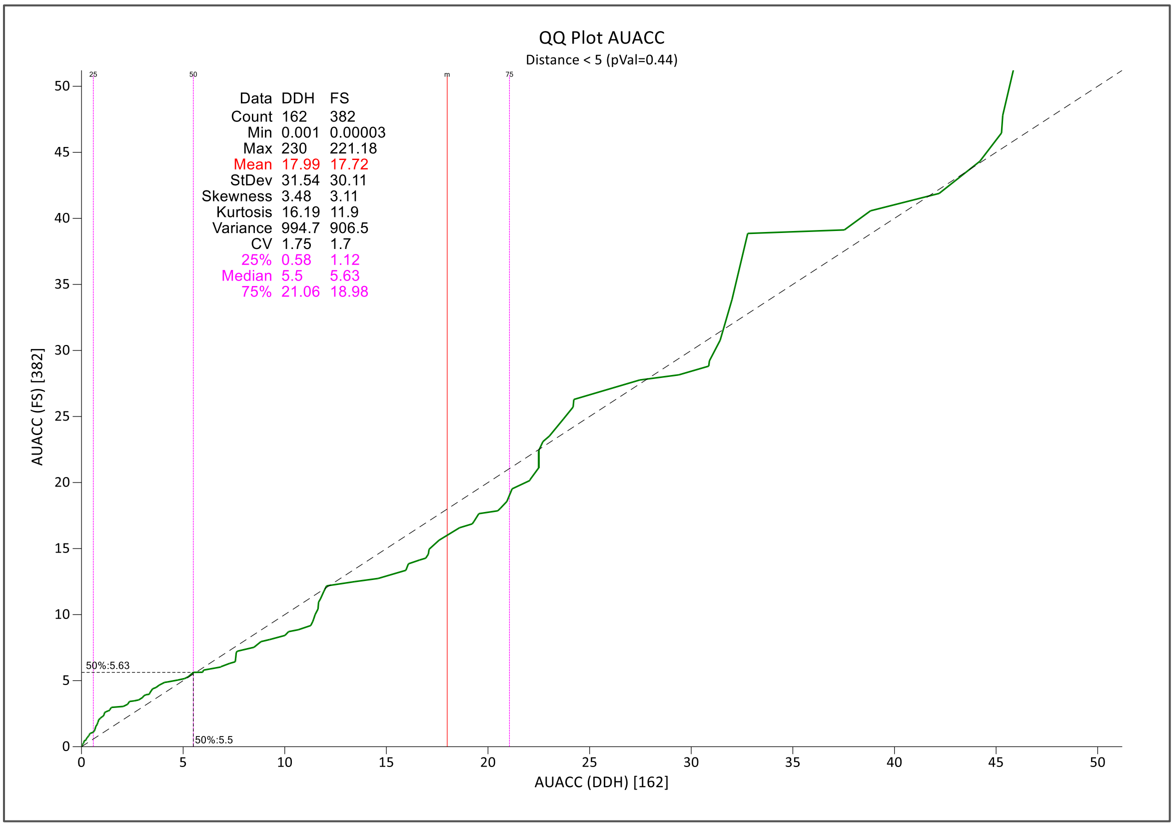
A comparison of face samples and drill holes was completed for the Shepherd veins (600, 611, 620, 621, 622) that were the dominant development focus for 2025 and will be a dominant production area for 2026–2027. This was achieved by restricting the face sample dataset to only include face samples within a 5 m diameter of a drill hole intersection, approximating half level separation and spatially close data.

Results for face sampling in Shepherd show a minor positive bias in drill hole grades in Au-Accumulation (Figure 14.1), with generally good alignment through the mean and 25–75% range of data, and a bias to face samples at high range Au-Accumulation.

Sb-Accumulation (Figure 14.2) shows a positive bias towards drill holes at higher Sb-Accumulation ranges, face samples at lower ranges, but an overall good agreement in mean and the 25%, 50% and 75% ranges. The data presented were filtered for >0.1% Sb-accumulation in drill holes to compare the zones where antimony was present. This filter is required due to the gold-only nature of much of Shepherd.

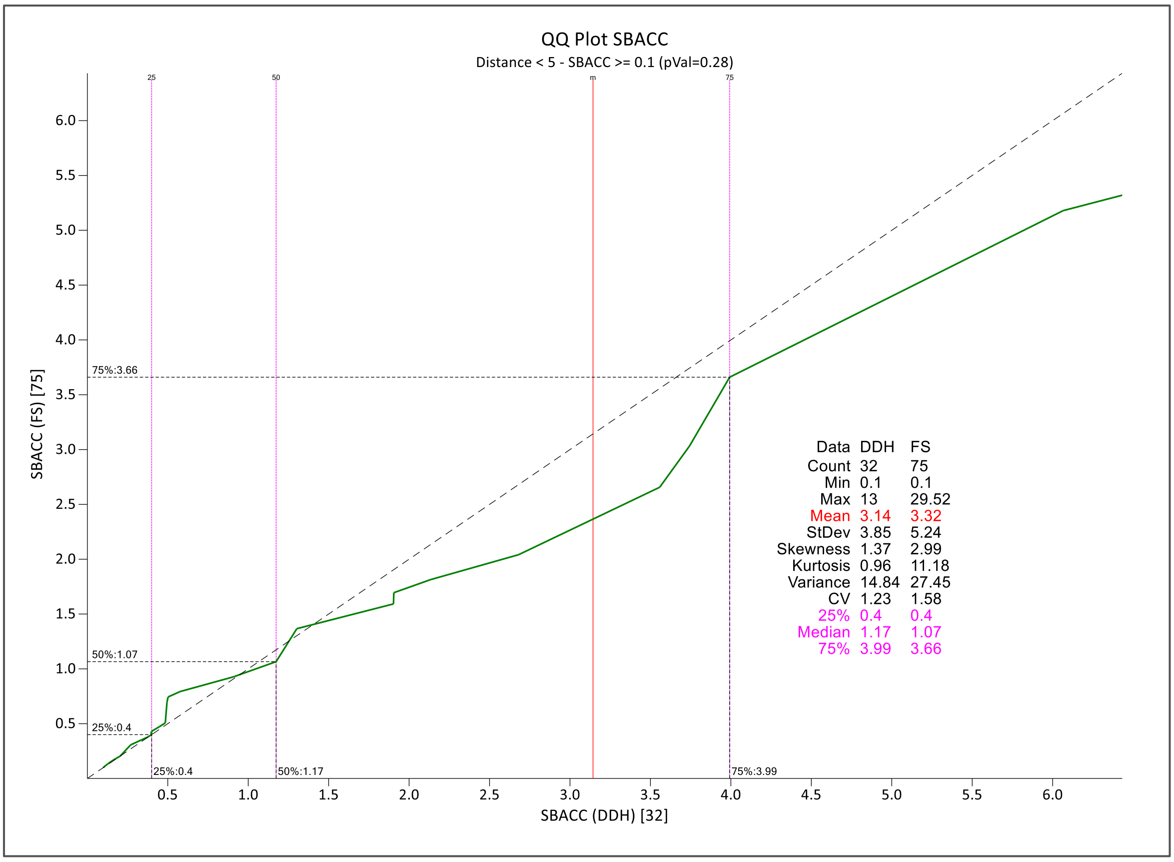
True thickness of intersections displayed the reverse bias for the reasons outlined in point three above, with a positive bias at low widths, changing to a negative bias at a true thickness above one metre thickness (Figure 14.3).

Figure 14.1: Q-Q plot of Au-Accumulation comparisons of drill hole data and face sample data



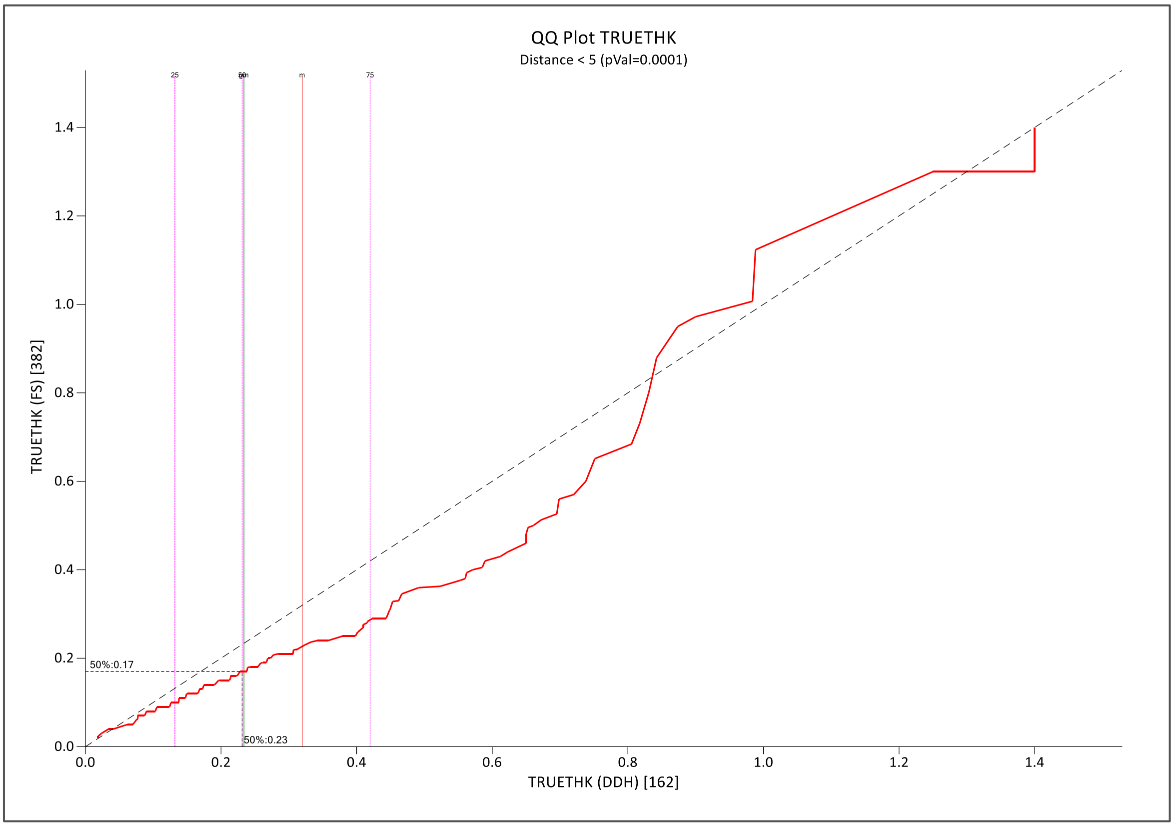
Notes: Data for major Shepherd veins (600, 611, 620, 621, 622).

Figure 14.2: Log Q-Q plot of Sb-Accumulation comparisons of drill hole data and face sample data



Notes: Data for major Shepherd veins (600, 611, 620, 621, 622), filtered to >0.1% diamond drill holes to review Sb present domains.

Figure 14.3: Q-Q plot of true-thickness comparisons of drill hole data and face sample data



Notes: Data for major Shepherd veins (600, 611, 620, 621, 622).

The QP considers that at grades and thicknesses of economic interest, the small positive biases seen in the grade accumulation variables and negative bias seen in thickness variable in the face samples relative to the drill hole samples are not material and support the combination of these two datasets for the purposes of Mineral Resource Estimation.

14.2 Geological Interpretation and Domaining

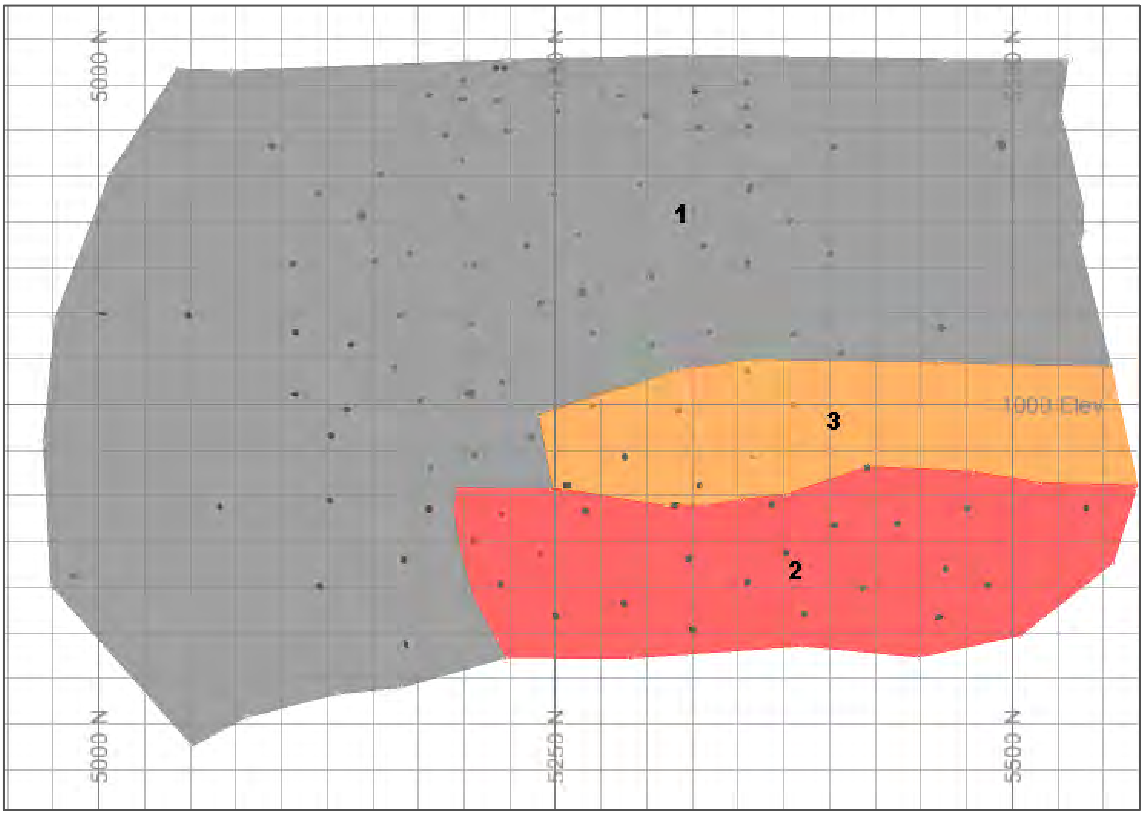
Data and observations from drill logs, core photography, underground face mapping, georeferenced face photography, surveyed structural pickups, and backs mapping were considered during the process of wireframe modelling. The identified intervals within both drill hole data and underground face sample data are incorporated into the wireframe of each lode structure. Interval flagging and wireframe creation on updated models was done via the Seequent Leapfrog Geo software suite, using a vein model methodology.

Each lode structure has been modelled separately and assigned a unique numeric zone code. The assays have been composited over the full length of the intersections (including any intervening waste) by lode.

Grade domaining on each lode/zone code was driven by geological interpretations of the structural context and grade tenor. Grade domains, where required, were used to separate high-grade and low-grade populations to an acceptable degree, and to further limit data trends of grade-shoots.

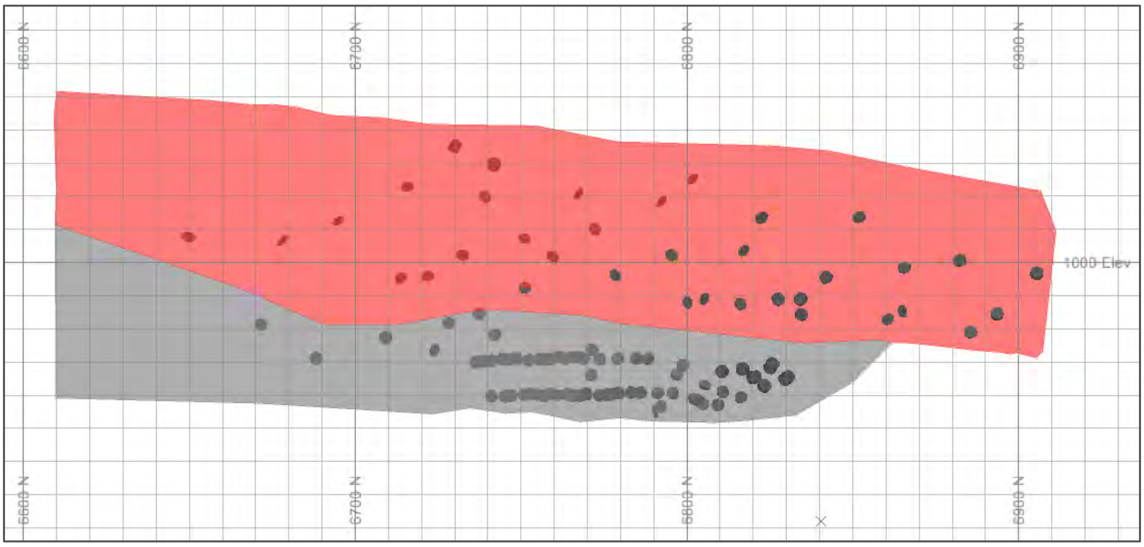
Domains for the 320 (Brunswick South), 501 (Kendal), and 600 (Shepherd), including sample locations, are displayed in Figure 14.4 to Figure 14.6 as an example, with a brief description of the domains and their geological context outlined in Table 14.2.

Figure 14.4: Longitudinal projection of the Brunswick South Lode (320)



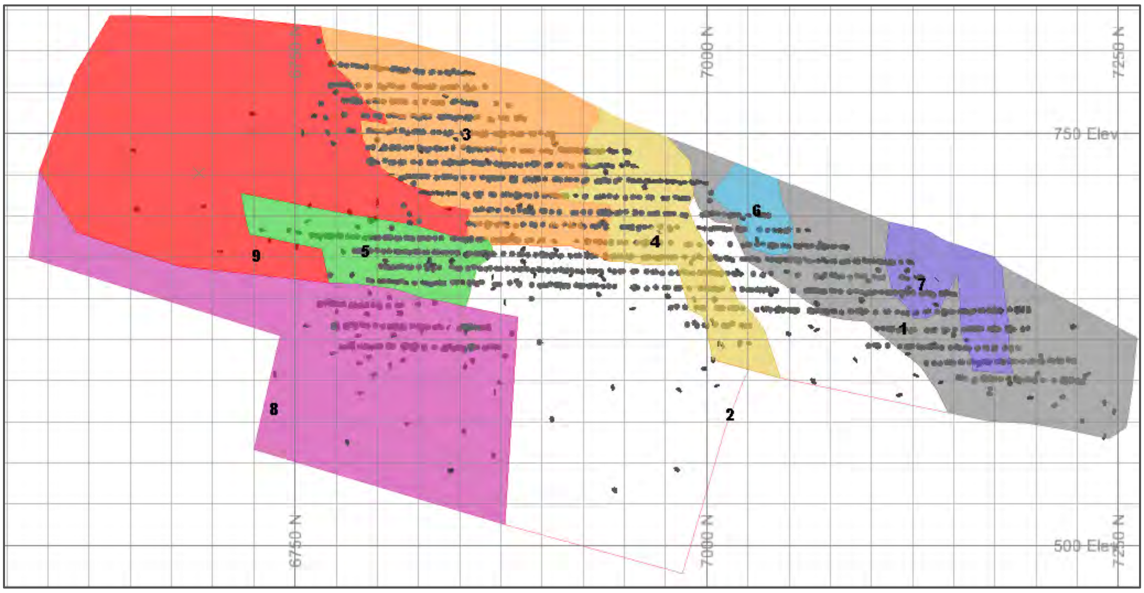
Notes: Displaying three grade domains determined by grade and structural controls on mineralisation. Sample points in grey. North to the right.

Figure 14.5: Longitudinal projection of the Shepherd Lode (600)



Notes: Displaying nine grade domains determined by grade and structural controls on mineralisation. Sample points in grey. North to the right.

Figure 14.6: Longitudinal projection of the Shepherd Lode (600)



Notes: Displaying nine grade domains determined by grade and structural controls on mineralisation. Sample points in grey. North to the right.

Table 14.2: Estimation domains and descriptions with geological context

Model	Domain description	Domain code	Description
Brunswick South (320)	Sb Dominant	1	Thunderbird Fault boundary
	Au Dominant	2	Au Dominant Kiwi/Rooster
	Intermediate Waste/Faulted Zone	3	Set at orientation coincident to bedding/LQ Faults
Kendal (501)	No. 3 HW	1	Below No. 3 Fault
	No. 3 FW	2	Above No. 3 Fault
Shepherd (600)	North Gold	1	Northern, classic Shepherd, Qz-Au high-grade zone
	Sporadic Gold	2	Qz-Au continues, with sporadic nature and tighter pods
	Sb HG zone	3	Main Au+Sb southern domain HW to the Doyle 3 Fault
	Central	4	Central pod through the Domain 2 sporadic Au, more systematic Au associated south of the 605 splay
	Sb below Doyle 3	5	Au+Sb zone, below Dom 3, low tenor of Sb but present
	Sb Pod 1	6	Zone of Sb in Domain 1
	Sb Pod 2	7	Zone of Sb in Domain 1
	Sub-Deimos Zone	8	Au ± Sb below the Deimos Fault
	Waste Zone	9	Southern bounding waste after vein strike change
True Blue (700)	Au + Sb Zone	1	Single global domain

14.3 Grade Capping

Grade capping was conducted as a part of the estimation process to mitigate the disproportionate influence of statistical outliers on the estimated mean for gold accumulation (AUACC), antimony accumulation (SBACC) and true thickness (TRUETHK). Statistical analysis of each domain for all lodes included in the 2026 Mineral Resource Estimation was completed using Datamine Supervisor software. Samples representing a step-change in the log probability or cumulative metal plots were examined as potential outliers. Where required, more conservative top-cuts were applied to achieve satisfactory model validation. Domains with a CV less than 1.8 were deemed suitable for resource estimation by ordinary kriging.

Examples of statistical plots generated used in the grade capping process are provided in Figure 14.5 to Figure 14.7 for the Shepherd (622) Domain 1, an important underground development location for the 2026 period.

The uncapped and grade capped values, and the effect of grade outliers on the overall sample statistics for the 2026 major models (Brunswick South 320, Kendal 501, Shepherd 600, and True Blue 700), are provided in Table 14.3.

Figure 14.5: Brunswick South (320) Domain 1 – Grade capping statistical plots for Au-Accumulation

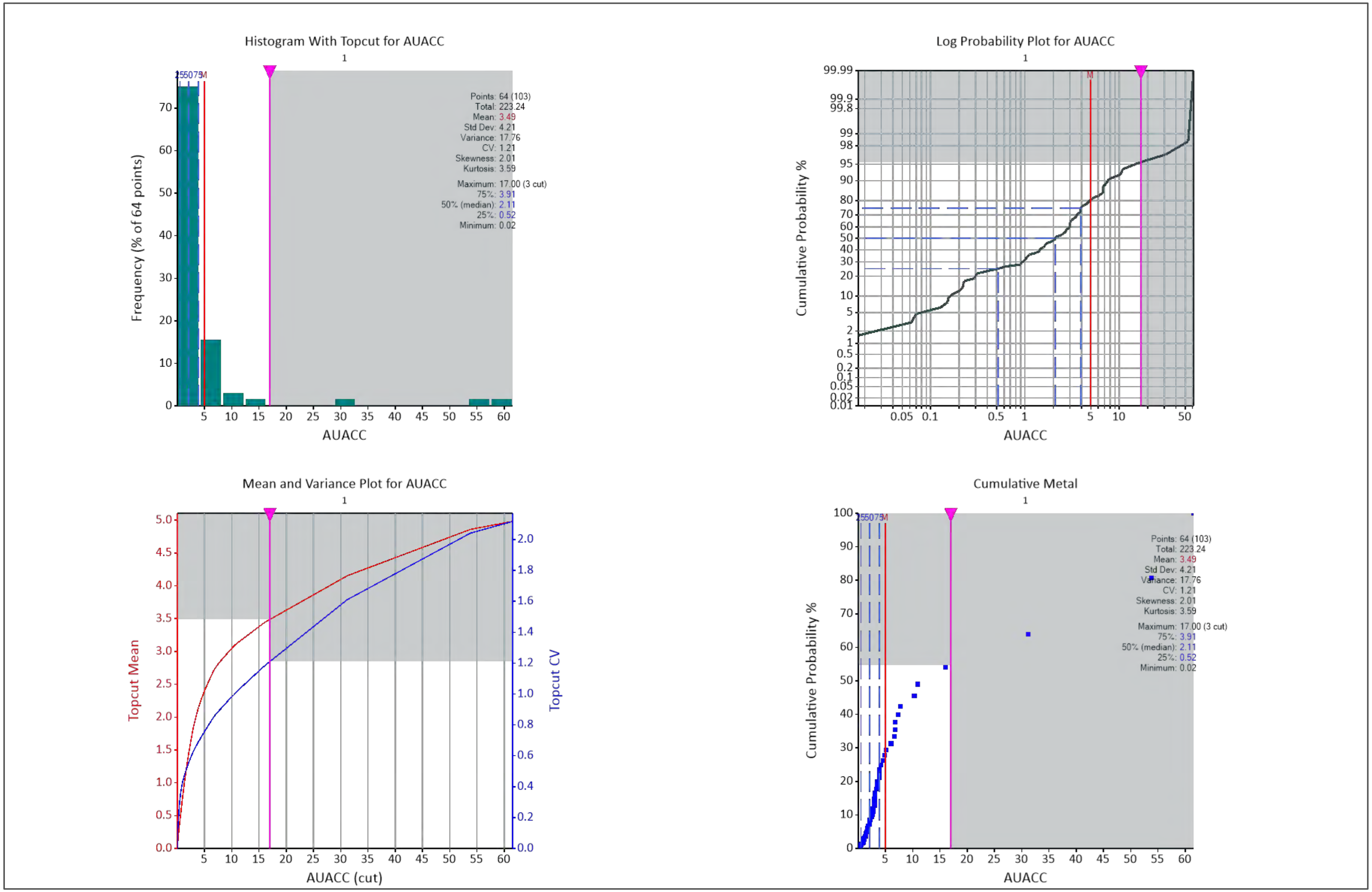


Figure 14.6: Brunswick South (320) Domain 1 – Grade capping statistical plots for Sb-Accumulation

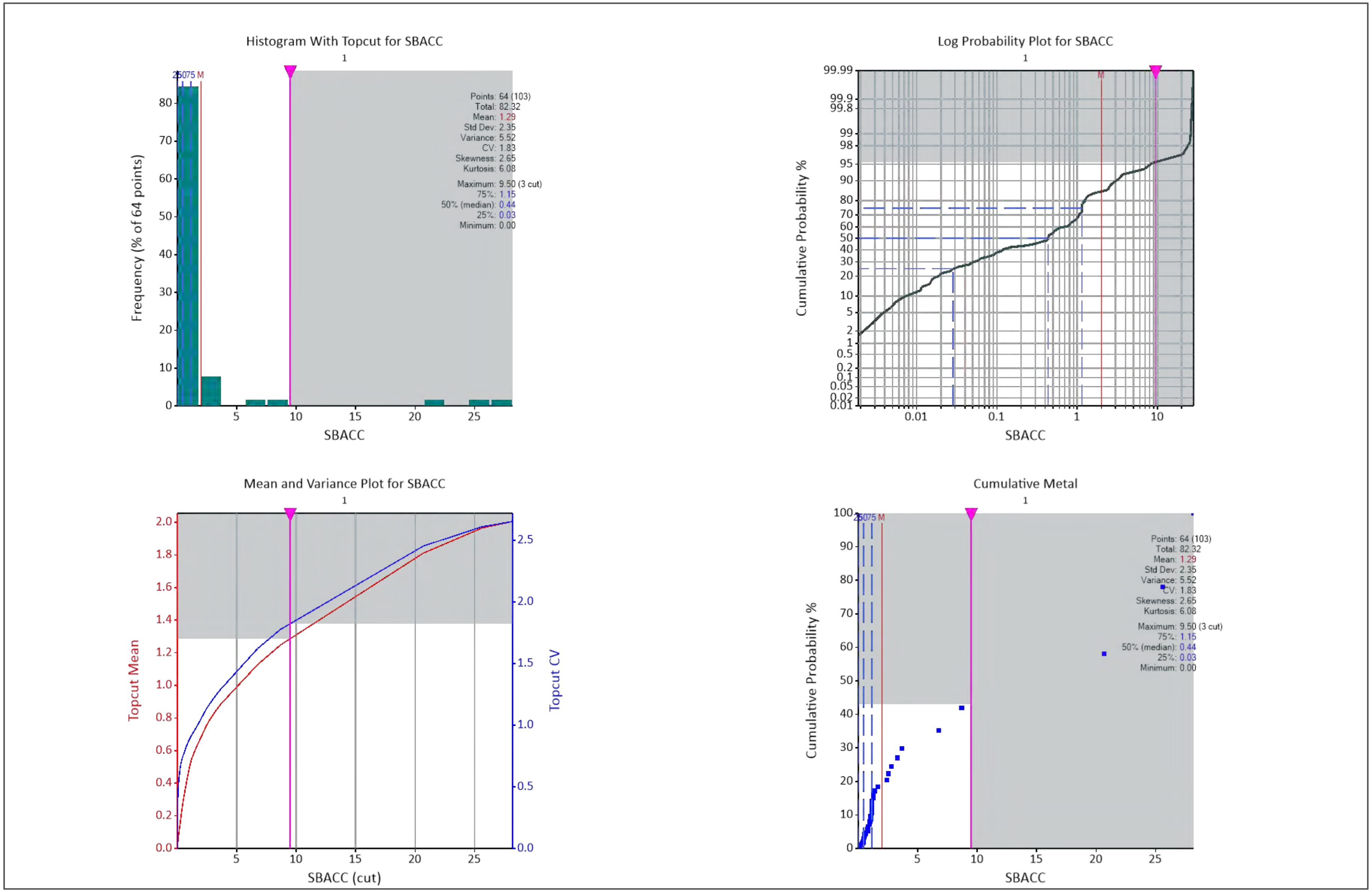


Figure 14.7: Brunswick South (320) Domain 1 – Grade capping statistical plots for True Thickness

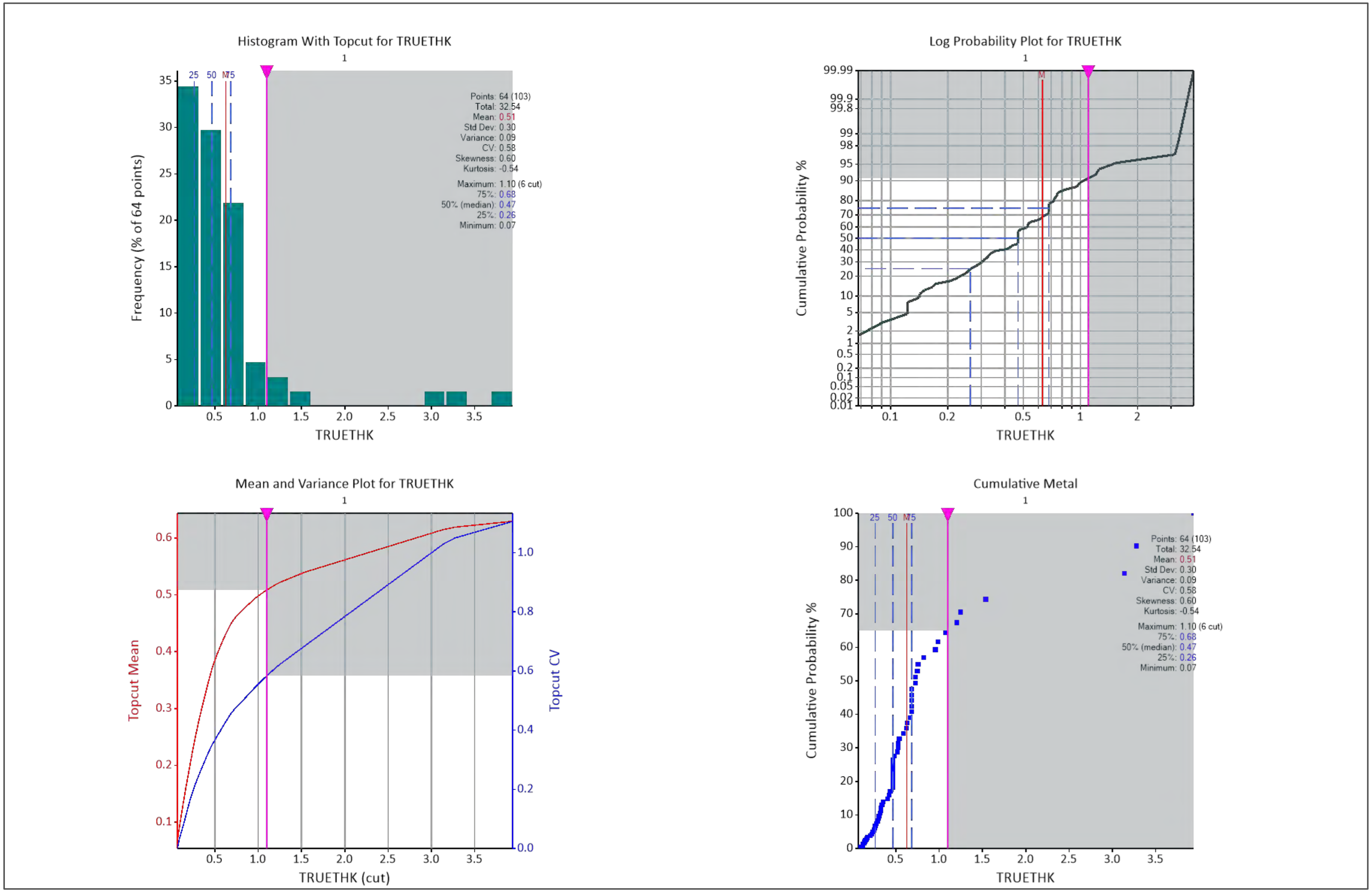


Table 14.3: Sample statistics for the major 2026 models (320, 501, 600, 700) before and after grade caps

Model	Variable	Domain	Number of samples		Mean grade			Capping value	Standard deviation		CV		Max uncapped grade	Uncapped percentile
			Total Samples	Capped	Uncapped	Capped	% Diff		Uncapped	Capped	Uncapped	Capped		
Brunswick South 320	AUACC	1	74	3	5.55	4.67	-18.8%	33	11.34	7.7	2.04	1.65	59	95.9%
	AUACC	2	23	3	13.24	9.33	-41.9%	35	21.6	12.75	1.63	1.37	67.65	87.0%
	AUACC	3	10	1	0.62	0.5	-24.0%	1.1	0.65	0.39	1.05	0.79	2.29	90.0%
	SBACC	1	74	3	1.91	1.21	-57.9%	8.5	5.16	2.14	2.71	1.77	30.91	95.9%
	SBACC	2	23	2	0.25	0.11	-127.3%	0.4	0.57	0.14	2.27	1.35	2.21	91.3%
	SBACC	3	10	2	0.07	0.03	-133.3%	0.1	0.13	0.04	1.85	1.37	0.42	80.0%
	TRUETHK	1	74	3	0.62	0.55	-12.7%	1.49	0.63	0.36	1.02	0.66	3.77	95.9%
	TRUETHK	2	23	-	0.61	-	-	-	0.61	-	1.01	-	2.41	100.0%
	TRUETHK	3	10	1	0.39	0.24	-62.5%	0.5	0.53	0.13	1.37	0.55	1.95	90.0%
Kendal 501	AUACC	1	68	2	15.18	7.98	-90.2%	61	59.19	13.9	3.9	1.74	474.5	97.1%
	AUACC	2	36	-	4.29	-	-	-	6.63	-	1.55	-	28.43	100.0%
	SBACC	1	68	1	6.04	5.85	-3.2%	28.5	8.3	7.6	1.38	1.3	41.59	98.5%
	SBACC	2	36	-	2.6	-	-	-	2.94	-	1.13	-	10.46	100.0%
	TRUETHK	1	68	-	0.37	-	-	-	0.39	-	1.03	-	1.48	100.0%
	TRUETHK	2	36	-	0.45	-	-	-	0.39	-	0.87	-	1.31	100.0%
Shepherd 600	AUACC	1	290	5	13.71	12.74	-7.6%	91	24.79	19.03	1.81	1.49	244.2	98.3%
	AUACC	2	200	2	3.47	3.33	-4.2%	32	7.15	6.38	2.06	1.91	52.48	99.0%
	AUACC	3	419	5	24.43	21.53	-13.5%	160	62.57	29.35	2.56	1.36	1	98.8%
	AUACC	4	195	3	26.62	22.12	-20.3%	160	68.1	34.24	2.56	1.55	0.857	98.5%
	AUACC	5	128	3	15.93	14.44	-10.3%	81	26.8	18.63	1.68	1.29	0.8	97.7%
	AUACC	6	35	1	24.2	22	-10.0%	65	26.88	19.22	1.11	0.87	0.635	97.1%
	AUACC	7	79	3	62.64	45.85	-36.6%	230	159.06	56.02	2.54	1.22	0.542	96.2%
	AUACC	8	141	3	12.99	11.94	-8.8%	80	22.96	18.09	1.77	1.51	230	97.9%
	AUACC	9	56	2	0.65	0.58	-12.1%	2.5	0.94	0.64	1.45	1.12	80	96.4%
	SBACC	1	290	4	0.07	0.03	-133.3%	0.8	0.43	0.12	6.46	3.75	2.5	98.6%
	SBACC	2	200	3	0.02	0.01	-100.0%	0.1	0.2	0.01	10.55	2.96	0.8	98.5%
	SBACC	3	419	-	6.04	-	-	-	7.39	-	1.22	-	0.1	100.0%
	SBACC	4	195	7	0.12	0.03	-300.0%	0.5	0.65	0.1	5.36	3.08	39.28	96.4%
	SBACC	5	128	4	1.01	0.15	-573.3%	1.8	8.75	0.38	8.67	2.54	0.5	96.9%
	SBACC	6	35	-	0.6	-	-	-	0.84	-	1.42	-	1.8	100.0%
	SBACC	7	79	4	1.89	1.17	-61.5%	8.5	5.25	2.3	2.77	1.96	3.28	94.9%
	SBACC	8	141	5	0.05	0.02	-150.0%	0.4	0.28	0.08	5.54	3.53	8.5	96.5%
	SBACC	9	56	6	0.1	0.01	-900.0%	0.1	0.36	0.03	3.6	2.4	0.4	89.3%
	TRUETHK	1	290	-	0.26	-	-	-	0.28	-	1.08	-	0.1	100.0%
	TRUETHK	2	200	4	0.35	0.34	-2.9%	1.3	0.35	0.28	0.99	0.82	1.3	98.0%
	TRUETHK	3	419	-	0.29	-	-	-	0.28	-	0.96	-	1.3	100.0%
	TRUETHK	4	195	-	0.36	-	-	-	0.29	-	0.79	-	1.4	100.0%
	TRUETHK	5	128	3	0.37	0.35	-5.7%	1.25	0.39	0.32	1.05	0.91	1.46	97.7%
	TRUETHK	6	35	-	0.42	-	-	-	0.32	-	0.75	-	1.25	100.0%
	TRUETHK	7	79	2	0.4	0.39	-2.6%	1.7	0.45	0.41	1.13	1.06	1.24	97.5%
	TRUETHK	8	141	1	0.2	0.2	0.0%	0.9	0.2	0.19	0.98	0.93	1.7	99.3%
	TRUETHK	9	56	3	0.24	0.23	-4.3%	0.65	0.22	0.18	0.9	0.8	0.9	94.6%
True Blue 700	AUACC	1	40	2	3.85	2.68	-43.7%	10.5	7.32	3.01	1.9	1.12	37.39	95.0%
	SBACC	1	40	-	1.43	-	-	-	1.7	-	1.19	-	7.88	100.0%
	TRUETHK	1	40	2	0.36	0.33	-9.1%	1.2	0.4	0.3	1.1	0.9	1.83	95.0%

14.4 Estimation Domain Boundaries

Structural controls on mineralisation have been identified through underground mapping and structural interpretation of drill core. These relationships and the grade distribution have been used to guide estimation domain boundaries. All domains have been modelled with hard boundaries (refer to Section 14.2 and Figure 14.4 to Figure 14.6).

As an example, in the Shepherd veins (600 series), a strong flexure is observed in the lodes that divide distinct north and south zones that are spatially correlated with a change in antimony and gold grades in the lodes – gold to the north, and gold + antimony to the south.

For the upper Kendal vein 540 estimation, a separate grade estimation boundary was applied for the near-surface areas containing RC-only drill intercepts, this limited population mixing between wider RC drill hole results and tighter diamond drilling results. This mixed population effect was evaluated in other Kendal lodes and deemed to not be material with the data distributions.

14.5 Vein Orientation Domains

To use the 2D accumulation method to estimate a Mineral Resource, dip and dip-direction domains were assigned to the input data area to calculate true thickness of intercepts and volume correctly.

The dip and dip-direction of each domain was determined by adjusting a plane of best fit to the dip and dip-direction of the domain. The details of this plane were then coded into the drill data associated with the domain.

The dip and dip-direction domains have been used to create volume correction factors for 2D to 3D conversion within the Z and Y directions using the following formula:

$$\textit{Z Correction Factor} = 1/\sin(\textit{dip})$$

$$\textit{Y Correction Factor} = \textit{Absolute}\,(1/\sin(\textit{dip-direction})).$$

$$\textit{Volume Correction Factor} = \textit{Z Correction Factor} \times \textit{Y Correction Factor}.$$

14.6 Bulk Density Determinations

Bulk density was assessed in underground and drill core samples in 2021 (Mining Plus, 2022) throughout the Youle and Shepherd Lode systems. The determinations were from whole-core samples, which were aligned with assay sample intervals, and are considered by the QP to still be representative for the purposes of the Mineral Resource Estimate.

The bulk density assigned to the Kendal and True-Blue models was updated to use the Augusta regression formula, drawing from Figure 14.4, Equation 2, based on observed gangue mineralogy and lode and waste bulk density results from drill programs.

The bulk density applied to Cuffley and Brunswick remains consistent to other historical models and BD data collected during mining, drawing from Figure 14.4, Equation 1.

14.6.1 Mineralised Material

A summary of the bulk densities applied to mineralised material in the resource models is given in Figure 14.4. Stibnite concentration continued to have the dominant effect on bulk density, and the formulas retain the stoichiometric based formula developed and implemented in the 2005 Mineral Resource Estimate conducted by McArthur Ore Deposit Assessments Pty Ltd (MODA, 2005).

The updated bulk density estimates for Kendal and True Blue incorporate additional data demonstrating a strong correlation with the Augusta regression (Equation 1). This supports the application of the Augusta regression to Kendal and True Blue, given the comparable geological characteristics and mineralisation styles of lodes. The characteristics include low quartz high siltstone gangue mineralogy within mineralised zones.

Table 14.4: Summary of the two derivations of the bulk density formula in use for the Mineral Resource Estimate

Models	Equation No	Equation
Augusta, Cuffley, Brunswick, True Blue and Kendal Lodes	1	$BD = ((1.3951 * \mathrm{Sb\%}) + (100 - (1.3951 * \mathrm{Sb\%})))/(((1.3951 * \mathrm{Sb\%})/4.56) + ((100 - (1.3951 * \mathrm{Sb\%}))/2.74))$
Youle and Shepherd Lodes	2	$If\ (Sb\% > 1)\ BD = ((1.3951 * \mathrm{Sb\%}) + (100 - (1.3951 * \mathrm{Sb\%})))/(((1.3951 * \mathrm{Sb\%})/4.56) + ((100 - (1.3951 * \mathrm{Sb\%}))/2.69))$ $If\,(Sb\% < 1)\ BD = (0.05661 * \mathrm{Fe\%}) + 2.5259$

Notes:

- Empirical formula of stibnite: Sb_2S_3.
- Sb%: antimony assay as a percentage by mass.
- Molecular weight of antimony (Sb): 121.757.
- Molecular weight of sulfur: (S): 32.066.
- 1.3951 is a constant calculated by 339.712/243.514 where 339.712 is the molar mass of Sb_2S_3, and 243.514 is the molar mass of antimony contained in one mole of pure stibnite.
- Bulk density of pure stibnite: 4.56.
- Bulk density of unmineralised gangue of 2.74 g/cm^3 in quartz-poor veins at Augusta, Cuffley, Brunswick, True Blue and Kendal Lodes (Eq.1).
- Bulk density of unmineralised gangue of 2.69 in quartz rich lodes of Youle and Shepherd (Eq.2), representing a ratio of 1:3 siltstone to quartz.
- Fe%: iron assay as a percentage by mass.

14.6.2 Unmineralised Material

Augusta, Brunswick and Cuffley

The unmineralised rock bulk density of 2.74 g/cm^3 has been averaged from 1,060 samples of drill core measured using the water immersion method during 2014.

The basic statistics for this series of samples has been shown in Table 14.5 and demonstrates very little variability in the waste material bulk densities. Waste rock density remained unchanged for pre-2021 models.

Table 14.5: Descriptive statistics of bulk density in waste material – Augusta, Brunswick, Cuffley

Statistic	Bulk density (g/cm^3)
Mean	2.74
Median	2.77
Mode	2.80
Standard deviation	0.11
Sample variance	0.01
Range	1.23
Minimum	2.01
Maximum	3.24
Count	1,060

Youle, Kendal, Shepherd and True Blue

Testwork on the bulk density of unmineralised Youle and Shepherd underground samples and drill core was completed during 2021 (Mining Plus, 2022). Summary statistics for waste material with < 5% quartz have been presented in Table 14.6; these showed very little variation around the mean of 2.76 g/cm^3. Therefore, 2.76 g/cm^3 has been applied to waste material in the Youle, Kendal, and Shepherd. An additional 176 samples from True Blue in 2025 returned a mean of 2.77 which was considered analogous to Youle and Shepherd, with observations of the same stratigraphy and 2.76 retained for True Blue.

Table 14.6: Descriptive statistics of bulk density in waste material – Youle/Shepherd

Statistic	Bulk density (g/cm^3)
Mean	2.76
Median	2.76
Mode	2.78
Standard Deviation	0.03
Sample Variance	0.01
Range	0.27
Minimum	2.62
Maximum	2.89
Count	368

14.7 Variography

Variographic analysis was carried out on the combined composited and grade capped face and drill hole samples for true thickness, gold accumulation and antimony accumulation. Variography was undertaken in two dimensions after projecting the data onto a constant easting. Variograms were produced using Datamine's Supervisor software using a normal score transform. The variogram models were back transformed prior to importing into Datamine software for the estimate. Where required, variogram orientations and ranges were altered to conform to observed grade trends within mineralised domains.

The nugget value was estimated using omnidirectional variograms with a short lag, as downhole variograms cannot be calculated on this dataset due to the samples being composited to the full length of the mineralisation. Therefore, the omnidirectional variogram with short lag most closely represents the small-scale geological and/or sampling grade variability of the data.

An example of the experimental normal scores variograms and fitted models for the Shepherd Lode (600) for gold and antimony accumulation, and lode true thickness is displayed in Figure 14.8 to Figure 14.10. Where a domain lacked sufficient pairs to produce meaningful variograms, domains of similar characters were combined (for instance, gold antimony domains of 3 and 5). Where entire models lacked sufficient pairs to produce meaningful variograms, variograms were borrowed from other domains of similar geological character and controls on mineralisation. This was the case for the combined domains 1, 2, 4, 6, and 7 (Au north zone) of the Shepherd Lode (600) which borrowed the SB-Accumulation variography from the combined gold antimony domains 3 and 5.

Figure 14.8: Shepherd 600 combined domain 3 Au-Accumulation (AUACC) variograms, illustrating the major direction, semi-major direction, back transform model, and omni-directional variogram in clockwise order

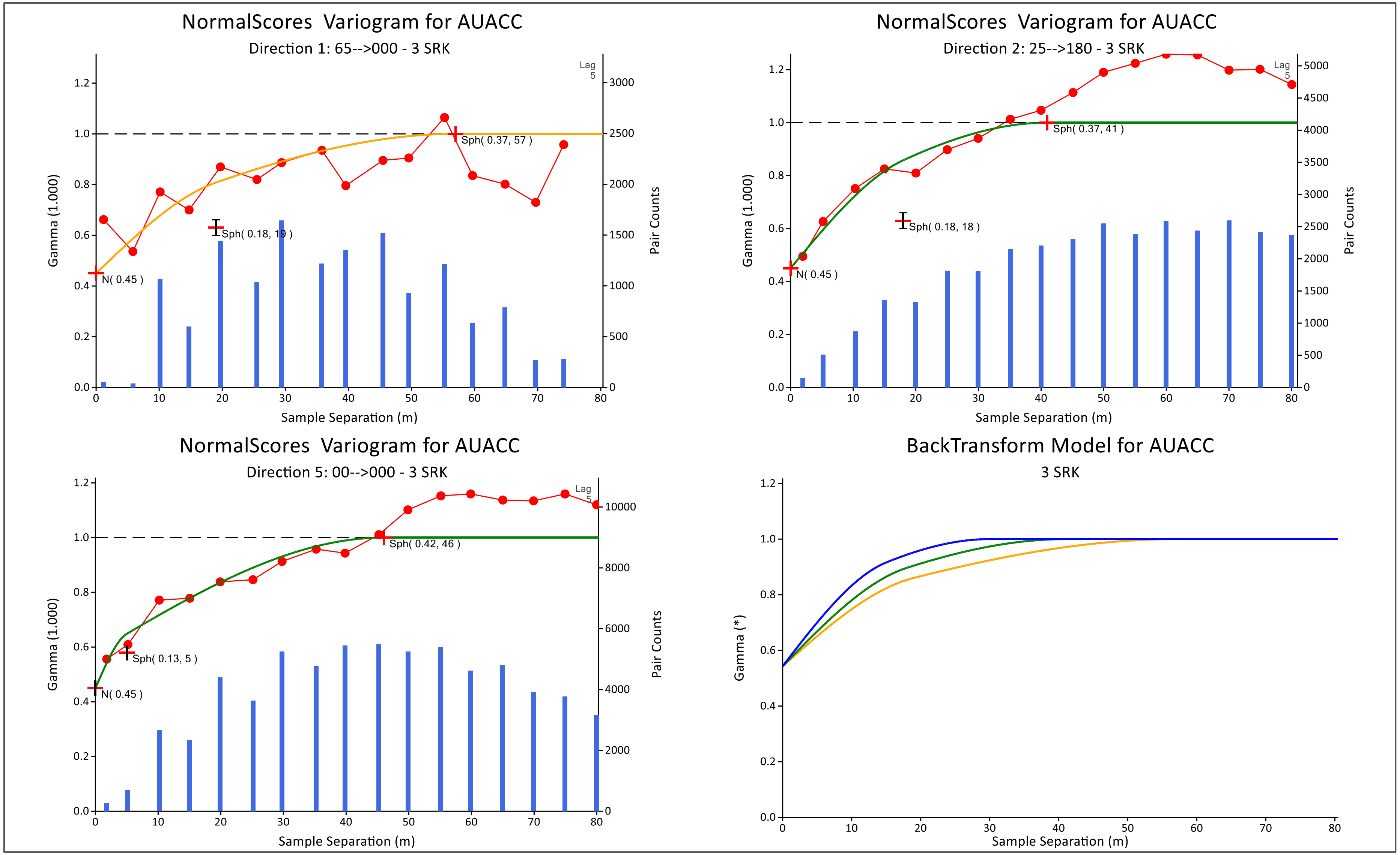


Figure 14.9: Shepherd 600 combined domain 3 Sb-Accumulation (SBACC) variograms, illustrating the major direction, semi-major direction, back transform model, and omni-directional variogram in clockwise order

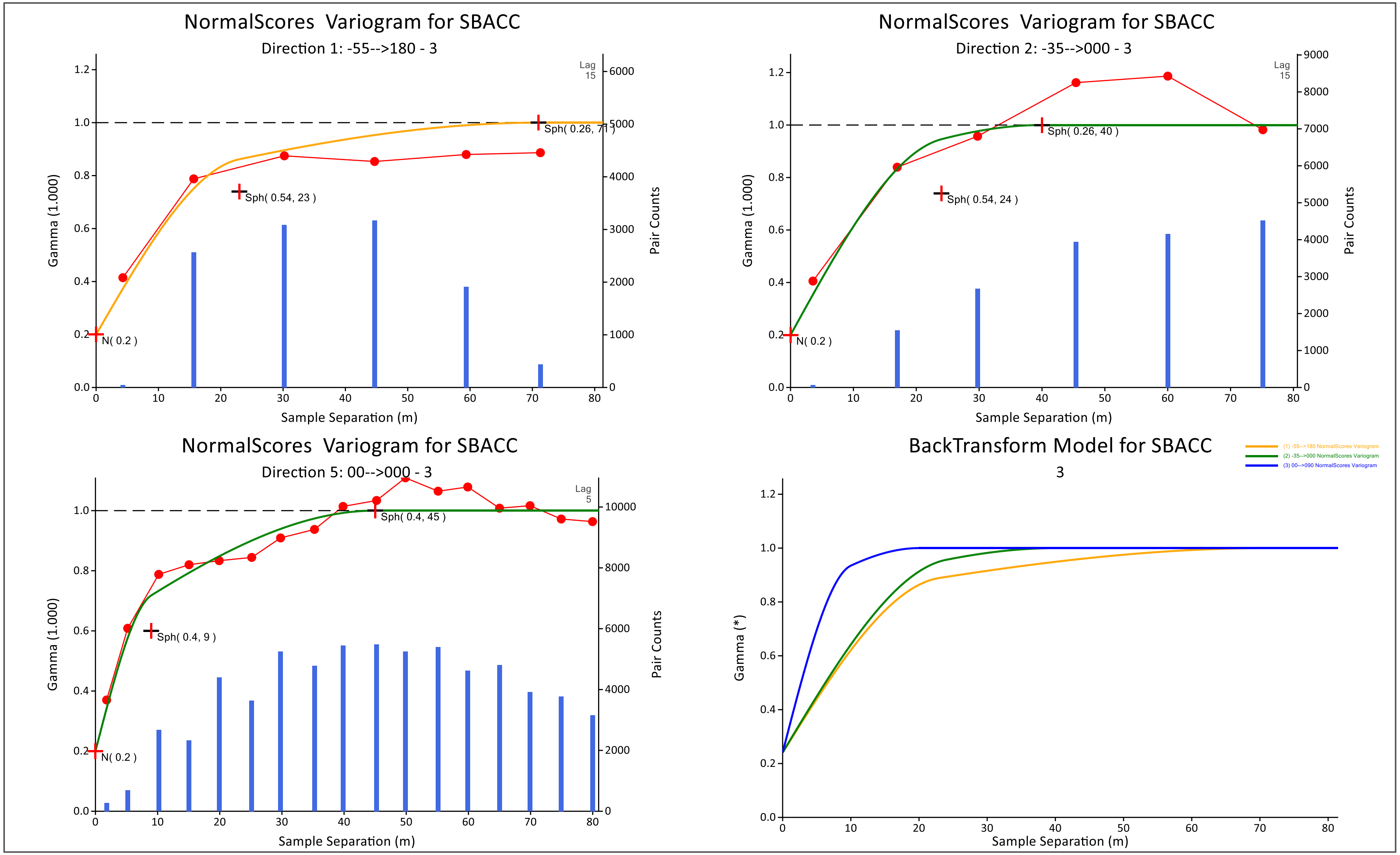
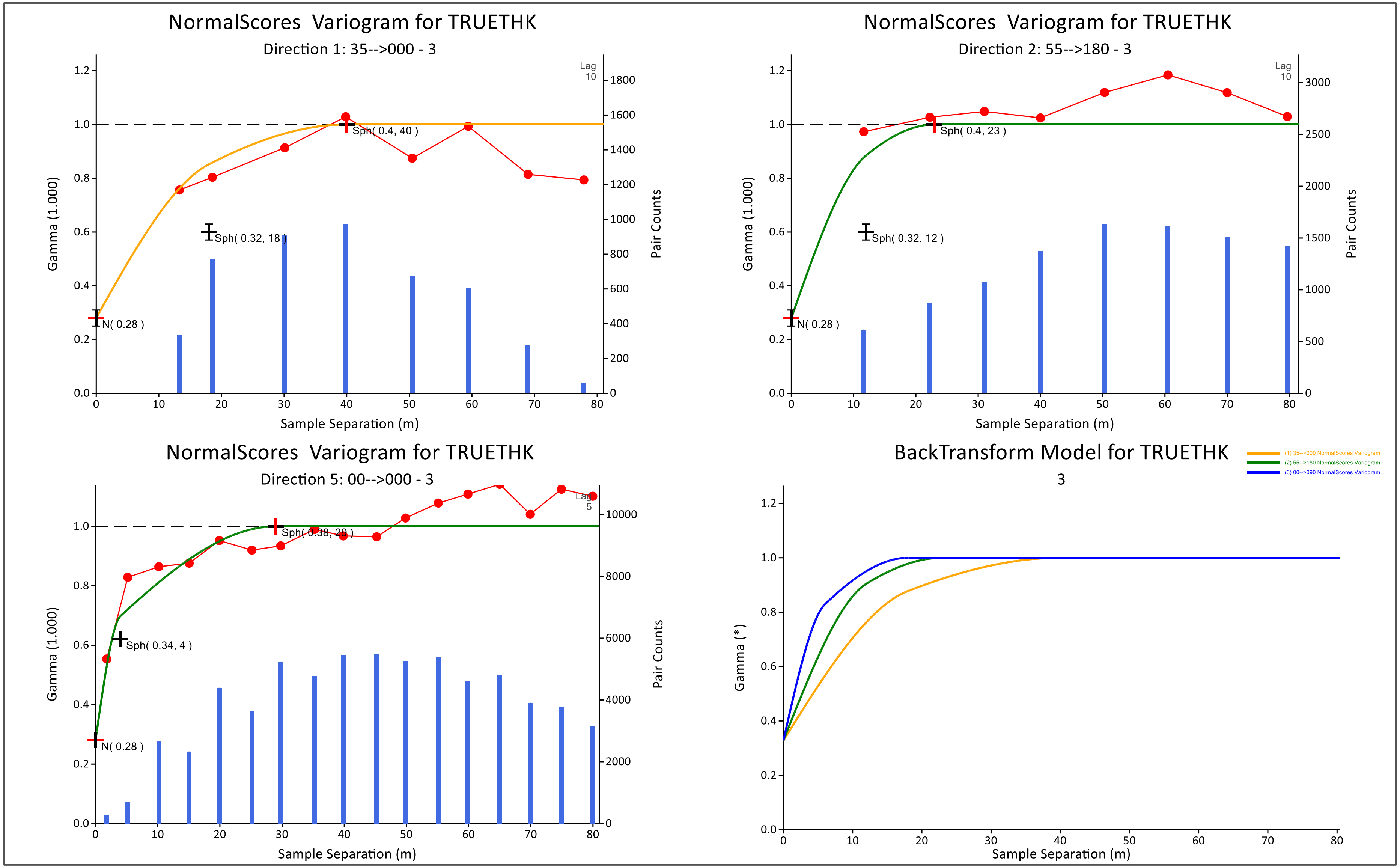
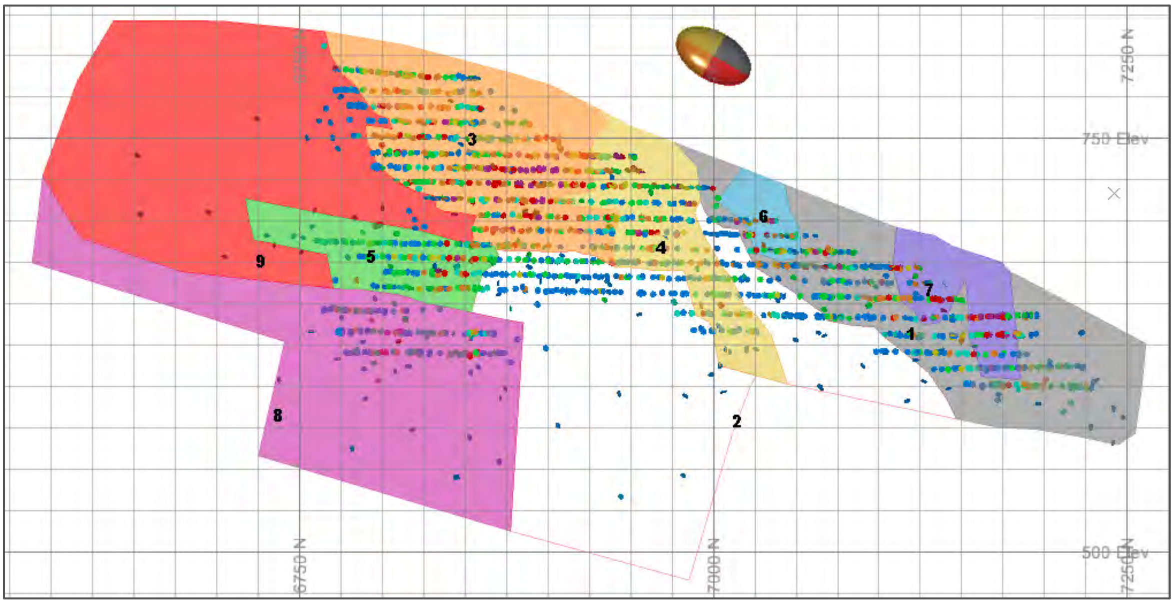


Figure 14.10: Shepherd 600 combined domain 3 true thickness (TRUETHK) variograms, illustrating the major direction, semi-major direction, back transform model, and omni-directional variogram in clockwise order



The orientation of the best grade continuity was selected based on the variographic analysis, and validated against observations made during underground mapping, logging, and geological modelling. The orientations and ranges identified during the variographic analysis were used to generate 3D ellipsoid wireframes, which were validated against the composite values in longitudinal projection (Au-accumulation in Domain 1, Figure 14.11).

Figure 14.11: Shepherd (600) long-section with grade domains and Au-Accumulation for intercepts shown with the Domain 1 search ellipse for Au-Accumulation



The updated variographic parameters determined for the major Shepherd vein 600 is detailed in Table 14.7.

Table 14.7: Variogram model parameters for the major lode in Shepherd (600)

Model	Domain	Element	Variogram orientations			Datamine rotations			C0	A1			C1	A2			C2
			Dir 1	Dir 2	Dir 3	Dir 1	Dir 2	Dir 3		Dir 1	Dir 2	Dir 3		Dir 1	Dir 2	Dir 3	
Shepherd (600)	Combined: 1, 2, 4, 7	AUACC	90	90	-150	3	1	3	0.544	11	8	8	0.144	48	24	24	0.312
		SBACC	90	90	-160	3	1	3	0.679	12	25	25	0.223	47	28	28	0.097
		TRUETHK	90	90	-150	3	1	3	0.392	4	7	7	0.245	36	27	27	0.363
	3	AUACC	90	90	-150	3	1	3	0.678	39	33	31	0.095	52	35	32	0.227
		SBACC	90	90	-160	3	1	3	0.273	21	39	39	0.355	66	40	40	0.372
		TRUETHK	90	90	-160	3	1	3	0.567	30	22	22	0.354	34	23	23	0.079
	Combined: 5, 8	AUACC	90	90	115	3	1	3	0.481	19	18	8	0.255	24	22	10	0.264
		SBACC	90	90	125	3	1	3	0.241	23	24	10	0.551	71	40	20	0.209
		TRUETHK	90	90	145	3	1	3	0.328	18	11	6	0.319	40	23	18	0.353
	6	AUACC	90	90	-150	3	1	3	0.544	11	8	8	0.144	48	24	24	0.312
		SBACC	90	90	-140	3	1	3	0.28	11	17	14	0.523	140	48	48	0.196
		TRUETHK	90	90	-150	3	1	3	0.392	4	7	7	0.245	36	27	27	0.363
	9	AUACC	90	90	115	3	1	3	0.543	18	18	15	0.241	72	50	30	0.216
		SBACC	90	90	125	3	1	3	0.241	23	24	10	0.551	71	40	20	0.209
		TRUETHK	90	90	145	3	1	3	0.328	18	11	6	0.319	40	23	18	0.353

Notes: Dir 1: Major; Dir 2: Semi-Major; Dir 3: Minor; C0: nugget variance; C1 and C2: sills of autocorrelated variance; A1 & A2: Range of spatial dependence. Drill hole and face samples for each lode were projected into an arbitrary north–south oriented vertical plane, hence Dir 1 and Dir 2 are relative, not actual directions.

14.8 Search and Estimation Parameters

Gold accumulation, antimony accumulation, and true thickness were estimated using ordinary kriging into the block model for each lode. The models were oriented north–south and were one block wide in the east–west direction. All search ellipses used for this method were parallel with the north–south block model orientation.

Where there were insufficient data to generate adequate variograms, and where the borrowing of variograms was not considered appropriate, inverse distance estimation was employed. Inverse distance to the power of 2 was employed for the inferred Sub-King Cobra (400 series) models, with the exception of the 410 which used inverse distance to the power of 3.

The following summarises the estimation process:

- Drill hole and face samples for each lode were projected into an arbitrary north–south oriented vertical plane.
- The orientation and anisotropy of the search ellipsoid for each lode was guided by the grade and thickness continuity modelled in the variographic analysis.
- Where the variogram lacked sufficient data pairs to produce meaningful variograms, variograms were borrowed from the adjacent lode domains that have a comparable geological setting.
- In the case of Sub King Cobra models, which had the geology domaining updated in 2026, no variogram could be modelled. As a result, the previous estimation methodology was retained with an inverse distance (squared) estimation (with the exception of 410, which used inverse distance cubed), an isotropic search, and the use of a limited influence around high-grade intercepts.
- Each estimate involved three search passes:
  - The first search pass dimensions were approximately equivalent to half of the gold accumulation variogram model range.
  - The second was twice the first pass in all three directions.
  - The third pass was generally six times the first pass in all three directions but adjusted to ensure all blocks were estimated.
- Where grade sub-domains were present, the estimation was completed separately within each sub-domain.
- The estimation was undertaken using a combined dataset of face sample and drill hole data. A limit to the number of face samples was applied to the regions of the estimate with low sample density (exploration drilling) zones. These regions correspond to the large blocks in Table 14.12. The face sample limit was reviewed domain by domain within each model but commonly set to a maximum of two.

The estimation parameters applied to the estimation of the Brunswick South 320, Kendal 501, Shepherd 600, and True Blue 700 models are detailed in Table 14.8, Table 14.9, Table 14.10 and Table 14.11, respectively. As iron percentage (Fe%) was required for density determinations (Equation 2, Section 14.6), Fe-Accumulation was calculated using the Sb-Accumulation estimation parameters.

Table 14.8: Brunswick South 320 block model search parameters

Resource class	Domain	Variable	First pass					Second pass					Third pass					
			Search distance (m)			# Samples		Second pass distance (m)			# Samples		Third pass distance (m)			# Samples		DH
			Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Limit
Indicated and Inferred	1	AUACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		SBACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		TRUETHK	40	15	15	3	8	80	30	30	2	10	240	90	90	1	5	2
	2	AUACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		SBACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		TRUETHK	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
	3	AUACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		SBACC	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2
		TRUETHK	40	15	15	2	8	80	30	30	2	10	240	90	90	1	5	2

Table 14.9: Kendal 501 block model search parameters

Resource class	Domain	Variable	First pass					Second pass					Third pass					
			Search distance (m)			# Samples		Second pass distance (m)			# Samples		Third pass distance (m)			# Samples		DH
			Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Limit
Measured	1	AUACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	4
		SBACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	4
		TRUETHK	30	20	20	2	6	60	40	40	2	12	180	120	120	1	5	4
	2	AUACC	30	20	20	2	8	60	40	40	2	4	180	120	120	1	5	4
		SBACC	30	20	20	2	8	60	40	40	2	4	180	120	120	1	5	4
		TRUETHK	30	20	20	2	6	60	40	40	2	4	180	120	120	1	5	4
Indicated and Inferred	1	AUACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	0
		SBACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	0
		TRUETHK	30	20	20	2	6	60	40	40	2	12	180	120	120	1	5	0
	2	AUACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	0
		SBACC	30	20	20	2	8	60	40	40	2	10	180	120	120	1	5	0
		TRUETHK	30	20	20	2	6	60	40	40	2	12	180	120	120	1	5	0

Table 14.10: Shepherd (600) block model search parameters

Resource class	Domain	Variable	First pass					Second pass					Third pass					
			Search distance (m)			# Samples		Second pass distance (m)			# Samples		Third pass distance (m)			# Samples		DH
			Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Limit
Measured	1	AUACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	15	0
		SBACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	15	0
		TRUETHK	25	15	15	2	8	50	30	30	2	10	150	90	90	1	15	0
	2	AUACC	25	15	15	3	8	50	30	30	3	8	150	90	90	1	10	0
		SBACC	25	15	15	3	8	50	30	30	3	8	150	90	90	1	10	0
		TRUETHK	25	15	15	3	8	50	30	30	3	8	150	90	90	1	10	0
	3	AUACC	29	20	15	2	6	58	40	30	2	10	174	120	90	1	10	0
		SBACC	36	25	15	2	8	72	50	30	2	10	216	150	90	1	10	0
		TRUETHK	36	25	15	2	6	72	50	30	2	12	216	150	90	1	10	0
	4	AUACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	10	0
		SBACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	10	0
		TRUETHK	25	15	15	2	8	50	30	30	2	12	150	90	90	1	10	0
	5	AUACC	12	11	15	2	6	24	22	30	2	10	72	66	90	1	10	0
		SBACC	36	25	15	2	8	72	50	30	2	10	216	150	90	1	10	0
		TRUETHK	36	25	15	2	6	72	50	30	2	12	216	150	90	1	10	0
	6	AUACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	10	0
		SBACC	25	15	15	2	8	50	30	30	2	10	150	90	90	1	10	0
		TRUETHK	25	15	15	2	6	50	30	30	2	12	150	90	90	1	10	0
	7	AUACC	25	15	15	2	8	50	30	30	2	6	150	90	90	1	10	0
		SBACC	25	15	15	2	8	50	30	30	2	6	150	90	90	1	10	0
		TRUETHK	25	15	15	2	6	50	30	30	2	6	150	90	90	1	10	0
	8	AUACC	12	11	15	2	8	24	22	30	2	10	72	66	90	1	10	0
		SBACC	36	25	15	2	8	72	50	30	2	10	216	150	90	1	10	0
		TRUETHK	36	25	15	2	8	72	50	30	2	12	216	150	90	1	10	0
	9	AUACC	36	25	15	2	8	72	50	30	2	10	216	150	90	1	10	0
		SBACC	36	25	15	2	8	72	50	30	2	10	216	150	90	1	10	0
		TRUETHK	36	25	15	2	8	72	50	30	2	12	216	150	90	1	10	0
Indicated and Inferred	1	AUACC	25	15	15	2	6	50	30	30	2	6	150	90	90	1	6	4
		SBACC	25	15	15	2	6	50	30	30	2	6	150	90	90	1	6	4
		TRUETHK	25	15	15	2	6	50	30	30	2	6	150	90	90	1	6	4
	2	AUACC	25	15	15	3	8	50	30	30	3	4	150	90	90	1	4	4
		SBACC	25	15	15	3	8	50	30	30	3	4	150	90	90	1	4	4
		TRUETHK	25	15	15	3	8	50	30	30	3	4	150	90	90	1	4	4
	3	AUACC	29	20	15	2	6	58	40	30	2	4	174	120	90	1	4	4
		SBACC	36	25	15	2	6	72	50	30	2	4	216	150	90	1	4	4
		TRUETHK	36	25	15	2	6	72	50	30	2	4	216	150	90	1	4	4
	4	AUACC	25	15	15	2	6	50	30	30	2	6	150	90	90	1	6	2
		SBACC	25	15	15	2	8	50	30	30	2	6	150	90	90	1	2	2
		TRUETHK	25	15	15	3	8	50	30	30	2	6	150	90	90	1	2	2
	5	AUACC	12	11	15	2	8	24	22	30	2	8	72	66	90	1	6	4
		SBACC	36	25	15	2	8	72	50	30	2	8	216	150	90	1	6	4
		TRUETHK	36	25	15	2	8	72	50	30	2	8	216	150	90	1	6	4
	6	AUACC	25	15	15	2	8	50	30	30	2	8	150	90	90	1	6	4
		SBACC	25	15	15	2	6	50	30	30	2	8	150	90	90	1	6	4
		TRUETHK	25	15	15	2	8	50	30	30	2	8	150	90	90	1	6	4
	7	AUACC	25	15	15	2	8	50	30	30	2	8	150	90	90	1	6	4
		SBACC	25	15	15	2	4	50	30	30	2	8	150	90	90	1	6	4
		TRUETHK	25	15	15	2	8	50	30	30	2	8	150	90	90	1	6	4
	8	AUACC	12	11	15	2	8	24	22	30	2	8	72	66	90	1	4	4
		SBACC	36	25	15	2	6	72	50	30	2	8	216	150	90	1	4	4
		TRUETHK	36	25	15	2	6	72	50	30	2	6	216	150	90	1	3	4
	9	AUACC	36	25	15	2	8	72	50	30	2	8	216	150	90	1	6	4
		SBACC	36	25	15	2	8	72	50	30	2	8	216	150	90	1	6	4
		TRUETHK	36	25	15	2	8	72	50	30	2	8	216	150	90	1	6	4

Notes: Fe-Accumulation (FEACC) calculated using the Sb-accumulation (SBACC) parameters. AUTT and SBTT calculated from AUACC and SBACC parameters, respectively.

Table 14.11: True Blue 700 block model search parameters

Resource class	Domain	Variable	First pass					Second pass					Third pass					
			Search distance (m)			# Samples		Second pass distance (m)			# Samples		Third pass distance (m)			# Samples		DH
			Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Major	Semi-major	Minor	Min	Max	Limit
Indicated and Inferred	1	AUACC	29	20	15	2	8	58	40	30	2	4	174	120	90	1	4	0
		SBACC	29	20	15	2	8	58	40	30	2	4	174	120	90	1	4	0
		TRUETHK	29	20	15	2	8	58	40	30	2	4	174	120	90	1	4	0

14.9 Block Model Definitions

The 2D estimates were run with all data, including face samples and diamond drill hole samples, for two different cell sizes resulting in two models with small and large block sizes, respectively. The block sizes were selected based on the sample spacing of each area (Table 14.12), with 10 m employed if drilling density was high or the lode shallow dipping.

The small block estimation was overprinted onto the large block estimation to generate a final combined block model. Both the small and large block models were regularised into a common cell size of 0.5 mY by 0.5 mZ in order to facilitate merging and to better define the mining depletion and domain boundaries.

The block model discretisation of 1,3,3 (XYZ) ensured the 2D data on a single easting coincided with the mid-point of the estimated block.

Table 14.12: Block model dimensions

	High sample data density (face samples)		Low sample data density (drilling only)	
	Block dimensions (m)	Discretisation	Block dimensions (m)	Discretisation
X	1	1	1	1
Y	2.5	3	10 or 20	3
Z	5	3	10 or 20	3

The east–west dimension (XINC) of each block was then converted to the horizontal thickness derived from the estimated true thickness multiplied by the Volume Correction Factor (see Section 14.5) to produce a 3D block model where:

$$XINC = Corrected\ Thickness$$

$$Corrected\ Thickness = True\ Thickness \times Volume\ Correction\ Factor$$

After the block models have been depleted and Mineral Resource categories applied, the block models were repositioned into true 3D space by projecting the centroid of the block to the western contact of the relevant lode and offsetting eastwards by half the block width (XINC).

14.10 Block Model Validation

The grade and thickness estimates were validated by the following:

- Visual comparison of sample inputs and geological understanding against the estimated model accumulation and grades in longitudinal projection.
- Global statistical comparisons by domain of the declustered input composites with the corresponding estimated variables: Au-Accumulation, Sb-Accumulation and true thickness (as shown in Table 14.13 to Table 14.16). A percentage difference less than 10% between the declustered samples and estimated grades is considered acceptable.
- Local validation using Y and Z swath plots comparing the declustered composites against estimated values (Figure 14.12 to Figure 14.23).

Polygonal sample declustering in Datamine RM was applied due to the clustered nature of face samples along the ore drives. Parameters were altered to ensure as many samples as possible are included in the weighting. Samples given a zero weighting are given a nominal 0.001 weight. The declustered means presented in the swath plots are generated by Supervisor using an averaged cell declustering method and are therefore different to the polygonal declustered means presented from Table 14.13 to Table 14.16.

Commentary is provided for each validation where there is a greater variance between the block model estimated grade and the polygonal declustered grade. For instance, in the Shepherd 600 global validation (Table 14.15) it is noted that:

- Domain 1 has an overcall in the polygonal declustering due to large waste zones with low data density abutting high-grade face samples; visually validating well.
- Domain 6 has an overcall in the polygonal declustering due to variable data across a high-grade zone where a low number of face samples are informing a relatively large number of blocks. Visually, the estimate looks to be honouring the input data faithfully. In addition, domain 6 represents a relatively small volume of the overall lode and therefore the overestimate is not considered material.

Table 14.13: Global validation of Brunswick South 320 block model by domain against composites and polygonally declustered composites

Variable	Domain	No. comps	Block model mean	Composite mean comparisons			Declustered composite
			Estimated grade	Composite grade (TC)	Polygonal declustered composite grade (TC)	% Diff. est. grade to composite	% Diff. est. grade to declustered composite
AUACC	1	74	3.87	4.56	3.71	-15%	4.3%
AUACC	2	23	9.53	9.33	9.26	2%	2.9%
AUACC	3	10	0.47	0.45	Not Material		
SBACC	1	74	1.11	1.21	1.07	-8%	3.7%
SBACC	2	23	0.10	0.11	Not Material		
SBACC	3	10	0.02	0.03	Not Material		
TRUETHK	1	74	0.59	0.55	0.61	7%	-3.3%
TRUETHK	2	23	0.57	0.61	0.57	-7%	0.0%
TRUETHK	3	10	0.24	0.24	0.25	0%	-4.0%

Table 14.14: Global validation of Kendal 501 block model by domain against composites and polygonally declustered composites

Variable	Domain	No. comps	Block model mean	Composite mean comparisons			Declustered composite
			Estimated grade	Composite grade (TC)	Polygonal declustered composite grade (TC)	% Diff. est. grade to composite	% Diff. est. grade to declustered composite
AUACC	1	67	5.477	8.088	5.168	-32%	6.0%
AUACC	2	35	4.117	4.348	4.064	-5%	1.3%
SBACC	1	67	3.727	5.920	3.616	-37%	3.1%
SBACC	2	35	2.499	2.606	2.313	-4%	8.0%
TRUETHK	1	67	0.383	0.377	Not Material		
TRUETHK	2	35	0.387	0.427	0.376	-9%	2.9%

Table 14.15: Global validation of Shepherd 600 block model by domain against composites and polygonally declustered composites

Variable	Domain	No. comps	Block model mean	Composite mean comparisons			Declustered composite
			Estimated grade	Composite grade (TC)	Polygonal declustered composite grade (TC)	% Diff. est. grade to composite	% Diff. est. grade to declustered composite
AUACC	1	530	9.70	11.75	8.79	-17%	10.4%
AUACC	2	302	1.57	3.45	Not Material		
AUACC	3	455	21.56	21.01	22.10	3%	-2.4%
AUACC	4	227	18.95	21.55	18.88	-12%	0.4%
AUACC	5	152	11.20	13.03	11.29	-14%	-0.8%
AUACC	6	59	24.94	18.47	21.20	35%	17.6%
AUACC	7	133	43.67	53.48	43.85	-18%	-0.4%
AUACC	8	333	7.86	12.44	7.35	-37%	6.9%
AUACC	9	56	0.43	0.56	Not Material		
SBACC	1	530	0.026	0.037	Not Material		
SBACC	2	302	0.003	0.004	Not Material		
SBACC	3	455	6.15	5.78	6.27	6%	-2%
SBACC	4	227	0.037	0.046	Not Material		
SBACC	5	152	0.131	0.163	Not Material		
SBACC	6	59	0.715	0.532	Not Material		
SBACC	7	133	1.18	0.93	1.17	27%	0.9%
SBACC	8	333	0.02	0.017	Not Material		
SBACC	9	56	0.02	0.022	Not Material		

TRUETHK	1	530	0.23	0.21	0.24	10%	-4.2%
TRUETHK	2	302	0.26	0.32	0.25	-19%	4.0%
TRUETHK	3	455	0.28	0.29	0.28	-3%	0.0%
TRUETHK	4	227	0.36	0.37	0.36	-3%	0.0%
TRUETHK	5	152	0.29	0.33	0.30	-12%	-3.3%
TRUETHK	6	59	0.43	0.39	0.41	10%	4.9%
TRUETHK	7	133	0.39	0.38	0.38	3%	2.6%
TRUETHK	8	333	0.18	0.16	0.18	13%	0.0%
TRUETHK	9	56	0.183	0.230	Not Material		

Table 14.16: Global validation of True Blue 700 block model by domain against composites and polygonally declustered composites

Variable	Domain	No. comps	Block model mean	Composite mean comparisons			Declustered composite
			Estimated grade	Composite grade (TC)	Polygonal declustered composite grade (TC)	% Diff. est. grade to composite	% Diff. est. grade to declustered composite
AUACC	1	45	2.10	2.46	1.98	-15%	6.1%
SBACC	1	45	1.36	1.42	1.24	-4%	9.7%
TRUETHK	1	45	0.38	0.33	0.38	15%	0.0%

Figure 14.12: Brunswick 320 global Au-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

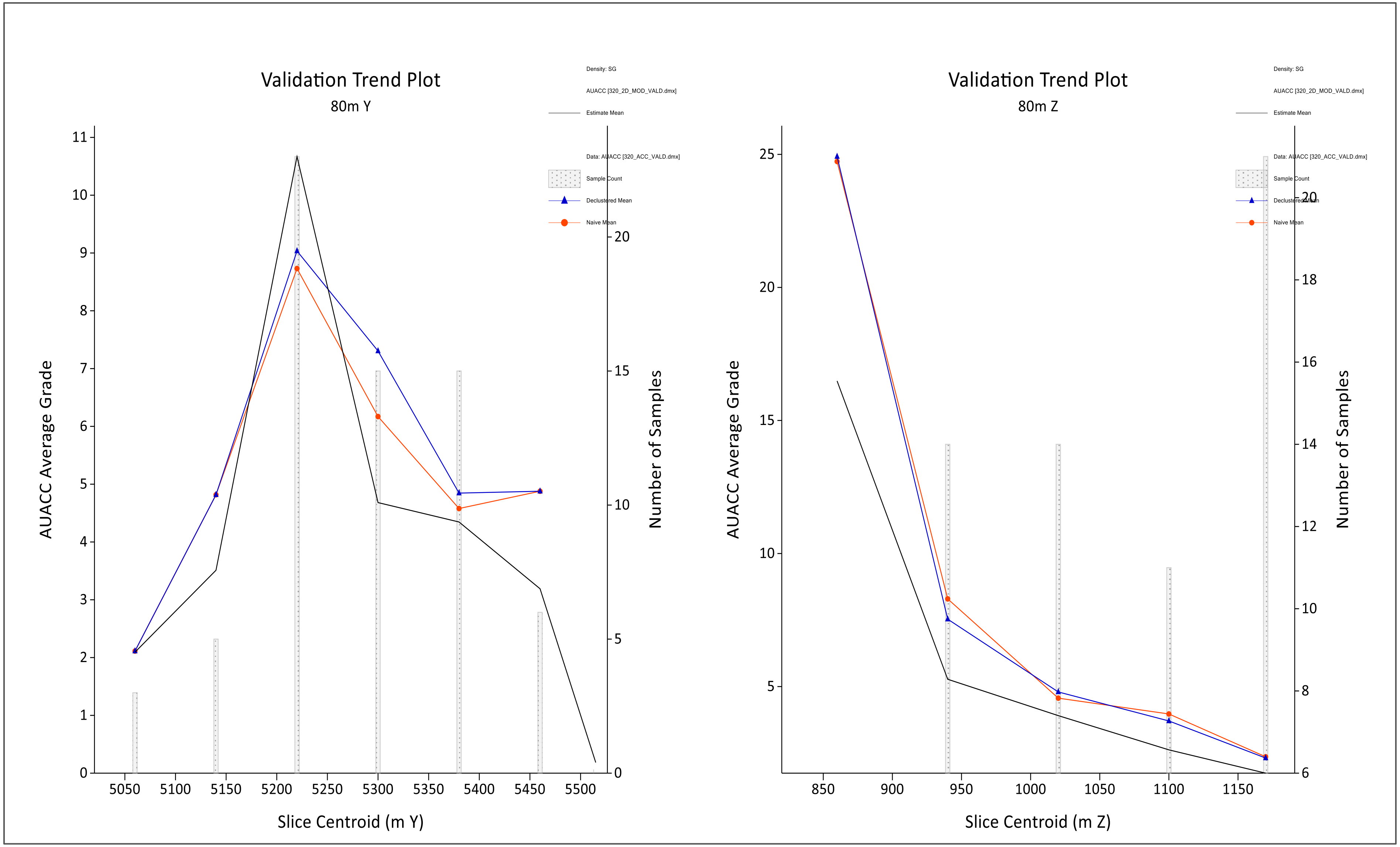


Figure 14.13: Brunswick 320 global Sb-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

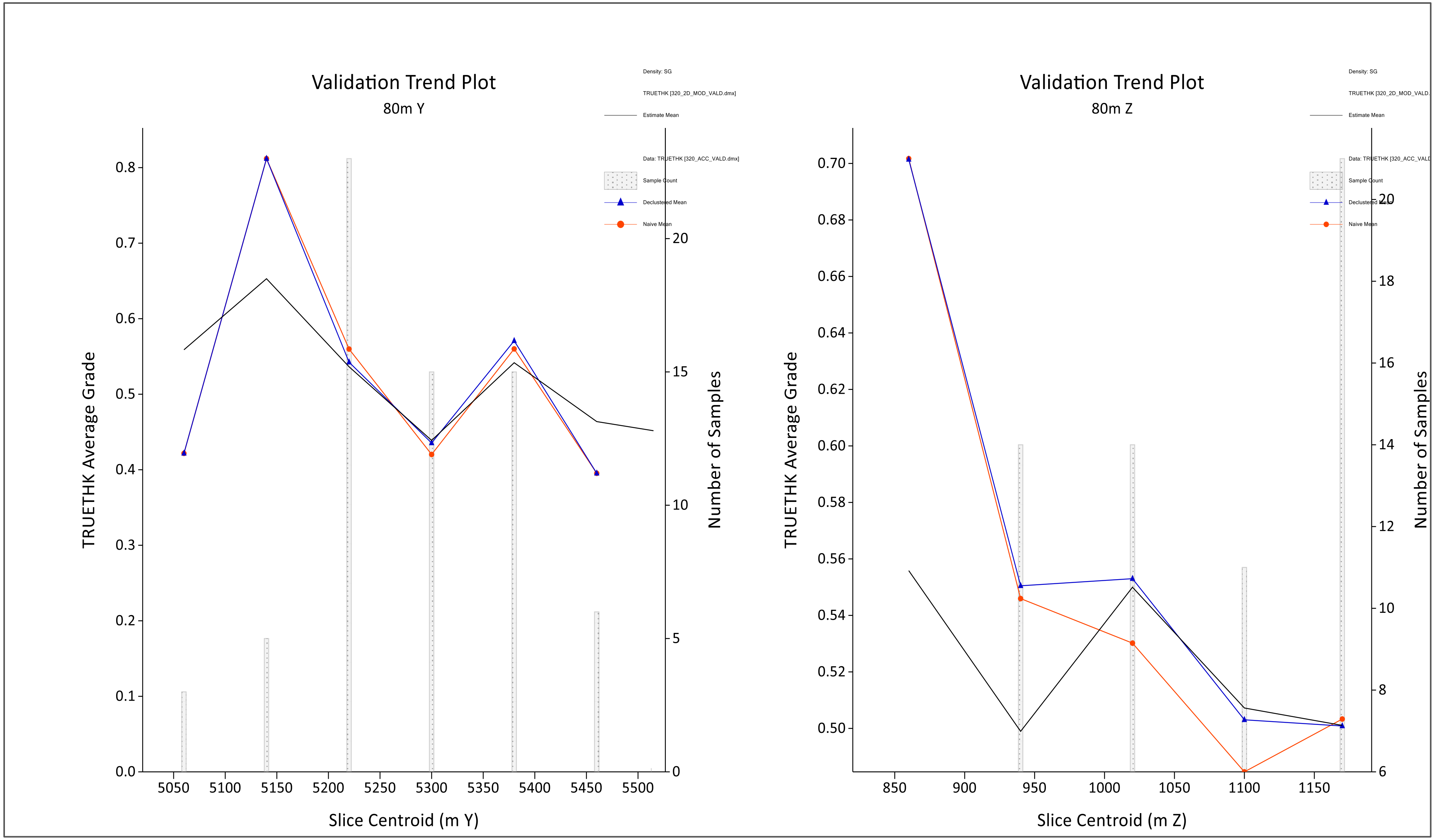


Figure 14.14: Brunswick 320 global true thickness swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

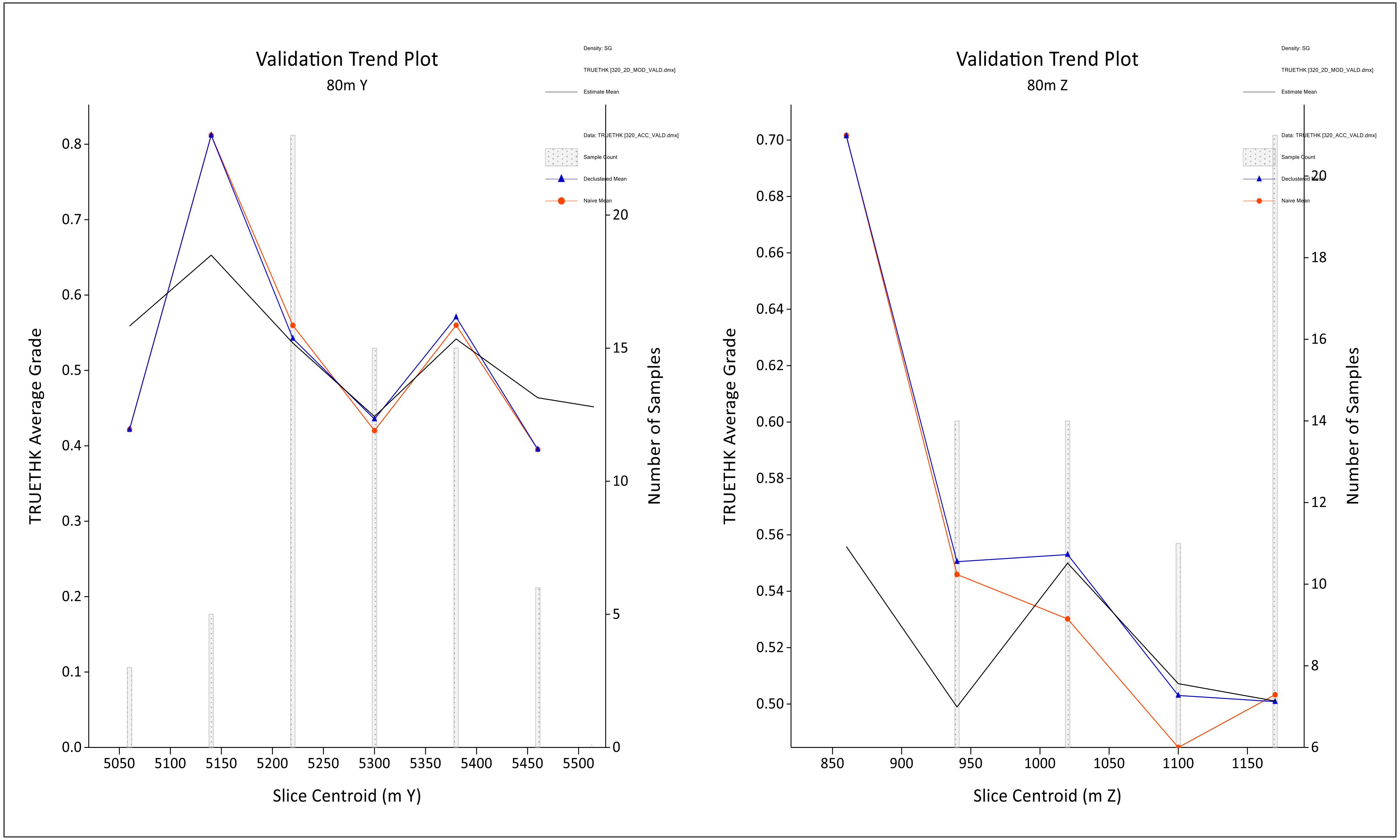


Figure 14.15: Kendal 501 global Au-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

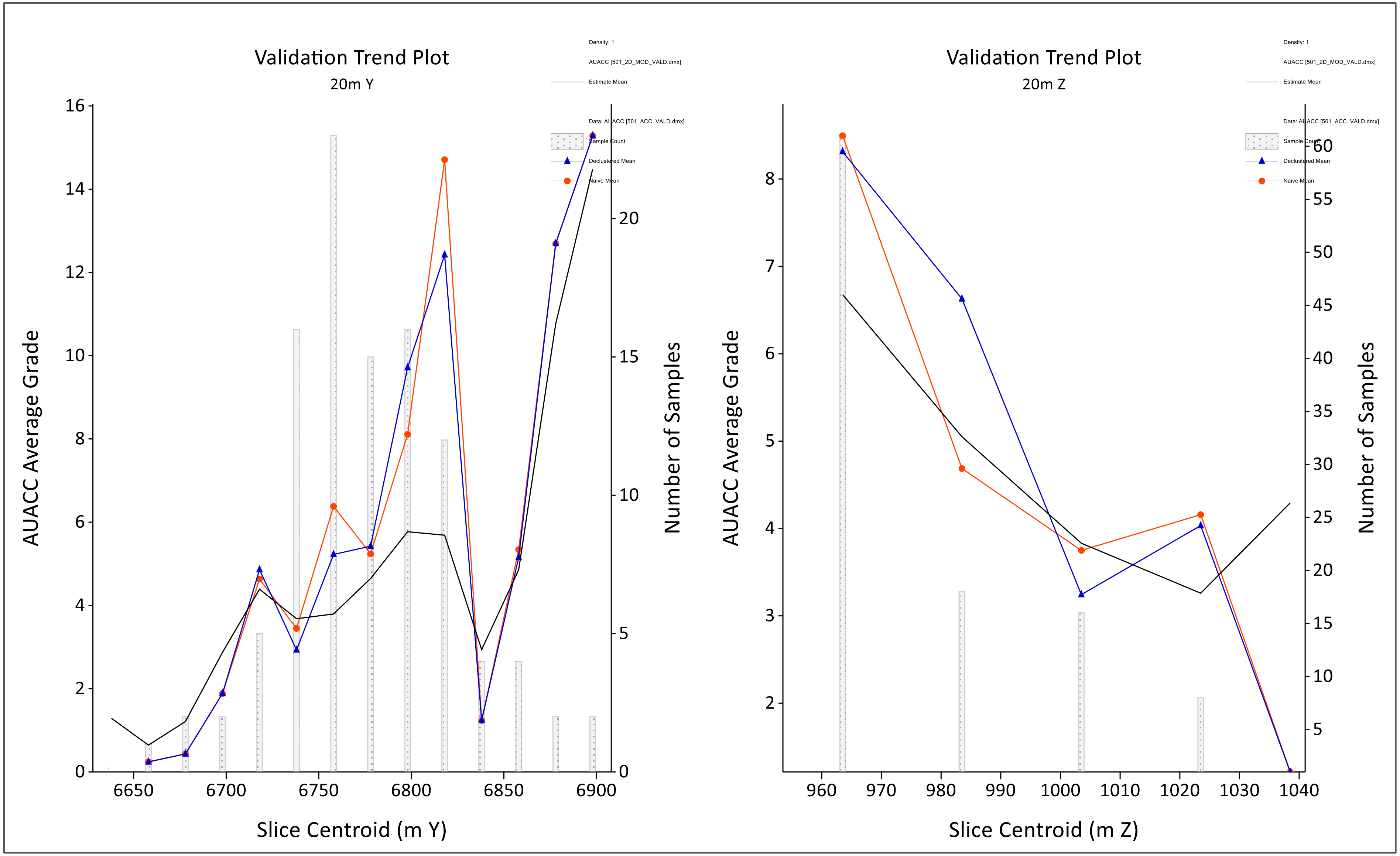


Figure 14.16: Kendal 501 global Sb-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

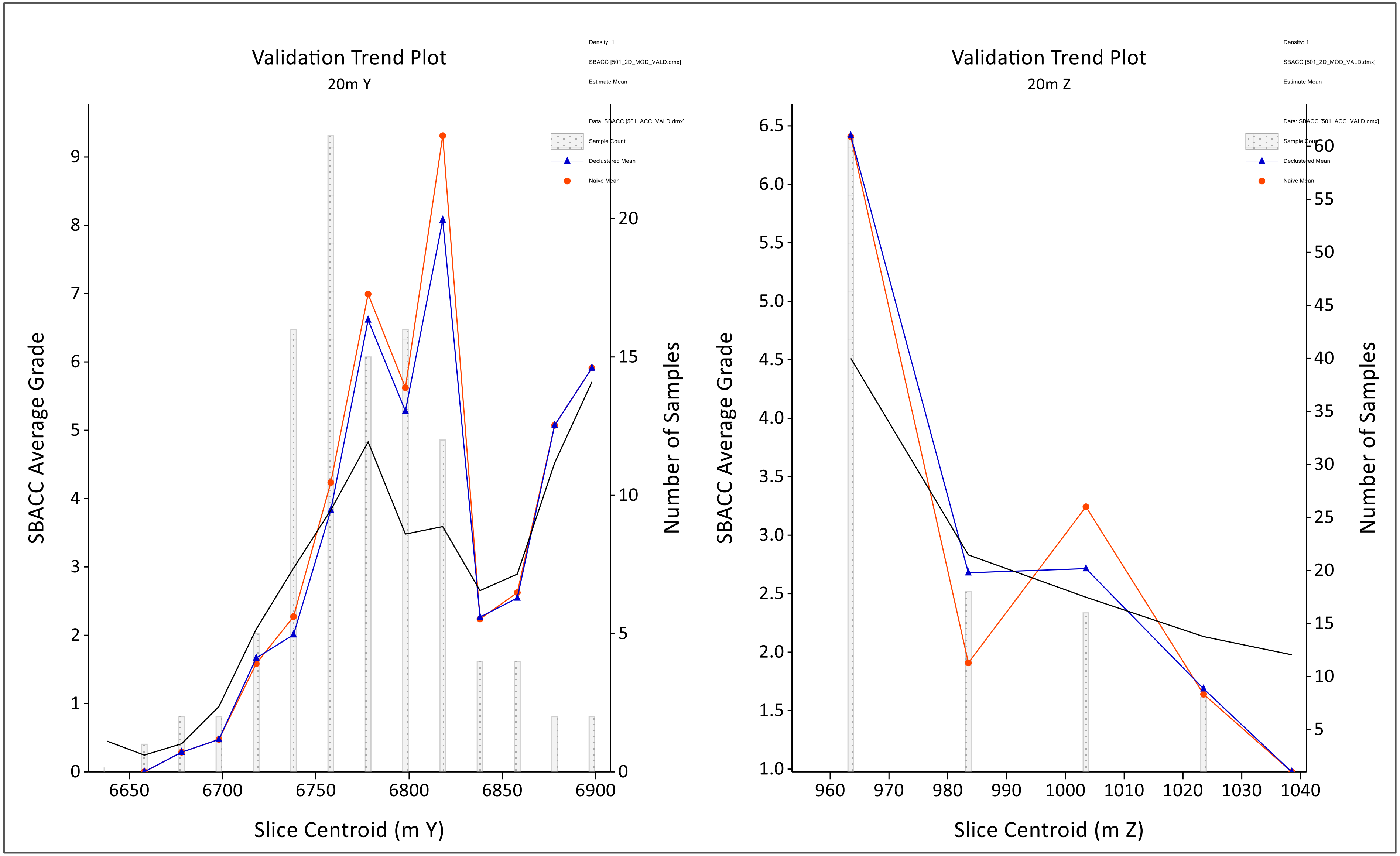


Figure 14.17: Kendal 501 global true thickness swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

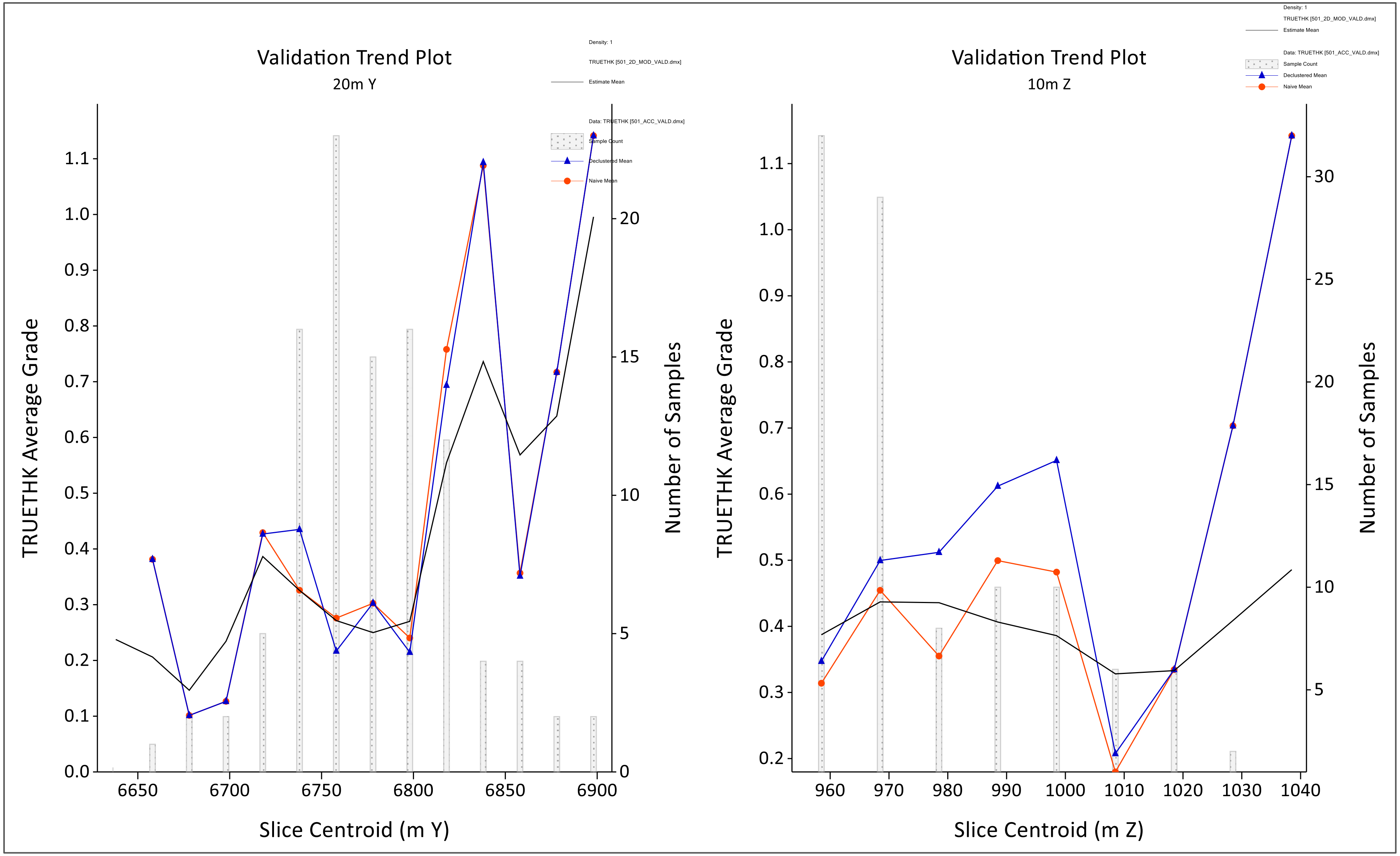


Figure 14.18: Shepherd 600 global Au-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

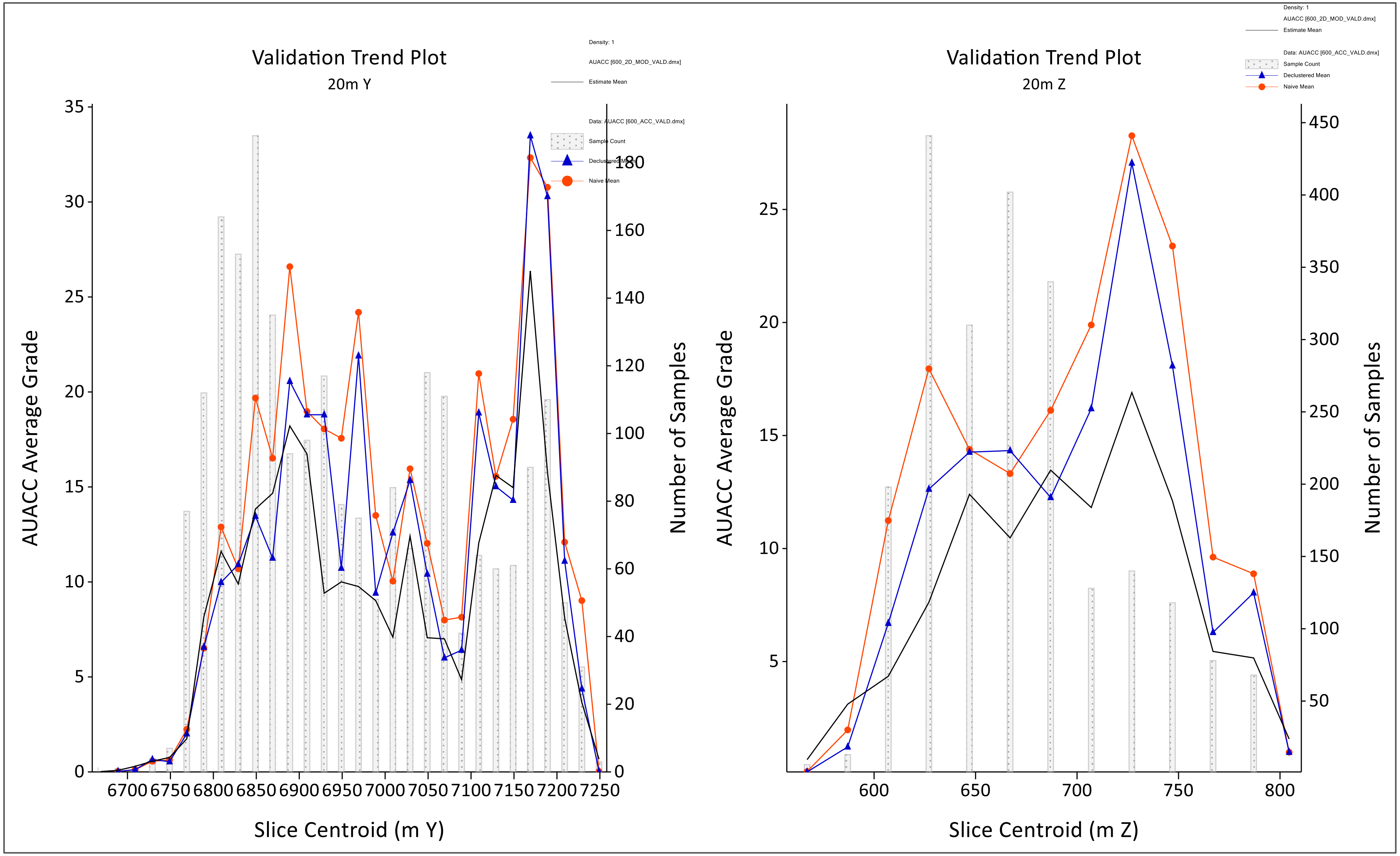


Figure 14.19: Shepherd 600 global Sb-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

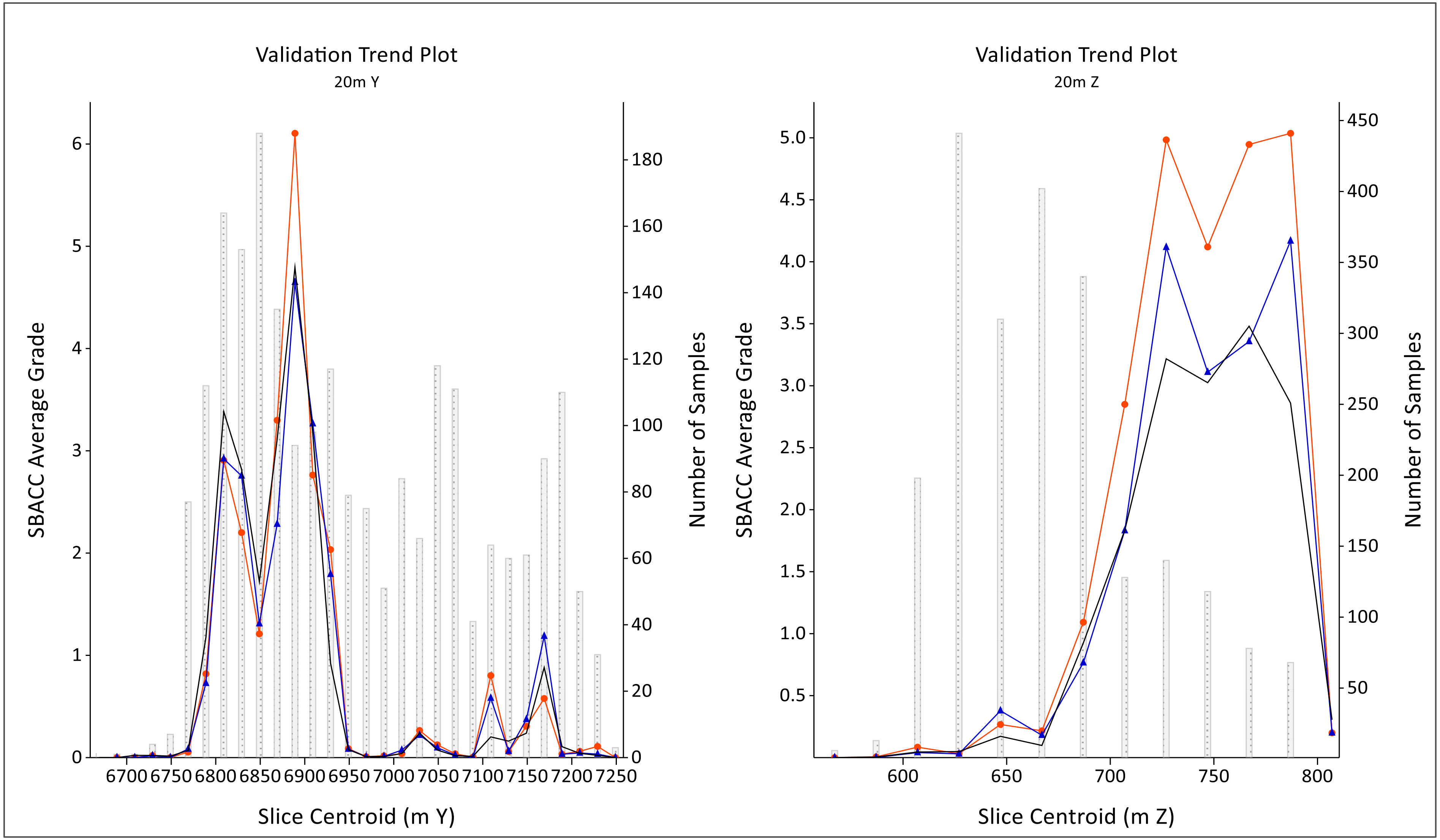


Figure 14.20: Shepherd 600 Global true thickness swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean (black)

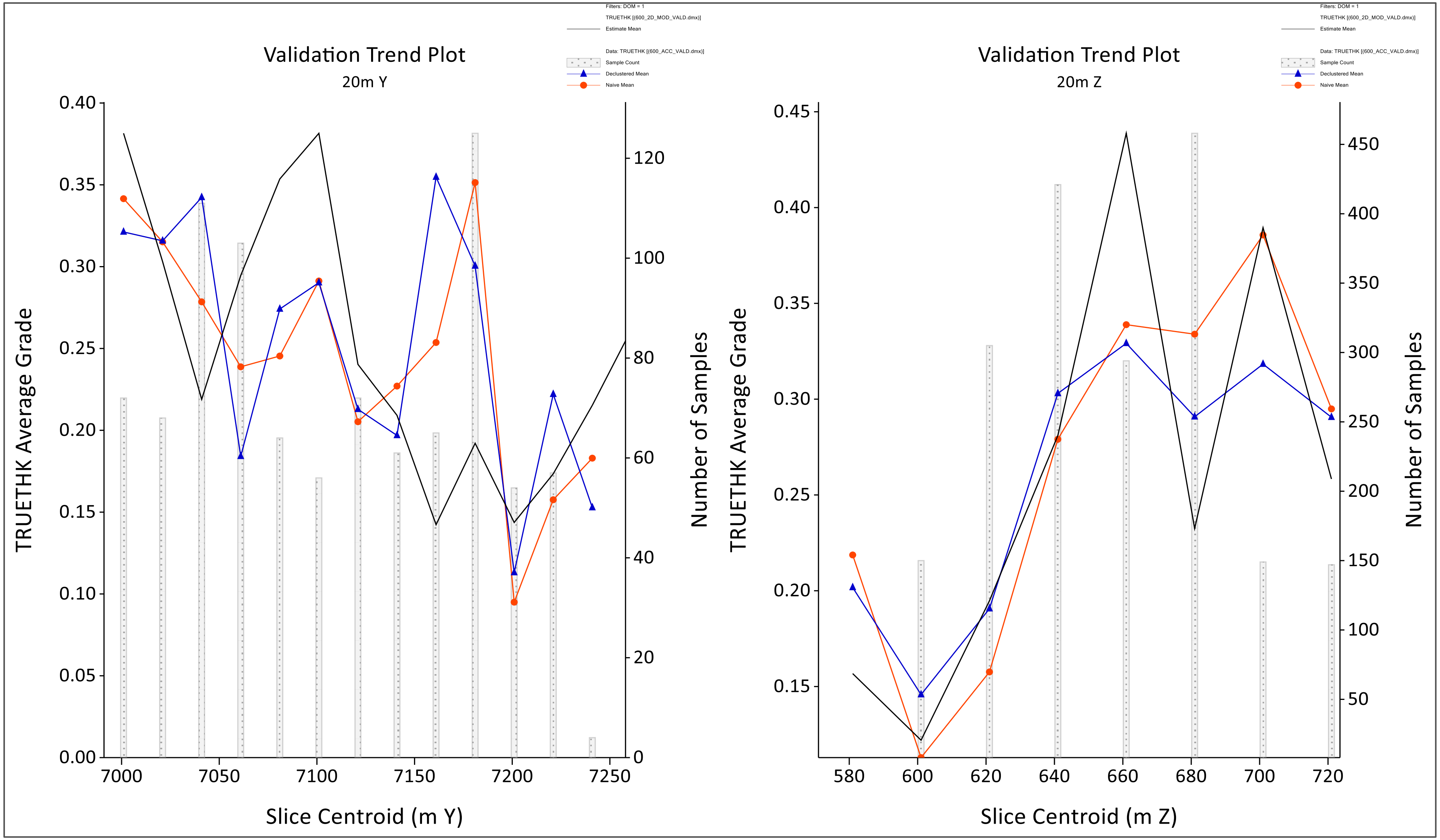


Figure 14.21: True Blue 700 global Au-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean ID2 (used; grey) and ID3 (black)

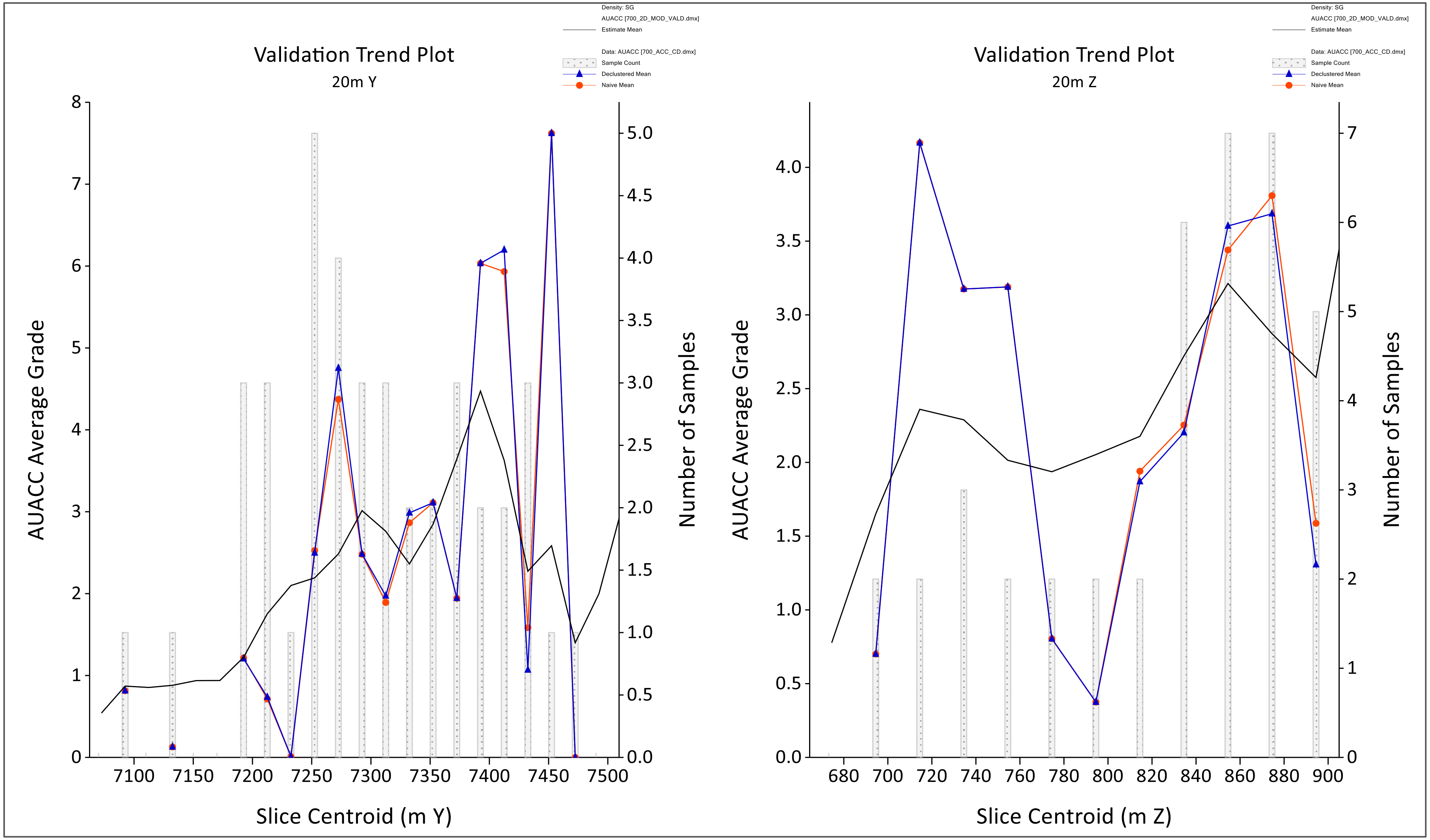


Figure 14.22: True Blue 700 global Sb-Accumulation swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean ID2 (used; grey) and ID3 (black)

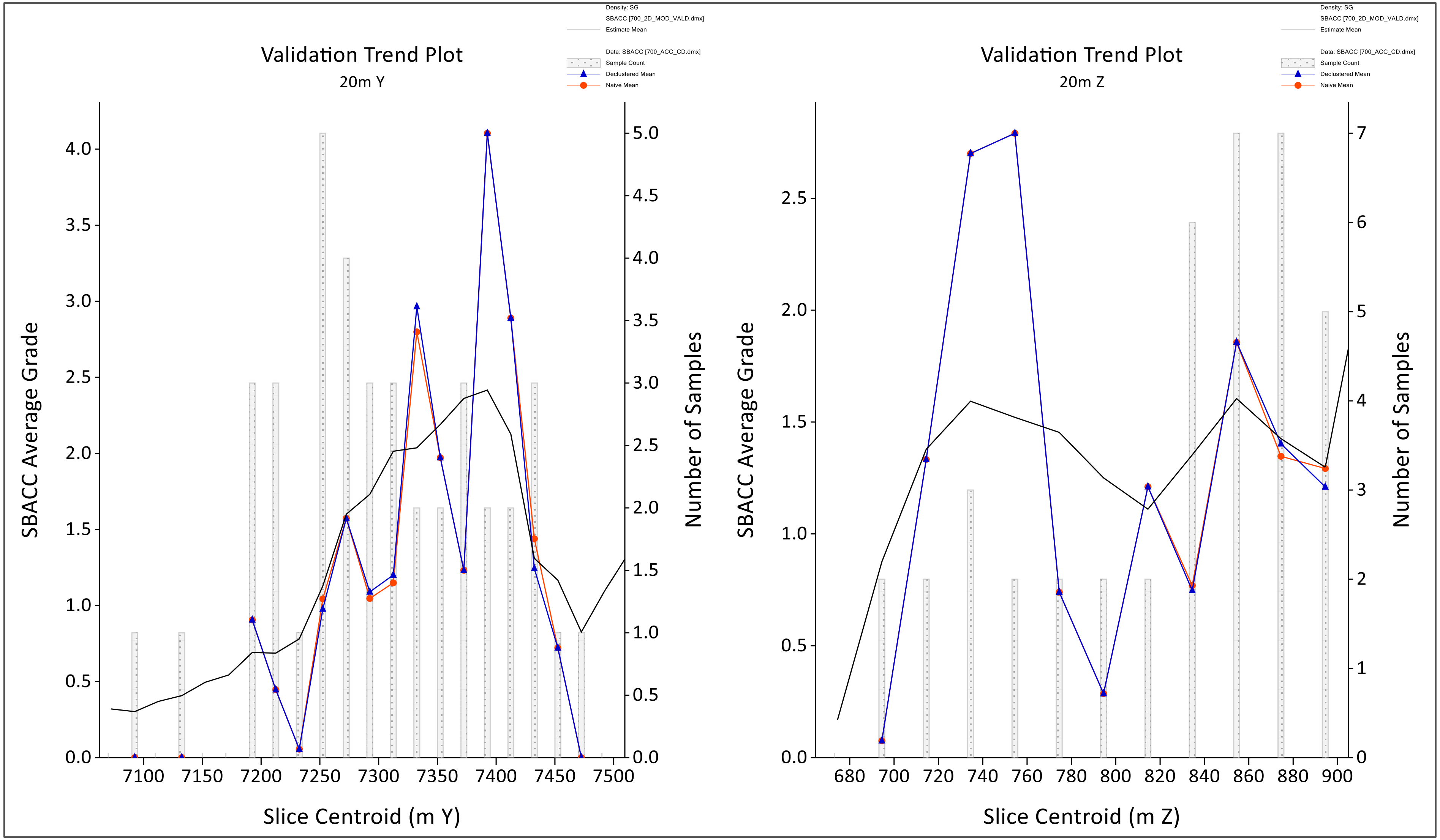
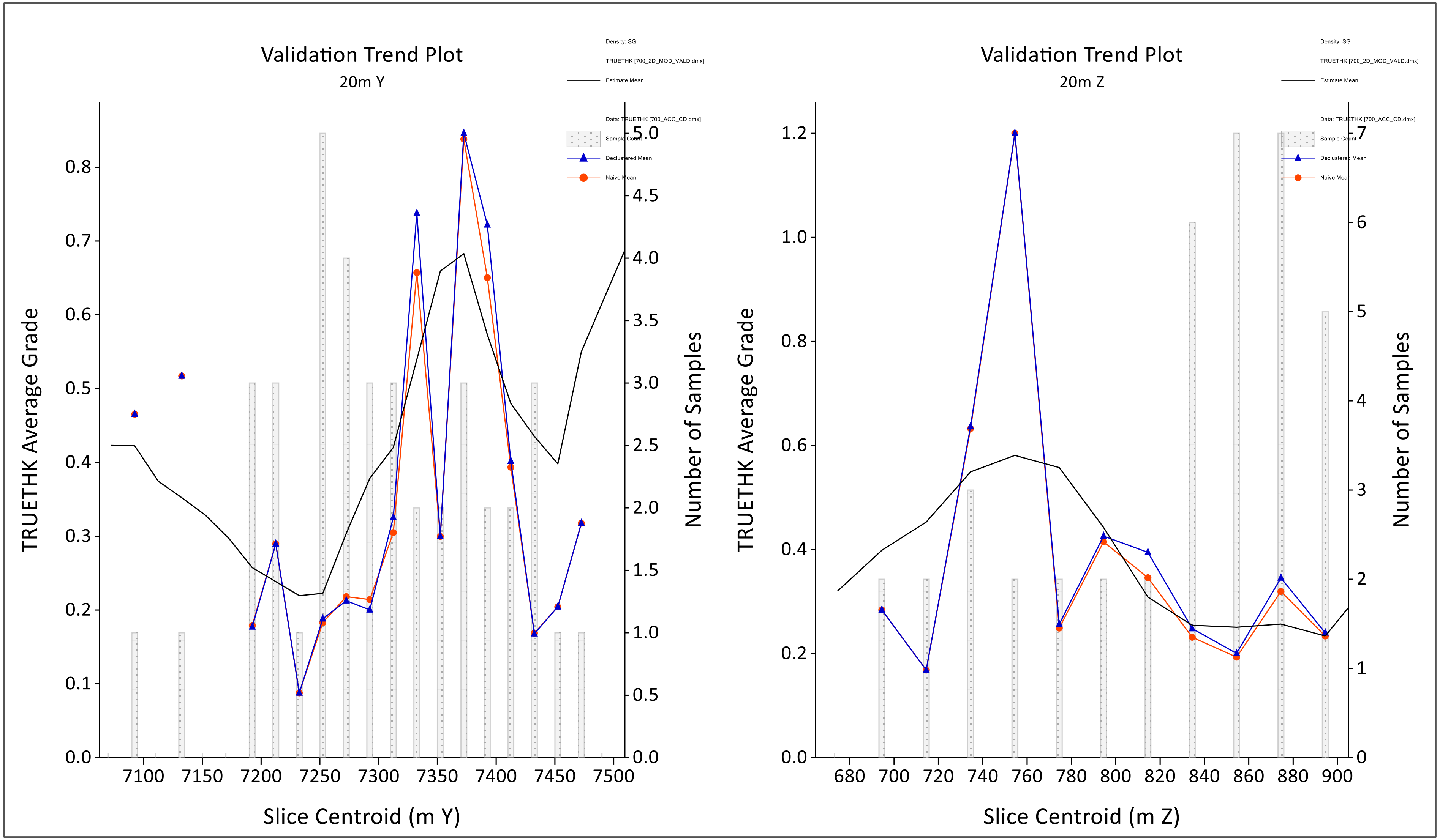


Figure 14.23: True Blue 700 global true thickness swath plot by northing and elevation. Naïve sample mean (red), cell declustered sample mean (blue), and estimation mean ID2 (used; grey) and ID3 (black)



14.11 Mineral Resource Classification

Classification of the Mineral Resource Estimate takes into account Alkane Resources' experience mining the deposit, the satisfactory reconciliation observed over many years and the well-established sampling, assaying, interpretation, and estimation processes in place.

Alkane Resources' ongoing mining experience continues to improve the geological confidence and understanding of the controls on the mineralisation, which guides decisions made during the construction of the geological model and the block models.

The classification criteria include the following, with examples of the major new and re-estimated veins in Figure 14.24 and Figure 14.27.

- The Measured Resources are located within, and are defined by, the developed areas of the mine. This criterion ensures the block model estimate is supported by close-spaced underground face sampling, at approximately 2–5 m spacing, and mapping.
- The Indicated Resources are located where the drill hole spacing in longitudinal projection is on a nominal 40 mN by 40 mRL grid, and where there is high geological confidence in the geological interpretation and the block model estimations.
  - The Slope of Regression (SoR) is used to assess the quality of the estimate and natural breaks are referenced to inform confidence boundaries, with a confidence of greater than 0.5 SoR used to guide the Indicated category.
  - The first search pass is used as an additional guide, related to sample density, which means that the majority of zones in the Indicated category are limited to approximately half the range of variogram for each domain.
- The Inferred Resource has irregular or widely-spaced drill hole intercepts that display geological continuity but limited or patchy grade continuity,
  - The SoR is typically below 0.5 and the blocks have been estimated in search pass of 2 or 3.

Figure 14.24: Brunswick South 320 block model with resource category boundaries

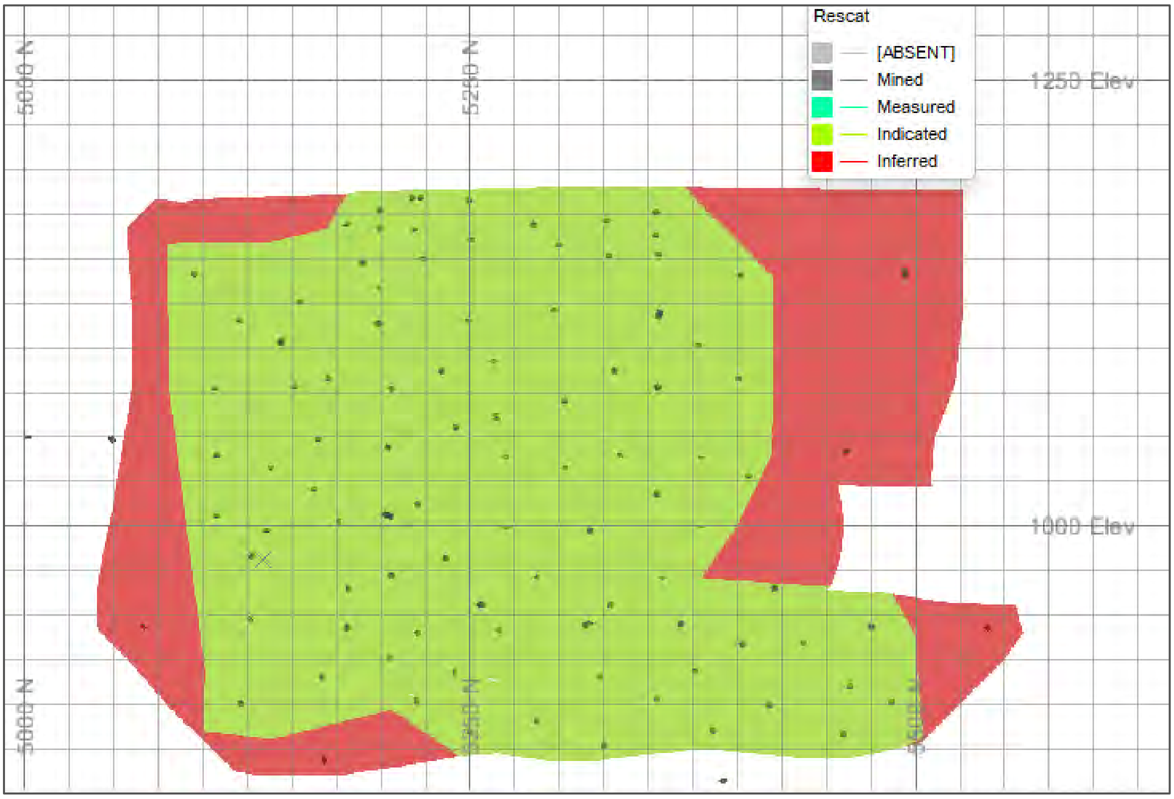


Figure 14.25: Kendal 501 block model with resource category boundaries

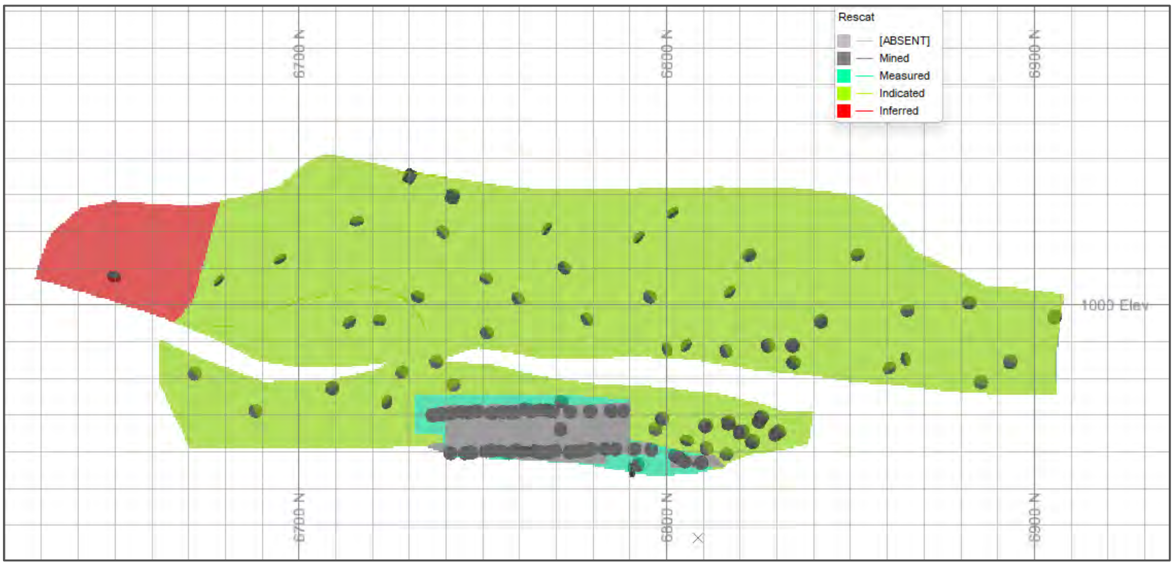


Figure 14.26: Shepherd 600 block model with resource category boundaries, including depletion

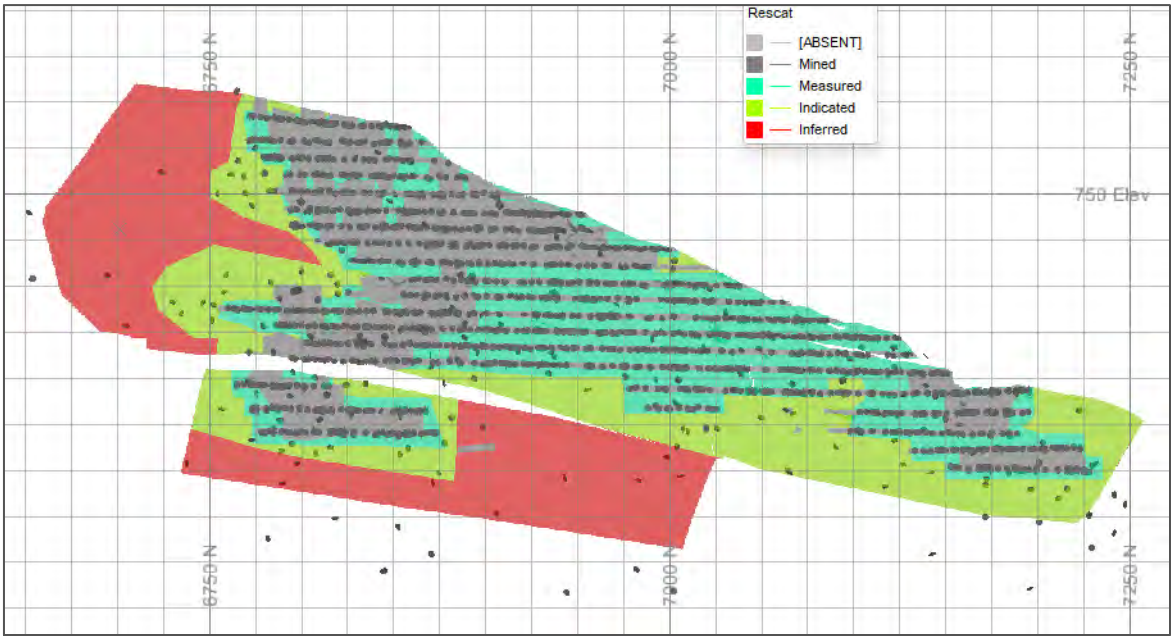
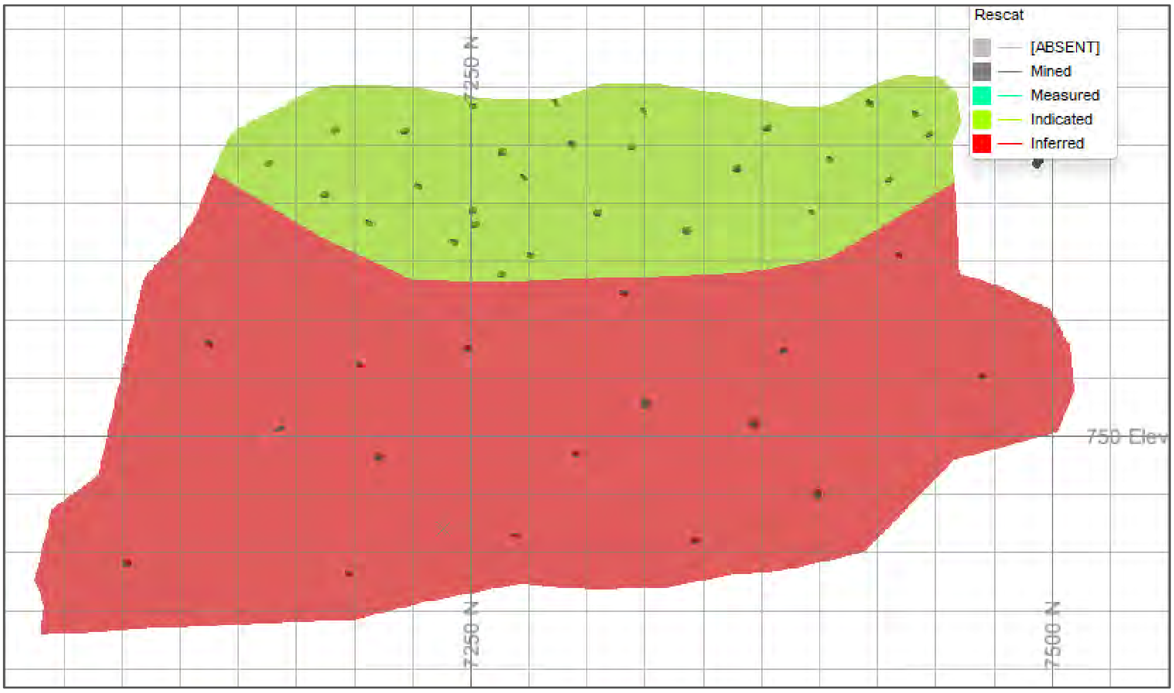


Figure 14.27: True Blue block model with resource category boundaries



The classification criteria are consistent with the previous Mineral Resource Estimate reported in March 2025 (SRK, 2025).

14.12 Mineral Resources

The Mineral Resources are stated here for the Augusta, Cuffley, Brunswick, Kendal, Shepherd, Youle and True Blue deposits with an effective date of 30 June 2026. This date coincides with the following:

- Depletion due to mining up to 30 June 2026.
- Survey of stockpiled ore that was mined and awaiting processing as of 30 June 2026.

All relevant diamond drill hole samples (available as of 17 June 2026) and underground face samples (available as of 1 June 2026) in the Costerfield Property were used to inform the Mineral Resource Estimate.

The Mineral Resources are reported at a cut-off grade of 3.0 g/t AuEq, after diluting to a minimum mining width of 1.2 m.

Dilution is applied by calculating a reporting resource width of 1.2 m multiplied by the volume correction factor (see Section 14.5) to account for vein dip. Where the resource width is less than the dip-corrected vein width, metal and combined lode plus waste tonnage at resource width is calculated to determine diluted grades. If vein width is greater than resource width, resource width is used. These grades at resource width are then used to determine gold equivalency for cut-off grade assessment.

The Augusta, Cuffley, Brunswick, Kendal, Youle, Shepherd, and True Blue deposits consist of a combined Measured and Indicated Mineral Resource of 1,993,000 t at 6.0 g/t Au and 2.1% Sb, and an Inferred Mineral Resource of 969,000 t at 3.6 g/t Au and 1.3% Sb.

Stockpiles retained at the Brunswick Processing Plant represent a Measured Mineral Resource of 49,000 t at 3.7 g/t Au and 0.7% Sb. Stockpile tonnage balances were calculated using drone acquired survey pickups, bulk density factors (If >3% Sb, 1.9 g/cm^3, otherwise 1.85 g/cm^3) and grades from production movements. For the Mineral Resource Estimate, only surface stockpiles with accurate surveyed volumes were included.

The gold equivalence formula used is calculated using the 2026 Budget LoM modelled recovery (refer to Section 17) at the Costerfield Property Brunswick Processing Plant, and is as follows:

$$\mathrm{AuEq} = \mathrm{Au}\ (\mathrm{g/t}) + 2.05 \times \mathrm{Sb}\ (\%)$$

Where the AuEq (g/t) factor of 2.05 is calculated:

- at a gold price of US$4,000/oz
- an antimony price of US$26,400/t
- with Budget LoM predicted metal recoveries of 90% for gold and 89% for antimony.

Refer to Market Studies and Contracts (Section 19) for an explanation on the source of the commodity price.

The 2026 Mineral Resource is detailed in Table 14.17.

Table 14.17: Mineral Resources at the Costerfield Property, inclusive of Mineral Reserves, as at 30 June 2026

Category	Inventory (kt)	Gold grade (g/t)	Antimony grade (%)	Contained gold (koz)	Contained antimony
Measured (Underground)	423	10.0	3.2	136	13.7
Measured (Stockpile)	49	3.7	0.6	6	0.3
Indicated	1,521	5.0	1.8	245	28.0
Measured + Indicated	**1,993**	**6.0**	**2.1**	**387**	**42.0**
Inferred	969	3.6	1.3	111	12.9

Notes:

[1] The Mineral Resource is estimated as at 30 June 2026 with depletion through to this date.

[2] The Mineral Resource is stated according to CIM guidelines and includes Mineral Reserves.

[3] Tonnes are rounded to the nearest thousand; contained gold (oz) is rounded to the nearest thousand; contained antimony (t) is rounded to nearest hundred.

[4] Totals may appear different from the sum of their components due to rounding.

[5] 3.0 g/t AuEq cut-off grade over a minimum mining width of 1.2 m is applied where AuEq is calculated using the formula: AuEq = Au g/t + 2.05 × Sb %.

[6] The AuEq factor of 2.05 is calculated at a gold price of US$4,000/oz, an antimony price of US$26,400/t, and recoveries of 90% for Au and 89% for Sb.

[7] Veins were diluted to a minimum mining width of 1.2 m before applying the cut-off grade and peripheral mineralisation far from current development was excluded to comply with the RPEEE criteria.

[8] The Stockpile Mineral Resource is estimated based upon surveyed volumes supplemented by production data.

[9] Geological modelling, sample compositing and Mineral Resource Estimation for updated models was performed by Joshua Greene, MAusIMM CP(Geo); Daniel Miszczuk, MAusIMM; Katherine Barta, MAusIMM, all employees of Alkane Resources.

[10] The Mineral Resource Estimate was prepared under the supervision of, and verified by, Cael Gniel MAIG RPGeo (Mineral Resource Estimation), an employee of SRK Consulting. Mr Gniel is the Qualified Person under NI 43-101 for the Mineral Resource Estimate Sections 2, 4, 6 to 12, 14 and 23 of the Technical Report.

Figure 14.28: Brunswick (320) block model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m

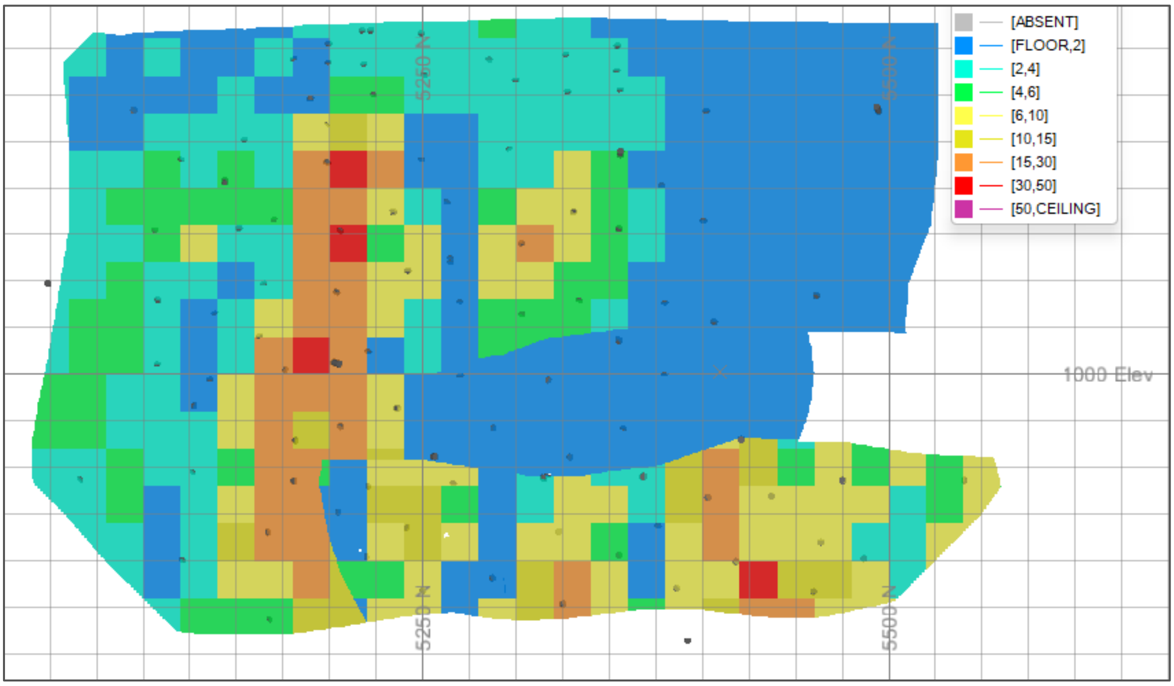


Figure 14.29: Kendal (501) block model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m

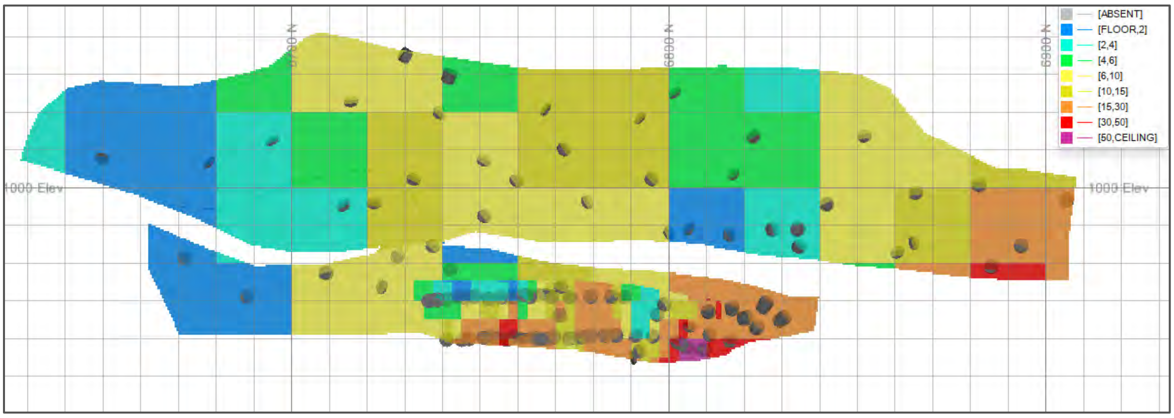


Figure 14.30: Shepherd (600) block model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m

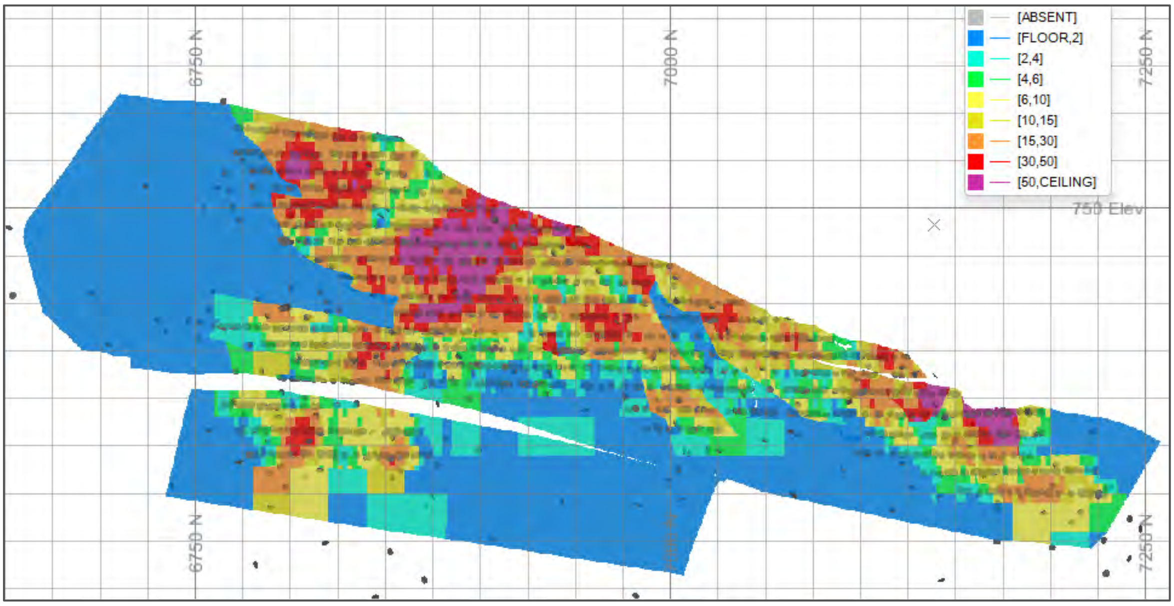
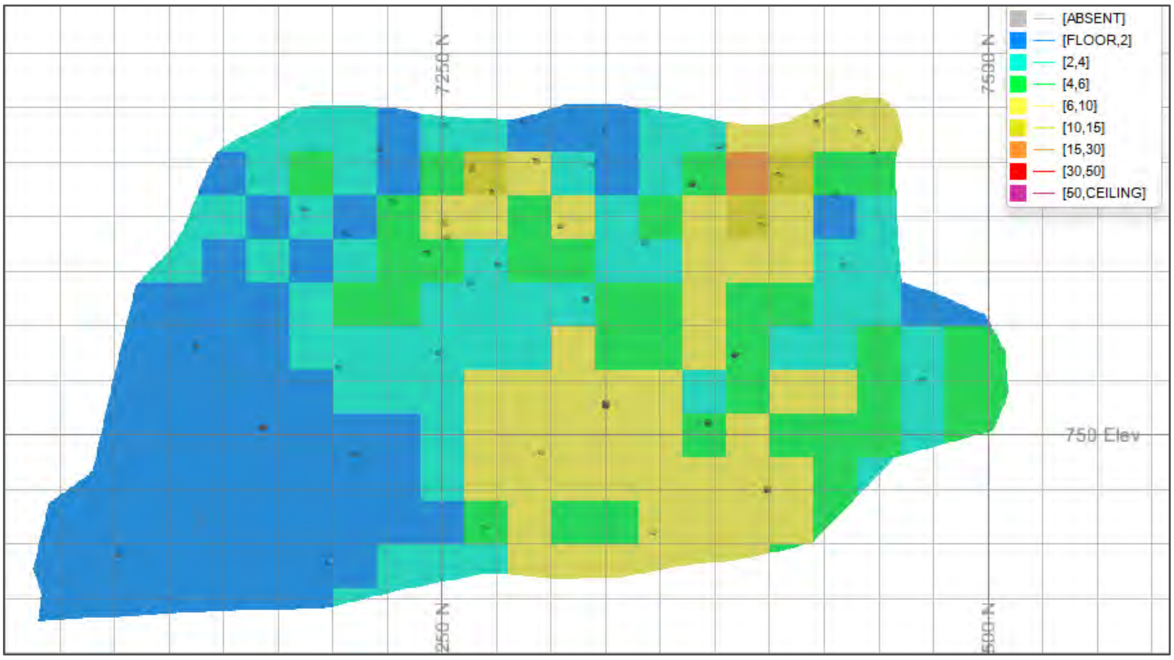


Figure 14.31: True Blue (700) block model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m



Details of the Costerfield Property Mineral Resources, by deposit area, are outlined in Table 14.18.

Table 14.18: Summary by deposit of the Costerfield Property Mineral Resources, including Mineral Reserves

Deposit	Resource Category	Tonnes	Au (g/t)	Sb (%)	Au (oz)	Sb (t)
Augusta Deposit	Measured	183,000	8.0	4.1	47,300	7,500
	Indicated	444,000	4.3	2.1	61,400	9,100
	Inferred	169,000	2.6	1.5	14,400	2,600
Cuffley Deposit	Measured	52,000	10.0	3.6	16,700	1,900
	Indicated	258,000	6.0	1.7	49,800	4,400
	Inferred	31,000	6.9	0.8	6,800	200
Brunswick Deposit	Measured	38,000	7.4	3.7	9,000	1,400
	Indicated	316,000	6.3	1.4	64,100	4,500
	Inferred	72,000	5.8	0.6	13,400	500
Sub King Cobra Deposit	Inferred	165,000	5.2	0.6	27,500	1,000
Youle Deposit	Measured	63,000	12.8	3.2	25,800	2,000
	Indicated	60,000	3.5	1.8	6,700	1,100
	Inferred	6,000	2.0	1.9	400	100
Kendal Deposit	Measured	6,000	3.7	2.8	700	200
	Indicated	295,000	3.4	2.4	32,200	7,000
	Inferred	379,000	2.9	1.7	34,800	6,400
Shepherd Deposit	Measured	81,000	14.2	0.8	36,900	600
	Indicated	82,000	6.7	0.9	17,700	700
	Inferred	8,000	5.2	0.8	1,300	100
True Blue Deposit	Inferred	66,000	6.0	1.8	12,600	1,200
	Indicated	139,000	2.7	1.5	12,100	2,100
Measured and Indicated		1,944,000	6.1	2.1	380,900	41,700
Inferred		969,000	3.6	1.3	110,800	12,900

Notes: Refer to notes for Table 14.17. Stockpiles not included.

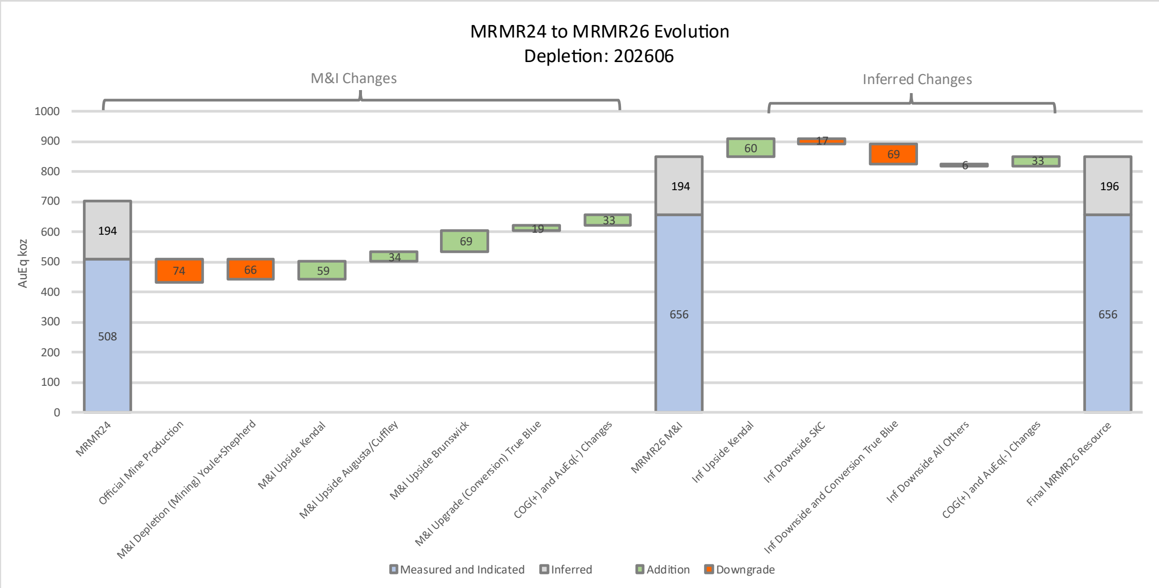
14.13 Comparison to 2024 Mineral Resource

A high-level comparison between the 2024 and 2026 Mineral Resource Estimates has been undertaken (Figure 14.32). To demonstrate areas of variance between the two reporting periods, the gold and antimony grades have been converted into AuEq (oz) values determined using the equation:

AuEq (oz) = Au (oz) + (Sb (t) x (Sb price/t / Au price/oz)

Where gold price = US$4,000/oz and antimony price = US$26,400/t.

Figure 14.32: Comparison between 2024 and 2026 Mineral Resource Estimates, depletion to 30 June 2026



Key variances between the two Mineral Resources are:

- The Mineral Resource was depleted and sterilised through mining activities by 74 koz AuEq, including both Youle, Shepherd, Kendal and minor Augusta/Brunswick sources.
- Exploration drilling success added 213 koz AuEq in Measured and Indicated at Kendal, Brunswick/Brunswick South, Augusta/Cuffley, and True Blue.
- Strengthening resource metal prices led to a lower cut-off grade, with stronger gold reducing the AuEq g/t factor, for a combined increase of 33 koz AuEq Measured and Indicated, and 33 koz AuEq Inferred.
- Inferred Mineral Resources were dominantly affected by exploration drilling down grade and Measured and Indicated conversion at True Blue (- 69 koz AuEq) and additions with the Kendal lodes (60 koz AuEq).

14.14 Reasonable Prospects for Eventual Economic Extraction

The RPEEE have been satisfied by applying a minimum mining width of 1.2 m and ensuring that isolated blocks above cut-off grade, which are unlikely to ever be mined due to distance from the main body of mineralisation, were excluded from the Mineral Resource.

The width of 1.2 m is the practical minimum mining width applied at the Costerfield Property for stoping. For blocks with widths less than 1.2 m, diluted grades were estimated by adding a waste envelope with zero grade and 2.74 t/m^3 (Augusta, Brunswick and Cuffley) or 2.76 t/m^3 (Youle, Kendal, Shepherd and True Blue) bulk density to the lode.

A 3 g/t AuEq cut-off grade over a minimum mining width of 1.2 m has been applied. The cut-off has been derived by Alkane Resources based on cost, revenue, and mining data from the July 2025 to February 2026 period, 2026 Budget LoM modelled recovery, and updated commodity price forecasts and exchange rates. This reflects a decrease from the previous Mineral Resource cut-off grade of 4.3 g/t AuEq (SRK, 2025) reflecting higher metal prices.

Significant pillars and remnant material that is above 3.0 g/t AuEq has been included in the Mineral Resource Estimate. From 2017 onwards, extraction of these areas has been an ongoing success and where zones have a demonstrated economic viability, they are deemed to meet RPEEE.

The height of all Kendal lodes was restricted to 10 m from surface to account for shallow historical workings and reduced confidence in extraction with the current underground methodology.

14.15 Reconciliation

Both the previous 2024 Mineral Resource Estimate (SRK, 2024) and the 2026 Mineral Resource Estimate (this report) were reconciled against the January 2025 to June 2026 (inclusive) official mine production:

- 218,205 t grading at 8.7 g/t Au and 0.9% Sb for 61,037 oz of contained gold and 2,005 t of antimony
  - Totals may vary to reported values due to rounding errors.
- Where Mine Production = Milled Production + Change (Δ) in Stockpile Inventory.

2024 Mineral Resource Estimate reconciliation evaluates the predictiveness of model after 18 months of production and new data, providing an indication of the estimation methodology suitability.

The 2026 Mineral Resource Estimate reconciliation is retrospective after the inclusion of data collected in 2026 and provides an indication on the health of new Mineral Resource Estimate to represent mineralisation.

Table 14.19: 2024 and 2026 Mineral Resource Estimate reconciliation against mine production

Jan 2025 to June 2026	Tonnage reconciliation		Grade reconciliation				Metal reconciliation					
	Tonnes	Tonnes variance (%)	Au g/t	Au variance (%)	Sb %	Sb variance (%)	Au (oz)	Au variance (%)	Sb t	Sb variance (%)	AuEq (oz)	AuEq oz variance (%)
Produced	218,205	-	8.7	-	0.92	-	61,037	-	2,005	-	74,249	-
2024 MRE	228,834	5 %	8.5	-3 %	0.92	0 %	62,289	2%	2,110	5 %	76,196	3 %
2026 MRE	228,867	5 %	8.7	0 %	0.94	2 %	64,137	5%	2,147	7 %	78,284	5 %

Notes: MRE – Mineral Resource Estimate.

The model reconciliation was completed according to the following process:

- Solid wireframe of as-mined stoping (where available) and development as-mined were used to code into the combined 3D located block model and report by lode.
- As block model derived stope tonnage, grades reflect as-mined cavity monitoring system (CMS)-derived stope volumes or as-designed if not available. CMS void scan coverage was 93% for the reporting period.

- ROM ore is stockpiled according to grade bins rather than by named mining area or mining level, therefore reconciliation was based on combined performance of the mining areas for 2026, dominantly Youle and Shepherd, with contributions from the Kendal, Augusta and Brunswick lodes as well as some long-term stockpile sources.

14.15.1 Reconciliation Discussion

Reconciliation performance demonstrates appropriate model predictiveness and model health, with grade and metal variances within ±10% margins for both the previous 2024 Mineral Resource Estimate (SRK, 2025) and the current 2026 Mineral Resource Estimate. A detailed breakdown is available in Table 14.19.

Risks noted include:

- 5% tonnage resource model overcall which is a potential driver of the difference to the official mined metal. This included total Sb metal (7%) and overall 5% AuEq oz variance for the 2026 Mineral Resource Estimate. No mining recovery factor is applied to the tonnage and some production loss, non-surveyed underground stocks, and stockpile variances may account for an overall tonnage variance.
- Major stoping sources were located along dominant antimony-led grade boundaries at the transition to gold-rich Youle which may have affected final antimony metal reconciliation.
- Although the 2024 Mineral Resource Estimate appears to outperform the 2026 Mineral Resource Estimate, the current reconciliation process does not provide sufficient resolution to confirm this due reconciliation process frequency, post-mining stockpile variance, and source blending.

Improvement in reconciliation performance is iterative and ongoing actions to address risks are being scoped in coordination with SRK by Alkane Resources' staff.

Alkane staff and the QP consider that the reconciliation performance of the 2026 Mineral Resource models is acceptable for the style of mineralisation.

14.16 Other Material Factors

SRK is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that could materially influence the Mineral Resources other than the modifying factors already described in other sections of this report.

15 Mineral Reserve Estimates

A mine plan was prepared from the 1 July 2027 financial year-end Mineral Resource based only on Measured and Indicated Resource blocks, and mined primarily using a long-hole stoping mining method with cemented rock fill (CRF). The minimum stoping width of 1.5 m was used, with unplanned dilution at zero grade for both gold and antimony.

An AuEq grade for Mineral Reserve has been calculated using commodity prices of US$3,100/oz Au and US$22,000/t Sb. AuEq grade is calculated using the formula:

$$AuEq = Au + (Sb \times 1.61)$$

where Sb is in % and Au is in grams/tonne

An operating cut-off grade of 4.4 g/t AuEq was determined from the Costerfield Property July 2025 to February 2026 average production costs.

The financial viability of Proven and Probable Mineral Reserve was demonstrated at metal prices of US$3,100/oz Au and US$22,000/t Sb. Refer to Market Studies and Contracts, Section 19, for an explanation on the source of the prices.

The 2026 Mineral Reserve is detailed in Table 15.1.

Table 15.1: Mineral Reserve at the Costerfield Property as at 30 June 2026

Category	Tonnes (kt)	Gold grade (g/t)	Antimony grade (%)	Contained gold (koz)	Contained antimony (kt)
Proven Underground	220	7.4	1.7	52	3.7
Proven Stockpile	49	3.7	0.6	6	0.3
Proven Total	**270**	**6.7**	**1.5**	**58**	**4.0**
Probable Underground	690	5.1	1.6	112	10.9
Total Proven and Probable	**960**	**5.5**	**1.6**	**170**	**15.0**

Notes:

[1] The Mineral Reserve is estimated as at 30 June 2026, and depleted for production through to 30 June 2026.

[2] Tonnes are rounded to the nearest thousand; contained gold (oz) is rounded to the nearest thousand; contained antimony (t) is rounded to nearest hundred.

[3] Totals may appear different from the sum of their components due to rounding.

[4] Lodes have been diluted to a minimum mining width of 1.5 m for stoping and 2.0 m for ore development.

[5] A operational cut-off grade of 4.4 g/t AuEq is applied. An incremental cut-off grade of 2.5 g/t AuEq is applied where mining rates do not meet mill capacity and the life of the mine is not extended.

[6] Commodity prices applied are US$3,100/oz Au, US$22,000/t Sb and exchange rate US$:A$ of 0.71.

[7] AuEq is calculated using the formula: AuEq = Au g/t + 1.61 × Sb %.

[8] The Mineral Reserve is a subset, a Measured and Indicated only schedule, of a LoM plan that includes mining of Measured, Indicated and Inferred Resources.The Mineral Reserve Estimate was prepared by Vaughn Goyne, AAusIMM, who is a full-time employee of Alkane Resources. The Mineral Reserve Estimate was independently verified by Robert Urie, FAusIMM(CP), who is a full-time employee of SRK. Robert Urie fulfills the requirements to be a ‘Qualified Person’ for the purposes of NI 43-101, and is the Qualified Person under NI 43-101 for the Mineral Reserve.

The net increase of 1,866 oz Au in Proven and Probable Mineral Reserves for 2026, relative to 2024, consists of the addition of 62,903 oz Au added by Mineral Resource conversion across the Costerfield Operation and a total of 61,037 oz Au depleted or sterilised from the 2024 Mineral Reserves through mining production or mining re-evaluation in 2026. The 3,855 t Sb net increase in Proven and Probable Mineral Reserves consists of 5,860 t Sb added by Mineral Resources conversion across the Costerfield Operation and 2,005 t Sb depleted or sterilised from the 2024 Mineral Reserves through mining production or mining re-evaluation in 2026.

15.1 Modifying Factors

The modifying factors of mining dilution and recovery have been taken into account when generating the Mineral Reserve. The modifying factors applied are based on mining method, lode type and structural considerations.

15.1.1 Mining Dilution

Jumbo development, floor benching, long-hole stoping with CRF, long-hole half-upper stoping with no backfill and remnant pillar slash stopes are the current main mining methods used at the Costerfield Property for the extraction of underground Mineral Reserve.

Due to the narrow width of mineralisation at the Costerfield underground operation, the Mineral Reserves includes a portion of planned mining dilution, since the Mineral Reserve is reported to conform to a minimum 1.5 m mining width. Where the lode width is greater than 1.2 m, the minimum mining width is the lode width plus a total of 0.3 m planned dilution from the HW and FW. Unplanned dilution includes waste rock from outside the planned drive profile or stope limits which is loaded and hauled to the mill. Unplanned dilution is generally the sum of overbreak caused by excessive explosive energy and/or geotechnical failures due to unfavourable ground conditions.

Surveys of the mined development drives and stopes to date are consistent with the recovery and dilution factors applied to the generation of the Mineral Reserve (Table 15.2).

Table 15.2: Costerfield Property mine recovery and dilution assumptions

Mining method	Planned width (m)	Unplanned dilution (%)	Tonnage recovery factor (%)
Ore development	2.0–4.5	10–20 (weighted avg 15)	100
Long-hole CRF	1.5–4.5	10–120 (weighted avg 26)	95
Long-hole half upper stoping	1.5–2.0	10–150 (weighted avg 21)	90
Remnant pillar slash stopes	1.5–1.6	200–300 (weighted avg 217)	70
Floor bench	2.0	10	85

The long-hole overbreak and dilution factors are consistent with operational results since there is adequate reconciliation between forecast tonnes and actual tonnes. These factors are based on stope inspections as well as stope scans that produce a 3D model of the open void which is then interrogated using mine planning software to generate the final void volume. Development dilution is based on the end of month survey reports which compare actual drive volume against the designed volume.

Both planned and unplanned dilution has been considered for establishing the production schedule. Planned dilution includes waste rock that will be mined and is not segregated from the design. Sources of planned dilution include the following:

- Waste rock that is drilled and blasted within the drive profile and where the overall grade of the blasted material is economically justified.
- Waste rock within the confines of the stope limits, including FW and/or HW material that has been drilled and blasted to maximise mining recovery and/or maintain favourable wall geometry for stability.

15.1.2 Mining Recovery

The tonnage recovery factors (Table 15.2) represent the recovered portion of the planned mining areas for the different mining methods and include in situ ore plus dilution material.

In stoping areas, visual inspections are carried out to estimate the stope void volume and determine if any ore is left in the stopes, which is recorded on the stope inspection sheets. Stope volumetric scans are also conducted to confirm the qualitative data captured during the stope inspections. These data are used in combination to estimate the recovery factors applied to the Mineral Reserve.

The remnant pillar slash stoping method is applied on a minor portion of the Mineral Reserve. This mining method has a reduced mining recovery in comparison to other long-hole stoping methods, having an estimated recovery factor of 70%. This value considers the factors of limited remote loader access when extracting ore from the remnant drive/draw point and unfavourable ground conditions around draw points that may potentially limit the recovery of material.

15.2 Cut-off Grade

The cut-off grade determined for Mineral Reserve is based on the July 2025 to February 2026 average operating costs, operational data and the Mineral Reserve economic parameters.

Parameters input into the cut-off grade calculation are:

- Gold price of US$3,100/oz.
- Antimony price of US$22,000/t.
- US$:A$ exchange rate of 0.71.
- Process recoveries are based upon a variable recovery formula applied at cut-off grade.
- Product payables are the weighted average payables of the 2026 LoM budget.
- The production schedule is sourced from the Mineral Reserve LoM plan.
- Unit costs for mining are based on July 2025 to February 2026 average operating costs data.
- Variable mining cost per tonne is the weighted average of development and stoping from July 2025 to February 2026 average operating costs data.
- Mining costs are in A$ and commodity prices are in US$.
- The cut-off grade determination does not include planned capital costs.

The resulting operating and incremental cut-off grades determined for the Mineral Reserve is summarised in Table 15.3, along with the values used in the determination of each cut-off grade.

Table 15.3: Mineral Reserve cut-off grade variables and cut-off grades

	Operating COG	Incremental COG
Mining cost (A$/t)	266.00	114.45
Processing cost (A$/t)	107.16	107.16
G&A cost (A$/t)	76.46	–
Sustaining capital (A$/t)	36.74	36.74
Gold price (US$/oz)	3,100	3,100
US$:A$ conversion value	0.71	0.71
Gold recovery (%)	88.1	84.9
Cut-off grade (g/t AuEq)	4.4	2.5

Notes: COG – cut-off grade; G&A – general and administrative.

An operating cut-off grade of 4.4 g/t AuEq was used for the Mineral Reserve with an incremental cut-off grade of 2.5 g/t AuEq applied where incremental mining conditions were met.

15.3 Mine Design and Planning Process

The mine design work is completed using Deswik.CAD and Deswik.ASD. The Mineral Reserve LoM scheduling is completed through Deswik.IS.

The Mineral Reserve is calculated from mine designs based on the 2026 Mineral Resource block models, which have been depleted for the production through to 30 June 2026.

The mine design methodology considers the Mineral Reserve cut-off grade, mining feasibility and economic assessment of individual mining blocks, and comprises the following general methodology:

- Determination of the mining method applied to individual areas based on access options, geological grade distribution, geometry of the lode, historical mining shapes and geotechnical constraints.
- Design of ore development and stope mining shapes in order to capture the geological block model using manual design (Deswik.CAD) and optimisation packages (Deswik.ASD).
- Assessment and validation of the output mining shapes and application of adjustments as required.
- Determination of the mining dilution and recovery factors to apply to design shapes
- Interrogation of the mining shapes against 3D geological block models in Deswik.IS to calculate and assign ore tonnes and grade.
- Identification of mining shapes of Measured and Indicated material above the cut-off grade for further design and assessment.
- Assessment and design of the waste development required to access ore development and stope blocks.

- Economic assessment of individual ore development and stope blocks on a level-by-level basis, based on variable mining costs applicable to the mining method and including waste access, haulage, processing, selling, royalty, and administrative costs.
- Inclusion of economically viable areas in the Mineral Reserve LoM schedule. Removal of uneconomic areas, or re-design and inclusion in the plan if re-assessment proves to be profitable.
- Application of dependency rules, mining rates and schedule constraints to the design shapes to link the mining activities in a logical manner within the Deswik.IS scheduling project.
- Export of the resulting Mineral Reserve LoM schedule or further economic validation through the financial model.

16 Mining Methods

The Augusta Mine is serviced by a decline development from a portal within the Augusta box-cut. The Augusta Decline dimensions are primarily 4.8 m high by 4.5 m wide at a gradient of 1:7 down. The majority of the decline development has been completed with a twin-boom jumbo. However, development of the decline from the portal to 2 Level was completed with a road-header; this section of decline has dimensions of 4.0 m high by 4.0 m wide. The Augusta Decline provides primary access for personnel, equipment, and materials to the underground workings.

The Cuffley Decline extends as a branch off the Augusta Decline at 1028 mRL and continues down to approximately 895 mRL. At 935 mRL, the Cuffley Incline extends off the Cuffley Decline and accesses mineral resources from the 945 mRL to the 1,050 mRL. This incline was used to extract N and Cuffley lodes. Mining in the Cuffley Incline is complete and it is now the location of the High Explosive (HE) Magazine.

A second decline within Cuffley, known as the 4800 decline, accesses the southern part of the Cuffley Lode which is positioned south of the East Fault. This decline commences at 960 mRL and extends to 814 mRL. The Mineral Reserve in the 4800 decline consists of remnant pillars from past stoping and long-hole Half Upper Stoping (HUS) and CRF stopes.

The Alison Incline is a branch off the Cuffley Decline accessing the area above the Cuffley lode to mine the Alison lode accessing Mineral Resources from 1002 to 1060. The Alison Incline had the dimensions of 4.8 m high by 4.5 m wide at a gradient of 1:7 up and was mined with a twin-boom jumbo.

The Brunswick Access, 5.5 m high by 4.5 m wide development, starts from 925 mRL on the Cuffley Decline and accesses the Brunswick Deposit at 955 mRL.

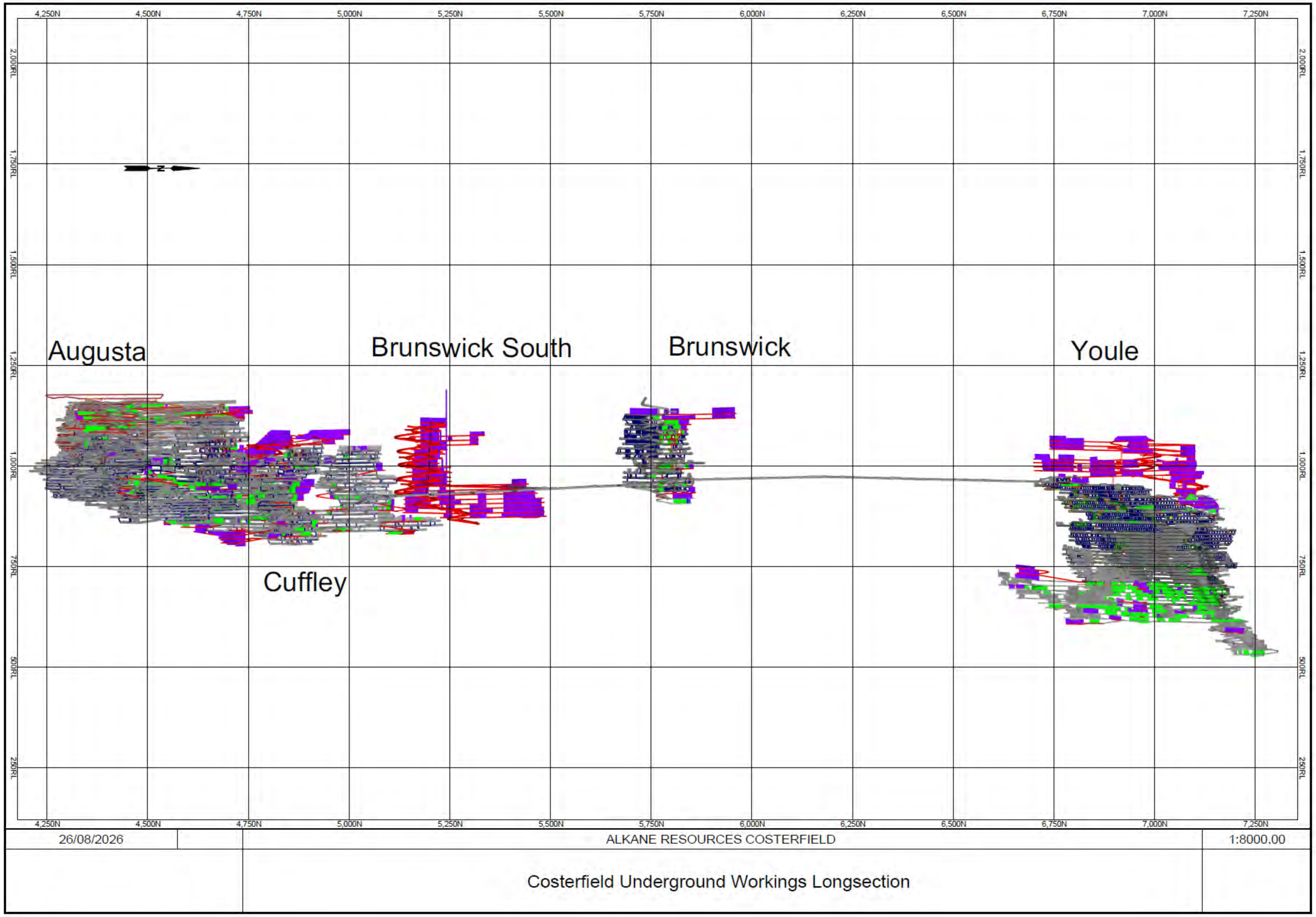
The Brunswick Incline continues from 955 mRL up to the Brunswick Portal. The Brunswick Incline development was mined to breakthrough into the Brunswick Open pit, establishing the Brunswick Portal during the second half of 2020. The Brunswick Incline has the dimensions 4.8 m high by 4.5m wide at a gradient of 1:7 up and was mined with a twin-boom jumbo. The Brunswick Open Pit was prepared for the portal breakthrough with a pushback completed by a combination of road-header and drill and blast supported by a twin-boom jumbo. The first 20 m advance of Brunswick Portal was completed by a road-header with the dimensions 5.0 m high by 5.0 m wide at a gradient of 1:25 up. The establishment of the Brunswick Portal provides an additional means of egress from the mine and is the primary material haulage route from underground to the Brunswick Mill for ore processing and waste storage.

The Youle access, 5.5 m high by 5.5 m wide, extends from the Brunswick Incline at 961 mRL and accesses the Youle Deposit at 957 mRL. From this level, the Youle Decline, 4.8 m high and 4.5 m wide, continues down to 548 mRL, accessing the Youle, Kendal and Shepherd deposits.

Mill feed is produced from three different mining methods: full-face jumbo development, long-hole CRF stoping and HUS. All mined ore material is hauled from the underground working areas to the Brunswick ROM via the Brunswick Incline and Portal. Waste material produced from mining is stored underground for use as stope backfill or stored on surface.

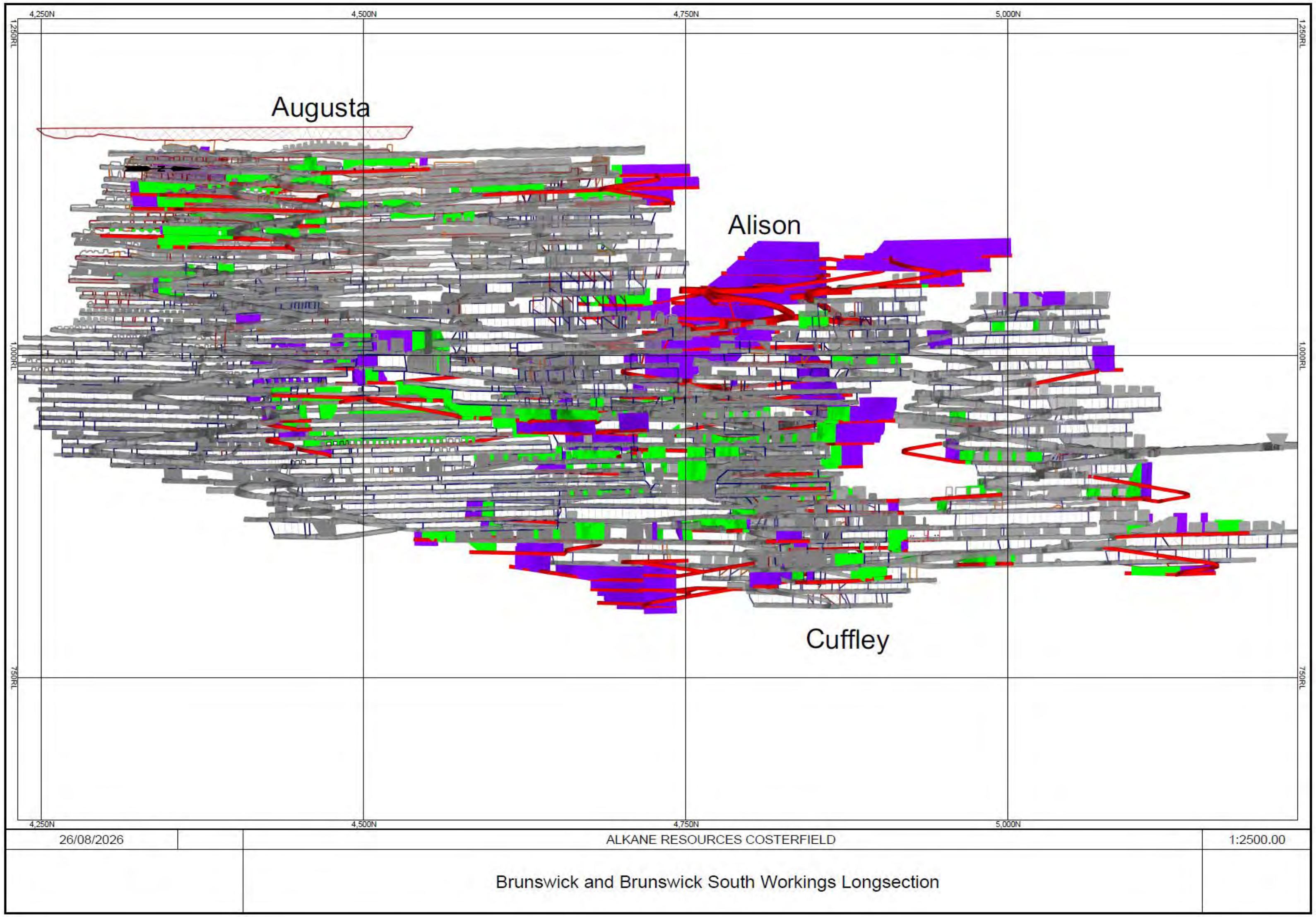
A schematic of the Augusta, Cuffley, Brunswick and Youle underground workings is presented in Figure 16.1 and the designed reserve stope shapes are presented in Figure 16.2 to Figure 16.4.

Figure 16.1: Long section of the as-built and Mineral Reserve designs – Augusta, Cuffley, Brunswick and Youle



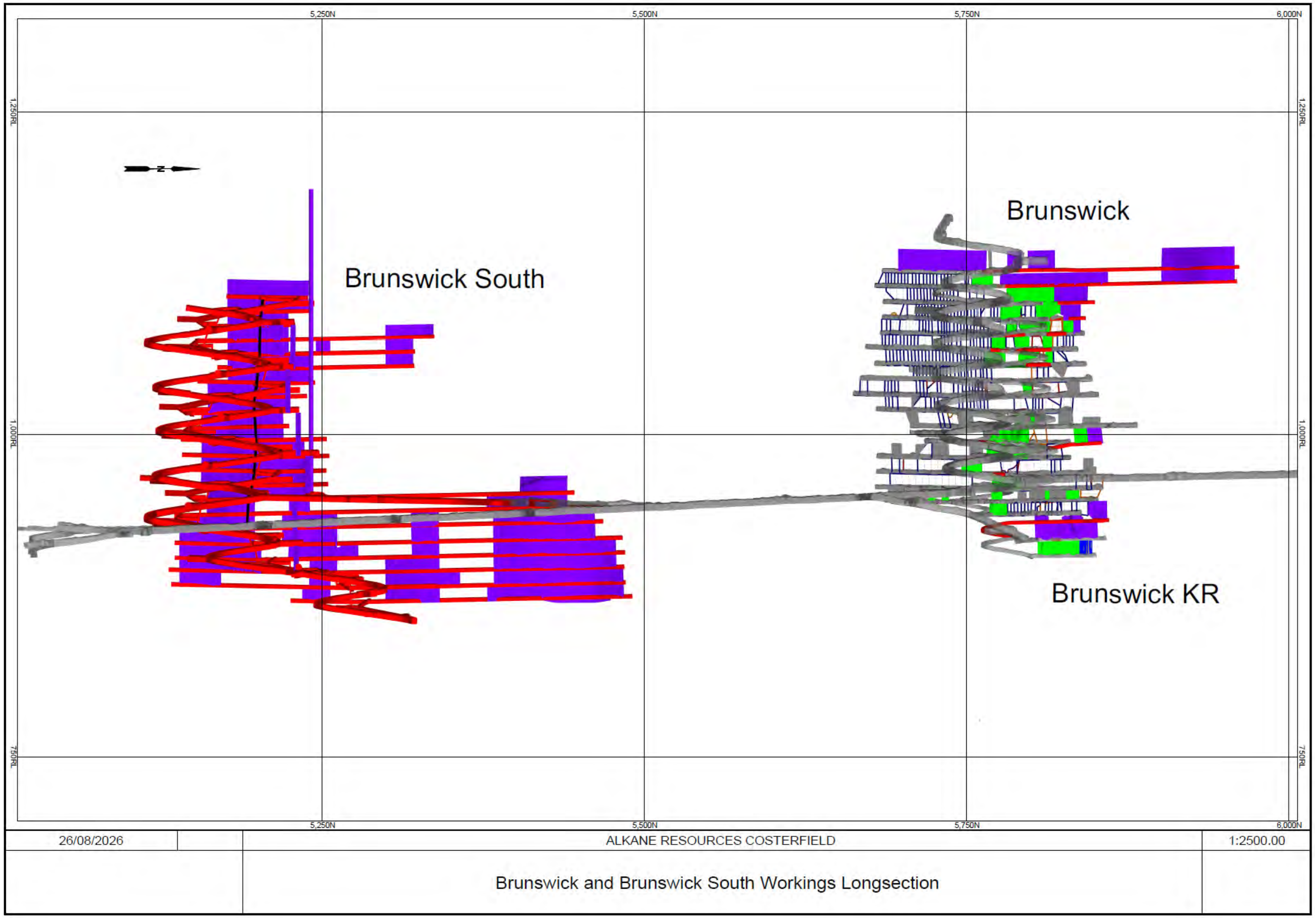
Notes: Red – planned development; green– measured planned production; purple – indicated planned production; grey – depleted workings.

Figure 16.2: Long section of Augusta and Cuffley Mineral Reserve mine design



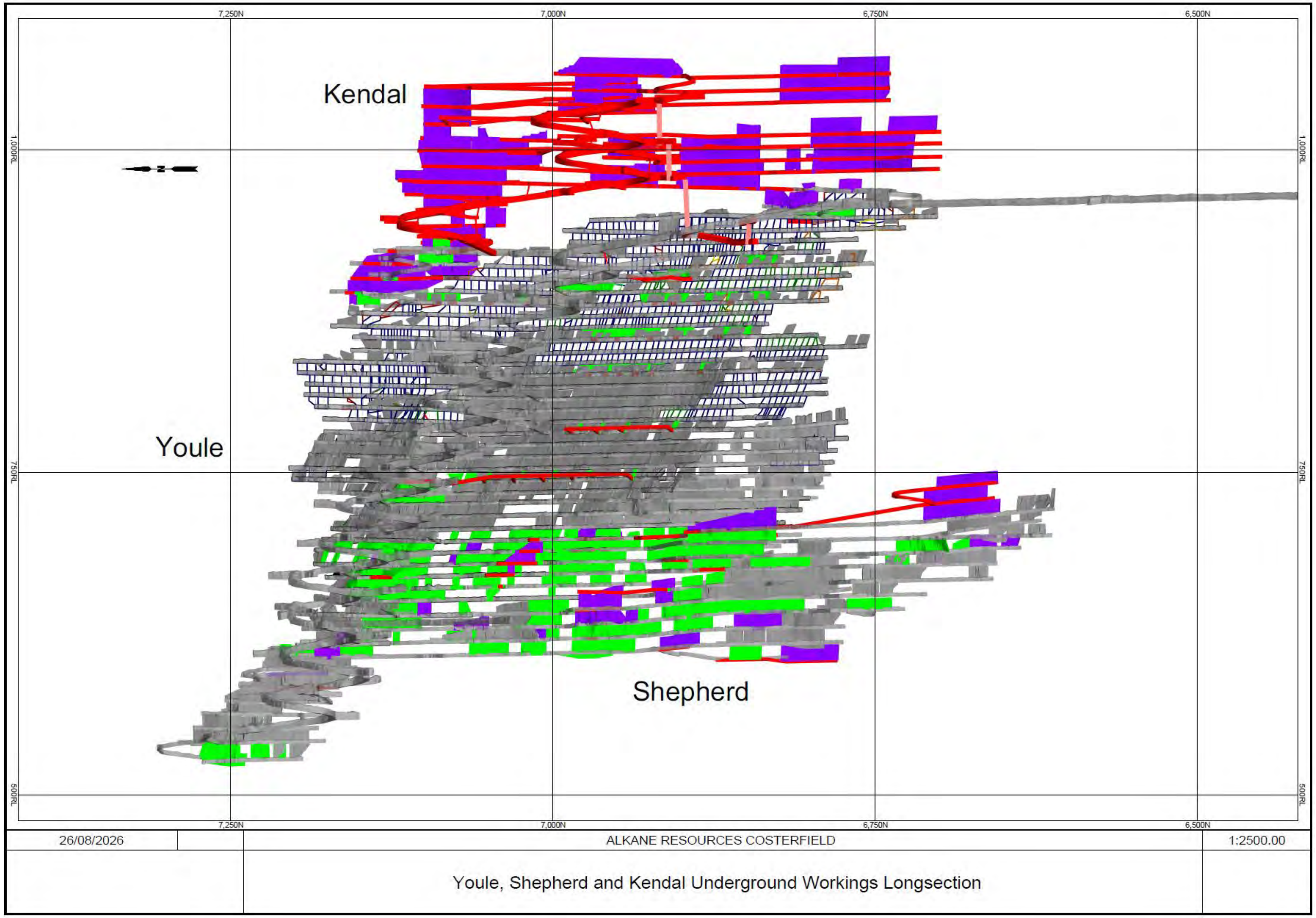
Notes: Red – planned development; green– measured planned stoping; purple – indicated planned stoping; grey – depleted workings.

Figure 16.3: Long section of Brunswick Mineral Reserve mine design



Notes: Red – planned operating development; green– measured planned stoping; purple – indicated planned stoping; grey – as built.

Figure 16.4: Long section of proposed Youle mine design on Youle and Shepherd lodes



16.1 Geotechnical

16.1.1 Rock Properties

Rock Mass Classification

The Q-System of rock mass classification has been adopted at the Costerfield Property. Rock mass classifications completed within all underground working domains show that rock mass quality varies ranging from 'extremely poor' to 'fair' rock mass in close proximity to target mineralisation according to the Q-System. Table 16.1 and Table 16.2 detail the underlying observations for the best case and worst case rock mass classifications, respectively.

Table 16.1: Best case rock mass classification

Best Case		
Q parameter	**Measure**	**Comments/observations**
RQD	90%	Excellent, (0–7 joints per m³)
Jn	6	Two joint sets plus random joints
Jr	2	Rock wall contact and smooth undulating roughness
Ja	3	Rock wall contact with silty or sandy clay coatings and a small clay fraction
Jw	1	Dry excavations with minor inflow (humid or a few drips)
SRF	2.5	Weak zones intersecting the underground opening, which may cause loosening of rock mass. Single weak zones with or without clay or chemical disintegrated rock (depth > 50 m). 105 MPa Rock strength in lower levels with stress levels estimated at approximately 25 MPa (from regional stress measurements), $\sigma c/\sigma 1 = 4.2$. Rock strength < 20 MPa in the upper levels of the mine (down to ~50 m below surface)
Q	**4**	**Fair rock mass**

Table 16.2: Worst case rock mass classification

Worst Case		
Q Parameter	**Measure**	**Comments/Observations**
RQD	40%	Poor, (20–27 joints per m³)
Jn	15	Four joint sets plus random joints, heavily jointed sugar cube effect
Jr	1	Rock wall contact and smooth planar roughness
Ja	10	Thick mineral filling. Zones or bands of thick clay preventing rock wall contact with shear displacement
Jw	0.66	Medium inflow, occasional outwash of joint fillings (many drips or 'rain')
SRF	5	Weak zones intersecting the underground opening, which may cause loosening of rock mass. Loose, open joints, heavily jointed or 'sugar cube'. 105 MPa rock strength in lower Cuffley levels with stress levels estimated at approximately 25 MPa (from regional stress measurements) giving $\sigma c/\sigma 1 = 4.2$. Rock strength < 20 MPa in the upper levels of the mine (down to ~50 m below surface)
Q	**0.04**	**Extremely poor rock mass**

Rock Strength

The Costerfield Formation (Section 7) siltstone has had a total of 106 Unconfined Compressive Strength tests carried out since 2009. Test results generally indicate that intact rock strength increases with depth due to sustained weathering in the upper strata. At levels less than 100 m below surface, intact rock strength usually exceeds 80 MPa but has been seen as low as 60 MPa usually when in proximity to a lode structure (within 15 m).

Rock Stress

In situ stress measurements have been undertaken at the Costerfield Property in proximity to the Youle lode, using the Deformation Rate Analysis technique on core samples at 520 m and 903 m below the surface.

At 520 m below the surface, the maximum principal stress is orientated at 300º/43º (trend/plunge) with a magnitude of 25 MPa, the intermediate principal stress is oriented at 184°/25° with a magnitude of 12.6 MPa, and the minimum principal stress is oriented at 074°/36° with a magnitude of 8.3 MPa.

At 903 m, the maximum principal stress is oriented at 346°/5.2° and a magnitude of 30 MPa, the intermediate principal stress is oriented at 091°/71° with a magnitude of 19.6 MPa, and the minimum principal stress is oriented at 018°/15° with a magnitude of 15 MPa.

In situ stress in levels below 895 mRL in Cuffley and 936 mRL in Brunswick has caused minor convergence, or squeezing ground, in isolated areas around major fault zones. In the Youle deposit, approximately between 880 mRL to 760 mRL induced stresses from retreat of the stoping front has exhibited convergence of variable magnitude throughout the ore drives with multiple factors driving the magnitude of convergence encountered (e.g. orientation of major structures and bedding, tunnel orientation and rock mass rating). Below 760 mRL convergence has been encountered within on lode development. To date, convergence encountered is in the light to fair squeezing classification, with tunnel strains between 0% and 5% encountered. Dynamic support is installed to ensure drive stability in areas expected to exhibit convergence with monitoring of convergence undertaken using a Hovermap hand held LiDAR scanner and damage mapping. Rehabilitation is undertaken as required when monitoring identifies the need for ground support reinstatement or upgrade.

In October 2021, stress modelling for the LoM extraction of Youle was completed. The modelling did not identify any areas where mining induced stress would cause regional instability. However, due to the complex nature of the rock mass, isolated cases of converging ground had potential to occur. Since completion of the modelling in 2021, the frequency and varying magnitude of encountered convergence in the on lode development triggered an update of the model to be undertaken which was completed in April 2024. This model was calibrated utilising data obtained from the Hovermap, which was not available during the initial modelling in 2021. The model update did not identify an issue with the LoM extraction strategy but did identify local high strains (>7%) will occur, expected around intersections with major structural interactions, which will require ongoing maintenance. No closure strains were predicted above levels that are already being safely managed at similar mine sites.

Stress conditions at Brunswick South and True Blue are expected to be similar to current workings with LoM stress modelling of extraction of each lode to be undertaken prior to stoping commencing.

Additional stress measurements are also planned to supplement existing data points prior to completion of the Brunswick South and True Blue stress modelling.

Rock Mass Alteration

Rock mass in the vicinity of mineralised structures is heavily fractured with multiple joint orientations, often with a portion of clay fill and smooth planar joint surfaces. In waste rock, away from mineralised lodes and discrete structures, the rock mass improves with lower fracture frequency and rough tightly healed joint surfaces present.

Hydrogeology

The regional hydrogeology is comprised of two main aquifers, the Shallow Alluvial Aquifer (SAA) and the Regional Basement Aquifer (RBA).

- The SAA is comprised of silts, sands and gravels, and is a perched groundwater system occurring across the site and within the confines of the creek and valley floors. There is clear evidence that this aquifer is perched, is laterally discontinuous and is less common in the area.
- The RBA is comprised of Silurian metasediments and forms the basement aquifer, where groundwater mainly occurs within and is transmitted through fracture systems beneath the upper weathered profile, at depths of greater than 20 m below the natural surface.

Details of the underground dewatering system are covered in Section 16.5.3.

Mine Design Parameters

Mining Methods

The dominant mining method is longitudinal long-hole stoping filled using CRF, with stope panels generally consisting of three to four operating levels mined bottom-up over CRF with a longitudinal retreat to a quasi-central access. Several other mining methods are applied to access and optimise the extraction of ore at the Costerfield Property:

- Capital development with twin-boom jumbo.
- Operating development with single boom jumbo.
- Blind up-hole longitudinal long-hole open stoping (‘half uppers’ or HUS).
- Floor benching of level ore development.
- Avoca stoping with CRF (‘reverse fill’).
- Avoca stoping with rockfill (‘reverse fill’).
- Overhand cut and fill (Flat backing ore level development).
- Long-hole rise mining

Mining methods are selected to suit ore drive/lode geometry and maximise ore recovery while minimising unplanned dilution.

Development Geometry

Standard development profiles adopted at the Costerfield Property include:

- 1.8 m wide × 3.0 m high ore drives
- 1.8 m wide × 3.2 m high ore drives
- 2.4 m wide × 3.0 m high access drives
- 2.4 m wide × 3.2 m high access drives
- 3.5 m wide × 4.0 m high access drives
- 3.5 m wide × 4.2 m high access drives
- 4.5 m wide × 4.8 m high decline/incline
- 5.5 m wide × 5.5 m high decline/incline
- 5.0 m wide × 4.8 m high level access
- 5.0 m wide × 6.5 m high truck tips
- 4.5 m wide × 4.8 m high ore stockpiles
- 6.5 m wide × 4.8 m high vent rise access drives.

Non-standard development profiles may be mined for major infrastructure, such as pump stations, explosives magazines, fan chambers, etc., or for variations to the applied mining methods, such as flat-backing, and floor benching, etc. Development spans and associated ground support are designed using empirical data and static load factor of safety calculations to ensure the stability of mined spans.

Stope Geometry

In response to observed ground conditions and production drill capability, inter-level spacing at the Costerfield Property is variable. Stope strike length varies based on the applied mining method, observed ground conditions and machinery capability. Stope geometry parameters include:

- stope height: up to 17 m but usually less than 13 m
- stope strike length: depends on ground conditions, but generally 3.6 m–13 m; however, HUS strikes can be extended further, ground conditions permitting
- minimum stope design width: 1.5 m (larger widths are mined for multiple veins or veins thicker than 0.9 m)
- stope dip: 45–90°.

Non-standard stope geometry may be mined to maximise ore extraction under unique circumstances, such as remnant mining, flat dipping orebodies and geological complexity. The empirical stope performance chart is consulted to ensure that designed stope spans will allow safe efficient extraction of target mineralisation.

Pillars and Offsets

In mine design and planning, the following pillars and offsets are observed to ensure the stability of mined excavations:

- Decline development is designed and mined with a 30 m offset to target mineralised structures; to date, stope production blasting has not influenced decline stability having applied the 30 m offset. This distance has been maintained as a minimum for the Brunswick, Youle and Shepherd lode.
- The minimum inter-level pillar width to height ratio is 1:2; for example, for 1.8 m wide ore drives, the minimum inter-level spacing is 3.6 m
- Minimum horizontal clearance between sub-parallel ore drives is 2 m
- The minimum pillar strike between unfilled blind up-hole longitudinal open stopes or HUS is 3 m.

Backfill

The practice of placing backfill in stope voids is undertaken to improve local ground stability, reduce unplanned dilution and improve mining recoveries. Details on the types of backfill and methods of placement is covered in Section 16.6.

Ground Support

Development and Support

Ground support elements installed in standard development profiles may include:

- galvanised resin bolts 2.1–3.0 m length
- galvanised hybrid bolts 1.5–2.4 m length
- galvanised friction bolts 1.5–2.4 m length
- 2.4 m × 4.2 m 5.6 mm diameter gauge galvanised mesh
- 3.2 m × 2.4 m 4.0 mm diameter gauge galvanised mesh
- 3.2 m × 1.8 m 4.0 mm diameter gauge galvanised mesh.

When spans exceed 5.5 m in development intersections or in response to deteriorating ground conditions and discreet structures, cement grouted single strand or twin strand, non-galvanised, bulbed, 4.5 m–6.0 m cable bolts are installed and tensioned to ensure the stability of development profiles.

Additional ground support may be installed to support non-standard development profiles or in response to poor ground conditions. Fibrecrete, resin injection, spiling, sets and straps have been installed in the past to support poor ground, development/stoping interactions and faults/shear zones. In addition, 2.4 m and 1.8 m Yield-Lok bolts have been installed in areas where squeezing ground is expected, however, hybrid bolts are now used as standard.

Stoping Ground Support

Additional support for designed stopes is installed on an as-required basis in response to compromised stope geometry, poor rock mass, interactions with faults/shears or interactions with other stopes and development. Single strand, non-galvanised, bulbed, 4.5 m–6 m cable bolts are generally installed as secondary support for stopes.

Other forms of ground support, including resin bolts, hybrid bolts, friction bolts, mesh, fibrecrete, resin injection and straps, may also be installed to provide secondary support for designed stopes.

16.2 Mine Design

16.2.1 Method Selection

Long-hole CRF stoping has been selected as the preferred mining method for the Mineral Reserve on the Youle and Shepherd lodes. This is based on the orebody geometry and current production fleet, as well as the experience gained through the application of this method during mining of Cuffley and Brunswick.

The long-hole CRF stoping method allows for a 'bottom-up' mining sequence with the benefit of minimising the number of crown/sill pillars required to remain in place. The location of the crown and sill pillars is determined by the grade distribution of the orebody and the local mine stability requirements. Recovery of the pillars is planned to be undertaken with the use of half-upper production stoping and remnant pillar extraction where grade and ground conditions permit. In future development areas, fill drives will be developed in place of the remnant by pass while the ore drive is developed. This will enable pillar extraction as stopes retreat and partial backfilling of voids to enable the pillar recovery and confine brows on retreat.

16.2.2 Method Description

The Youle orebody has been mined with a sub-level spacing of 9 m floor to floor, or 6 m backs to the floor vertically and 6–13 m backs to the floor along the dip of the orebody. This sub-level spacing has been implemented in order to minimise dilution and improve recovery in the flatter dipping Youle ore. It also allows for stable vertical spacing between levels and optimal stope height for drilling accuracy. The orebody dip varies greatly in Youle between 38° and 85°, which is dependent on the influence of major structures interacting with the Youle lode. In areas where the dip of the ore is below 40°, extraction drives are widened to steepen the FW of the stope to ensure full recovery. Stope HWs designed less than 45° require backfill with cemented aggregate fill (CAF) rather than CRF to ensure fill confinement and stability of the HW.

The Shepherd ore deposit consists of multiple lodes that are positioned in the FW of the Youle structure which range from moderately flat dipping (~55°) to subvertical between 70° and 90° dip. The Shepherd deposit was first mined in the second half of 2021 on the extents of the southern Youle lode at 757 mRL. The Youle mine predominantly accesses the subvertical Shepherd deposit below 650 mRL. Here the sub-level spacing has been increased to 11–13 m floor to floor to account for the verticality of the lodes. The increased level spacing ensures that final stope height is optimised within the limits of the mining method, as well as improving design efficiency by reducing overall ore and waste development. The Shepherd deposit is designed to be extracted primarily by a long-hole CRF stoping method on each of the individual lodes. Where separate lodes run parallel and the separation between the lodes does not allow individual ore drives or stope panels, ore drives and stopes have been designed to capture the mineralisation up to a width of 4.5 m. This method has been used successfully on the Youle lodes by stripping the development out to the required width on retreat with stoping.

Mining within the Augusta Mine has targeted several individual lodes, including the AS, W, NM, E, K and Cuffley lodes, which vary in width from 0.1 m to 1.5 m and dip between 45° and 85°. This lode geometry is favourable for long-hole CRF and HUS when using mechanised mining techniques. However, in the past, ore was also extracted using air-leg CRF and HUS methods. The current Mineral Reserve in the Augusta Mine is planned to be extracted using various mechanised methods depending on the ore location, access requirements, and the proximity to previously mined areas. The majority of Augusta Mineral Reserve is planned to be extracted using long-hole HUS due to limited development access for fill drives. Areas that have access for both an extraction and fill drive use the long-hole CRF stoping method.

Remnant pillar slashing is the planned method for areas where HUS has previously been undertaken. This method involves developing a waste access parallel to the original production drive, with draw points breaking through to the ore zone. Production slash-holes are drilled into the remnant rib pillars to be fired and the ore extracted with remote loading operations. Areas of remnant ore are individually assessed and those deemed both economically viable and safe to extract remotely have been included in the Mineral Reserve.

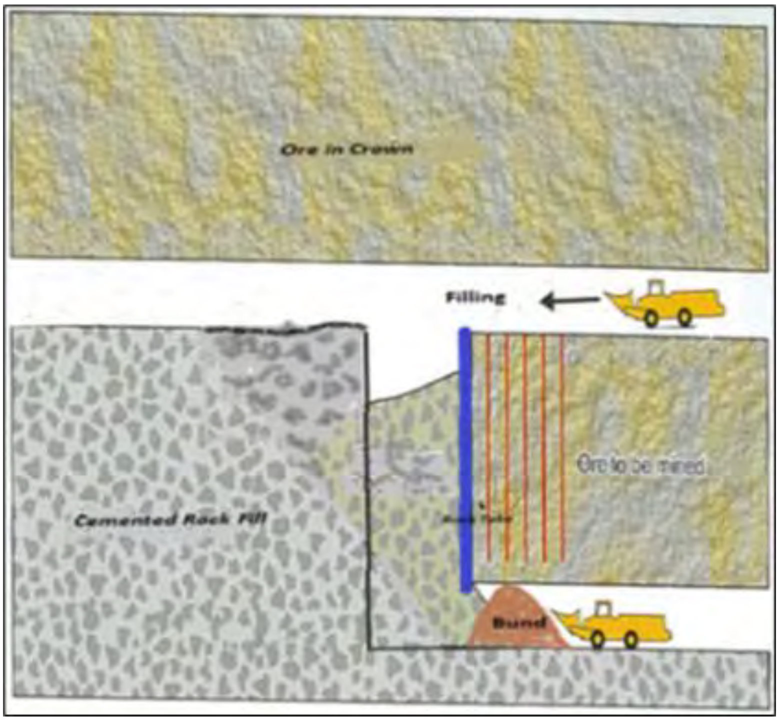
Throughout the Cuffley lodes, a sub-level spacing of 10 m floor to floor, or 7 m backs to the floor, has been established to ensure stable spans, acceptable drilling accuracies and blast-hole lengths. A sub-level spacing of 15 m was developed for two select areas. This involved drilling up from the lower level to 8 m and drilling and firing the remainder from the upper level using downholes. While this has been a success, it has not been implemented elsewhere in the mine.

The Brunswick orebody has applied a sub-level spacing of 12 m floor to floor, or 9 m backs to the floor. This has been established due to improved drill accuracy, steep lode geometry and the wider orebody, with the average diluted stope width of 2.0 m versus 1.5 m in Cuffley and Augusta. Brunswick has primarily been mined with long-hole CRF stoping due to it being accessed and developed from the bottom up. The Brunswick Mineral Reserve consists of the remaining level closeout stopes, ore development and CRF/HUS stoping on northern extents, and remnant extraction of pillars left in place for localised ground stability. The production cycle for long-hole CRF/CAF stoping, as illustrated by Figure 16.5, comprises the following:

- Develop access to the orebody.
- Establish bottom sill drive and upper fill drive.
- Drill production blastholes in a minimum two-hole per ring pattern, depending on the ore width. The nominal stope design width is 1.5 m.
- Fire the blast of 5.4–13 m strike and extract ore with a tele-remote loader.
- Place rock bund at the brow of the empty stope and place poly tubes in the stope. Poly tubes are pre-fabricated tubes with an inner PVC pipe and outer coating polymer tube. Mesh tubes can also be used if poly tubes are unavailable. Mesh tubes are tightly rolled steel mesh. Tubes placed in the leading edge of stope prior to filling and eliminates the need for boring reamer holes in next stoping panel.

- Place CRF into the stope.
- Remove rock bund at the brow of the stope after 12-hour curing time.
- Commence extraction of adjacent stope once the CRF has cured for 24 hours.

Figure 16.5: Long-hole CRF stoping method



Source: Potvin, Thomas, Fourie, (2005)

The HUS method is similar to CRF stope method; however, it is implemented where there is no access to a fill drive. The mining cycle comprises the following:

- Drill up to 13 m length blind production long-holes for a strike length of 3–13 m.
- Fire stope and extract ore with a tele-remote loader.
- Leave a 3 m strike rib pillar where required by ground conditions.
- Commence the next stope.

The half upper partial backfill stope method is similar to the HUS method; however, it is implemented with an offset fill drive horizontally level to the previously filled ore drive above and has fill points developed to the top of the HUS towards the brow to enable filling and confinement of the brow. The mining cycle comprises the following:

- Develop fill drive in parallel to the previously filled ore drive above.
- Develop fill points.
- Drill up to 13 m length blind production long-holes for a strike length of 3–13 m breaking into the fill points as well.
- Fire stope and extract ore with a tele-remote loader.

- Backfill the void (this removes the requirement of a pillar) and confine the brow.
- Commence the next stope.

16.2.3 Materials Handling

Since the completion of the Brunswick Portal, all underground ore is trucked to the surface via the Brunswick Incline. Once on the surface, the ore is transferred to the Brunswick ROM pad where it is stockpiled, screened, blended and crushed prior to being fed into the Brunswick Processing Plant.

Waste material from development headings is trucked internally underground and used for backfill or trucked to the surface and stockpiled at the Bombay Waste Rock Storage Facility. Small portions of suitable waste material is screened on the surface and trucked underground to be used as road base and CAF fill. In times of reduced underground waste production, trucks are backloaded on the surface with stockpiled waste to haul underground and use in stope filling.

16.3 Mine Design Guidelines

The mining schedule follows a predominantly bottom-up stoping sequence where possible, mining from the northern and southern extents retreating toward the central access. This sequence enables a consistent production profile to be maintained because it allows for dual development headings on each level.

The current and planned sequence for the Youle, Shepherd and Brunswick South orebodies uses crown pillars at various intervals to allow for a consistent production profile and optimised recovery of ore.

16.3.1 Level Development

Development ore drives are mined to ensure the ore is positioned in the face for maximum recovery and feasible long-hole production drilling. Production development is mostly directed under geology control and sometimes survey control where stand-off/pillars need to be maintained. Production drives are excavated and supported with a single boom jumbo and are loaded with a manual or tele-remote operated load haul dump (LHD).

16.3.2 Vertical Development

Vertical development at the Costerfield Property exists in the way of primary ventilation shafts, return/fresh ventilation rises and escapeway ladders. Throughout Cuffley, ventilation rises of 3.5 m × 3.5 m have been excavated between levels to extend the existing primary exhaust system both above and below the Cuffley fan chamber and exhaust shaft. The Brunswick Mine used a 3.5 m diameter shaft to supply fresh air to the workings and act as a second means of egress. The Brunswick Portal is the Fresh Air Intake (FAI). The Brunswick Fresh Air Raise (FAR) has been regulated to ensure adequate airflow in the Brunswick straight. The Youle ventilation shaft has a diameter of 4.0 m, exhausting air from Youle workings and a providing secondary means of egress. The Youle primary exhaust system is extended with 4.0 m × 4.0 m ventilation rises between the levels as development progresses below the ventilation shaft and fan chamber. Ladder rising with a diameter of 0.8–1.2 m has been developed for the installation of escape ways providing a second means of egress between working levels.

16.3.3 Stoping

The strike length of stopes is determined using a case-by-case assessment of the overall mining sequence, ore orientation, geological considerations and geotechnical stability. All blasted material is assumed to have a swell factor of 30% and non-mineralised material is allocated a default relative density of 2.74 t/m^3 for Augusta, Cuffley and Brunswick and 2.76 t/m^3 for Youle and Shepherd. The relative density of mineralised material is estimated within the geological resource block model.

16.3.4 Mine Design Inventory

The planned mining inventory for each lode is summarised in Table 16.3.

Table 16.3: Mineral Reserve inventory by lode

Lode	Ore tonnes	Au oz	Sb t	Au g/t	Sb %
Youle	47,958	9,910	450	6.4	0.9
Youle REM	21,841	3,628	332	5.2	1.5
Shepherd	119,959	33,473	612	8.7	0.5
Kendal	172,853	16,243	3,461	2.9	2.0
Alison	58,430,	6,992	634	3.7	1.1
Brunswick Main	50,662	6,570	1,098	4.0	2.2
Brunswick KR	7,599	777	217	3.2	2.8
Brunswick South	170,581	34,645	1,791	6.3	1.1
Cuffley	187,251	40,517	3,893	6.7	2.1
Augusta	73,841	11,752	2,174	5.0	2.9
Total	**910,975**	**164,506**	**14,662**	**5.6**	**1.6**

Notes: The difference in tonnes compared to Proven and Probable totals refers to mineralised waste through mining included in LoM plan.

16.4 Ventilation

The current Costerfield Property mine ventilation circuit is comprised of fresh air being sourced from four surface intakes, these being:

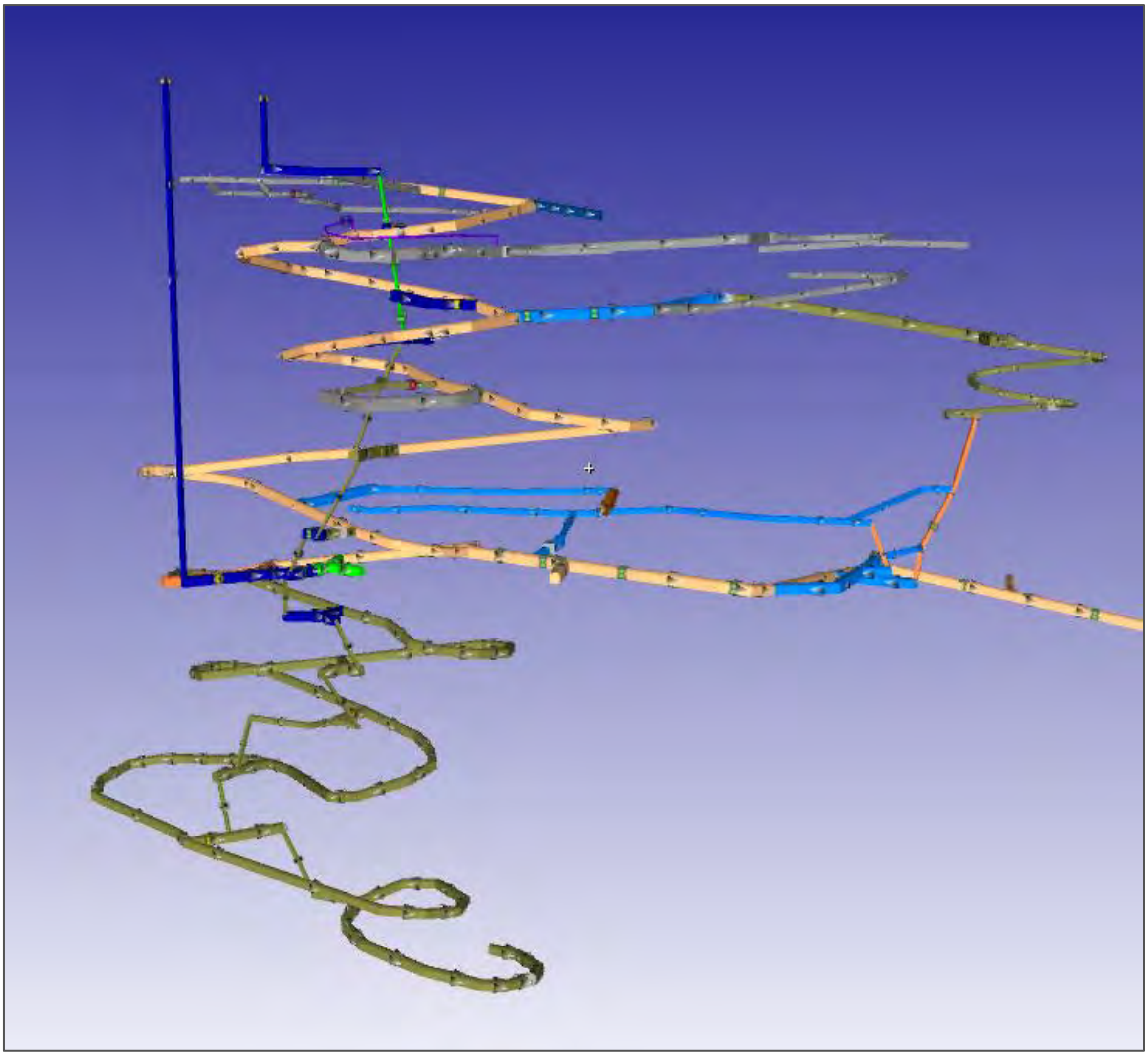
- The Augusta portal, the FAR.
- The Brunswick Portal and through the Brunswick FAR regulated to 75% open, which services the 1056 Fresh Air Base (FAB). This airflow is pulled into the mine via two separate underground primary chambers that exhaust air out of the mine via the Cuffley return airway (RAW) at a flow rate of 67 m^3/s and the Youle RAW at 106m^3/s.

16.4.1 Primary Ventilation Circuit

At Augusta/Cuffley fresh air travels into the old Augusta workings via the Augusta FAR and enters the Augusta side of the mine at the 1,020 mRL, at which point it flows back up the Augusta decline where it enters the Cuffley Decline and joins the primary flow entering the mine from the Augusta portal. This airflow travelling down the Cuffley Decline, splits at the 4800 decline and the Cuffley Incline, with the remaining airflow continuing towards the Brunswick access. The Brunswick airflow travels towards the Cuffley workings, where it will meet the air flow from the Cuffley before exhausting out of the 915 RAW. The lower levels of the Augusta Decline are now paste filled to just below the 1,020 mRL.

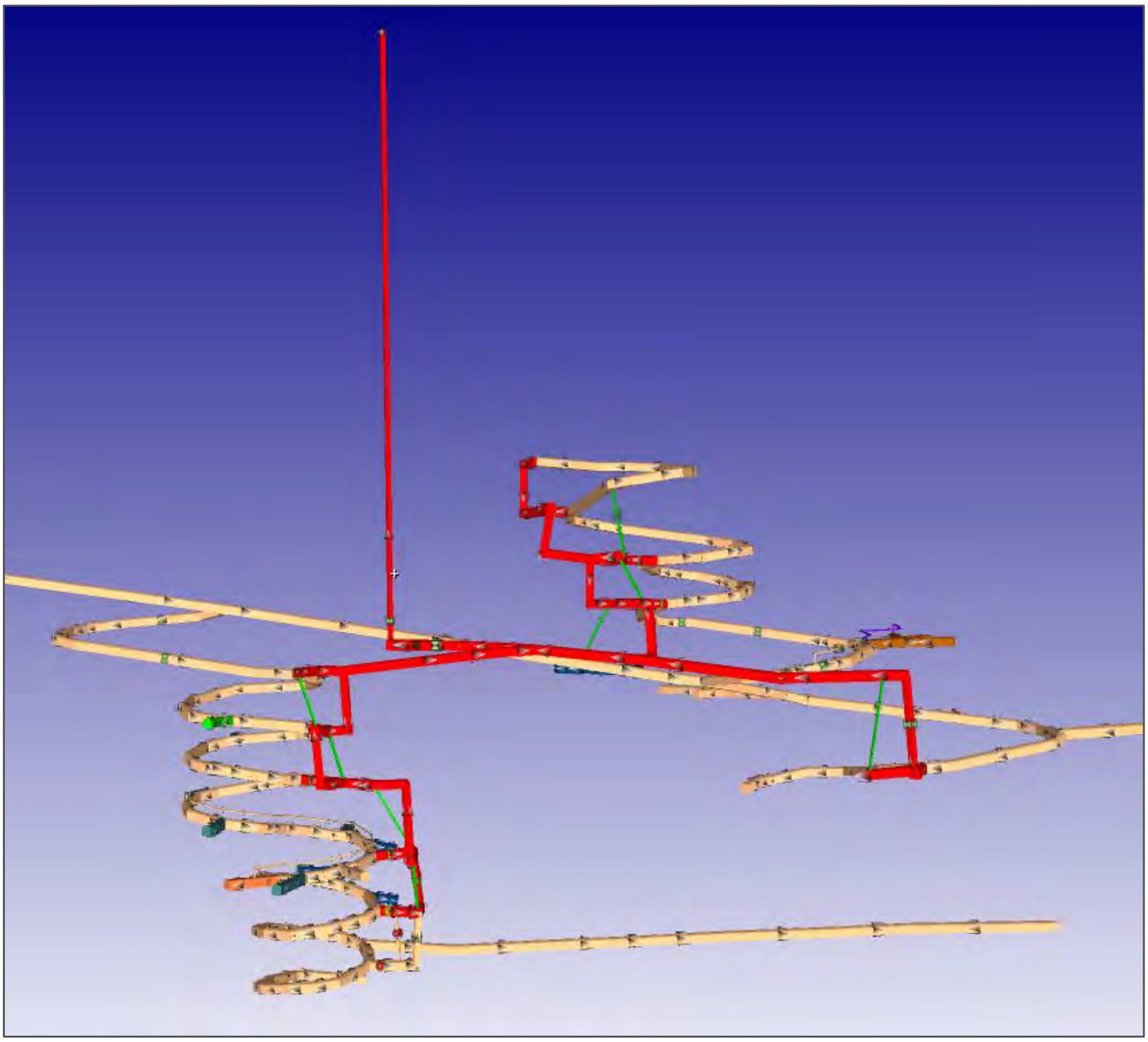
The Cuffley Incline is also where the current HE magazine is located. Primary airflow in the 4800 decline and Cuffley Incline reports to the Cuffley RAW where it exhausts to surface. The primary ventilation circuit for Augusta is presented in Figure 16.6.

Figure 16.6: Augusta primary ventilation circuit



The primary ventilation circuit for Cuffley is presented in Figure 16.7. Fresh air is drawn through the Cuffley decline from Augusta and return air (in red) is exhausted through the Cuffley Return Air Rise (RAR) by either the 4800 decline or 915 RAW.

Figure 16.7: Cuffley primary ventilation circuit

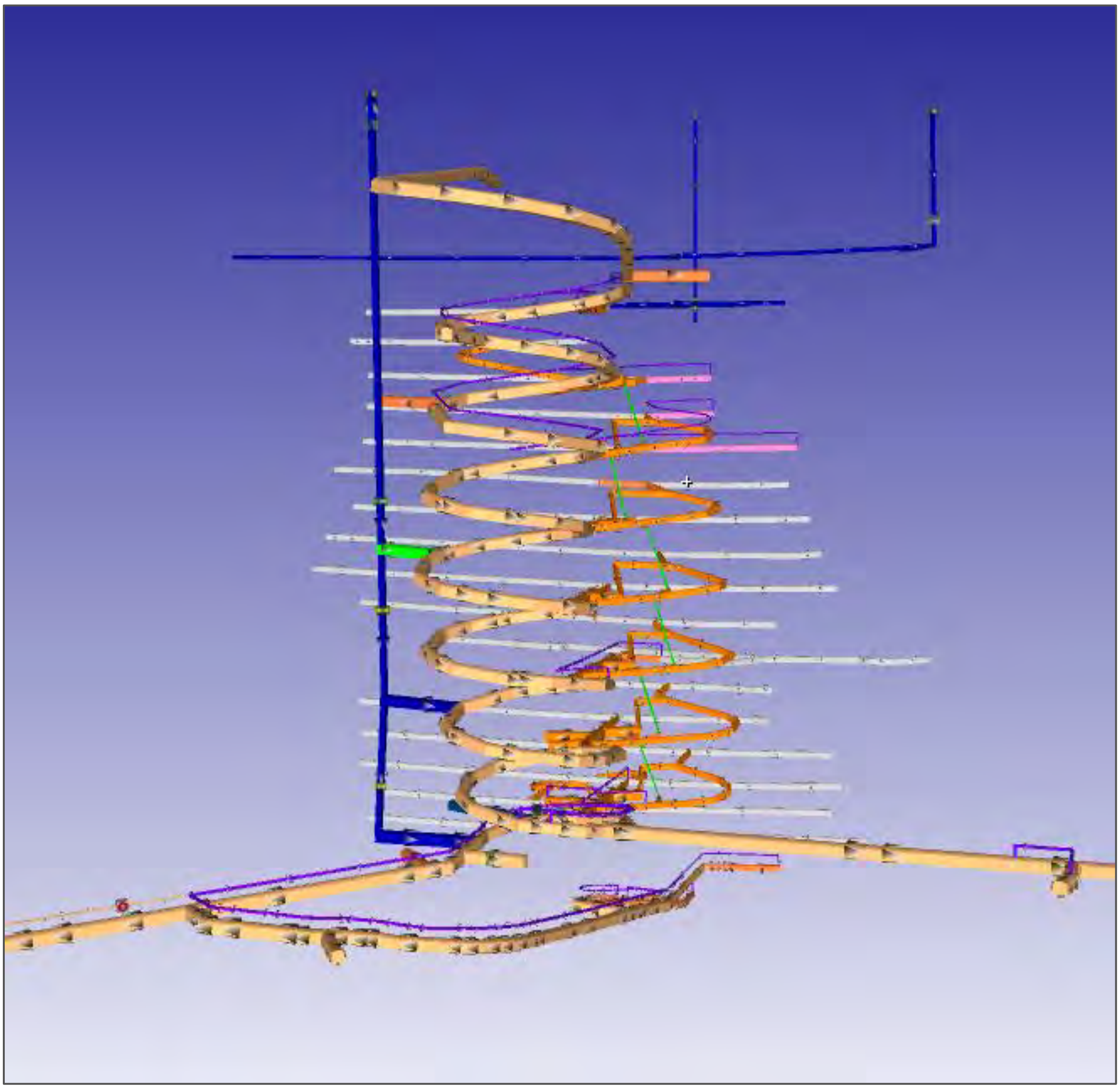


16.4.2 Primary Ventilation Circuit – Brunswick/Youle

The Brunswick workings are supplied primary airflow from the Brunswick portal (84 m^3/s), while the Youle workings are also supplied fresh air from the Brunswick portal (84 m^3/s). The Youle working levels are supplied airflow via the use of secondary ventilation fans.

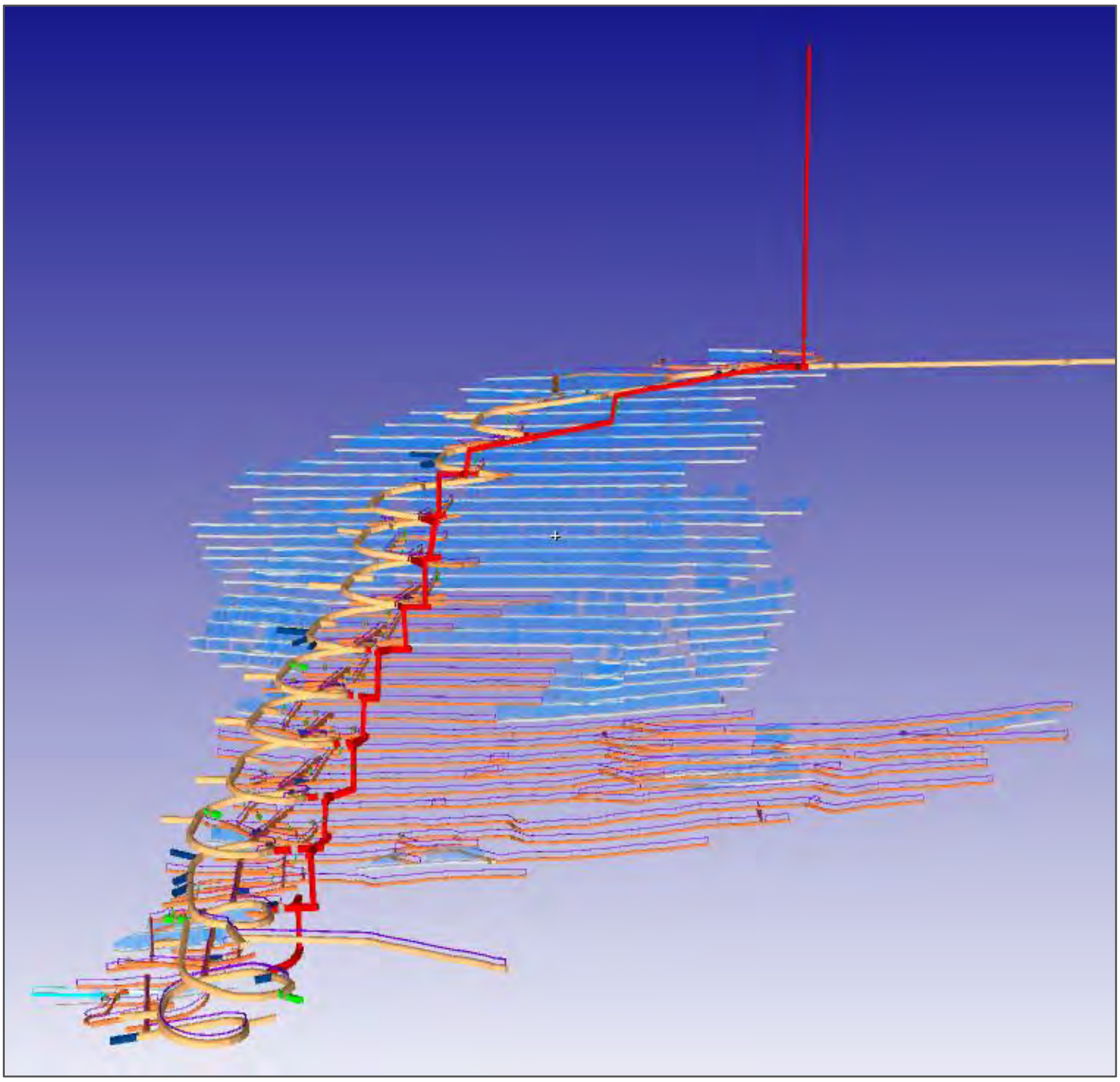
The primary ventilation circuit for Brunswick is presented in Figure 16.8. Fresh air is drawn through the Brunswick Portal and Brunswick FAR and continues to Youle.

Figure 16.8: Brunswick primary ventilation circuit



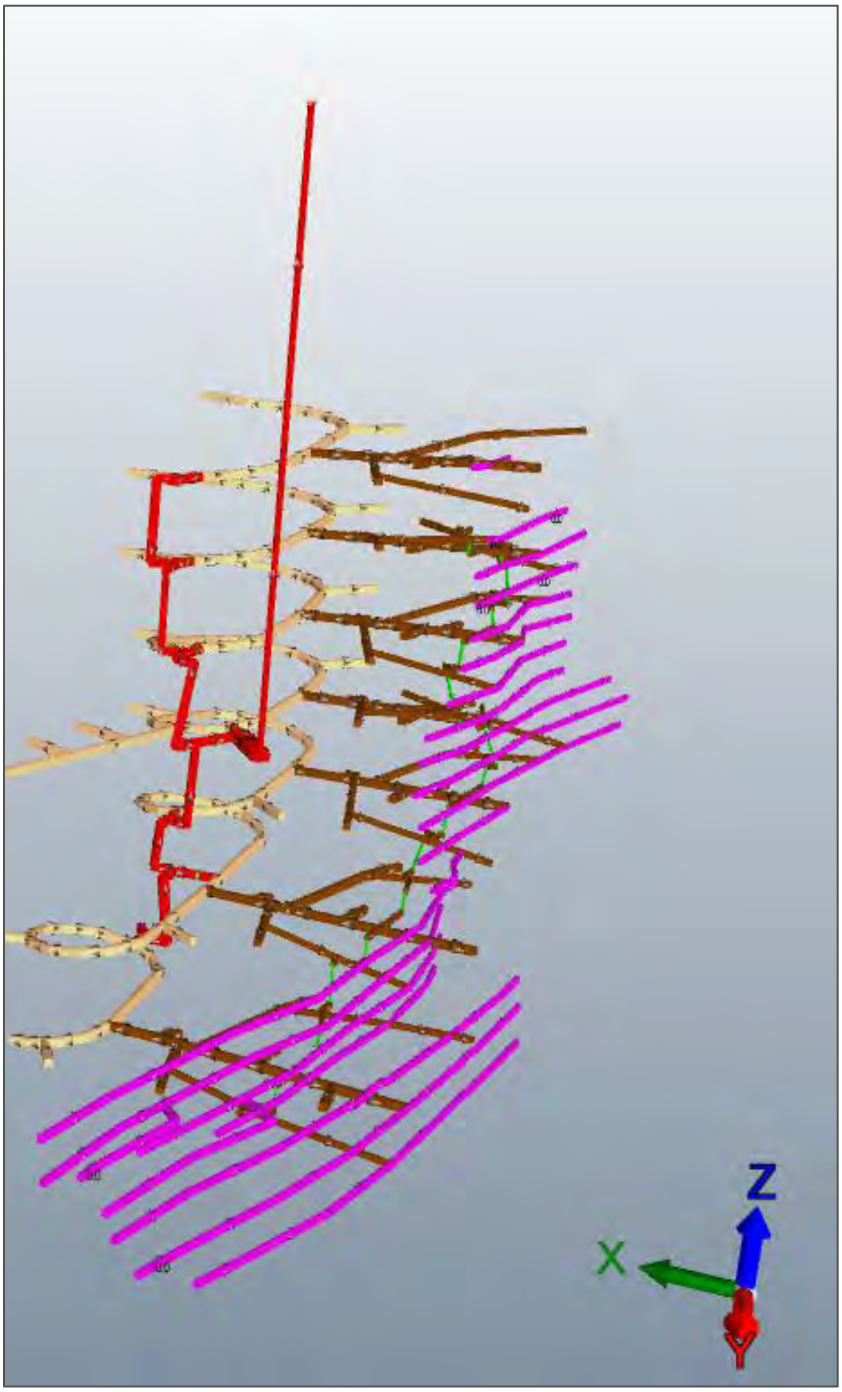
The Youle primary ventilation circuit is presented in Figure 16.9. Fresh air is drawn through the Youle Access and down the Youle Decline to the 618 RAW. From the 618 RAW, air is exhausted through the Youle RAW system to the Youle 957 RAR shown in red.

Figure 16.9: Youle primary ventilation circuit



The Brunswick South planned ventilation circuit will run on a secondary 110 kW fan to access a 3.5 m diameter shaft which is to be constructed close to the orebody up to surface and will act as an exhaust, enabling Brunswick South to run independently once the primary ventilation shaft is in use. The primary circuit will split between the up and down dip of the orebody from the primary fan chamber location with a RAW system constructed above and below the primary fan chamber RL. The access will act as the intake air from the Brunswick Straight access.

Figure 16.10: Brunswick South primary ventilation circuit



16.4.3 Primary Ventilation Rises and Fans

The specifications of the existing Augusta, Cuffley and Youle ventilation rises are as follows:

- Augusta FAR (1,020 mRL to the surface), 3.0 m diameter
- Cuffley RAR (950 mRL to the surface), 3.0 m diameter
- Cuffley RAR (above the 955 mRL – from the 1010 level), 3.5 m × 3.5 m diameter
- Cuffley RAR (below the 955 mRL – from the 814 level), 3.5 m × 3.5 m diameter
- Brunswick Fresh Air Way (1,056 mRL to the surface) – 3.5 m diameter – regulated shaft
- Youle RAW (current) 957 mRL – 4.0 m diameter.

Two Clemcorp CC1400 MK4 single stage 110 kW axial fans have been built into a bulkhead at the 950 mRL Cuffley RAW. The Brunswick FAR has been regulated to ensure adequate airflow in the Brunswick straight, while still providing adequate airflow to the 4800 decline and the Cuffley Incline where the HE magazine is located, ensuring that the HE magazine ventilation reports directly to the Cuffley RAW.

The operating parameters of these fans are:

- Current operating fan total pressure of 306 Pa for 56 m^3/s for a single fan.
- Maximum operating fan total pressure of 2,380 Pa at 42 m^3/s.

The Youle primary fans comprises two Clemcorp CC1400 MK4 single-stage fans, located at the 957 mRL Youle RAW. These two fans are installed in parallel in a fit for purpose bulkhead, capable of running four primary fans. The operating parameters of two fans in parallel are:

- Current operating fan total pressure of 1,032 Pa for 103 m^3/s.
- Maximum operating fan total pressure of 2,480 Pa for 42 m^3/s per fan.

A summary of the primary ventilation fan statistics are detailed in Table 16.4.

Table 16.4: Primary ventilation fan details

Fan location	Fan type	Quantity	Installation type	Operating pressure (Pa)	Total airflow (m^3/s)	Fan shaft power (kW)
950 Cuffley RAW	Clemcorp CC1400 MK4 11 0kW	1	Parallel	268	67	110
957 Youle RAW	Clemcorp CC1400 MK4 110 kW	2	Parallel	1,026	102	110

April 2026 Ventilation Survey

The ventilation survey, conducted in April 2026, measured total primary airflow at 159 m^3/s within the Costerfield Property underground mine. This survey was conducted with a total of four primary fans operating in the following locations:

- One in Cuffley at a fan total pressure of 267.8 Pa.
- Two primary fans in Youle, which recorded a fan total pressure of 1,026 Pa.

All airflow velocities measured throughout the mine are currently measuring under 6 m/s. There were also no temperature readings recorded above 27° wet bulb, showing that the primary circuit has no areas of concerns due to heat.

Secondary Ventilation Auxiliary Fans

The Costerfield Property is currently adopting a secondary ventilation strategy using single and twin stage Clemcorp and Zitron fans no larger than 1200 mm in diameter. Secondary fan selection is determined by:

- the dimensions of the excavation
- the rate of extraction
- diesel equipment requirement
- the length of ventilation ducting
- the primary airflow available
- maintaining a minimum air velocity of 0.5 m/s where diesel equipment operates.

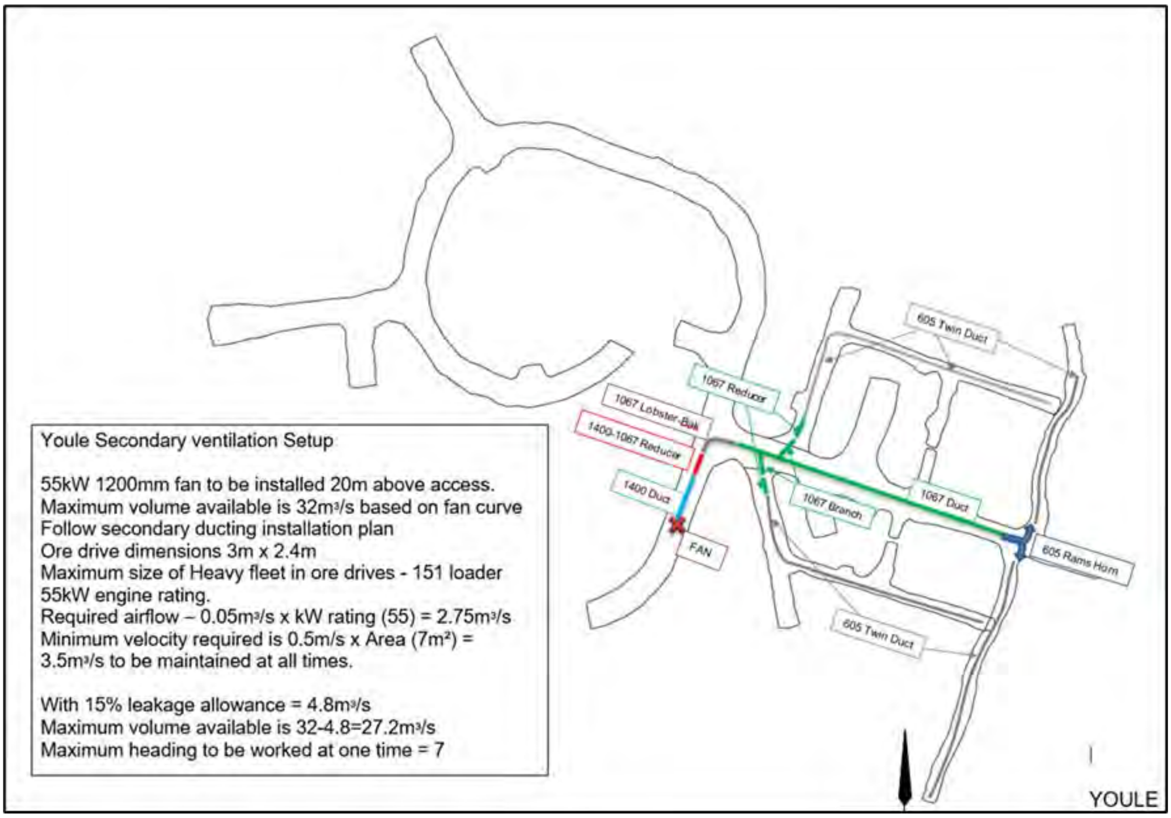
The secondary ventilation ducting used at the Costerfield Property consists of ventilation bag with diameters of:

- 1,400 mm
- 1,070 mm
- 605 mm twin duct
- 790 mm twin duct.

Generally, 55 kW single or twin stage fans are used to ventilate level access and ore drives. Twin stage fans are used when ore drives are scheduled to extend further than typical development. Capital decline development is ventilated by a 75 kW twin stage fan and 1,400 mm diameter ducting.

A standard secondary ventilation installation for an operating level in Youle is shown in Figure 16.10. The installation includes a fan placed in primary flow above a working level access which ventilates three ore drive levels and six ore drive headings. Ventilation chokers are used in all levels for when additional flow may be required in other areas on the same secondary system. The return air from the ore drives joins the primary flow on the decline and continues to the Youle RAW.

Figure 16.10: Standard secondary ventilation installation for Youle level access



16.5 Mine Services

16.5.1 Compressed Air

Compressed air is generated for the underground mining activities by the Augusta surface compressed air plant and is supplemented by a backup compressor at the Brunswick Plant. Further detail of the compressed air plant specifications can be found in Section 18.2.3.

16.5.2 Raw Mine Water

Raw mine water is sourced from the Augusta Mine Dam located on the Augusta site, and water is delivered to the underground workings through two separate supply lines. The Augusta and Cuffley areas of the mine are supplied from header tanks at the Augusta portal via 4" HDPE pipe run through mine development. Youle and Brunswick are supplied via a service-hole connected to a header tank on surface at the Brunswick site. Pressure reducer valves are installed in the water supply lines at 60 m vertical intervals to manage the water pressure underground.

The Augusta Mine Dam is fed directly from the rising main that extends from the Cuffley 945 Pump Station.

16.5.3 Dewatering

Dewatering of the underground workings is managed through a series of collection sumps that report to various pump stations throughout the mine. From the intermediate pump stations and sumps, groundwater reports to the bottom of the 4800 decline Settlement Sump via gravity for silt management. From the 4800 decline, the water is pumped to the underground Cuffley 945 Pump Station where it is discharged via the Rising Main to the surface storage dams.

16.6 Backfill

The practice of placing CRF in stope voids has been undertaken in Cuffley, Augusta, Brunswick and Youle to improve local ground stability, reduce unplanned dilution and improve mining recoveries. CAF is also selectively used as an alternative to CRF in Youle for improved confinement and stability in flat dipping stopes. Loose rockfill is placed as backfill in stopes where the filled void will not be exposed by an adjacent stope. Loose sand fill is used on a limited basis where a low slump material is required to fill voids that cannot be filled adequately with CAF or CRF. The use of paste fill (cemented tailings mix) was also considered as a possible alternative for backfilling open stopes in the production cycle, but was found that the tailings from the Brunswick Processing Plant were unsuitable for backfill purposes due to the high moisture, clay content and cost considerations. Paste fill is being used as fill into previously mined areas in Augusta and Cuffley for stabilisation purposes and tailings disposal underground via a paste plant on Augusta surface.

The CRF uses waste rock sourced from development with the addition of a cement slurry mix that results in a final product composing of 4% cement. CAF uses waste rock that is screened to a smaller diameter aggregate, with the addition of a cement slurry to form a final product composing of 8% cement.

Dry cement is stored on surface at the Brunswick site in bulker bags. The dry cement is delivered underground to mixing bays via a flatbed truck and Caterpillar 1700G loaders. At the mixing bay, the dry cement is hydrated and dumped by the 1700G loader from an underground stored location, to be mixed with waste rock in varying size batches using a Caterpillar 1700G loader.

Once mixed, the cemented fill is trammed to the fill point of the open stope using a Toro 151 or Sandvik LH203 loader. A bund is placed at an appropriate distance from the top of the stope to minimise potential for loader to overbalance or drive into the stope void. Care is taken during placement of the fill that the poly tube is not displaced which is secured by chains during the filling process.

The quality of the cemented fill is ensured by the use of a PLC control at the cement batching plant and standardised bucket filling of the waste rock. Records are kept of batch quantities for all batches.

The nominal curing time before firing the adjacent stope is 24 hours. After 12 hours, the rock bund placed at the brow of the stope can be removed in preparation for drilling and/or charging the adjacent stope panel.

The cemented fill methods have proved effective in minimising dilution during subsequent panel extraction as well as providing better ground stability and has improved recovery by eliminating the requirement for rib pillars.

16.7 Mineral Reserve Schedule Assumptions

The Mineral Reserve schedule was completed using the assumed mining rates shown in Table 16.5. Total development and production rates are constrained by the combination of development headings or stoping fronts available at the one time and the resources available.

Table 16.5: Schedule assumptions

Description	Value
Operating dev m advance/cut	1.8–2.8
Max. operating dev m/mth/heading	25–40
Max. total operating dev m/mth	500
Capital dev m advance/cut	3.6
Max. capital Dev m/mth/heading	180
Max. production drilling rate m/day/drill	144–180
Max. production bogging rate t/day/loader	56–275
Max. production backfill rate t/day/loader	44–256

16.7.1 Equipment Requirements

The existing development, production and auxiliary underground equipment fleet will continue to be used, where applicable, with additional equipment purchased to meet the planned replacement schedule or meet increased production demands. Costerfield will begin owner operator capital development in FY2026, purchasing a CAT R2900 XE Loader, a Normet MC605 charge rig, two CAT AD30 underground trucks and a Sandvik DD422i twin boom jumbo to facilitate these works. To assist in operational development increase in rates, Costerfield will be purchasing an additional Komatsu WX03 loader and Resimin MUKI FF single boom jumbo in FY2026.

The existing mobile equipment fleet is summarised in Table 16.6.

Table 16.6: Underground mobile equipment fleet

Equipment type	Equipment model	Existing fleet
Single-boom jumbo	Resemin MUKI FF	4
Production drill	Resemin MUKI LHBP 2R	3
LHD – loader	CAT R1700G	3
LHD – loader	Toro 151-D	1
LHD – loader	Sandvik LH203	7
LHD – loader	Komatsu WX03	1
Haulage truck	MT42 Atlas Copco Truck	1
Haulage truck	Caterpillar AD30	1
Cement agi	Jacon Transmix 5000	1
Stores Truck	Isuzu FSS550	1
Integrated Tool Carrier	Volvo L90	1

Equipment type	Equipment model	Existing fleet
Telehandler	Dieci 33.11	1
JCB	JCB 403ZX WHEEL LOADER	1
Service tractor	Carraro TN5800	1
Grader	MITSUBISHI GRADER MG460	1
Light vehicle	Toyota Land Cruiser	1
Light vehicle	Kubota 4x4 Utility	3
JCB	Carraro TN5800	2
Service tractor	MITSUBISHI GRADER MG460	1
Light vehicle	Toyota Land Cruiser	29
Light vehicle	Kubota 4x4 Utility	4
Total		**68**

16.7.2 Personnel

An existing core group of management, environmental, technical services (Engineering, Survey, Geology), administration, maintenance, supervisory, and production personnel continue to operate at the Costerfield Property. As a residential operation, all employees commute daily from their place of residence.

Level access and decline capital development in Alison is currently completed by a contractor using its own twin-boom jumbo and Normet charge rig.

Shift Schedule

The Costerfield Property functions a continuous mining operation, 24 hours a day, 365 days per year. Operators and maintenance personnel work 11-hour shifts, 7 days on, 7 days off, alternating between dayshift and nightshift.

Augusta support staff work a standard Australian working week of 5 days on, 2 days off, 8 hours per workday.

All on-costs for annual/sick leave and training have been estimated in the direct and indirect operating costs, respectively.

Personal Levels

All equipment has been assigned with one operator per crew per machine where applicable. Cross-training occurs for all operators, ensuring that each shift panel is adequately multi-skilled to cover for any unplanned sickness, annual leave and general absenteeism.

The current personnel numbers for the Costerfield Alkane Resources workforce totals 355 employees.

16.8 Schedule Summary

A summary of the key physicals in the Mineral Reserve schedule is presented in Table 16.7.

Table 16.7: Summary of schedule physicals

Description	Units	Quantity
Capital Development	m	1,321
Operating Development (Waste)	m	15,258
Operating Development (Ore)	m	10,319
Development Ore Tonnes	tonnes	201,946
Development Ore Grade Au	g/t	4.1
Development Ore Grade Sb	%	1.2
Stoping Ore Tonnes	tonnes	709,028
Stoping Ore Grade Au	g/t	6.04
Stoping Ore Grade Sb	%	1.72
Total Ore Tonnes	tonnes	910,974
Total Ore Grade Au	g/t	5.6
Contained Au	ounces	164,506
Total Ore Grade Sb	%	1.6
Contained Sb	tonnes	14,662
Opening stocks		
ROM Ore Tonnes	tonnes	49,093
ROM Ore Grade Au	g/t	3.7
ROM Ore Grade Sb	%	0.6

Notes: Ore tonne totals differ from reported reserve tonnes. The reserve schedule includes mining of inferred and below cut-off grade development (assigned zero grade) to access proven and probable material.

17 Recovery Methods

17.1 Brunswick Processing Plant

The Brunswick Processing Plant treats an antimony and gold rich sulfide ore through a conventional comminution, gravity and flotation style concentrator. It has been operating since 2007 and was owned by Mandalay Resources from late 2009 until late 2025, when a merger occurred between Mandalay Resources and Alkane Resources. Since its initial commissioning, several plant upgrades have resulted in production capacity increases to the current rate of approximately 10,000–13,000 t/month over the 2015–2026 calendar years. The concentrator operates 24 hours per day, 7 days per week, while crushing operates under noise restriction guidelines during extended dayshift hours.

The surface crushing and screening facility processes underground feed down to a particle size range suitable for milling through a two-stage, closed circuit ball milling circuit. Centrifugal style gravity concentrators are used on the combined primary milling product and secondary mill discharge to recover a gold-rich gravity concentrate. This is upgraded further over shaking tables and sold as a separate gold concentrate product which is transported to a local refinery.

Secondary milled products are classified according to size and processed through a simple flotation circuit comprising of two StackCell roughers (which can be used independently in either a rougher or a recleaner duty), two additional rougher tank cells followed by the original flotation train rougher, scavenger and single stage cleaning. Two CavTube flotation columns were added to the tailings end of the existing flotation circuit and were successfully commissioned in April 2021.

The flotation concentrate is dewatered through thickeners and with filtration to produce a final antimony-gold concentrate product. This product is bagged (each bag weighs between 900 kg and 1,600 kg) and trucked to port where the bags are packed into shipping containers and shipped to customers overseas for refining. The flotation tailings are thickened before being pumped to the new TSF, as underground paste fill is on hold until more voids are available.

The Brunswick Processing Plant flowsheet is a simple, conventional, well-proven circuit with more than 18 years of operation and is suited to processing of the Costerfield ores remaining in the LoM plan. A summary processing flowsheet has been provided in Figure 17.1 and Figure 17.2.

Figure 17.1: Brunswick Processing Plant communition and gravity flowsheet

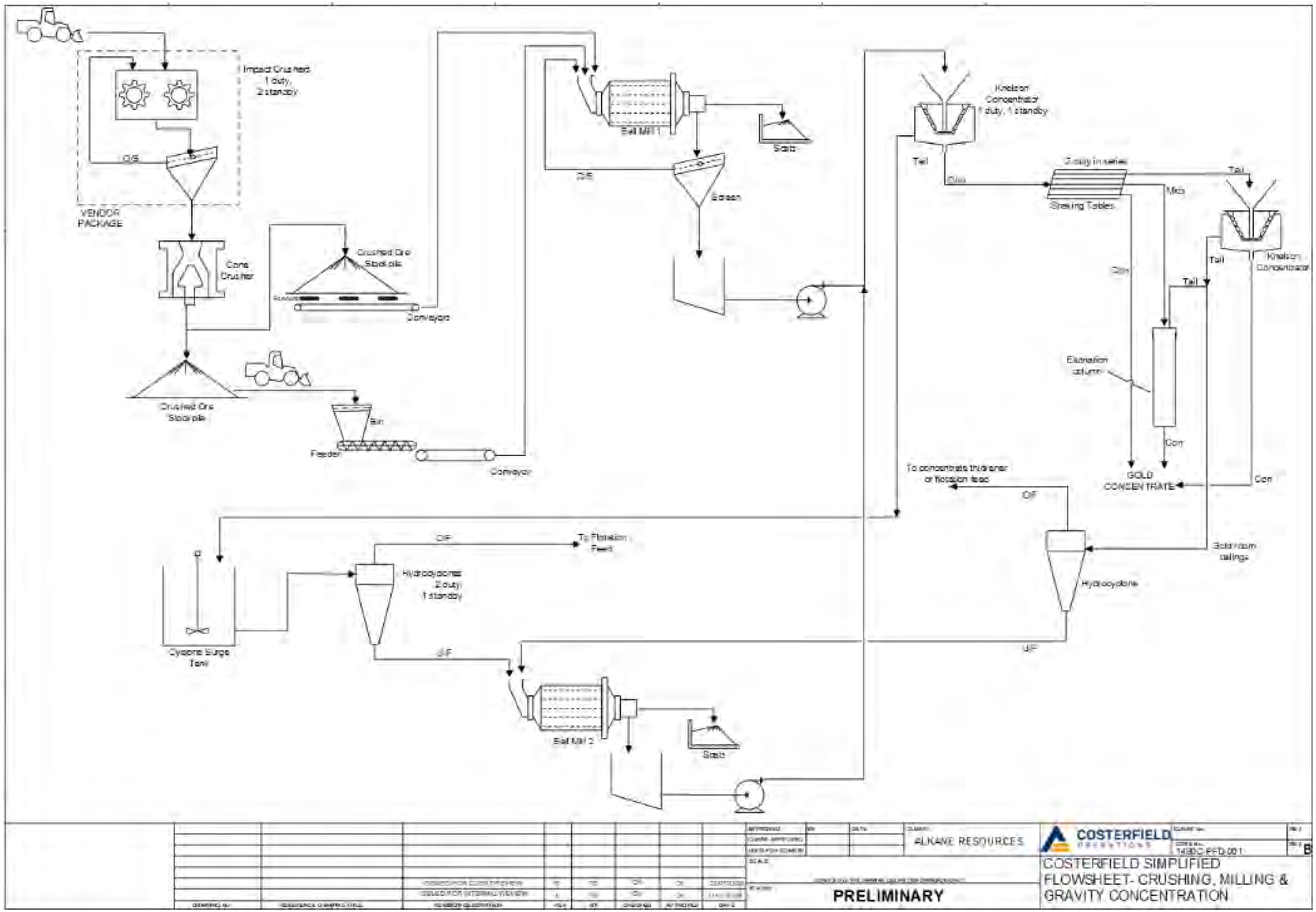
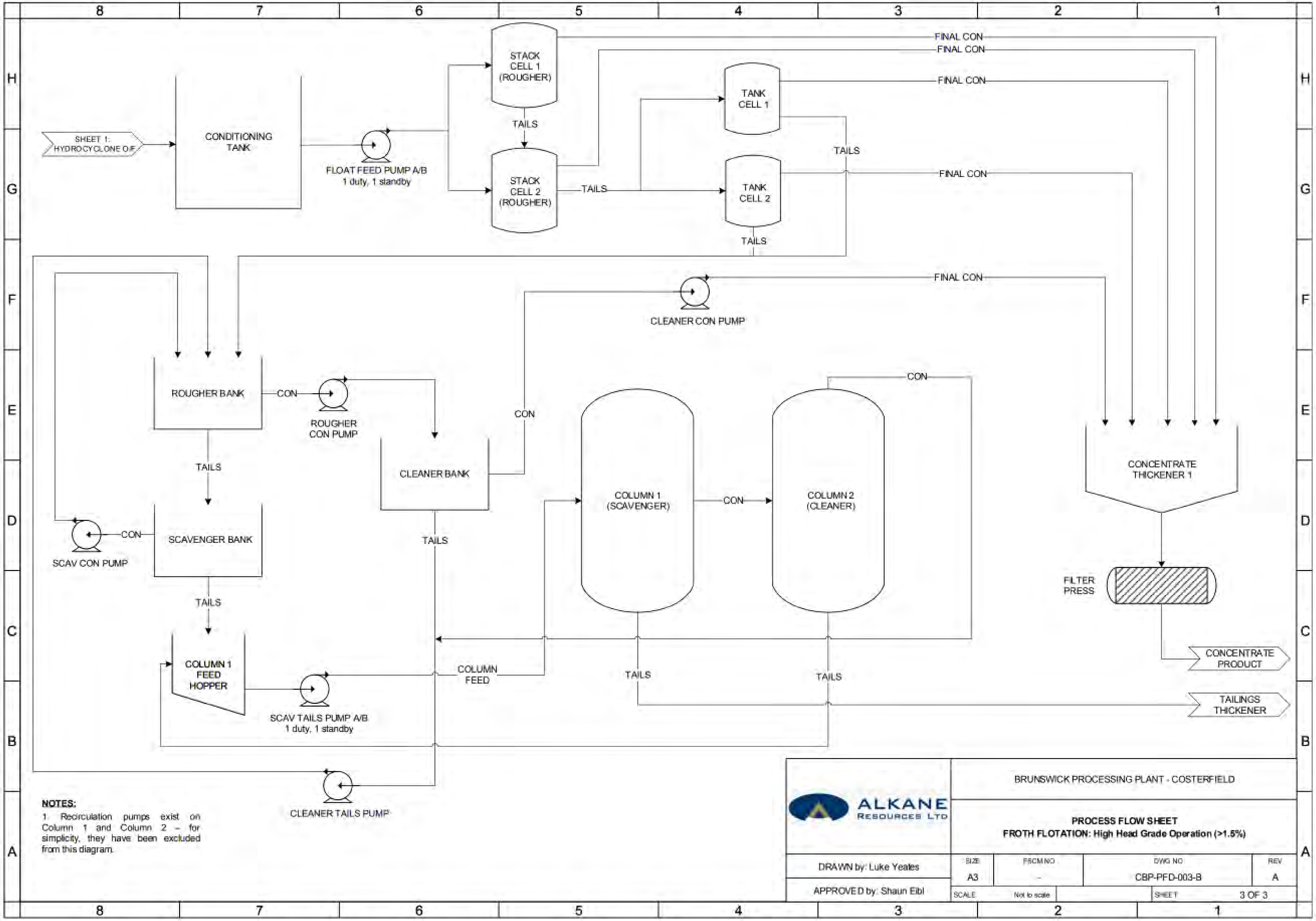


Figure 17.2: Brunswick Processing Plant flotation flowsheet



17.1.1 Crushing and Screening Circuit

The crushing and screening circuit consists of a primary and secondary crushing plant. The primary crushing circuit is in closed circuit with a 35 mm vibrating screen. It uses a duty and a standby diesel-powered Finlay I-130RS mobile impact crusher and a Finlay I-140RS mobile impact crusher. The primary product is fed to a Finlay C-1540RS mobile cone crusher that operates in closed circuit with a 12 mm screen. Crushed ore can be loaded into a 40 t fine ore bin or directly onto a 1,500 t capacity reclaim (tunnel) feeder. The crushing and milling circuit have a demonstrated average throughput capacity of 10,000–13,000 dmt per month

17.1.2 Milling Circuit

Crushed ore is deposited into the fine ore bin, tunnel feeder or both, discharging onto the primary mill feed conveyor to feed the milling circuit. The milling circuit comprises two ball mills in series, both operating in closed circuit. The primary mill operates in closed circuit with a Dutch State Mines (DSM) screen, with the screen oversize returning to the primary mill for further grinding and the screen undersize being fed to a centrifugal style gravity concentrator. This recovers a small mass of high-grade gold concentrate that is sent to the gold room for further gravity upgrading using shaking tables and a small centrifugal-style gravity concentrator. The final gravity concentrate is sent directly to a gold refinery within the state as a separate saleable product.

The gravity gold production varies, but recoveries from the Youle and Shepherd blend feed are typically around 55–65% but can be over 70% of the gold delivered in the feed. The gravity tailings are pumped to a dedicated classifying hydrocyclone (cyclone) with the overflow going to feed for the flotation plant or to the concentrate thickener. The underflow is returned to the secondary ball mill for further grinding. The milling circuit has a target grind size P_{80} of 53 µm. The secondary ball mill discharge is combined with the DSM screen undersize so is also fed to the centrifugal gravity concentrator.

17.1.3 Flotation Circuit

The flotation circuit is designed to recover an antimony-gold rich sulfide concentrate. The flotation circuit is fed from the secondary ball mill cyclone overflow. The cyclone overflow is fed to a conditioning tank where lead nitrate, an activator, and potassium amyl xanthate, a collector, are added. The conditioning tank feeds two 48-inch flotation StackCells, currently operating in series with two site fabricated rougher tank style flotation cells again in series. The StackCell and rougher tank cell concentrates are combined with the final cleaner concentrate as the final product.

The rougher tank cell tailings flow to the original flotation circuit. This consists of eight square Denver DR100 cells for the remaining rougher and scavenging duties, followed by six Denver DR15 cells used for cleaning duties. The concentrate from the Denver rougher flotation cells is pumped to the cleaner flotation cells while the tailings become feed for the scavenger flotation cells. The concentrate from the scavenger flotation cells is recycled to the feed of the Denver rougher flotation cells while the scavenger tailings are pumped as feed to the rougher CavTube column flotation cell. The rougher CavTube column tail is the final tail stream that reports to the final tailings thickener. The rougher CavTube concentrate feeds the cleaner CavTube column flotation cell. The cleaner CavTube tails are recycled to the feed of the rougher CavTube. The cleaner CavTube concentrate is fed back to the Denver rougher cells. The Denver cell cleaner tailings are also recycled to the rougher flotation cells. During periods of low antimony feed grade, a StackCell is used as a secondary cleaner. The flotation circuit effectively recovers the antimony and any gold not collected in the gravity gold circuit.

17.1.4 Concentrate Thickening and Filtration

Final concentrate produced from the combined StackCells, tank rougher cells and cleaner flotation stages are pumped to concentrate thickener 1. Overflow from concentrate thickener 1 is pumped to concentrate thickener 2 for clarifying. The thickened underflow from both thickeners is pumped directly to a plate and frame pressure filter for final dewatering.

The concentrate filter cake is discharged directly into concentrate bags. The filtrate is recycled to the concentrate thickener while the concentrate thickener 2 overflow is recycled back to the plant as process water to maximise water re-use and minimise concentrate losses.

17.1.5 Tailings Circuit

The flotation circuit tailings are settled in a thickener. The tailings thickener overflow is recycled back to the plant as process water and the thickened solids are pumped to a TSF where it is discharged via a conventional spigot system. Using the paste plant for underground disposal is on hold until more voids are available for filling. Any additional water from the tailings is decanted and recycled to the plant for use as process water.

17.1.6 Throughput

The Brunswick Processing Plant has a throughput capacity of up to 14,000 dmt/month but typically averages closer to 11,000–13,000 dmt/month. Since operations commenced, the plant has demonstrated ongoing production creep, from around 5,000 t/month achieved in January 2012 to its current status.

Annual plant throughput has been matched to mining rates in recent years as the underground mine production has at times limited the available mill feed. The forecast production rates are well supported by consistent historical production over several years as well as ongoing plant upgrades and debottlenecking projects. Average throughput from 2024 to 2026 ranges from 10,500 dmt to 12,500 dmt per month, averaging 11,600 dmt per month.

There is currently approximately 10,200 dmt of feed on the ROM pad and COS, with total stocks in pit stockpiles, overflow stockpiles, ROM and COS at approximately 49,000 dmt. A conscious decision has been made to maintain mill feed stocks that will provide a comfortable buffer for any disruption to mining and allow for more stable mill operations.

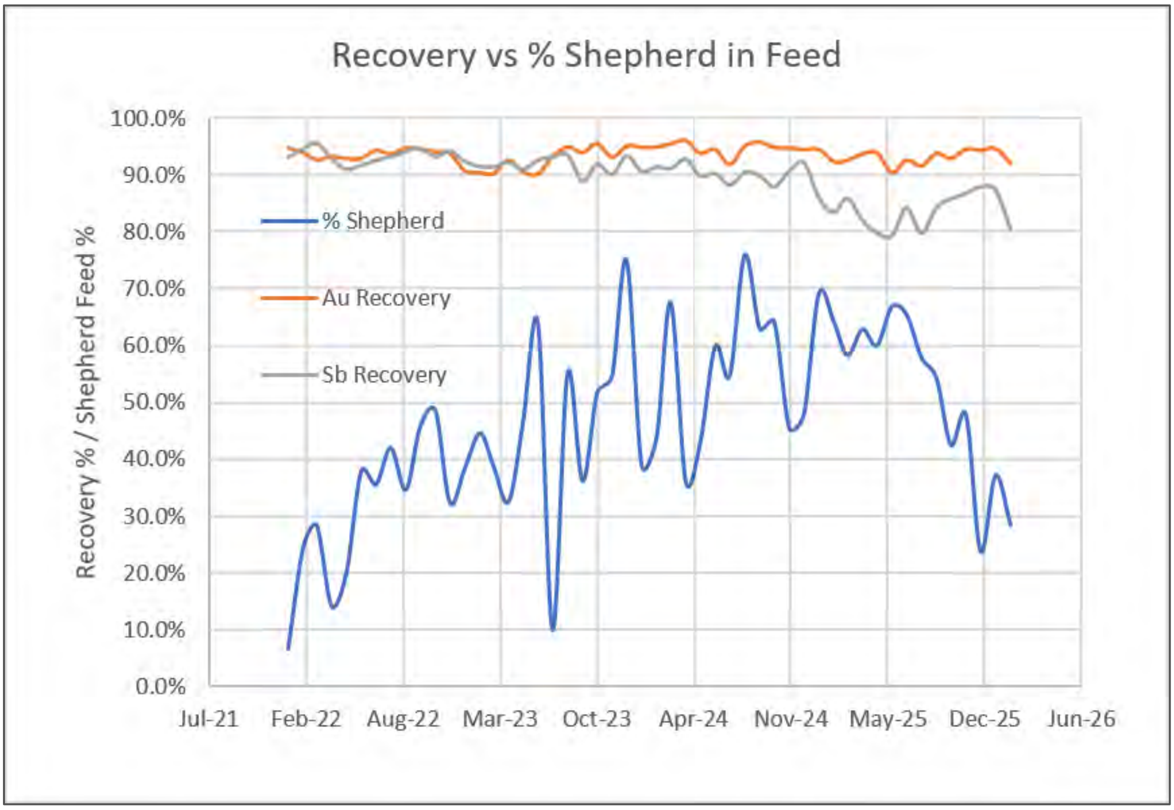
Further discussion of historical production and forecast LoM plant throughput on the current ore feed blend is provided in Section 13.

17.1.7 Metallurgical Recovery

Head grade versus recovery relationships have been developed for both antimony and gold using plant operating data (Figure 17.3). The gold head grade versus tailings grade recovery relationship for non-Brunswick ores has used January 2022 to February 2026 monthly production data. The Youle and Shepherd ore blends recently processed have been used to determine recovery for non-Brunswick ores; Youle and Kendal (a sub-domain of Youle) will continue to form the bulk of the mill feed from non-Brunswick lodes.

Similarly, the antimony recovery algorithm for non-Brunswick ores has used the monthly operational data for January 2022 to February 2026 to reflect the lower head grades typically associated with higher proportions of Shepherd ore.

Figure 17.3: Plant antimony and gold recovery with Youle and Shepherd blending



Forecast antimony and gold recoveries used for LoM planning, budgeting and economic modelling are based on these recovery relationships. This is the best method of forecasting recovery when processing a similar feed blend. These algorithms are updated annually to reflect changes in ore blend or plant upgrades.

The recovery relationships are well understood and are appropriate for metallurgical recovery estimation purposes. They are supported by historical concentrator recoveries at similar feed grades and compare well to previous grade/recovery relationships. Further recovery confidence is provided by the consistent recoveries of both antimony and gold achieved over a number of years across a range of feed grades. Full details have been provided in Section 13 of this report.

17.2 Services

17.2.1 Water

The water services at the Brunswick Processing Plant consist of raw water, process water and excess water disposal systems. The process water supply consists of concentrate thickener overflow, tailings thickener overflow and TSF decant return water.

The plant operates with a positive water balance with excess water requiring disposal being processed through a permeate reverse osmosis (RO) plant at the Brunswick Processing Plant. This plant, designed to treat 2 ML/day, was constructed in 2014, and has remained in operation as per regulatory approvals. A pre-treatment plant to feed the RO plant was installed in 2017. This has enhanced the robustness of the RO operation, limiting downtime and reducing consumables consumption.

The Splitters Creek evaporation facility has the capacity to treat approximately 104 ML/year net (evaporation minus rainfall) and treats the bulk of the excess water.

The TSF and process water is stored in and distributed from a dedicated tank system. Due to underground dewatering, adequate process water supplies are available to meet the LoM process water requirements.

17.2.2 Air

The Brunswick Processing Plant requires both low pressure (LP) and high pressure (HP) air supplies. Currently, three separate LP blowers supply the rougher, scavenger and cleaner cells, with the existing tank cells running off HP air.

The HP air supply was upgraded to a variable speed compressor in 2017 in order to increase the capacity and availability of high-pressure air and reduce the shock load on the power supply on start-up of the fixed speed compressor units. The pressure filter also runs using HP air.

The processing facility has adequate air to meet the LoM requirements and no current upgrades are required or planned.

17.2.3 Power

Due to the need for additional electrical power for the development of the Brunswick and Youle underground orebodies, upgrades to the power supply and reticulation circuits were completed in 2019. This involved consolidating three separate incoming sources of electrical supply into a single supply source and distributing electrical power from that single point. This has allowed for greater efficiencies through minimising losses from each supply point and also allows additional local site back-up generation to occur from a single point.

This has simplified starting and stopping of supplementary site diesel fired power depending on the demand. The mill and RO plant will continue to be powered from this single point. There is also provision for additional power demand for the mill up to 2 kVA (refer to Section 18).

Further improvements to electrical switchboard controls have been ongoing in order to remove local power boards and relocate them to a central location.

17.3 Plant Upgrades

There have been no major fixed plant upgrades since 2021 when the second StackCell and rougher and cleaner CavTube columns were installed. A third mobile impact crusher was purchased in 2022, and a mobile cone crusher was purchased in 2024, adding redundancy to the crushing regime.

Further details of recent plant upgrades in each processing circuit are provided in the following subsections.

17.3.1 Crushing and Screening Unit

In mid-2024, a stacker conveyor was delivered to site with the purpose of delivering crushed fines to a central stockpile (COS) on the ROM pad. This stacker is used to build the tunnel feeder stockpile or COS on the ROM pad. The Finlay C-1540RS mobile cone crusher purchased in 2024 (Q4) after a 3-month trial in Q3 has continued to show increased throughput at lower cost and a significant maintenance reduction.

Pre-crushing with a jaw crusher on the lower ROM pad has been trialled to increase the wear life of crusher consumable parts and increase crushing capacity. The impact of this equipment on the circuit will continue to be monitored. The pre-crushing has assisted in crushing all available ore grade stocks each month. New stackers have been purchased to transport pre-crushed material directly to the upper ROM.

Further works on the tunnel feeder are required to reach full operating capacity.

A rolls crusher, TCF 400, has been purchased and delivered to crush scats which are currently ejected from the ball mill, which should marginally increase throughput rates. Additional infrastructure is required before this can become operational.

17.3.2 Milling Circuit

The milling circuit remains fundamentally unchanged. Small modifications have occurred with the installation of a second conveyor belt from the tunnel feeder to the feed chute. The feed chute design has also altered to accommodate this. Alternative screen types have been trialled at the DSM to improve life and functionality.

The finer crushed ore feed size allows the target throughput rate to be achieved on all ore types. All planned upgrade work will be to maintain the current infrastructure around the mill.

17.3.3 Flotation Circuit

No recent changes to the flotation circuit have been made other than some pipework modifications. The first of these was instigated to allow the option of using a StackCell as a second cleaner rather than a rougher during low antimony head grade campaigns. It can still be used as a primary rougher when required.

Rougher and cleaner CavTube column flotation cells were installed and commissioned by Eriez Manufacturing Co on the flotation tail in April 2021. This new flotation circuit on the tailings stream initially produced a separate low-grade antimony-gold concentrate. However, the cleaner column concentrate is now usually recycled back to the rougher feed. A single concentrate product allows better organisation of the concentrate pad and easier estimates of shipment grades. The blended plant concentrate is sold to customers in regular shipments.

The rougher column tail from this additional column circuit is the final plant tail. The columns are sized for the full tailings slurry capacity.

17.3.4 Concentrate Thickening and Filtration

Two concentrate thickeners now operate in series rather than parallel, with all antimony concentrate from the main plant reporting into one, and the overflow reporting to the second thickener. This allows for a more uniform concentrate to be bagged and sampled and capture of any material lost from thickener 1 overflow.

Both thickeners feed the pressure plate and frame filter press in parallel. Loading and pressing time for the filter press is not a bottleneck for production, whereas settling capacity in the concentrate thickener can be a bottleneck at higher metal production rates and needs to be carefully managed.

17.3.5 Tailings Circuit

The tailings thickener has sufficient capacity to meet the current throughput. The average tails thickener underflow solids density will be maintained at approximately 50% w/w solids (+/- 10%).

Historically, both the Bombay and Brunswick TSFs were used interchangeably as the primary source of tailings storage. Both Bombay and Brunswick TSFs are at capacity and are no longer in use. A 5-year operating TSF – with a design capacity of approximately 788,000 dmt and situated to the northwest of the Brunswick Pit – commenced construction in September 2024 and became operational in July 2025. It is the primary means of tailings disposal.

Paste filling of underground voids can also be undertaken when required. Cement binder is mixed with thickened plant tailings, and pumped underground to fill old workings. In 2024, a pug mill was purchased and installed at the Augusta Mine site. The pug mill is capable of processing the entirety of the thickened mill tailings and can operate continuously to meet the requirements of the Brunswick Processing Plant. Paste filling was used as the primary tailings disposal method until the new TSF was completed but is not currently operational. Once more locations for underground disposal of cemented tailings are identified, paste filling will resume.

17.3.6 Reagent Mixing and Storage

All reagents arrive on site pre-mixed as liquids. The reagent storage area is being upgraded such that one operational intermediate bulk container (IBC) will be the primary feed for each reagent, with top up by gravity from a second IBC situated above.

All the dosing points will be fed from the operational IBC only. The reagent pumps will be located centrally and upgraded from EWIN 8x6 Iwaki to DS500 pumps. The DS500 hose pumps have been slowly introduced to the plant over time and are considered more reliable, provide more accurate dosing, are lower maintenance and can pump over greater distances than the existing diaphragm pumps. It is intended that the DS500 pumps be integrated into the Supervisory Control and Data Acquisition (SCADA) system in the future to allow control of dose rates from a central location.

The existing mixing facilities will be retained on site to allow flexibility in the future.

17.3.7 Water

Due to the age of the RO plant, the pre multimedia filters and internal media were replaced in 2025.

18 Project Infrastructure

The infrastructure associated with the Costerfield Property consists of surface, underground, tailings storage, power and water supply, waste rock storage, diesel storage, explosives storage, maintenance and housing facilities.

18.1 Surface Infrastructure

The Costerfield Property's surface infrastructure facilities are typical of a conventional flotation style concentrator and underground mining operation of this size.

18.1.1 Augusta Mine Site

The Augusta Mine site comprises the following infrastructure, which is also referenced in Figure 18.1:

- office and administration complex, including change house
- store and laydown facilities
- heavy underground equipment workshop
- evaporation and storage dams
- temporary surface waste rock stockpile area
- Augusta Mine box-cut and portal
- ventilation exhaust raise
- ventilation intake raises
- mine water recirculation dam and silt settlement channel
- exploration drilling contractor offices and workshop
- capital development contractor workshop
- paste batch plant and cement silo.

Figure 18.1: August Mine site – aerial view

18.1.2 Brunswick Mine Site

The Brunswick site comprises the following infrastructure – refer to Figure 18.2:

- gold-antimony processing plant and associated facilities
- central administration complex
- process plant workshop
- TSFs
- ROM stockpiles
- waste rock stockpiles
- RO plant capable of treating 2 ML of water per day
- previously mined Brunswick Open Pit
- Brunswick mine portal and backfill cement silo
- Brunswick Primary Ventilation Raise
- Youle Primary Ventilation Raise
- exploration geology offices, core farm and core processing facility.

Figure 18.2: Brunswick Mine site – aerial view

18.1.3 Splitters Creek Evaporation Facility

The Splitters Creek Evaporation Facility is situated on a 30 ha parcel of land that is located approximately 3 km from the Augusta site and lies within ML MIN5567. The facility facilitates the evaporation of a combination of groundwater extracted from the Costerfield Property mines and brine which is a by-product of the RO filtration plant. The facility enables underground dewatering rates to be maintained ahead of mining operations.

The evaporation facility site comprises the following:

- 150 ML storage dam
- 40 ML evaporation terraces

- recirculation pumping system that directs water from the storage dam to the evaporation terraces
- Splitters Creek rising main that feeds water from the Augusta Mine Dam to the evaporation terraces
- leakage detection system on the Splitters Creek rising main.

In 2020, permits were amended and approved to allow brine to be discharged to the Splitters Creek Evaporation Facility.

18.1.4 Margarets Aquifer Recharge Borefield

The Margarets Aquifer Recharge Borefield is located approximately 1 km south of the Augusta operations. Aquifer recharge infrastructure at the Margarets Borefield includes several bores. A 2-year research development and demonstration approval is now complete and the project is awaiting final approval for ongoing operation.

18.2 Underground Infrastructure

The underground infrastructure at the Costerfield Property is typical of an underground mining operation.

18.2.1 Secondary Means of Egress

The secondary means of egress consists of a ladderway system that connects all underground workings to the surface in parallel with the main development declines. The ladderway system comprises the following:

- The Augusta second means of egress is via Capital access to Cuffley via the Cuffley Primary Ventilation Shaft in an emergency gig.
- The Cuffley ladderways extend from the Cuffley Incline, Cuffley Decline and 4800 Decline to the 945 mRL. From the 945 mRL level, extraction is performed via the Cuffley Primary Ventilation Shaft in an emergency gig.
- The Brunswick ladderways are mined between every second operating level cross-cut, allowing a secondary means of egress parallel to the main decline travel way to the 1056 FAB, where the emergency gig can be landed for final extraction to surface.
- The Youle ladderways are mined between every operating level of the Youle development with the exception of the 947, 957 and 967 levels. These ladderways allow a secondary means of access to the bottom of the Youle Primary Ventilation Shaft. The 947, 957 and 967 levels have secondary access to the bottom of the Youle Primary Ventilation Shaft via the Youle Decline and parallel RAW development. The emergency gig can also be operated in the Youle Primary Ventilation Shaft to allow extraction of personnel from this point if required.
- The emergency gig attaches to a standard crane hook and hoists personnel in an emergency up and down the Cuffley Primary Ventilation Shaft using a 200 t mobile crane as the hoist. The emergency jig is capable of evacuating five persons, or 600 kg (120 kg per person), at a time.

18.2.2 Refuge Chambers and Fresh Air Bases

Eight underground refuge chambers and two permanent FABs are strategically placed within the mine to mitigate hazards posed by irrespirable atmospheres and entrapment.

The capacity of the refuge chamber required is dictated by the number of personnel planned to be working in the immediate vicinity serviced by the refuge chamber. The position of the refuge chamber facilities enables all personnel to be within 750 m of a refuge chamber, as recommended in the Western Australian *Refuge Chambers in Underground Metalliferous Mines Guideline* (Department of Mines and Petroleum, 2013).

It is not intended for refuge chambers to substitute a secondary means of egress, but to provide refuge during an incident where the underground atmosphere is irrespirable or when ladderways may be inoperative or inaccessible.

The refuge chambers and FABs are located in the following places:

- The Brunswick workings has a 16-man refuge chamber located at stockpile 5 in the Brunswick access, and a FAB at the 1056 vent access.
- The Youle workings has a 20-man refuge chamber located at stockpile 10, a 16-man refuge chamber located at the 747 refuge chamber cuddy, a 10-man refuge chamber at the 657 refuge chamber cuddy, and a 20-man refuge chamber at the 618 refuge chamber cuddy
- The 4800 Cuffley Decline has a 16-man chamber located at the 909 stockpile.
- The 4-man refuge chamber is a travelling chamber that may be positioned in areas not serviced by fixed refuge chambers if the need arises. It is currently in the Alison Incline development and will be replaced with a new 20-man refuge chamber in this location in the future.

18.2.3 Compressed Air

The existing compressed air plant comprises of three 593 cfm compressors located at the Augusta site, plus one additional compressor at the Brunswick Mill site. The overall plant capacity is 67.2 m^3/min (2,373 cfm). Compressed air is delivered underground via a 4-inch HDPE ‘poly’ pipe. Each level is then supplied from the decline via 2-inch HDPE piping.

Air receivers have been placed at the Brunswick 1006 mRL and Stockpile 5 Youle to increase the system efficiency. Compressed air is used to power pneumatic equipment and/or activities including:

- airleg drills
- Pneumatic Ammonium Nitrate-Fuel Oil (ANFO) loaders
- blasthole cleaning/prepping for development rounds
- diaphragm air pumps
- long-hole cleaning/preparation.

18.2.4 Ventilation System

The primary ventilation infrastructure currently consists of five FAIs and two primary exhaust shafts. The FAI system consists of the following :

- Augusta Portal, which has 56 m^3/s (of air) entering the portal.
- Augusta FAI, which is a series of air leg rises from the surface to the 1020 Level (RL) in the Augusta workings, contributing 12 m^3/s of air flow.
- The Augusta FAR is a 150 m vertical raise bore shaft from surface to the 1020 Level in the Augusta workings. The Augusta FAR is 3 m in diameter and approximately 11 m^3/s of fresh air enters the mine through this shaft.
- Brunswick FAR is a 230 m, 3.5 m diameter vertical raise bore shaft from the surface to the 956 mRL in the Brunswick workings. The shaft is currently backfilled with waste rock up to the 1,056 mRL. Approximately 3m^3/s enters the mine through the Brunswick FAR, which is currently regulated to 98% closed. The air flow through the Brunswick FAR supplies adequate air flow to the 1056 FAB which serves as a refuge point in the event of an emergency.
- Brunswick Portal is a 5 mW × 5 mH arched profile which reduces to 4.5 mW × 4.8 mH after approximately 20 m of development. The Brunswick Portal allows 80–83 m^3/s of fresh air to enter the mine under the current configuration.

The RAR system includes the following:

- Cuffley RAR is a 230 m, 3 m diameter vertical raise bore shaft from surface to the 950 RAW. The Cuffley primary fan chamber is positioned at the bottom of this shaft, which is capable of running three single stage Clemcorp CC1400 Mk4 fans driven by 110 kW motors. The three fans are installed in a fan bulkhead in parallel. Currently, the primary ventilation is configured such that only one of the three primary fans at the Cuffley primary fan chamber is required to operate. The Cuffley RAR exhausts 54–56m^3/s from the mine workings.
- Youle RAR is a 232 m, 4 m diameter vertical raise bore shaft from surface to the 957 RAW. The Youle primary fan chamber is positioned at the bottom of this shaft, which is capable of housing four single stage Clemcorp CC1400 Mk4 fans driven by 110 kW motors. The four fans are installed in a fan bulkhead in parallel. Currently, the primary ventilation is configured such that only two of the four primary fans at the Youle primary fan chamber are required to operate. The Youle RAR exhausts 103 m^3/s.
- As part of the development of the Brunswick South lode, a new vertical exhaust raise is planned to be excavated with dimensions of 3.5 m diameter and 235 m length. Three Zitron G2ZVN1-1400 fans driven by 110 kW motors fans will be installed at the Brunswick South primary fan chamber with space for a fourth if required in future.

The primary ventilation flow is distributed through the mine using secondary fans positioned in areas of primary air flow that force ventilate the active development and stoping levels as required.

18.2.5 Dewatering System

The process of dewatering in advance of the mining level development is achieved by leaving diamond drill holes drilled from underground open to drain. Due to the fractured nature of the aquifer, the groundwater inflows are not predictable. Total mine inflow for the active workings is approximately 1.7 ML per day.

In order to manage silt, all inflowing groundwater is pumped or gravity fed to the 4800 Decline Silt Settlement Sump. Clarified water is transferred from the 4800 Pump Station (comprising two duty and one standby WT084 WEARTUFF Mono Pumps) to the 945 Pump Station and Rising Main infrastructure (comprised of four WT088 WEARTUFF Mono Pumps) where it is discharged to surface storage and transfer dams.

The Cuffley, 4800 and Augusta workings are all gravity fed systems to feed the 4800 Decline Silt Settlement Sump.

Brunswick has a series of sumps connected by gravity fed drain holes that feed into the decline sump at the 956 mRL; a 20 kW pump transfers water from this sump to the 4800 Decline Silt Settlement Sump.

Youle has a series of sumps connected by gravity fed drain holes that feed into three linked pump stations (each comprising one duty and one standby WT084 WEARTUFF Mono Pump), located at the 897 mRL, 777 mRL and 657 mRL pump stations.

The Rising Main extends to the mine dam. From here, water is distributed to the RO water treatment facility or to the Splitters Creek Evaporation Facility.

18.2.6 Other Underground Infrastructure

An underground crib room is positioned at the 957 mRL Youle and the underground magazine is positioned at the 955 mRL Cuffley Incline. The magazine allows for the safe storage of mine explosives.

In addition to fixed plant, Alkane Resources owns, operates, and maintains a full underground mining equipment fleet, including production drills, loaders, trucks, jumbos and ancillary equipment required to undertake ore development and production operations.

18.3 Tailings Storage

Current tailings storage is provided through Brunswick West TSF, which began storage once completed in May 2025. The Brunswick West TSF will have a current capacity to June 2030, at which time a new tailings dam or storage method will be required.

Two TSFs not in operation currently, comprising the Bombay TSF and Brunswick TSF, are facilities currently at capacity. Both facilities are constructed of earthen embankments in a conventional turkey nest configuration.

18.4 Power Supply

The Costerfield Property’s electrical power is supplied by grid power and supplemented on site by on demand diesel fired generator sets. This is comprised of high voltage (HV) 22 kV, 11 kV and low voltage (LV) 415 V systems.

The HV infrastructure is supplied via a single 22 kV feeder from Powercor (network provider) at the Augusta Substation 1. The system then steps down this power on site to 11 kV, 1000 V and 415 V using separate transformers. The 11 kV power is dispersed to six HV substations via the HV network. At the six 11 kV transformers, power is stepped down further to 1 kV and 415 V.

The 11 kV system extends from the underground operations back to the surface to supply the Brunswick Processing Plant where it is stepped down to 415 V from 11 kV.

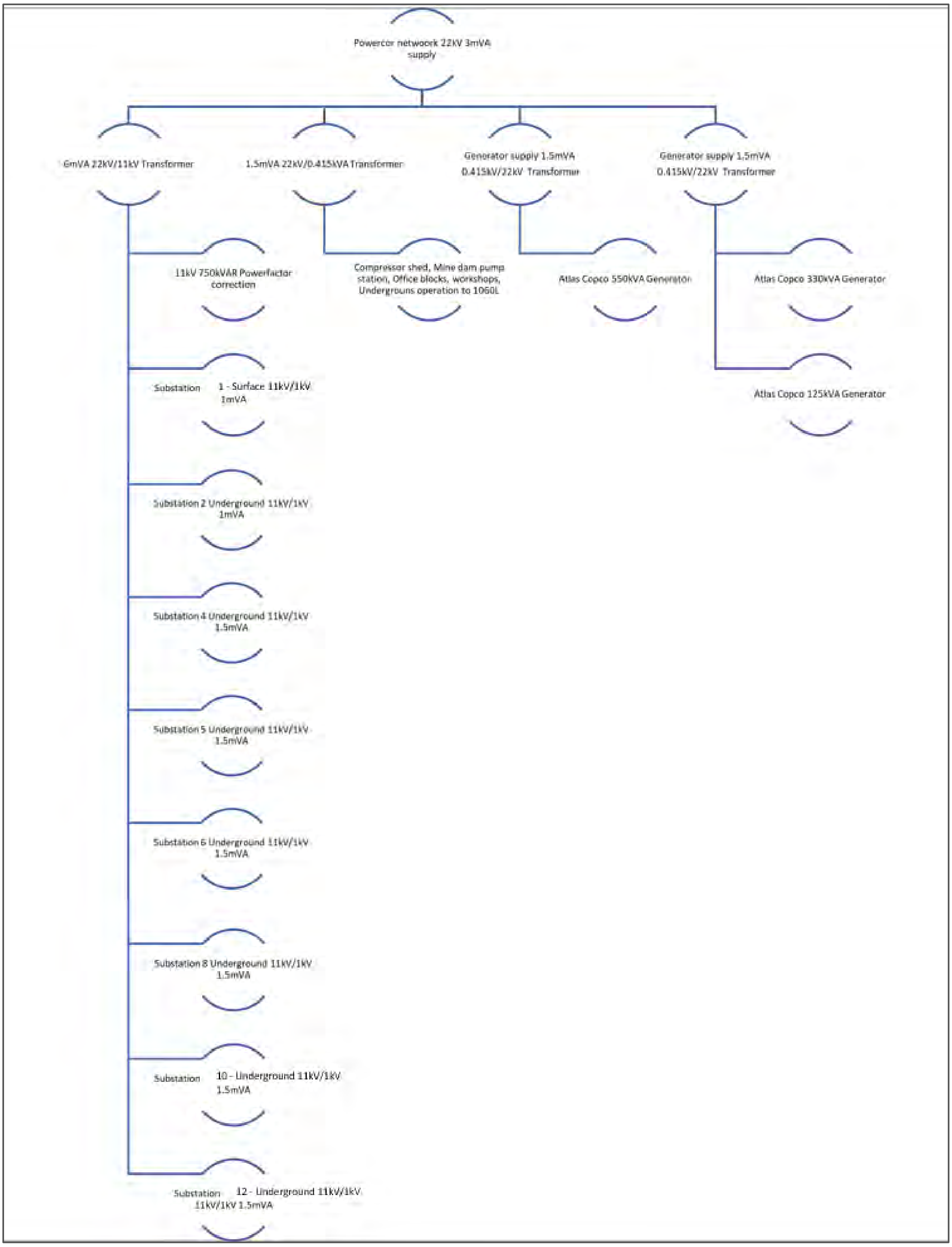
The majority of site electrical power demand is provided by 3 MVA of network power with the remainder provided through synchronised diesel fired generation on site if needed. The system's power quality is also supported by means of an 11 kV Power Factor Correction Unit (PFCU).

The main power system equipment on site consists of:

- overhead powerlines
- HV substations
- HV ring main units
- HV transformers
- HV PFCU
- three synchronised generators and one island mode generator
- site electrical power reticulation.

The operation uses between 3 MVA and 3.5 MVA of demand at any given time. The summary Costerfield electrical power reticulation diagram is presented in Figure 18.3.

Figure 18.3: Costerfield power reticulation diagram



18.5 Water Supply

Water for underground and surface operations is sourced from the Augusta Mine Dam which is fed directly from the rising main that extends from the Cuffley 945 Pump Station to surface, i.e. raw water is sourced from underground dewatering.

The Brunswick Processing Plant sources water from a number of sources including recycled process water from the Brunswick and Bombay TSFs.

Potable water is trucked to site by a private contractor and is placed in surface holding tanks for use in the change house and office amenities. Potable water for drinking is provided in 15 L containers.

Water disposal is discussed in Section 20.1.2.

18.6 Water Management

Groundwater is currently pumped from the underground workings to the Mine Dam at a rate of approximately 1.8 ML per day. Mine water is then pumped from the Mine Dam to either the Splitters Creek Evaporation Facility or a series of water treatment and disposal facilities (located at the Brunswick site).

The Augusta Evaporation Facility comprises three dams with a total storage capacity of 137 ML. The total site water storage capacity, including smaller catchment and operational dams at Splitters Creek, Brunswick and Augusta, is approximately 289 ML.

The water services at the Brunswick Processing Plant consist of the raw water, process water and excess water disposal systems. The process water supply consists of concentrate thickener overflow, tailings thickener overflow and Brunswick and Bombay TSFs decant return water. While the process plant uses water from a closed circuit, make-up process water is required to supplement water evaporated at the Brunswick and Bombay TSFs.

The total evaporation and water disposal capacity, including discharge of RO treated water and from the Splitters Creek Evaporation Facility, and is currently estimated at 555 ML per year, assuming the long-term average Heathcote climatic conditions.

Aquifer recharge trials have been successful at the Costerfield Property through the Margarets Aquifer Recharge Project. Aquifer recharge is not currently part of Costerfield's water management plan as the project is awaiting final approval for ongoing operation.

18.7 Waste Rock Storage

Waste from underground capital and operating waste development is hauled to surface at the Brunswick site via the Brunswick portal or used in underground backfilling operations. Surface haulage trucks shift waste from intermediate stockpiles predominantly to the Bombay Waste Stockpile, where it is stored for future use in CRF, capital projects (e.g. tailings dam construction) and for rehabilitation purposes.

A small percentage of waste material hauled to surface is screened or crushed, to be used for road base underground and cement aggregate fill. Further detail is provided in Section 20.1.3.

18.8 Surface Ore and Waste Haulage

The completion of the Brunswick Portal Project in 2020 allowed a significant reduction in the requirement to haul ore and waste in road registered trucks along Heathcote–Nagambie Road. Underground trucks now haul directly to the Brunswick Pit where a surface haulage contractor manages the load, haul, and dump operations for both ore and waste rock to their respective final stockpiles.

18.9 Diesel Storage

A self-bunded diesel storage tank of 68,000 L capacity exists at the Augusta Mine site. This diesel storage caters for all underground and surface diesel needs for Augusta.

The Brunswick site is catered by a self-bunded diesel storage tank of 65,000 L capacity.

18.10 Explosives Storage

All storage, import, transport and use of explosives is conducted in accordance with the WorkSafe *Dangerous Goods (Explosives) Regulations 2011*.

Alkane Resources uses its own licensed personnel and equipment to handle, store, transport and use explosives on the Augusta site. The designated explosives supplier produces all the explosives products off site. The ANFO is supplied in 20 kg bags, while the emulsion is supplied as a packaged product. ANFO is primarily used for development and production purposes, with emulsion used when wet conditions are encountered.

The current Underground Magazine is located at the 955 mRL and is operated under the control of the designated 'black ticket holder' on behalf of Alkane Resources, who is the licensee. The current Augusta Magazine licence allowances are summarised in Table 18.1.

Table 18.1: Current Augusta licence maximum quantities and types of explosives

Class code	Type of explosive	Maximum quantity
1.1D	Blasting explosives	40,000 kg
1.1D	Detonating cord	10,000 m
1.1B	Detonators	21,000 items

An emulsion magazine is located underground at the 915 RL and is operated under the control of the designated 'black ticket holder' on behalf of Alkane Resources, who is the licensee; this is setup for usage as a trail to move into production in future if trail are successful.

Table 18.2: Current Augusta licence maximum quantities and types of explosives

Class code	Type of explosive	Maximum quantity
5.1 Group 2	Emulsion magazine	16,000 kg

18.11 Maintenance Facilities

Maintenance facilities at the Costerfield Property comprise the following:

- A surface mine maintenance workshop facility is located adjacent to the box-cut at Augusta. This workshop is capable of servicing all mobile underground equipment both electrically and mechanically. The surface mine maintenance workshop also includes a bay for an on-site boiler maker and facilities for an auto-electrician; mobile fleet parts stores are also incorporated into this facility.
- A underground service and maintenance works bay is located at the 917ACC in Youle.
- A mine electrical workshop allows electrical maintenance of all electrical assets, including fixed, mobile, LV and HV.
- The Brunswick Processing Plant is equipped with undercover maintenance facilities capable of servicing fixed and mobile processing plant, including the Finlay primary crushers. This facility also allows for fabrication works where necessary.

18.12 Housing and Land

Alkane Resources owns 16 land allotments surrounding the Augusta, Brunswick and Splitters Creek Evaporation Facility sites. Of these properties, five have residential dwellings. The remaining seven consist of vacant land. The residential dwellings are used as temporary housing for company employees.

The land allotment located on Peels Lane and Costerfield South acts as an offset area for Alkane Resources' mining and processing activities. It has been identified that the Peels Lane Offset has 'the potential to generate a total of 4.35 'habitat hectares' and associated large trees (Biosis Research, 2005).

The Peels Lane Offset was purchased as part of the Work Plan for MIN4644 and acted as an offset for the vegetation loss due to the construction of the Augusta Mine site. The offset site has also been used to meet the offset requirements for the Brunswick West TSF.

19 Market Studies and Contracts

19.1 Antimony

19.1.1 Concentrate Transport

Concentrate is discharged directly into 1.5 t bulk bags for transport by road train to the Port of Melbourne and subsequent shipment to overseas customers. Road trains carry an average payload of approximately 42 t, with shipments scheduled at least monthly on a cost, insurance and freight basis.

A third-party logistics provider manages concentrate transport, storage and vessel loading at the port. Minalysis Pty Ltd provides all logistics coordination and shipping documentation services.

19.1.2 Contracts

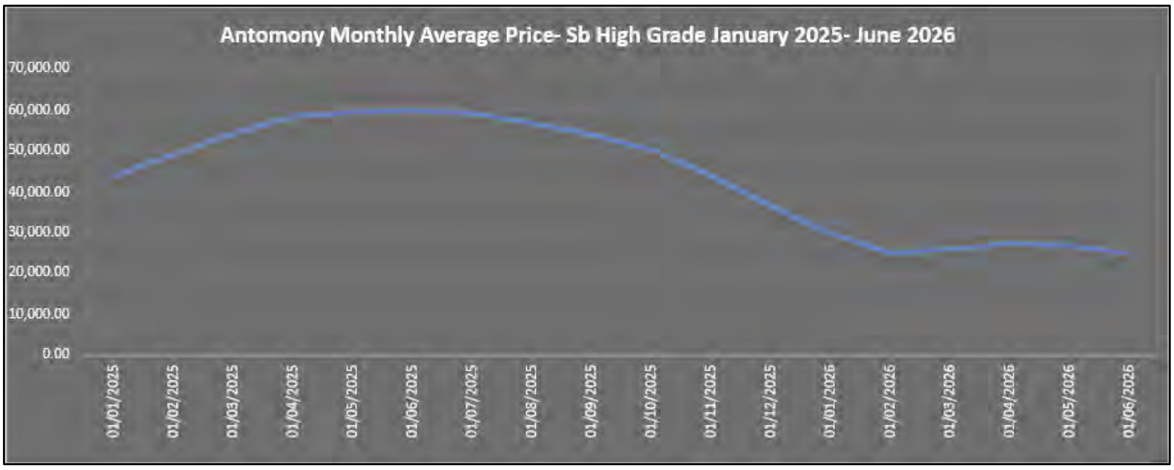
The antimony-gold concentrate produced at the Costerfield Property is sold directly to specialist smelters that recover both antimony and gold, with revenue derived from the payable metal content of the concentrate.

Commercial terms and pricing arrangements are confidential and are not disclosed in accordance with contractual confidentiality obligations.

19.1.3 Markets

Antimony pricing is based on the applicable customer contract and is referenced to either the Fastmarkets Rotterdam quotation or the Shanghai Metals Market quotation, in US dollars. The payable factor is determined by the quality and form of the antimony product sold.

Figure 19.1: Antimony monthly price average



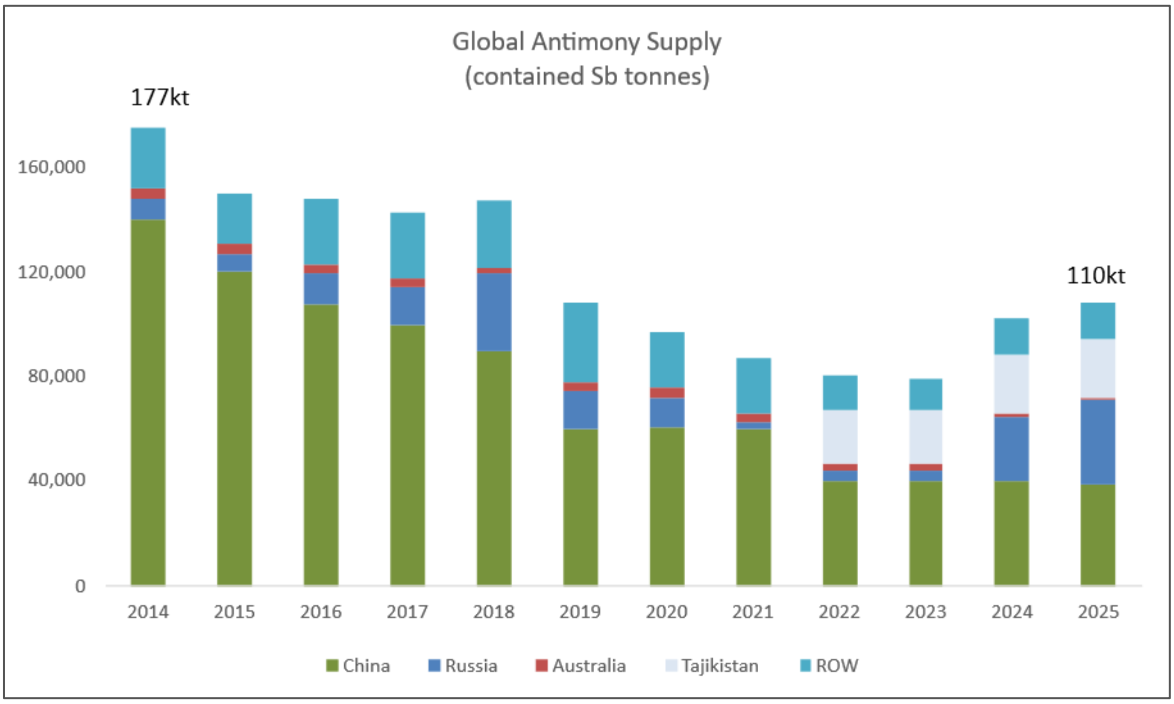
Source: Fastmarkets

19.1.4 Global Outlook

The following commentary is based on information provided by Alkane's marketing consultant, WEMCO.

China's introduction of export restrictions on antimony in 2024 contributed to significant price volatility during 2025 and 2026. Fastmarkets' Rotterdam antimony price reached record levels exceeding US$60,000/t in mid-2025 before retreating as market conditions evolved. By mid-2026, a partial easing of Chinese export restrictions, together with increased supply availability and seasonal market factors, had contributed to prices declining to approximately US$20,000/t.

Figure 19.2: Global antimony supply by year



Source: WEMCO (2025)

The Chinese domestic antimony price has generally mirrored trends observed in international markets, although at lower absolute levels.

While constrained Chinese supply continues to provide underlying support for global antimony prices, some weakness has emerged in demand from the solar photovoltaic glass sector. Nevertheless, ongoing procurement by strategic and defence-related end users is expected to support international prices at around US$20,000/t, while a recovery in domestic Chinese demand is anticipated following the summer period.

Raw Material Trade Flows

China remains the primary destination for global antimony-gold concentrate processing, sourcing feed from all major producing regions. However, significant installed smelting capacity continues to operate below capacity due to constraints in the supply of domestic antimony raw materials.

19.1.5 Antimony Usage

Enormous growth in the solar photovoltaic (PV) glass sector has been a key driver of antimony demand in recent years. However, signs of market weakness associated with overinvestment are emerging in China, which dominates global PV glass production. In the near term, demand from strategic and defence-related applications is expected to provide price support, while consumption in the wire and cable sector, where antimony is used in flame-retardant PVC coatings, remains robust. The PV glass market is expected to recover over the medium term, supported in part by oil price volatility.

Antimony continues to be classified as a critical mineral by several western jurisdictions, including the United States and Australia.

19.2 Gold

19.2.1 Markets

The Costerfield Operation produces two gold-bearing products: a gold-antimony concentrate sold to overseas customers and a higher-grade gold concentrate sold within Australia. Revenue is based on customer-specific payable terms, which vary according to the quality and characteristics of the concentrate supplied.

Commercial sales terms and pricing arrangements are confidential and are not disclosed in accordance with contractual confidentiality obligations.

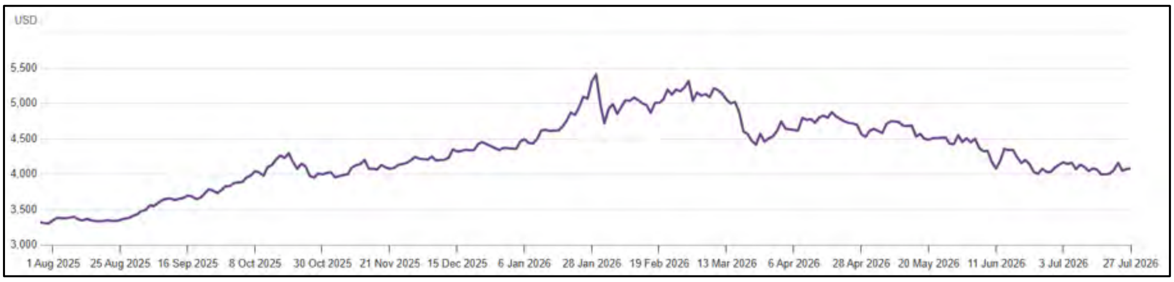
19.2.2 Global Outlook

Gold is a widely traded global commodity, with market outlooks and pricing forecasts updated regularly by a range of industry analysts and financial institutions. As such, it is not the purpose of this report to review or independently validate all available market commentary.

A variety of views exist regarding the outlook for gold prices. Recent commentary suggests that weaker equity markets, a more hawkish monetary policy stance from the US Federal Reserve, and easing geopolitical and supply chain disruptions could place downward pressure on gold prices. However, ongoing geopolitical uncertainty, particularly in the Middle East, continues to support investor demand for gold as a safe-haven asset and is expected to contribute to elevated market volatility.

As illustrated in Figure 19.3, the gold price increased significantly over the review period before moderating from recent highs.

Figure 19.3: US$/oz monthly gold price average in last year



Source: www.gold.org/goldhub/data/gold-prices

19.2.3 Resource and Reserve Pricing

For the Mineral Reserve, the gold price used is based on the rounded 3-year trailing average while for the Mineral Resource the gold price used is based on a 30% premium from the Reserve price (Figure 19.3).

For the Mineral Reserve, the antimony price used is based on the rounded 3-year training average while for the Mineral Resource the antimony price used is based on a 20% premium from the Reserve price. The calculations are also conservative in relation to currently observed price increases (Figure 19.3).

Table 19.1: Gold and antimony prices used for Resource and Reserve (US$)

	2024YE Resource price	2024YE Reserve price	End FY26 Resource price	End FY26 Reserve price
Gold	2,500	2,100	**4,000**	**3,100**
Antimony	19,000	16,000	**26,400**	**22,000**

20 Environmental Studies, Permitting, and Social or Community Impact

20.1 Environmental and Social Aspects

20.1.1 Mine Ventilation

Ventilation shafts have been installed in the Cuffley, Brunswick and Youle mines to maintain suitable air quality and volumes within the expanded underground mine.

The Cuffley ventilation shaft is located on freehold land owned by Alkane Resources and is an exhaust air outlet.

The Brunswick ventilation shaft is located on Crown land near the Brunswick Processing Plant and is a fresh air intake.

The Youle ventilation shaft is located on freehold land owned by Alkane Resources and is an exhaust air outlet.

The to-be-developed Brunswick South shaft is to be located freehold land owned by a member of the public and is an exhaust shaft.

20.1.2 Water Disposal

The disposal of groundwater extracted from the mine workings is a critical aspect of the Costerfield Property. The current approved Work Plan does not allow for off-site disposal of untreated groundwater or surface water.

The climate in Central Victoria enables water to be removed through evaporation. Average pan evaporation is 1,400 mm per year according to the nearest Bureau of Meteorology monitoring station at Tatura, 65 km northwest of Costerfield. Mean rainfall in the area is 576 mm per year, recorded at the Bureau of Meteorology monitoring station at Heathcote, with the highest annual rainfall recorded in 1973 as 1,048 mm. The annual rainfall by year in the Heathcote area between 2013 and 2025 is detailed in Table 20.1.

Table 20.1: Rainfall measurements from 2013 to 2024

Year	Rainfall (mm)	Above/below average
2013	554	Below
2014	510	Below
2015	299	Below
2016	687	Above
2017	504	Below
2018	379	Below
2019	350	Below
2020	675	Above
2021	590	Above
2022	893	Above
2023	589	Above
2024	677	Above
2025	411	Below

The Costerfield Property currently operates a series of water storage and evaporation dams, including the following major storage facilities:

- Splitters Creek Evaporation Facility, comprising 20 terraces and a HDPE lined storage dam
- three HDPE lined evaporation and storage dams at the Augusta site
- HDPE lined Return Water Pond at the Brunswick site.

An RO plant was installed in 2014 at the Brunswick Processing Plant in order to treat groundwater pumped to surface for mine dewatering purposes. In 2017, an ACTIFLO unit was also installed as a pre-treatment to the RO plant, which is used to decrease the antimony and dissolved solid levels prior to RO treatment.

Treated water from the RO plant is licensed to be discharged into a neighbouring waterway, to be provided to local community members for stock watering or gardening or used for dust suppression purposes on roads around the site. The creek discharge is licensed by the Environment Protection Authority (EPA), and permits up to 360 ML/year of RO treated permeate to be discharged into the Mountain Creek South diversion, which feeds into the Wappentake Creek at a maximum rate of 2.0 ML/day.

The waste product from the RO plant, known as brine, contains concentrated levels of salt, antimony and other elements removed from the groundwater. The RO plant brine is stored in the plastic lined evaporation dams at Augusta and discharged to the Splitter Creek Evaporation Facility.

The Splitters Creek Evaporation Facility, completed in 2015, has the capacity to treat 104 ML/year net (evaporation minus rainfall). The purpose of the facility is to evaporate water surplus to the operation's needs that is extracted from the Costerfield Property and thereby allow continued dewatering from the underground workings. The facility consists of a series of shallow evaporation terraces that follow the natural topographic contours. Groundwater is pumped from the Augusta storage dams and discharged to the terraces. The water cascades down the slope via the terrace spillways to the storage dam at the lowest point. A water pump recirculates water from the storage dam back up to the terraces in order to enable the evaporation terraces to be filled from the storage dam as evaporation rates allow.

Current evaporation, RO plant processing and re-use capacity is calculated to be approximately equivalent to the current dewatering rates; however, additional complementary treatment options are being investigated and trialled to ensure adequate capacity in the future.

20.1.3 Waste Rock

Waste rock that is surplus to underground backfilling requirements is stockpiled on the surface in various locations. Testing of the waste rock has confirmed that the material is non-acid generating and therefore does not pose an acid-mine drainage risk.

Waste rock is currently stockpiled next to the Augusta Mine box-cut, with the maximum height and shape of the stockpile prescribed in the approved Work Plan. The approved Work Plan requires that this stockpile be removed on closure in order to return the land to the prior use as grazing pasture. The waste rock will ultimately be used to fill the box-cut and the TSFs.

Waste rock is also stockpiled at the Rockgarden, an approved storage location north of the Bombay TSF. Waste rock and overburden from TSF construction is also stockpiled in the Brunswick pit waste stockpile, west of the Brunswick Pit.

Waste rock and overburden have been used for construction activities in the past, including for Bombay TSF, Brunswick TSF, Brunswick West TSF and the Splitters Creek Evaporation Facility. Future approved construction and closure activities will use waste rock stored at these locations.

A portion of waste rock is screened and used in backfilling the underground stopes; however, sufficient waste rock will need to be retained in order to fulfil rehabilitation and TSF expansion requirements.

20.1.4 Tailings Disposal

Alkane Resources has one operational TSF, the Brunswick West TSF.

Construction of the Brunswick West TSF commenced in August 2024, with commissioning in June 2025. The design capacity of this dam is 584,000 m^3. Two previous tailings storage dams (Bombay TSF and Brunswick TSF) have both been filled to capacity and are currently in a care and maintenance phase while closure planning is being undertaken.

The Brunswick Processing Plant employs a tailings thickener that has sufficient capacity to handle the current throughput. The average tailings thickener underflow solids density continues to be maintained at around 50% (+/- 10%).

The Brunswick West TSF is projected to reach its maximum operating capacity by June 2030. Preliminary investigations for a new TSF are currently underway. This includes site selection activities and the development of an options assessment by ATC Williams Pty Ltd.

The design phase is anticipated to take approximately 12 months, followed by a planning and approvals process expected to take around 2 years before construction can commence. Costerfield

Operations expects to receive support from Resources Victoria throughout the dam approval process.

Early stakeholder engagement has commenced, and working relationships have been established between Costerfield Operations and the Victorian State Government. These relationships are expected to support the progression of the project through the approvals process.

20.1.5 Air Quality

The approved Environmental Monitoring Plan for the Augusta Mine includes an air quality monitoring program, consisting of dust deposition gauges located at various places surrounding the Costerfield Property, and five dust deposition gauges at the Splitters Creek Evaporation Facility.

The monitoring data are provided to the regulatory authorities and Community Representatives through the quarterly Environmental Review Committee (ERC) meetings.

Control measures currently in place to manage dust emissions from the operations include:

- a road watering program using treated groundwater
- proactive real-time monitoring of dust with portable DustTrak monitors
- moisture control of mill feed during processing
- sealing of sections of haul roads
- maintaining moisture on TSFs and waste rock stockpiles.

Previous ventilation shaft emission monitoring reports indicate that the ventilation shafts are not a significant source of dust emissions.

20.1.6 Groundwater

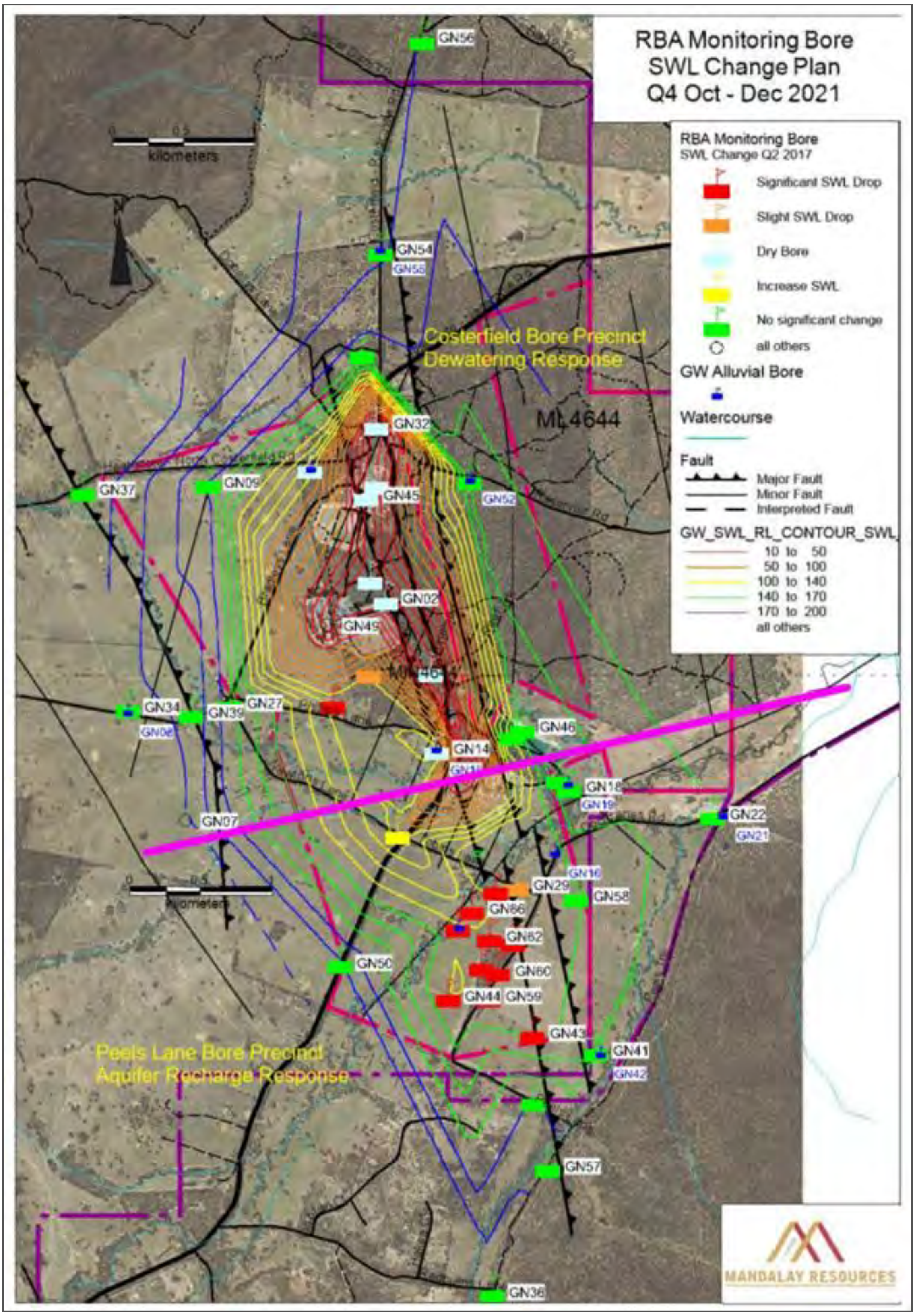
A conceptual hydrogeological model was developed for the Costerfield Property in 2014 based on current groundwater monitoring data, which indicated that the Augusta, Cuffley, Brunswick and Youle deposits are located in the regional groundwater aquifer.

Key aspects of the groundwater for the reporting year include the following:

- Dewatering from the mine totalled 704.3 ML in FY2026
- The extraction licence limit for FY2026 was increased from 700 ML to 734 ML to include the rollover of unused allocation associated with a water trade completed in Q2 FY2026.
- The current groundwater extraction licence of 700 ML/year has been approved by Goulburn-Murray Water and is up for renewal in June 2034.

The groundwater model was reviewed in 2021 to confirm the current impact on groundwater levels by dewatering from the mine as the underground workings extended laterally and vertically. The model shows a cone of depression in the bedrock aquifer trending in a north–south orientation, parallel to the deposits (Figure 20.1).

Figure 20.1: Groundwater elevation contour map of the areas surrounding the Augusta Mine, as at December 2021



The regional groundwater aquifer is confined to semi-confined, and is comprised of Silurian siltstones and mudstones, with groundwater flow occurring within fractures and fissures in the rock. This is overlain by a perched alluvial aquifer comprised of recent gravels, sands and silt, which is connected to the surface water system.

Based on the monitoring data and the conceptual hydrogeological model, it appears that the current dewatering activities at the operation do not affect the alluvial aquifer. Therefore, there is no impact to local landowners or the surface water system.

20.1.7 Noise

The approved Environmental Monitoring Plan for the Costerfield Property includes a noise monitoring program which comprises routine attended and unattended noise monitoring at eight locations and reactive monitoring at sensitive receptors in the event of complaints or enquiries. Monitoring is carried out in accordance with EPA Victoria's Environment Reference Standard 2021.

Noise from the Costerfield Property is a sensitive issue for nearby neighbours. In order to address noise complaints or any other issues from members of the public, the Alkane Resources Complaints Procedure includes processes to record complaints, and to identify and implement immediate and longer-term actions. All complaints are discussed at the quarterly ERC meetings.

The current Costerfield Property is not expected to significantly change the nature of noise emissions from the site. Construction of new waste rock storage, TSF or evaporation facilities may require some additional noise monitoring which will be identified as part of the WPV approval process.

During construction, an additional 10 dBA of noise is permitted to be generated. Existing resources and procedures are adequate to accommodate any required modifications to the noise monitoring program.

20.1.8 Blasting and Vibration

DEECA prescribes blast vibration limits for the protection of buildings and public amenities. Alkane Resources undertakes constant blast vibration monitoring in order to assess compliance with the prescribed limits and reports this information to the ERC quarterly.

20.1.9 Native Vegetation

The Costerfield Property has been developed and is operated with the aim of avoiding and minimising impacts on native vegetation. Where native vegetation has been impacted, Alkane Resources has obligations to secure native vegetation offsets.

Alkane Resources has purchased approved native vegetation offset at Peels Lane in Costerfield to fulfil obligations relating to *Victoria's Native Vegetation Management – A Framework for Action*, associated with the original clearing of native vegetation at the Augusta Mine site and the Bombay TSF. The Peels Lane offset site has been assessed as containing 4.35 habitat hectares of various Ecological Vegetation Classes and associated large trees in accordance with the framework guidelines.

Expansion of the Costerfield Operation through construction of the Splitters Creek Evaporation Facility, Brunswick TSF and Bombay TSF has had a minimal impact on the native vegetation and the Peel Lane site has sufficient offset credits to meet the site's foreseeable future needs.

20.1.10 Visual Amenity

The key aspect of the Costerfield Operation that might have affected visual amenity was the construction of the Splitters Creek Evaporation Facility.

Community consultation took place as part of the planning for the facilities, and mitigation measures were implemented where appropriate. Screening vegetation was planted in consultation with the relevant land manager and nearby neighbours.

20.1.11 Heritage

A heritage survey of the South Costerfield Shaft, Alison and New Alison surface workings was completed by LRGM Services Pty Ltd in Q1 2012. The purpose of this survey was to identify and record cultural heritage features in the areas of interest that exist within the current ML (MIN4644). The Taungurung Clans Aboriginal Corporation is the Registered Aboriginal Party designated as the Traditional Owners of the land on which ML MIN4644 is located.

The survey identified that no features of higher than local cultural heritage significance were identified, with the following features of local cultural heritage significance being noted:

- South Costerfield (Tait's) Mine Shaft
- Old Alison Mine Shaft
- New Alison Mine Shaft.

The expansion of the mining operations did not result in any disturbance to historical mine workings or other heritage features.

20.1.12 Community

The Costerfield Operation is one of the largest employers in the region and is a significant contributor to the local economy. Alkane Resources preferentially employs appropriately skilled personnel from the local community and sources goods and services from local suppliers wherever possible.

Alkane Resources has developed and implemented the Costerfield Property's Community Engagement Plan, which has been approved by DEECA in accordance with the requirements of the MRSD Act 1990. This plan sets the framework for communication with all of the business's stakeholders in order to ensure transparent and ongoing consultative relationships are developed and maintained.

The Community Engagement Plan includes processes to manage community inquiries and complaints to ensure timely and effective responses to issues affecting members of the community. The current Community Engagement Plan is considered an appropriate framework to address the needs of stakeholders through the planning and implementation of the proposed mine expansion.

In early 2016, Alkane Resources initiated regular community reference meetings under the auspices of the ERC. This forum, the Community Reference Sub-Committee, gives community members the opportunity to find out about current and future issues at the mine, to provide their input and to ask questions.

20.1.13 Mine Closure and Revegetation

The MRSD Act 1990 requires proponents to identify rehabilitation requirements as part of the Work Plan approvals process and ensures that rehabilitation bonds are lodged in the form of a bank guarantee to cover the full cost of rehabilitation up front, prior to commencing work. Rehabilitation bonds are also reviewed on a regular basis to ensure that unit cost assumptions and the scope of work is kept up to date. WPVs also trigger a review of the rehabilitation bond if the work to be carried out affects final rehabilitation.

Alkane Resources has developed a Mine Closure Plan, which provides an overview of the various aspects of closure and rehabilitation that have been included in the rehabilitation bond calculation and reflects the rehabilitation requirements described in the approved Work Plans and Variations.

The Mine Closure Plan describes how the Augusta site, including the box-cut, waste rock storage, office area and evaporation dams, will be rehabilitated back to the former land use as grazing pasture. The mine decline will be blocked and the portal backfilled with waste rock, with the box-cut being levelled back to its original surface contours. Topsoil and subsoil have been stored on site to facilitate the final revegetation.

The rehabilitation plan for the Brunswick Complex includes removal of all plant and infrastructure, returning the disturbed area back to native forest, and to create a safe and stable landform that can be used for passive recreation. The TSFs will be dried out, capped with waste rock and topsoil, and planted with native vegetation. The plan includes provisions for monitoring the TSFs post closure.

The rehabilitation plan for the Splitters Creek Evaporation Facility includes evaporation of the remaining stored groundwater and removing the clay lining from the terraces, which is placed back into the HDPE line storage dam. The liner in the storage dam will be folded back over the clay and capped with waste rock, clay and topsoil, and planted with grasses. Topsoil and subsoil has been stored on site to enable this final vegetation.

20.2 Regulatory Approvals

20.2.1 Work Plan Variation

Future changes to mining activities, such as potential changes to waste rock storage facilities and TSFs, will require a risk based WPV to be approved. DEECA facilitates this approval process and will engage with relevant referral authorities, as required. DEECA may prescribe certain conditions on the approval, which may include amendments to the environmental monitoring program. The Work Plan approval process involves a thorough consultation process with regulatory authorities, and any conditions or proposed amendments requested to the WPV are generally negotiated to the satisfaction of both parties.

All on-site and off-site risks must be assessed in the new Work Plan review process and adequate controls and monitoring programs implemented to mitigate any negative impacts.

20.2.2 Other Permitting

In addition to the approval of a WPV, any future expansion of the current Costerfield Operation will require a number of other potential consents, approvals and permits (Table 20.2).

Table 20.2: Permit requirements

Stakeholder	Instrument
Private Landholders	Consent/compensation agreement with owner of the land on which the mine is located.
City of Greater Bendigo	Responsible authority holder and issuer on the Planning Permit for existing and new TSFs.
Minister for Planning	Planning Permit decision maker for new authorisations via Development Facilitation Program.
DEECA	Compliance with Native Vegetation Management Framework for removal of native vegetation associated with the power supply, evaporation facility and expansion of TSF footprints.
EPA	EPA consent to discharge RO treated water to a local waterway.

21 Capital and Operating Costs

The capital and operating cost estimates for the Costerfield Operation described in the following section have been derived from a variety of sources, including:

- historical production from the Costerfield Property, predominantly the past 18 months completed by Alkane Resources
- manufacturers, contractors and suppliers
- first principle calculations, based on historical production values
- costs including allowances for power, consumables, labour and maintenance.

All cost estimates are provided in 2026 Australian dollars (A$) and are to a level of accuracy of ± 10%. Escalation, taxes, import duties and custom fees have been excluded from the cost estimates.

21.1 Capital Costs

The estimated total capital requirements for the Costerfield Operation are outlined in Table 21.1.

A detailed breakdown of the individual capital items was sourced from the 2026 budget document. Sustaining capital costs listed in the 2026 budget are extended out through the duration of the reserves in the LoM.

Table 21.1: Costerfield Operation – capital cost estimate

Area	Total	FY27(A$ M)	FY28(A$ M)	FY29 (A$ M)	FY30 (A$ M)	FY31 (A$ M)	FY32 (A$ M)	FY2033
Capital development	76.3	27.3	29.1	17.1	2.8	0.0	0.0	0.0
Processing plant	22.5	7.5	10.1	2.2	1.1	1.4	0.2	0.0
Administration	1.8	0.5	0.4	0.3	0.2	0.2	0.2	0.1
Environmental	50.5	4.8	14.5	4.7	23.6	1.2	1.2	0.4
OH&S	2.2	0.2	0.7	0.3	0.3	0.3	0.3	0.1
Operational geology	1.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Exploration	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Closure	27.7	0.0	0.0	0.0	0.0	0.0	0.0	27.7
Mining	45.7	26.2	4.0	5.1	3.5	3.0	3.0	1.0
Total capital cost	227.9	66.9	59.0	29.9	31.6	6.2	6.2	29.3

Notes:

[1] Totals may not sum due to rounding.

[2] OH&S – occupational health and safety.

[3] Bank guarantees held in favour of the government of A$12.619 M with the Commonwealth Bank of Australia are refundable on sign-off completion of rehabilitation works.

21.1.1 Processing Plant

Alkane Resources has identified and estimated the capital costs associated with the maintenance of the Brunswick Processing Plant and other mill site related initiatives, including:

- plant front end re-design, including Ball Mill #1 feed hopper
- refurbishment of existing plant and key components
- leaching test work and infrastructure
- tailings repurposing
- purchase of critical spares
- miscellaneous upgrades to surface facilities
- installation of Vertimill to increase mill throughput and optimise performance.

The main processing plant infrastructure cost items are plant front end redesign, including the purchase of a reclaim feeder and the Vertimill installation. All associated costs are based on tendered rates.

21.1.2 Administration

Administration related capital costs include optic fibre, telephone network upgrades, minor software improvements and reporting improvements such as tablets.

21.1.3 Environmental and Occupational Health and Safety

Capital costs related to the environmental and occupational health and safety departments include predominantly sustaining capital. The sustaining capital expenditure allows for ongoing operation of environmental monitoring and permitting activities.

21.1.4 Mining

Mining related capital costs consist of sustaining capital to ensure production rates are achieved, and project capital that further improves the efficiency of the mining process. An owner-operator capital development team is being implemented at Costerfield in FY2027 with new equipment purchases of an AD30 truck, R2900 XE loader and DD422i twin boom jumbo to facilitate this. Capital will also be invested to facilitate an increase in personnel, with car parks, change rooms and other facilities being increased in size.

Sustaining capital allows for replacement of light vehicles, rebuilds of 1700 and LH 203 loaders, MT436 truck, production drills and development drills.

The cost estimates have been based on recent quotations or agreements from appropriate suppliers.

21.1.5 Capital Development

Decline development quantities have been based on the mine designs prepared for the project. The lateral development quantities are based on each production level in the mine being accessed by the decline system with allowance for stockpiles, level access, sumps, refuge chamber cuddies, vent accesses, truck tips and CRF mixing bays.

The unit cost for lateral development has been based on a combination of the agreed development rates with the mining contractor and owner-operator development team undertaking the capital development and historical costs for consumables (explosives, fuel, ground support and rehabilitation) and services. The capital development rates include an allowance for the haulage of waste rock to the surface and also haulage, handling and stockpiling of waste once it is on surface.

21.1.6 Closure

Closure costs are estimated at A$27.686 M for the current Costerfield LoM reserve.

21.2 Operating Costs

Operating costs are derived from tracked historical expenditure under operating expenditure cost codes and financial analysis split costs using a combination of mining and milling physicals, along with mining operations timesheet and payroll data. This method ensures an accurate split of operational costs for estimating purposes.

The operating cost estimates applied in this Technical Report are summarised in Table 21.2 and described further in the following sections.

Table 21.2: Costerfield Property operating cost inputs

Description	Unit	A$	Data source
Jumbo operational development	A$/t	195	July 2025 to February 2026 average
Stoping	A$/t	194	July 2025 to February 2026 average
Mining administrative	A$/day	17,597	July 2025 to February 2026 average
Geology	A$/day	9,063	July 2025 to February 2026 average
ROM haulage	A$/t	6	July 2025 to February 2026 average
Processing plant	A$/t milled	107	July 2025 to February 2026 average
Site services	A$/day	9,297	July 2025 to February 2026 average
General and administrative	A$/day	30,807	July 2025 to February 2026 average
Selling expenses excluding royalty	A$/t con	293	July 2025 to February 2026 average

Notes: Royalty costs are calculated in accordance with royalty payment structures. Antimony royalty is paid at a rate of 2.75% of revenue less selling costs. Gold royalty is also paid at 2.75% of revenue less selling costs with 2,500 of saleable gold ounces exempt from royalty payment.

21.2.1 Lateral Development

The estimated unit cost for lateral development has been developed from July 2025 to February 2026 average costs for labour, equipment, consumables, and services, as well as achieved development physicals. An allowance for the haulage to surface has also been included.

The lateral development (operating) for Augusta, Cuffley, Brunswick and Youle will continue to be undertaken on an owner-operator basis.

The required lateral development is summarised in Table 21.3.

Table 21.3: Summary of lateral development requirements

Description	Metres
Capital development lateral	10,260
Capital development vertical	1,170
Operating development (waste)	15,258
Operating development (ore)	10,319

The direct operating costs related to lateral development include:

- direct labour including superannuation, workers compensation, payroll tax and partial allowances for leave accrual
- drilling consumables, such as drill steel, bits, hammers, etc.
- explosives
- ground support supplies
- direct mobile plant operating costs for fuel and lubricants, tyres and spare parts
- services materials, including poly pipe, ventilation bag and electrical cables
- reallocation of costs associated with maintenance, ventilation, power supply, compressed air supply, dewatering, water supply and underground communications
- miscellaneous materials required to support development activities.

21.2.2 Production Stoping

The direct costs for stoping have been developed from July 2025 to February 2026 average costs for direct labour (including superannuation, workers compensation, payroll tax and partial allowances for leave accrual), consumable materials, and equipment operating and maintenance, as well as achieved productivities associated with the following:

- installation of secondary ground support
- drilling, loading, and blasting long-holes by Costerfield employees
- production from the stope with an underground loader (remote or manual) and tramming to a stockpile or truck loading area
- loading haul trucks from stockpile (if required)
- backfill preparation and placement
- reallocation of costs associated with maintenance, ventilation, power supply, compressed air supply, dewatering, water supply and underground communications.

21.2.3 Mining Administration

Mining administration includes costs associated with mining management, supervision, and technical services, such as Mining Engineering, Survey, Geotechnical Engineering and Mine Geology. These costs have been estimated from actual Costerfield July 2025 to February 2026 mining administration costs.

21.2.4 Geology

Geology includes costs associated with resource estimation, resource definition drilling, sampling, assaying, and laboratory expenses as well as associated management and labour. These costs have been estimated from actual Costerfield July 2025 to February 2026 geology costs.

21.2.5 Run-of-Mine Haulage

The cost of trucking from the Brunswick Pit ROM to the Brunswick Processing Plant ROM pad has been calculated based on the average of the July 2025 to February 2026 total costs of this short distance surface haulage. Costs calculated include indirect costs and profit.

21.3 Processing Plant

The Brunswick Processing Plant costs include:

- tailings disposal
- ROM management
- ball mill crushing and grinding
- general operating and maintenance
- reagent mixing, thickening and flotation
- gold room expenses
- all flocculants and reagent chemicals
- plant maintenance and reallocated electrical costs associated with plant operation.

The processing costs have been estimated from July 2025 to February 2026 average processing costs.

21.4 Site Services

Site service costs refer to indirect costs related to Health and Safety, Environment and Community Relations, as well as costs related to the water treatment plant, water disposal and the RO plant. Compensation expenses are also included in this cost item.

These costs have been estimated from actual Costerfield July 2025 to February 2026 costs.

21.5 General and Administrative

The general and administrative costs refer to site-wide operational costs rather than costs directly associated with operational departments. This cost includes General Site Management, including all staff costs, Human Resources, Finance and Administration.

These costs have been sourced from Costerfield actuals July 2025 to February 2026 general and administrative costs.

21.6 Selling Expenses

Costerfield uses a third-party company to arrange the sale and transport of concentrate from the Brunswick Processing Plant to the smelter in China. The Costerfield portion of the selling expenses is calculated from historical costs and comprises road transport from the Brunswick Processing Plant to the Port of Melbourne, shipping from Melbourne to China, shipment documentation, freight administration and assay exchange/returns.

22 Economic Analysis

This section is not required as the property is currently in production. Costerfield is a producing issuer and there is no planned material expansion of the current production. SRK has verified the economic viability of the Mineral Reserve via financial modelling using the inputs discussed in this report.

23 Adjacent Properties

Alkane Resources manages the Costerfield Operation, holding a 100% interest in licences MIN4644, MIN5567, EL5432, EL5519, EL006842, EL006847, EL008320 and RL007485 which comprise the Property. There are two current tenement applications in place (MIN008841 and EL008964) for the Costerfield Operations, awaiting acceptance from DEECA. There are no advanced projects in the immediate vicinity of the Property, and there are no other Augusta-style antimony-gold operations in production within the Costerfield district.

Exploration on adjacent tenements (EL006504, EL006912, EL006951, EL007144, EL007296, EL007331, EL007352, EL007481, EL007498, EL007499, EL008161, EL008178, EL008822, EL008839, EL5433, EL5406, EL5490, EL5546 and EL5548), are shown in Figure 23.1. The ownership and status of each of the surrounding ELs is detailed in Table 23.1.

Figure 23.1: Augusta Mine adjacent properties

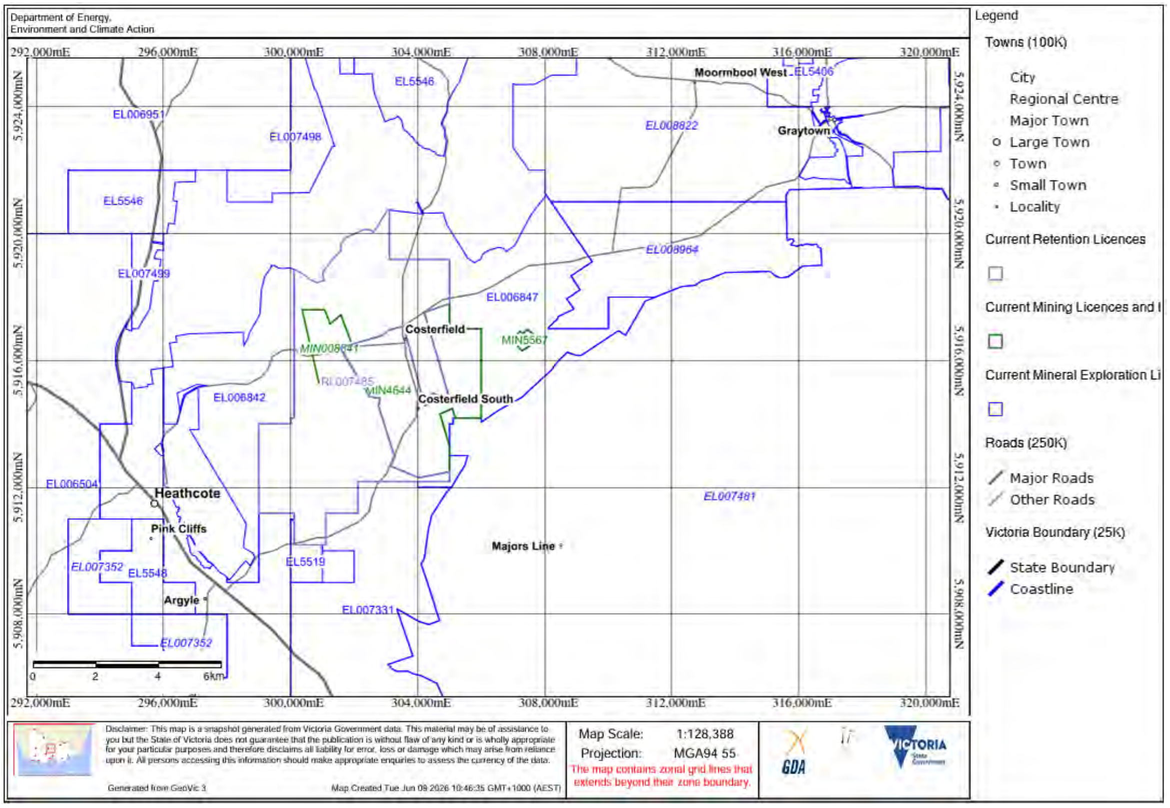


Table 23.1: Ownership details – Costerfield Operations adjacent properties

Tenement	Owner	Status	First Granted	Expiry
EL006504	Fosterville Gold Mine Pty Ltd	Current	19/03/2018	18/03/2028
EL006912	ECR Minerals (Australia) Pty Ltd	Current	08/12/2022	07/12/2027
EL006951	Outback Goldfields Australia Pty Ltd	Current	16/03/2023	15/03/2028
EL007144	Syndicate Minerals Pty Ltd	Current	17/12/2020	16/12/2030
EL007296	ECR Minerals (Australia) Pty Ltd	Current	28/12/2022	27/12/2027
EL007331	Kalamazoo Resources Limited	Current	08/04/2021	07/04/2031
EL007352	Fosterville Gold Mine Pty Ltd	Application		
EL007481	Torrens Gold Exploration Pty Ltd	Application		
EL007498	SXG Victoria Pty Ltd	Pending Renewal	28/05/2021	27/05/2026
EL007499	SXG Victoria Pty Ltd	Pending Renewal	28/05/2021	27/05/2026
EL008161	Dart Mining NL	Application		
EL008178	Falcon Gold Resources Pty Ltd	Application		
EL008822	Southern Star Gold Pty Ltd	Application		
EL008839	Southern Star Gold Pty Ltd	Application		
EL5433	ECR Minerals (Australia) Pty Ltd	Current	28/03/2013	27/03/2028
EL5406	Truelight Mining Pty Ltd	Current	01/11/2012	31/10/2027
EL5490	Golden Camel Mining Pty Ltd	Current	06/12/2013	05/12/2028
EL5546	SXG Victoria Pty Ltd	Current	08/05/2017	07/05/2027
EL5548	Golden Camel Mining Pty Ltd	Current	08/05/2017	07/05/2027

Source: Geovic (2026)

24 Other Relevant Data and Information

There is no other relevant data or information material to the Costerfield Property that has not been documented in the other sections of this Technical Report.

25 Interpretation and Conclusions

The QP summarise here the results and interpretations of the information and analysis being reported on.

25.1 Geology and Mineral Resource

All relevant diamond drill hole samples (available as of 17 June 2026) and underground face samples (available as of 1 June 2026) in the Costerfield Property were used to inform the Mineral Resource Estimate. The Mineral Resource is estimated as at 30 June 2026, with depletion through to this date.

The Mineral Resource Estimate is reported at a cut-off grade of 3 g/t AuEq after diluting to a minimum mining width of 1.2 m.

The gold equivalence formula used is calculated as follows:

$$AuEq = Au\,(g/t) + 2.05 \times Sb\,(\%)$$

Commodity prices used in the equivalence formula are US$4,000/oz Au and US$26,400/t Sb, and recoveries of 90% for Au and 89% for Sb.

The RPEEE has been satisfied by applying the minimum mining width of 1.2 m and ensuring that isolated blocks above cut-off grade, which are unlikely to ever be mined due to distance from the main body of mineralisation, were excluded from the Mineral Resource.

The width of 1.2 m is the practical minimum mining width applied at the Costerfield Property for stoping. For blocks with widths less than 1.2 m, diluted grades were estimated by adding a waste envelope with zero grade.

The QP for the Mineral Resource considers that the geological and assay data used as input to the Mineral Resource Estimate have been collected, interpreted and estimated in line with best practice as defined by CIM (CIM 2018, 2019). Data verification work showed the geological data are suitable for use as input to the Mineral Resource Estimate. Validation of the Mineral Resource Estimate block model showed good agreement with the input data. A retrospective reconciliation exercise showed acceptable agreement between 2025/2026 production tonnes and grades with the equivalent tonnes and grades reported out of the current block model.

Additionally, the QP does not consider any other significant risks or uncertainties could reasonably be expected to affect the reliability or confidence in the exploration information or Mineral Resource Estimate.

25.2 Mining, Ore Reserve and Mining Schedule

SRK makes the following observations regarding the mining operations:

- The Costerfield Operation has considerable experience in successfully mining the narrow vein gold and antimony mineralisation in the deposits at the operation using the long-hole CRF stoping mining method.

- The planned mining methods, production rates, costs and modifying factors that have been used to inform the Mineral Reserve are closely based on actual performance from recent site operations.
- The Brunswick South mining area will provide a new mining area for the operation. The area requires capital development over the coming year to be developed. The modifying factors used for this area in the Ore Reserve estimate are based on recent site actual performance.
- The Mineral Reserve is based on the Measured and Indicated Resource material with the application of appropriate modifying factors.
- Inferred Resources have not been included in the financial evaluation that has been completed to confirm the economic viability of the Mineral Reserve.

25.3 Mineral Processing and Metallurgical Testwork

SRK makes the following observations regarding the processing aspects of the operation:

- The Brunswick concentrator is a conventional flotation style concentrator incorporating a gravity gold recovery circuit. It has a well demonstrated production record of consistent throughput and well understood metallurgical recoveries across a range of feed types. The forecast LoM feed is comprised predominantly of Youle, Kendal and Augusta/Cuffley ores, all of which have been previously processed successfully. While Brunswick and Brunswick South material will comprise approximately 25% of the LoM blend and have a somewhat lower overall gold recovery than other lodes, SRK considers that the processing facility is, and will remain, amenable to processing the LoM ores. The forecast LoM feed is similar to the ores processed in 2023 and 2024, with Youle, Shepherd and Kendal comprising the predominant ore sources. The metallurgical behaviour of the Youle, Shepherd and Kendal ore blend is not expected to materially change. While a small amount of Brunswick material (8% of LoM blend with lower gravity gold recovery) will be fed to the processing plant, SRK considers that the processing facility is, and will remain, amenable to processing the LoM ores.
- There appears to be a relationship between the arsenic head grade and overall gold recovery i.e. the Brunswick and Brunswick South zones have a higher proportion of gold that is associated with arsenopyrite, which is more difficult to recover.
- Separate recovery algorithms have been derived for Brunswick and non-Brunswick ore types to account for the differences in gold and antimony recovery between these ore zones. The updated antimony and gold feed grade versus metallurgical recovery algorithms used for the 2026 Mineral Reserve Estimation use an operational dataset from January 2022 to February 2026 for non-Brunswick ores for both gold and antimony, which reflects the forecast LoM Youle and Kendal dominated feed and lower than historical antimony head grades. Separate Brunswick algorithms have been developed using a dataset from March 2019 to October 2019, which represented a high Brunswick feed blend. SRK endorses their use for the purpose of the Mineral Reserve Estimation.
- Considerable effort to improve gravity and flotation recoveries has been made since Brunswick ores were last treated in quantity in 2020; furthermore, concentrate grade targets have been substantially relaxed, allowing additional gold and stibnite to be recovered to concentrate that might otherwise have reported to tailings. As such, the Brunswick algorithms are considered somewhat conservative for gold recovery as there is potential upside.

- The forecast throughput and associated processing costs reflect the historical capacity of the plant and are appropriate for use as metallurgical modifying factors for the Mineral Reserve Estimate.

26 Recommendations

26.1 Geology

The Costerfield Property is an advanced operation with effective procedures and a demonstrated history of replacing depletion. The reconciliation performance of the 2026 models is considered acceptable but improvements to the system would be beneficial. Considering this, SRK recommends the following:

- Continue to expand and infill Kendal and Brunswick South.
- Implement a monthly reconciliation framework that allows Alkane to track F1, F2 and F3 reconciliation performance spatially throughout the orebody.

26.2 Mining

SRK makes the following recommendations regarding the mining operations:

- Continue to monitor the dilution and recovery performance of the stopes; this is particularly relevant for the Brunswick South mining area and also the remnant stopes.
- Continue to monitor the rockmass response to mining and compare this to the forecast from the geotechnical numerical modelling.
- At the next Ore Reserves cycle, update the cost allocation used to develop the unit costs for the cut-off grades and area economic analysis. This should focus on separating fixed costs such as ventilation and dewatering from the development and stoping unit costs.

26.3 Mineral Processing and Metallurgical Testwork

SRK recommends that the following items be addressed in future work:

- Incorporate arsenic assays into the block model and mine scheduling, and report arsenic content in plant feed – this would allow a better understanding of the negative gold recovery impacts of the Brunswick zones to be gained. Arsenic could potentially also be included in the gold recovery algorithms using a multi-element approach.
- Use screen fire assay to assess the relative coarseness of gold, as a proxy for gravity recovery. It may be possible to link the proportion of gold in the oversize fraction to testwork and/or plant gravity recovery. Therefore, a much wider view on the variability of gravity recovery across the deposit could be gained relatively easily.
- Campaign treatment of Brunswick South ore to allow the actual recovery impacts to be assessed without the complications of other ore types, and to confirm whether historical plant upgrades will substantially improve overall gold recovery for this material. A high Brunswick/Brunswick South blend treated over a several weeks would allow the Brunswick algorithms to be confirmed or updated with more certainty for future Mineral Reserve Estimates.
- Continue to update the gold and antimony metallurgical recovery algorithms annually based on actual production data to account for potential changes to plant equipment or operating strategy. These relationships should then be applied to any Mineral Reserve Estimate and LoM production schedule updates.

27 References

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Date 11th September 2026

Certificate of Qualified Person

a. I, **Carla Margaret Kaboth** am a **Principal Process Engineer** with **Core Resources Pty Ltd** with a business address at **36 Corunna St, Albion, QLD, 4010, Australia**.

b. This certificate applies to the technical report entitled Costerfield NI 43-101, dated September 2026 (the "Technical Report").

c. I am a graduate of University of Queensland, [Bachelor of Engineering (Mineral Processing), Hons, 1994]. I am a member, Fellow and Chartered Professional (CP) in good standing of the Australasian Institute of Mining and Metallurgy (AusIMM) [Member # 111430]. My relevant experience is 29 years as a practising metallurgist / process engineer in the field of base metal concentrator and gold plant operation, testwork, plant design and Feasibility Studies. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").

d. My most recent personal inspection of the Property, Costerfield, was from 10th to 11th March 2026 for two days.

e. I am responsible for Sections 13 and 17 of the Technical Report.

f. I am independent of Alkane Resources Limited as defined by Section 1.5 of the Instrument.

g. I have previously inspected the Property that is the subject of the Technical Report on two occasions, in 2023 and 2024, for historic NI 43-101 Technical Reports.

h. I have read the Instrument and the Technical Report, Sections 13 and 17 have been prepared in compliance with the Instrument.

i. At the effective date of the technical report, to the best of my knowledge, information and belief, the Technical Report, Sections 13 and 17, contain all scientific and technical information that is required to be disclosed to make the technical report not misleading.

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ALK NI43-101 2026 RR TR_Costerfield 45723 Report
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Date 11/09/2026

Certificate of Qualified Person

a. I, Cael Gniel am a Senior Consultant (Resource Geology) with SRK Consulting (Australasia) Pty Ltd with a business address at Level 3, 18–32 Parliament Place, West Perth WA 6005 Australia.

b. This certificate applies to the technical report entitled Costerfield Operation, Victoria, Australia, NI 43-101 Technical Report, dated 11 September 2026 (the “Technical Report”).

c. I am a graduate of Monash University, Bachelor of Science, 2012. I am a member in good standing of the Australian Institute of Geoscientists (Member number: 7710). My relevant experience is 7 years working in Victorian gold operations and 8 years working as a consultant performing Mineral Resource Estimation. I am a “Qualified Person” for purposes of National Instrument 43-101 (the “Instrument”).

d. My most recent personal inspection of the Property was 21st January 2026 for 1 day.

e. I am responsible for Sections 2, 4, 6 to 12, 14, 23 of the Technical Report.

f. I am independent of Alkane Resources Limited as defined by Section 1.5 of the Instrument.

g. I have previously worked at the Costerfield Operation from 2012-2018.

h. I have read the Instrument and the Technical Report has been prepared in compliance with the Instrument.

i. At the effective date of the technical report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

“Original document dated, signed and sealed by Cael Gniel, BSc (Geosciences and Chemistry, MAIG, RPGeo (Mineral Resource Estimation)”.

Cael Gniel

Senior Consultant (Resource Geology)

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b. This certificate applies to the technical report entitled Costerfield Operation, Victoria, Australia, NI 43-101 Technical Report, dated 11 September 2026 (the "Technical Report").

c. I am a graduate of the University of New South Wales, Bachelor of Mining Engineering, 1997. I am a member in good standing of the Australian Institute of Mining and Metallurgy (Member number: 111309). My relevant experience is 27 years of mining engineering experience in both operations and consulting. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").

d. My most recent personal inspection of the Property was 10 March 2026 for 2 days.

e. I am responsible for Sections 3, 5, 15, 16, 18 to 22 and 24 of the Technical Report.

f. I am independent of Alkane Resources Limited as defined by Section 1.5 of the Instrument.

g. I have prior involvement with the Property that is the subject of the Technical Report in previous NI43-101 reports.

h. I have read the Instrument and the Technical Report has been prepared in compliance with the Instrument.

i. At the effective date of the technical report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

"Original document dated, signed and sealed by Robert Urie, BEng Mining (Hons), Grad Cert (Applied Finance) Securities Institute, FAusIMM(CP)".

Robert Urie

Principal Consultant (Mining)

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Toronto Stock Exchange

Consent of Qualified Person

I, Carla Margaret Kaboth, consent to the public filing of the technical report titled, *NI 43-101 Technical report on* Costerfield NI 43-101 and dated 11 September, 2026 (the "Technical Report") by Alkane Resources Limited.

Dated this 11 September 2026

Regards
SRK Consulting (Australasia) Pty Ltd

Carla Margaret Kaboth

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Consent of Qualified Person

I, Cael Gniel, consent to the public filing of the technical report titled, Costerfield Operation, Victoria, Australia, NI 43-101 Technical Report and dated 11 September, 2026 (the "Technical Report") by Alkane Resources Limited.

Dated this 11 September 2026

Regards
SRK Consulting (Australasia) Pty Ltd

Cael Gniel

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The Manitoba Securities Commission
Financial and Consumer Services Commission, New Brunswick
Nova Scotia Securities Commission
Office of the Superintendent of Securities, Government of Newfoundland and Labrador
Office of the Superintendent of Securities, Prince Edward Island
Toronto Stock Exchange

Consent of Qualified Person

I, Robert Urie, consent to the public filing of the technical report titled, Costerfield Operation, Victoria, Australia, NI 43-101 Technical Report and dated 11 September, 2026 (the “Technical Report”) by Alkane Resources Limited.

Dated this 11 September 2026

Regards
SRK Consulting (Australasia) Pty Ltd

Robert Urie

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