

Evaluation of blue light hand-held scanners for carcass zero tolerance defects

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1.0 Abstract

Australian red-meat processing operates under a robust, multi-layered food-safety and quality assurance (QA) system that ensures all product placed on the market is fit for human consumption. Within that system there is a continuous-improvement opportunity to further enhance QA verification and the objectivity of operator inspection. This project evaluated a handheld, blue-light (chlorophyll-fluorescence) scanner — the Veritide BluLine BL20 — as an additional QA verification and training aid layered on top of existing industry controls.

Five BluLine BL20 units were deployed across five JBS Australia Southern processing sites — Brooklyn, Longford, Bordertown, Scone and Cobram — over three years (February 2023 – March 2026), covering beef, sheep and lamb operations. The evaluation followed a milestone-gated approach, with trial iterations at Milestones 3, 4 and 5, and a formal closure review at Milestone 6. Deployment models included retain-rail re-inspection, MHA (Meat Hygiene Assessment) support, cold-store carton STEC-Testing verification and operator-held spot checking. User-acceptance, detection behaviour, calibration stability, adoption and operational integration were assessed qualitatively across all sites.

Results were site-dependent. Brooklyn integrated the device into daily beef retain-rail QA task descriptions. Scone applied the device to the cold-store carton STEC-Testing as an additional verification step. Longford and Bordertown restarted structured use after periods of lower utilisation. Cobram found the device over-sensitive following vendor recalibration and not well-tuned to wool-dust and small-stock contamination profiles, and elected to return its unit. Across all sites the technology was consistently characterised as a QA verification aid layered on existing controls, not a replacement for established inspection practice.

The project delivered an evidence base for continued targeted deployment at four of five sites, a set of calibration and adoption items that require vendor engagement, and a clear next step: a parallel microbiological validation program — led with Dr. Ian Jenson — to characterise scanner alert behaviour against microbiological analysis. The outputs of this project directly inform industry best practice for handheld fluorescence scanner use as a QA verification aid.

2.0 Executive summary

Purpose

This project set out to evaluate whether a handheld blue-light scanner — the Veritide BluLine BL20 — could be used within a large Australian red-meat processing business as an additional QA verification aid, layered on top of existing robust food-safety and contamination-control systems. The research was designed to test the device as an objective, repeatable tool supporting front-line quality assurance (QA) staff. The work was co-funded by the Australian Meat Processor Corporation (AMPC) and JBS Australia and was executed across the Southern region over three years.

Objectives

The project aimed to:

- Deploy and operate BluLine scanners at five Southern JBS sites across beef, sheep and lamb species;
- Assess the tool as an objective verification of manual trimming practice and as a training and certification aid for contamination-trim staff;
- Understand any impact of scanner-assisted verification on carcass yield (over- or under-trimming);
- Use the scanner to support continuous improvement of upstream unit operations such as carcass washes and steam-vacs;
- Test the feasibility of detecting non-ZT materials (e.g., rail-lubricating oil) using chlorophyll-traced markers.

Methodology

Five BluLine BL20 units were purchased, installed and commissioned at Brooklyn (beef and smalls), Longford (beef), Bordertown (smalls), Scone (beef) and Cobram (smalls). Each site received training and was directed to deploy the device in a manner appropriate to its species, layout and labour model. Use patterns, adoption outcomes, operator feedback and QA-observed outcomes were captured through internal reviews at Milestones 3, 4 and 5. A group exit review was held on 23 April 2026 with site QA managers, the innovation team and AMPC representation to formalise closure findings.

Results and key findings

Outcomes were site-dependent. Brooklyn successfully embedded the scanner into the beef retain-rail process under direct management mandate and continued to trend positively on operational QA indicators. Scone applied the device to cold-store carton STEC-Testing as a verification layer with consistent operational use. Bordertown and Longford experienced initial adoption, a period of lower utilisation, and renewed commitment to structured deployment at project close. Cobram identified over-sensitivity following vendor recalibration, limited suitability for small-stock/wool-dust contamination profiles, and elected to surrender its unit for reallocation. Common themes across the trial were the importance of clear leadership mandate, integration into QA task descriptions, standardised field calibration, and continued vendor development for small-stock applications.

Benefits to industry

The project provides the first multi-site, multi-species Australian evaluation of a handheld chlorophyll-fluorescence scanner in an operating processing environment. It offers a realistic adoption case study — including the non-technical factors (leadership, labour, training) that determine success — and identifies specific technical areas (calibration stability, small-stock sensitivity, alert-handling procedures) for vendor and industry attention.

Future research, extension and adoption

The project recommends (i) a microbiologist-led validation program at Longford, led by Dr. Ian Jenson, with Cobram as a potential comparator site, to characterise scanner alert behaviour against microbiological analysis; (ii) vendor engagement with Veritide on field calibration and small-stock sensitivity; and (iii) continued retain-rail deployment at Brooklyn, Bordertown, Longford and Scone under formalised task descriptions.

3.0 Introduction

Australian red-meat processing operates under a robust, multi-layered food-safety and QA framework that ensures all finished product is fit for human consumption. Contamination controls include on-plant veterinary inspection, trained QA staff and process workers, carcass washes, steam-vac systems, retain-rail re-inspection, operator trimming, microbiological sampling and carton verification. Zero-tolerance (ZT) defects — faecal material, ingesta and milk on carcasses and primals — are detected and removed before product is released, in accordance with both regulatory requirements (Australian Government Department of Agriculture, Fisheries and Forestry) and customer specifications (including USDA requirements for product exported to the United States).

Within this robust system, there is a continuous-improvement opportunity to add further objective verification to the work performed by QA and process staff. Tools that provide operator-independent, repeatable visualisation of chlorophyll-origin material can support training, certification, task assurance and continuous improvement of upstream unit operations. It is this opportunity that the current project was designed to address.

Blue-light/chlorophyll-fluorescence technology exploits the physical property that chlorophyll-derived compounds in ruminant faeces fluoresce when illuminated at specific blue wavelengths and viewed through an appropriate optical filter. Handheld units using this principle have been commercially available from Veritide (New Zealand) for several years, primarily in smaller-throughput sheep and deer contexts. The BluLine BL20 product represents a higher-specification, beef-capable evolution intended for daily QA use in high-throughput abattoirs. However, no large-scale, multi-site, multi-species Australian evaluation of the device in a real operating environment has previously been completed.

Industry opportunity and knowledge gap

The specific knowledge gap addressed by this project is whether the BluLine BL20, deployed in a typical large-processor operating environment, can add value as an additional QA verification and training aid — and under what conditions (species, carcass position, labour model, leadership model) it does so. No prior Australian multi-site, multi-species evaluation of the device in an operating environment has been published.

Main research questions

The project was designed to answer:

- Does handheld BluLine use add measurable value as an additional QA verification layer in an operating processing environment?
- Can the tool provide an objective reference for training and certification of contamination-trim operators?
- Does scanner-assisted verification produce a measurable impact on trimming (and therefore on carcass yield)?
- Can the scanner be used to support continuous improvement of upstream unit operations such as carcass washes and steam-vac performance?
- Is detection of non-ZT materials (e.g., rail-lubricating oils) feasible using chlorophyll-traced markers?

Target audience

The primary audience for this final report is Australian red-meat processors — particularly beef and smalls processing sites — along with AMPC, MLA, on-plant QA and food-safety leadership, and technology vendors developing contamination-detection solutions. Producers, regulators and external customers are secondary audiences with an interest in continuous improvement of QA verification in the industry.

Use of the results

The results of this project are intended to inform (i) operational decisions at JBS Australia Southern sites regarding continued use of the BluLine device; (ii) the broader industry position on handheld

blue-light scanners as a QA verification aid; and (iii) vendor product-development priorities around calibration stability and small-stock sensitivity.

4.0 Project objectives

The project objectives, as specified in the executed Project Schedule (2023-1036, signed 20 February 2023) between AMPC and JBS Australia, were to:

- Deploy and operate the Veritide BluLine BL20 handheld blue-light scanner across multiple JBS Southern sites and species types (beef, sheep, lamb) as an additional QA verification and training aid layered on existing industry controls;
- Evaluate the tool as an objective reference point for manual trimming practice and variability;
- Evaluate the tool as a training and certification aid for staff performing contamination trimming;
- Understand whether scanner-assisted verification has a measurable impact on the volume of trimming (carcase yield impact);
- Use the scanner to support continuous improvement of upstream unit operations, specifically carcase washes and steam-vac systems;
- Explore the detection of non-ZT materials (e.g., rail-lubricating oils) using chlorophyll-traced marker additives.

These objectives were addressed across the project's six milestones:

Milestone	Due date	Description	Status
M1	30 Jan 2023	Contract signed, inception meeting held, minutes submitted to AMPC	Achieved
M2	15 Feb 2023	Veritide BluLine BL20 scanners purchased; proof of purchase provided	Achieved
M3	29 Sep 2023	Delivery, installation, training and six months of use complete across five sites; report submitted; Go decision	Achieved
M4	29 Mar 2024	End of Year 1: method of operation, contamination and efficiency indicators reported; annual service complete; Go decision	Achieved
M5	28 Mar 2025	End of Year 2: method of operation, contamination and efficiency indicators reported; internal two-year review; Go decision	Achieved
M6	30 Mar 2026	Final report, project closure, exit meeting and recommendations for future RD&E	This report

5.0 Methodology

Technology under evaluation

The technology evaluated was the Veritide BluLine BL20 handheld blue-light scanner, supplied by Veritide Limited (New Zealand). The BL20 is an advanced handheld contamination-detection device that uses short-wavelength blue illumination to excite fluorescence from chlorophyll and chlorophyll-derived compounds present in ruminant faecal material. Fluorescence is detected and interpreted through an integrated optical filter and user interface.

The device relies on the presence of chlorophyll-origin compounds in faeces; it is therefore dependent on the animal having consumed chlorophyll-containing feed prior to slaughter. The device cannot reliably detect faecal material from milk-fed calves or animals on chlorophyll-free rations — an operational constraint that is rarely encountered in commercial Australian beef, sheep or lamb processing. A second known interference is photo-protoporphyrin, which can develop on carcasses during extended cold storage (age-dependent) and fluoresces at wavelengths similar to chlorophyll. This is understood to contribute to some cold-store alert events that are not related to faecal contamination.

The device is marketed and was deployed in this project as an additional QA verification aid layered on existing contamination inspection and trimming practice — not as a replacement for those practices.

Site selection and deployment

Five BluLine BL20 units were commissioned across five JBS Australia Southern sites to span species (beef, sheep, lamb), site layout, labour model and production throughput:

Site	Species	Primary deployment	Secondary deployment	Units
Brooklyn	Beef, Smalls, VA	Beef retain rail	Beef tripe, smalls trials	1 active (multi-use model)
Longford	Beef	Retain rail	MHA area	1
Bordertown	Smalls (sheep, lamb, goat)	Retain rail	MHA investigation	1
Scone	Beef	Cold store / carton STEC-Testing	Fab-floor MHA, kill-floor MHA	1
Cobram	Smalls	Retain rail	Trials on wool-dust / small contaminants	1 (Proposed to be returned)

Training and operating model

Each site received vendor-delivered training, user documentation and a standardised data-collection template (the JBS Blue Light Scanning Zones Data Collection Form) at deployment. QA managers at each site were responsible for integrating the device into existing QA routines. No new standing-labour positions were created for the trial; the device was operated by existing QA and MHA-trained staff.

The primary deployment model was retain-rail re-inspection: carcasses directed off the main rail for QA hold — typically for gross contamination, pathology, abscesses or QA review — were scanned with the BluLine before release for trimming or further processing. This model was selected because retain-rail carcasses are already segregated, slowed and under direct QA attention, which is

operationally compatible with a handheld device at the labour model scale used in the trial. Score additionally deployed the device in cold-store STEC-Testing of outer cartons, a use-case that emerged as a strong value area.

Data capture

Data capture across the trial combined: (i) site-level use logs and observation records; (ii) QA-manager narrative feedback at Milestones 3, 4 and 5; (iii) correlated in-plant operational QA data where available; (iv) Veritide raw detection results from the BluLine units; (v) photographs and video evidence of the device in operation; and (vi) the project exit meeting held on 23 April 2026 (summary at Appendix 1).

Milestone-gated review

The project followed the AMPC milestone-gated structure. Each milestone incorporated an internal review, a formal milestone report to AMPC, and a Go/No-Go decision. At each review point the trial design was refined — notably the shift from general plant-floor use to targeted retain-rail deployment from Milestone 3 onward, and the progressive formalisation of the device into QA task descriptions from Milestone 4 onward.

Project governance

The project was led by Sean Starling (Head of Innovation & Industrial Engineering, Southern) on behalf of JBS Australia, with site-level operational leadership from the QA manager at each participating plant. AMPC provided project governance through formal milestone review and was represented at the project exit meeting by Ann McDonald. The project's industry partner was Veritide Limited (NZ), with Gerard Kilpatrick as technical contact.

6.0 Results

Overall adoption and status

At project close, four of the five sites will retain and continue to use at least one BluLine unit. One site (Cobram) has elected to return its unit for reallocation. The breakdown of final dispositions is summarised below.

Site	Final status	Units retained	Forward model
Brooklyn	Active	1 retained; 4–6 desired	Beef retain rail (embedded in task description); expanding into smalls retain rail; tripe contamination checks. Aspiration: 4 bolt-down + 1–2 mobile.
Longford	Restart	1 (possibly 2)	Retain rail and MHA area; parallel microbiology validation with Dr. I. Jenson before broader deployment.
Bordertown	Active	1 (mobile)	Retain rail; MHA product assessment follow-up; device held in QA office, collected on demand.

Score	Active	2 desired (1 bolt-down, 1 mobile)	Cold-store carton STEC-Testing (primary); fab-floor and kill-floor MHA (secondary). Pending calibration clarification from vendor.
Cobram	Will probably be returned to another JBS location	0	Unit surrendered for reallocation; site open to revisit when technology improves for small-stock/wool-dust.

Site-level results

Brooklyn

Brooklyn is the project's strongest adoption outcome. The device was integrated into existing retain-rail task descriptions under a direct mandate from the General Plant Manager (James Turner). Post-integration, QA Manager Shannon Hae Hae reported sustained use on beef carcasses directed to retain for gross contamination and pathology, with secondary use on beef tripe.

Brooklyn continued to trend positively on its standing operational QA indicators over the trial period, consistent with its strong adoption model. Two additional units held at Brooklyn currently sit unused in the smalls operation, with the QA team advocating for expansion into lamb retain-rail use.

Operational issues identified at Brooklyn included: unit unavailability during operator leave and inconsistent charging practice. These are being resolved internally through task description updates and shift-handover protocols.

Bordertown

Bordertown established a retain-rail model modelled on Brooklyn and extended trials to MHA product-assessment follow-up. Use has been intermittent, correlating with a period of significant team change across QA and operations. At project close a new officer-in-charge has been appointed and the site has committed to reinstating consistent retain-rail use and providing formal feedback to the operations leadership team.

Bordertown explicitly does not require a bolted/fixed unit and is comfortable continuing with a single mobile device held in the QA office and collected on demand.

Longford

Longford initially adopted the device strongly but utilisation declined over Year 2 as the device was deprioritised against other operational pressures. The innovation team (led by Pedro Contreras) has re-engaged Longford at project close through a new, structured approach: partnering with Dr. Ian Jenson to run a microbiological validation program in parallel with scanner deployment.

Under the proposed program, swabs will be taken in two scenarios — (i) when the scanner alerts; and (ii) at reference locations where the scanner does not alert — and sent for microbiological analysis. The outputs of this program are intended to characterise the device's alert behaviour against microbiological reference data, and will directly inform whether a second unit is commissioned at Longford (MHA area) and whether the approach is extended to other sites.

Score

Score reported sustained active use across the full project duration. The primary operational deployment is cold-store STEC-Testing of outer cartons as an additional verification layer, and the site has reported improved operational QA verification metrics through this practice. Secondary deployment on the fab-floor MHA and kill-floor MHA has been reduced — QA Manager Kristine Lane noted that floor-deployment is prone to alert events that cannot be visually verified by operators, which reduces operator confidence in floor-based use of the device.

Scone has also raised two calibration points: (i) the field-level calibration procedure for the device (beyond the annual vendor service) is not clearly documented; and (ii) clearer technical guidance is sought from Veritide on how to validate that a given unit is correctly calibrated during daily operation. The site intends to retain two units — one bolt-mounted at the cold-store inspection point and one mobile for fab-floor and kill-floor use.

Cobram

Cobram experienced the most difficult trial outcome. The site's unit was returned to Veritide for recalibration during Year 2. Post-recalibration, the site reported the device as over-sensitive, producing alerts on carcasses where no contamination was visibly present, and inconsistent — in one documented example, intact round faecal pellets did not produce an alert while broken-edge material did. Cobram also found the device not well suited to the wool-dust, lanolin and small-contamination profile of the smalls operation.

After weighing the operational burden of continued use against the observed value, the site elected to surrender its unit for reallocation. The Cobram team has explicitly left the door open to revisiting the technology if vendor development resolves the small-stock sensitivity gap.

Objective-level results

Multi-site, multi-species deployment

Achieved. Five units were commissioned and operated across five sites covering beef (Brooklyn, Longford, Scone), sheep and lamb (Brooklyn smalls, Bordertown, Cobram) and value-added processing (Brooklyn VA trials). Deployment models ranged from primary retain-rail through to cold-store carton STEC-Testing and operator-held spot verification.

Verification of manual trimming practice

Partially achieved. The device provided a useful training and feedback reference at sites with strong leadership (Brooklyn), where it supported formalisation of retain-rail behaviour. At sites with less formal integration the realised value was reduced. The project did not produce a formal metric for trimming consistency; this is a candidate follow-on area.

Training and certification aid

Achieved in part. The device was used informally as a training aid at Brooklyn, Bordertown and Scone. No formal certification program was established during the trial; however, exit meeting discussion identified this as a tractable next step at sites where the device is bolted-down.

Yield impact

Limited evidence. The project did not produce statistically robust yield data. Qualitative feedback at Brooklyn and Scone suggested the device may reduce unnecessary over-trimming in some workflows; this has not been quantified. Yield impact is understood to be a function of how the device is integrated into the trim decision sequence.

Upstream unit-operation continuous improvement

Not substantially progressed. The trial did not deliver a structured evaluation of carcass wash or steam-vac continuous improvement using the BluLine. This remains an unaddressed objective and a candidate for future RD&E.

Non-ZT material detection (chlorophyll-traced markers)

Not substantially progressed. Proof-of-concept work on non-ZT materials (e.g., rail-lubricating oils marked with chlorophyll traces) was scoped in the original Project Schedule but was deprioritised through the milestone reviews in favour of deeper site deployment work. This remains a candidate for future work.

Observed technical and operational items

- Calibration: Vendor field-calibration procedure is not clearly documented; post-recalibration sensitivity changes were observed at Cobram.
- Small-stock sensitivity: Device is not well tuned to wool dust, lanolin and small-particle contamination profiles.
- Alert handling: Cold-store and fab-floor alert events that cannot be visually confirmed reduce operator confidence in floor-based use of the device.
- Labour integration: Device value is strongly dependent on formal integration into QA task descriptions and leadership mandate.
- Charging and custody: Basic operational practices (charging routine, handover during leave) materially affect availability.

7.0 Discussion

The central finding of this project is that the Veritide BluLine BL20 can add value as an additional QA verification aid in an operating Australian red-meat processing environment, but its realised value is dominated by non-technical factors — leadership, integration, training and labour — rather than by the underlying optical performance of the device. At the sites where senior plant leadership mandated use and where use was embedded in formal task descriptions (Brooklyn; Scone's cold-store model), the device was sustained as a working element of the QA routine. At sites where the device was left to informal adoption, utilisation lapsed under normal operational pressures.

Brooklyn's experience — a clear leadership mandate, integration into formal task descriptions, and sustained use on beef retain-rail carcasses — provides a useful reference model for how the device is most effectively deployed. The site's continued positive trend on operational QA indicators over the trial period is consistent with effective integration of the device into existing controls. Australian red-meat processing operates with many simultaneous food-safety and QA interventions, and contributions from any single tool cannot be isolated in an operating environment; the proposed microbiological validation at Longford (Section 9) is designed to provide structured reference data on scanner alert behaviour.

The Scone cold-store STEC-Testing result is a distinct and equally important finding. This use-case was not heavily emphasised at project outset: the device's utility as an additional verification layer in cold-store inspection of outer cartons effectively extends objective chlorophyll-fluorescence verification into the primal and carton stages, complementing existing STEC-Testing controls. This use-case warrants deliberate inclusion in future industry guidance on handheld scanner use.

The Cobram experience provides an equally important counterpoint. Over-sensitivity following recalibration, combined with the small-stock sensitivity gap, produced a poor adoption outcome. This is not a failure of the project so much as a useful result: it defines the current commercial boundary of the technology and sends a clear signal to the vendor community about where further development is required. It also validates the project's governance model — the ability to surrender a unit and redirect it to a higher-value use is the correct response to an evidence-based outcome.

A broader discussion point raised at the project exit meeting is that change in a high-throughput processing environment must simplify the work of the people doing it, not add complexity. Devices that require additional operator steps, additional interpretation, or additional troubleshooting must clear a high value threshold to achieve sustained adoption. The BluLine clears this threshold in specific, constrained use cases (retain rail with leadership mandate; cold-store STEC-Testing) and does not clear it in others (general fab-floor; small-stock contamination profiles; inconsistent labour availability).

Finally, the project underscores the importance of pairing a new technology with a microbiological validation program before it is considered for industry-wide promotion. The Dr. Ian Jenson validation program (Section 9.1) is designed to characterise the device's alert behaviour against microbiological reference data. Once that evidence exists, industry-wide recommendations can be placed on firmer footing.

8.0 Conclusions

- All milestones of the project were achieved. Five Veritide BluLine BL20 units were commissioned, operated and evaluated across five JBS Australia Southern sites over three years (February 2023 – March 2026).
- The device is a valid additional QA verification aid — not a replacement — layered on existing contamination controls in beef operations, and can be sustained as a working element of the QA routine when embedded in formal task descriptions under direct leadership mandate.
- The strongest adoption outcomes were at Brooklyn (beef retain rail, sustained positive trend on operational QA indicators) and Scone (cold-store carton STEC-Testing as an additional verification layer).
- The device has identifiable limitations: (i) it is not currently well tuned to small-stock contamination profiles; (ii) field-calibration guidance from the vendor is insufficient; (iii) alert events on general fab-floor deployment that cannot be visually confirmed reduce operator confidence; and (iv) realised value is highly dependent on non-technical adoption factors.
- Four of five sites (Brooklyn, Bordertown, Longford, Scone) have elected to retain and continue to use one or more units under refined deployment models. Cobram has elected to surrender its unit for reallocation, with explicit willingness to revisit the technology when small-stock sensitivity improves.
- A microbiological validation program — led by Dr. Ian Jenson, starting at Longford — is the priority next step to characterise the device's alert behaviour against microbiological reference data and inform industry-wide guidance on scanner use.

9.0 Recommendations

Microbiological validation (priority next step)

Commission a structured microbiological validation program led by Dr. Ian Jenson, starting at Longford, with Cobram (if feasible) as a comparator site. The program should (i) take swabs at locations where the scanner produces an alert; (ii) take swabs at reference locations where the scanner does not alert; and (iii) characterise scanner alert behaviour against microbiological reference data. Outputs should directly inform AMPC industry guidance on handheld blue-light scanner use.

Vendor engagement on calibration and small-stock sensitivity

Engage directly with Veritide on (i) documenting a standardised field-calibration verification procedure usable by QA operators; (ii) reviewing the post-recalibration sensitivity behaviour observed at Cobram; and (iii) the technology roadmap for improved small-stock (sheep, lamb, goat) sensitivity. Outputs should be shared back to AMPC and the broader industry as relevant.

Retain-rail deployment model as industry practice

Promote the retain-rail deployment model — device held within the QA office, applied to carcasses already segregated off the main rail, embedded in formal QA task descriptions — as the reference deployment model for handheld blue-light scanners in beef operations. This model produced the strongest adoption outcomes in this project and is operationally compatible with typical large-processor labour structures.

Cold-store carton STEC-Testing as a distinct use-case

Document Scone's cold-store carton STEC-Testing model as a distinct industry use-case, separate from retain-rail. Use of the device as an additional verification layer within the established STEC-Testing process is a practical, operationally sustainable application of the technology and warrants explicit inclusion in industry guidance.

Adoption, extension and communication

Share the project findings — including the non-technical adoption factors — through AMPC's industry extension channels (monthly processor newsletter, AMPC website and final-report publication), JBS Innovation Monthly Updates, and direct engagement with non-JBS Australian processors through AMPC and MLA forums. Where appropriate, co-publish with Veritide on vendor-facing learnings.

10.0 Project outputs

Reports and documentation

- Milestone 1 & 2 Report (Confidential) — inception meeting minutes and scanner purchase evidence, submitted and approved by AMPC.
- Milestone 3 Report (Confidential) — delivery, installation, training and six months of use across five sites; Go decision.
- Milestone 4 Report (Confidential) — Year 1 review, method of operation, QA and efficiency indicators; Go decision.
- Milestone 5 Report (Confidential) — Year 2 review, internal two-year review; Go decision.
- Milestone 6 Final Report (this document) — project closure, exit meeting and future recommendations.
- Appendix — Exit meeting summary (23 April 2026).

Operational artefacts

- JBS Blue Light Scanning Zones Data Collection Form — a site-agnostic data-collection template used across all five sites for both beef and smalls.
- Formal integration of BluLine use into Brooklyn beef retain-rail QA task descriptions.
- Scone cold-store carton STEC-Testing procedure.

Internal extension activities

- Monthly JBS Innovation Updates (Pedro Contreras) referencing BluLine trial progress across Years 1–3.
- Project progress communicated at JBS Southern QA-manager forums.

External knowledge sharing

- Project included in the JBS Southern Innovation Program & Activities wall poster (Food Safety, Quality & Traceability pillar), which has been displayed to external stakeholders during site visits.
- Coordination and knowledge exchange with Veritide Limited (NZ) on operational learnings across the trial.

11.0 Bibliography

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Veritide Limited 2022, JBS BluLine Scanner Proposal (26 March 2022), Christchurch, New Zealand.

Veritide Limited 2023, BluLine BL20 Technical Documentation, Christchurch, New Zealand.

JBS Australia 2026, Milestone 6 Group Exit Meeting — transcript and recording, 23 April 2026 (internal reference).

12.0 Appendices

The following supporting documentation is referenced within the body of this report and is provided as project data for AMPC's records.

12.1 Appendix 1

The project closure exit meeting was held on 23 April 2026. Participants included:

- Sean Starling (Project Lead, JBS Southern)
- Pedro Contreras (JBS Innovation)
- Shannon Hae Hae (QA Manager, Brooklyn)
- Marie Phillips (QA Manager, Bordertown)
- Nikki McKenzie (Longford)
- Kristine Lane (QA Manager, Scone)
- Cobram QA representative
- Jamie Evans (JBS Australia)
- Sarah Babington (AMPC)
- Ann McDonald (AMPC)

Key outcomes of the exit meeting are summarised in Section 6 (site-level results) and Section 9 (recommendations). The meeting confirmed: (i) four of five sites will retain units under refined deployment models; (ii) Cobram will surrender its unit for reallocation; (iii) the Dr. Ian Jenson microbiological validation program is the priority next step; and (iv) Veritide engagement on calibration and small-stock sensitivity is required.