



NI 43-101 Technical Report

**Great Atlantic Salt Project, Newfoundland and Labrador,
Canada**

Atlas Salt Inc.

Prepared by:

SLR Consulting (Canada) Ltd.

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1.0 Summary

1.1 Executive Summary

SLR Consulting (Canada) Ltd. (SLR) was retained by Atlas Salt Inc. (Atlas or the Company) to prepare an independent Technical Report on the Great Atlantic Salt (GAS) Project (the Project or GAS Project), located near the town of St George's, Newfoundland, Canada. The purpose of this Technical Report is to present the results of an updated Feasibility Study (the 2025 UFS or the UFS) of the Project. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

The Project is located within a block of claims totalling 7,275 ha (the GAS Property) and comprises development of an underground salt mine with decline access with an eventual production capacity of 4.0 million tonnes per year (Mtpa) of rock salt. The product will be crushed salt with a minimum grade of 95% sodium chloride (NaCl) for the road de-icing market. All mining, crushing, and sizing facilities will be located within the underground mine. The finished product will be transported by conveyor 2.5 km to a dedicated storage and port facility and loaded onto ships for destination markets on the US East Coast (USEC), Québec, and the Maritime Provinces.

The effective date of the Mineral Resource estimate and Mineral Reserve estimate in the Technical Report is September 30, 2025. Information in this report is current as of the effective date of Mineral Reserves unless otherwise specified.

SLR completed a feasibility study for the Project in 2023 (the 2023 FS). This Technical Report presents the results of an update to the 2023 FS.

1.1.1 Conclusions

The Qualified Persons (QP) have the following conclusions by area.

1.1.1.1 Geology and Mineral Resources

- The geological setting of the deposit is well understood, with the GAS halite being constrained by a combination of exploration drilling and downhole and ground geophysical surveying. The Project is hosted within Devonian and Carboniferous strata of the Bay St George Sub-Basin of the regional Maritimes Basin of southwest Newfoundland; an extensive geological basin underlying the Gulf of St Lawrence and surrounding areas.
- The GAS halite deposit is a basin-wide, bedded evaporite salt deposit with wide lateral extent. The deposit is part of a stratigraphy including sedimentary strata from a range of depositional environments including marine, shallow marine and salina, to fluvial and deltaic. Salt formation within sedimentary environments occurs through the evaporation of seawater within shallow enclosed or isolated basins. The Codroy Formation of the Codroy Group represents the dominant stratigraphic unit within the Project area.
- Salt horizons correlated with the GAS deposit have been intersected in 13 drill holes, of which nine have been assayed. The four unassayed holes include two located outside the resource area and two geotechnical holes that were terminated shortly after entering the Salt-1 horizon. Within the resource area, the deposit extends from approximately 180 m to 395 m depth and varies in thickness from about 68 m in the southwest to 340 m in



the northeast. Geophysical information suggests that the deposit extends further laterally than what is currently classified as Mineral Resources.

- The halite is overlain by a thick succession of sandstones, siltstones, mudstones, and conglomerates, referred to as Red Beds, and is immediately underlain by a basal anhydrite, both of which form relatively sharp boundaries with the major halite horizons. There are two interburden layers in the deposit and the salt horizons have been named as follows:
 - 1-Salt is below the Red Beds and overlies the first interburden layer.
 - 2-Salt is between the two interburden layers.
 - 3-Salt is below the second interburden layer and overlies the basal anhydrite.
- Mineral Resources at the Project conform to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions).
- As at September 30, 2025, Indicated Mineral Resources are estimated to total 383 million tonnes (Mt) averaging 96.0% NaCl containing 368 Mt of NaCl. Inferred Mineral Resources are estimated to total 868 Mt averaging 95.2% NaCl containing 827 Mt of NaCl. This estimate is unchanged from the previous estimate for the Project, with an effective date of May 11, 2023.
- The sample preparation, analysis, and security procedures at the Project are adequate, and the quality assurance/quality control (QA/QC) results are adequate to support Mineral Resource estimation.
- The drill hole database is of sufficient quality and is suitable for use in a Mineral Resource estimate.
- The QP is not aware of any material limitations on data verification and is of the opinion that database verification procedures for the GAS Project are adequate for the purposes of Mineral Resource estimation. Verification by SLR has included a review of spatial, geological, and geochemical data in relation to the deposit, and updated geological interpretations informed by new drill hole data and reprocessed seismic survey data.
- The QP is of the opinion that the block modelling methodologies and the selected block sizes are suitable for the style of mineralization and proposed mining method.
- The deposit remains open to additional exploration and further technical study, which are warranted.

1.1.1.2 Mining and Mineral Reserves

- As at September 30, 2025, the Probable Mineral Reserves are estimated to be 95.0 Mt grading 95.9% NaCl. There are 39.3 Mt grading 95.9% NaCl of Probable Mineral Reserves in the 2-Salt horizon and 55.8 Mt grading 95.9% NaCl of Probable Mineral Reserves in the 3-Salt horizon.
- The Probable Mineral Reserves are based on Indicated Mineral Resources only, after the application of mining plans and designs. No Inferred Mineral Resources were included in the estimate of Mineral Reserves. Inferred Mineral Resources included within the mine plan were treated as waste.



- A mining plan has been developed based upon the Probable Mineral Reserves for an initial mine life of 24.25 years at a steady state operating rate of 4.0 Mtpa of road salt product. There are additional Indicated Mineral Resources at depth that have not been converted to Mineral Reserves.
- The deposit is planned to be accessed by two declines from surface to the plant elevation at the 240 Level (nominally 240 m below surface) and to the first production level at the 320 Level.
- Over the 24.25 life of the Project, the declines will be extended to a further six production levels down to the 536 Level.
- Salt will be mined using continuous miners (CMs) and truck haulage in a room and pillar mining operation. Rooms will be 17 m wide; pillars will be 25 m square.
- Mining levels will be up to 20 m high consisting of four vertical cuts each five metres high. Mining levels will be separated by 16 m sill pillars.
- Mining is planned for the 2-Salt and 3-Salt horizons.
- At a block model mining cut-off grade of 90% NaCl, the total production for the initial 24.25 year mine plan is estimated to be 95.0 Mt grading 95.9% NaCl. Mining faces will be blended to maintain the production grade higher than the minimum 95% NaCl road salt specification.
- The mine equipment will primarily comprise electric and battery electric units.
- Mine design and planning are supported by geotechnical studies and geomechanical testing.

1.1.1.3 Mineral Processing

- Processing to produce de-icing salt will take place in a processing plant that will be located underground within the mine.
- A multi-stage crushing and screening plant using roll crushers and inclined vibrating screens has been designed to minimize the generation of fines. The flow sheet comprises three crushing and four screening stages, including screening-out of product-size material before each crushing stage to further reduce the potential for fines generation. Regardless, a fine screening circuit has been included to allow for the removal of excessive fines if necessary.
- The process design has been based on unconfined compressive strength (UCS) tests on thirty samples from drill holes CC-8 and CC-9b completed in 2022 and 2023. The results range from 14.7 MPa to 38.8 MPa with a 75th percentile value of 28.6 MPa.
- Abrasiveness of six samples from drill holes CC-7 completed in 2022 has been assessed by CM manufacturers as “not abrasive” to “slightly abrasive”, while Bond abrasion index results from six samples from CC-7, CC-8, and CC-9b indicate that the salt’s abrasivity is very mild to mild. Additionally, Cerchar Abrasivity Index (CAI) testing on six samples from CC-8 characterized the samples’ abrasivity as very low.
- These results indicate that the salt may be successfully processed to produce de-icing salt conforming to American Society for Testing and Materials (ASTM) Designation D632-12 (2012) (ASTM D632-12) by conventional dry crushing and screening methods.



1.1.1.4 Infrastructure

- The Project is located within the town limits of St. George's. To develop the Project, surface infrastructure is required to augment the infrastructure that exists already in the area.
- A surface clearing will be developed at the site where the majority of new infrastructure will be located. New infrastructure will include access roads, utility connections to town, site roads, buildings, stockpiles, conveyors, an electrical substation, and product conveyors.
- Water that has come in contact with the site will be collected in an effluent water pond, and then discharged into a local creek nearby. It is anticipated that water will require treatment only for total suspended solids.
- A series of conveyors is required to transfer the salt from the mine to the port, including an intermediate salt storage building, and a two-kilometre overland conveyor.
- Turf Point Port is an existing aggregates exporting facility owned by a third party that is currently used to ship gypsum to markets in North America. SLR has assumed that the GAS Project will use the port for the shipment of salt on a contract basis with a third party owner.
- The principal components of the port as it exists today include an aggregate storage building, outdoor aggregate storage, reclaim system feeding onto a conveyor, and a ship loader mounted on the structural steel trestle with a loading rate of nominally 1,000 tonnes per hour (tph). Vessels up to 225 m long, 32.26 m in beam and an alongside depth of 10 m can be accommodated.
- It is proposed that the existing port facilities will be augmented as part of the Project to enable the port to be suitable for exporting 4.0 Mtpa of rock salt. The following key changes proposed include modifying the existing storage building, constructing a new storage building, completing a series of reclaim feeders, and refurbishment of the existing trestles and ship loader. With the addition of the new storage building, the total storage at the port will be 60,000 t. The ship loader would be upgraded and refurbished to increase its capacity to 1,400 tph.

1.1.1.5 Marketing

- The sole product produced from the GAS Project will be rock salt used for de-icing purposes, with a minor amount of colour (white) based product.
- The target market with the highest potential for GAS to penetrate is Québec and the Maritimes, New England, and the USEC (collectively, the High Potential Market). The combined annual consumption of road salt in these markets ranges from 11.0 Mtpa to 16.0 Mtpa.
- The deposit will be developed for a production rate of 4.0 Mtpa of saleable product as a base case, achieved in Year 4 of operations after a three-year ramp-up period. At 4.0 Mtpa, this would position the Project to supply 25% to 36% of the current High Potential Market by the time it achieves full production. It is intended that this market penetration would be achieved by first supplanting rock salt that is imported from overseas markets, followed by displacement of production from aging rock salt mines in the St. Lawrence Basin.



- Based on a review of both publicly available information and commissioned studies, the economic analysis for the UFS is based on a price of C\$81.67/t for road salt Free on Board (FOB) Turf Point (with a Q3 2025 basis).

1.1.1.6 Environment

- From an environmental and social perspective, SLR characterizes the Project as low risk. Negative environmental and social impacts and risks are expected to be limited and readily mitigable.
- The Company initiated baseline studies in 2022 which focused on water and ecology components. Additional baseline work has been conducted which focused on avifauna, bats, and certain tree species as required by provincial regulators.
- The Impact Assessment Agency of Canada (IAAC) confirmed in writing that the Project was not subject to a federal review under the Impact Assessment Act (IAA) on December 6, 2023.
- The Project required registration under the Newfoundland and Labrador (NL) Environmental Protection Act (NL EPA). Atlas submitted an Environmental Assessment (EA) Registration document on February 28, 2024 to the NL Ministry of Environment and Climate Change (ECC) and received a conditional release from conducting an EA on April 19, 2024.
- The Project has evolved since the EA Registration submitted to the NL ECC and described to IAA in 2024. The main changes include an increase in production rate from 2.5 Mtpa to 4.0 Mtpa, re-alignment of surface infrastructure at the mine site, and changes to offsite infrastructure, namely adding a caisson or pile structure to the Turf Point marine terminal. While these changes are not expected to trigger additional environmental review, in-water work at the port may necessitate permitting under the federal *Fisheries Act*. In addition, a permit for dredging will need to be obtained by the port operator or their contractor.
- Several environmental permits are required and will be applied for in a phased approach. A permit register and high-level schedule have been developed for the Project.
- The Project is located within the town of St George's. The nearest Indigenous community is the Qalipu Mi'kmaq First Nation, with a central administrative office in Corner Brook, approximately 70 km to the north of the Project area. Some residents of St. George's report Indigenous ancestry.
- The Project represents a significant long-term economic opportunity for the community of St. George's and the surrounding area.
- Atlas Salt maintains a list of stakeholders and Indigenous communities and has engaged with local communities. Atlas, in association with independent consultants, has developed engagement plans to be implemented as the Project progresses and to support the environmental approval and permitting processes.
- Conceptual closure planning and a high-level closure costing has been developed for early works, and for the overall Project as part of this UFS. Closure plans and costs will need to be approved by the regulator and financial assurance provided prior to initiating Early Works, Capital Development and Commercial Production.



1.1.1.7 Risks and Opportunities

- Through the risk review process undertaken as part of the UFS, no major unique risks were identified that expose the Project Base Case to unreasonable risk. The risks identified are typical of large capital projects in the mining industry.
- The two principal technical risk are a material increase in capital costs and construction schedule delays due to inability to achieve the assumed advance rates during construction of the two declines and the related risk of encountering and controlling unanticipated volumes of ground water inflows during decline construction.
- Some of the risks associated with the Project, such as the penetration into the market, price of salt, and lead times on critical equipment, are open ended or beyond the control of the Project at this stage.
- A number of opportunities were identified that can only be realized during the Front-End Engineering and Design (FEED), Implementation and Operational phases of the Project.
- SLR considers the most significant opportunity to be the extension of the mine life based upon the conversion of Inferred Mineral Resources at depth and beyond the current resource extents, as well as identifying potential value-added salt products that could be eventually produced from the GAS Project.

1.1.2 Recommendations

The outcome of this UFS shows that the Project has significant economic potential. The QPs recommend that the Project be advanced to the Basic Engineering level of study, and that the environmental permitting process be further advanced. The QPs offer the following recommendations by work area. In certain areas, the recommendations have been split between those that are recommended as part of the next level of study, and those that are intended for longer-term Project development.

1.1.2.1 Geology and Mineral Resources

The QP recommends the following be considered as part of the next level of study, or future drilling programs and Mineral Resource updates:

- 1 Where possible, future drill holes should be completed at a larger drill core diameter to provide greater material for sampling and to reduce issues with core splitting and sampling.
- 2 Continue to maintain the more regular analytical sampling spacing applied in holes CC-8 and CC-9b.
- 3 Reconcile the geological model developed for mine access design work with the geological model developed for salt modelling and Mineral Resource estimation.
- 4 The QP recommends that Atlas consider obtaining a sub-set of bulk density measurements using the Archimedes immersion method on intact core samples to cross-check the gas pycnometer results.
- 5 The QP offers the following recommendations with respect to future QA/QC:
 - a) Increase the frequency of laboratory repeats to account for the difficulty in the collection of reliable field duplicates due to issues with core splitting.



- b) Obtain appropriate blank material, for example equivalent material used internally by Actlabs, for blind insertion into the sample stream by Atlas. This could be a commercially available blank or inert material obtained locally and crushed by Atlas.
 - c) Obtain additional infill and/or check samples in drill hole CC-5. Current Mineral Resource classifications consider that grade continuity between CC-5 and CC-2, spaced at approximately 600 m, is more variable than observed between other closely spaced drill holes.
- 6 Standardize geological records by re-photographing and re-logging older drill holes, particularly CC-1 and CC-5, to align them with the quality of data collected from recent drilling campaigns. While this work is not considered material to the current Mineral Resource estimate, the QP recommends it be undertaken by Atlas as part of routine data improvement to ensure consistency across the deposit.

1.1.2.2 Mining and Mineral Reserves

For the next level of study, the QP recommends the following:

- 1 Advance the Project planning towards construction and production through further engineering and definition of the capital and operating costs.
- 2 Advance pre-production mine development planning and scheduling through further engineering and definition.
- 3 Review sill and barrier pillar dimensions to maximize the extraction ratio.
- 4 Complete detailed design of the auxiliary ventilation systems to support production level development and production activities at the continuous mining units.
- 5 Undertake further geomechanical and hydrogeological investigations including:
 - a) Additional packer testing in Red Beds in the areas of the planned declines.
 - b) Installation of wells for continuous, long-term monitoring of groundwater levels.
 - c) Transient groundwater modelling.
 - d) Incorporate updated hydrogeological conditions into decline geotechnical design.
 - e) Near surface geotechnical investigation around the mine terrace and boxcut area.
- 6 Ongoing definition of the location and character of the interburden layers and larger mudstone inclusions.
- 7 Update the estimate of inflows and subsequent development plans for the handling of groundwater inflows in the decline.

As part of ongoing project development, the QP recommends the following:

- 1 Review the production mining cycle and short-term production sequence to maximize the productivity of the mining operation while maintaining grade blending capability.
- 2 As part of mine optimization work, consider automation systems including:
 - a) Truck dispatch systems to optimize production.
 - b) Automated control of the CM alignment (horizontal and vertical).
- 3 Develop plans and procedures for:
 - a) Determination of the salt grades for production planning.



- b) Grade control to meet product specifications.
- 4 Implement InSar surface deformation monitoring two years prior to the commencement of mining.
- 5 Develop a ground control manual for development and operations.
- 6 Evaluate of the ventilation requirements based upon a waste heat analysis.
- 7 Consider “ventilation on demand” to supply fresh air when and where required to suit the mining activities.
- 8 Establish ventilation monitoring and control systems to demonstrate that the air quality is suitable and to reduce fan operation.
- 9 Complete detailed design of the process plant ventilation system.
- 10 Consider developing processing and marketing plans for the sale of 1-Salt horizon that will be exposed through pre-production mine development.

1.1.2.3 Mineral Processing

While the engineering completed during the feasibility study is sufficient to support the capital cost estimate at AACE Class 3 level, the QP recommends that the following be considered as part of the next level of engineering:

- 1 Refine the process plant layout while considering the configuration of all transfer points. Vertical drops through chutes into crushers and onto screens and conveyors should be avoided to minimize fines generation and airborne dust. Chutes should be designed to provide sloped transfers at a high enough angle that will prevent the chutes from blocking up, while at a low enough angle to minimize impacts by ensuring that transfers are by sliding rather than falling streams. Consideration should be given to the inclusion of low-friction linings in all transfer chutes.

1.1.2.4 Infrastructure

As part of the next level of study, the QP recommends the following:

- 1 Conduct further geotechnical investigations around the area of the proposed site terrace, to facilitate further engineering works related to foundations of buildings and stockpiles.
- 2 Conduct geochemical testing of the overburden and red beds, to determine whether there are any deleterious elements that could impact the water effluent treatment system.
- 3 Continually update the site-wide water balance.
- 4 Complete hydrogeological testing of the red beds and overburden in the area of the surface facilities.
- 5 Review overland conveyor alignment routes and site access routes, and determine whether any easements, right of ways, or land purchases are required to achieve the selected alignment.
- 6 Review crossing requirements for the overland conveyor with the town of St. George’s and other stakeholders to determine optimum crossing locations and methods.

As part of ongoing project development, the QP recommends the following:



- 1 Conduct studies to identify suitable road construction material in the vicinity of the Project.
- 2 Conduct a logistics and traffic study to determine the impact of construction on the town.
- 3 Conduct further discussions with NL Power to confirm and undertake any modifications required at the St. George's substation.
- 4 Conduct further review with the town of St. George's, to confirm suitability for the Project to connect services to the municipal sewer and water systems.
- 5 Install a weather station at the Project to gain site-specific meteorological conditions, which will assist in infrastructure planning.
- 6 Develop a commercial agreement with the port owners that summarizes the terms on which Turf Point Port can be used by Atlas to export salt.

1.1.2.5 Marketing

In order to further develop the marketing and logistics plan in the next level of study, the QP recommends the following:

- 1 Meet with potential customers and distributors and arrange letters of intent or other documentation that will lead to formal supply contracts.
- 2 Meet with Canadian and international shipping companies to develop letters of intent or contracts for shipping and logistics.
- 3 Further investigate transportation and distribution options to customers inland of the destination ports, particularly in USEC markets.

1.1.2.6 Environment

As part of ongoing project development, the QP recommends the following:

- 1 Obtain confirmation from provincial and federal authorities that the changes to the Project definition do not trigger additional environmental review obligations.
- 2 Confirm what, if any, permitting requirements may be associated with in-water work at the Turf Point marine terminal, and incorporate these activities into the Project execution schedule as appropriate.
- 3 The geology of the salt deposit suggests that Project development is unlikely to result in the generation of acid rock drainage/metals leaching (ARD/ML), owing mainly to the lack of sulphide mineralization. Carry out limited sampling and static geochemical characterization of the overburden/till, sedimentary rocks and conglomerates in the "Red Beds" as well as in the interburden material in the halite during the construction phase.
- 4 Implement the Indigenous community engagement plan, as well as the general community and stakeholder (including relevant regulators) engagement plan. Ensure that sufficient information is provided to the Qalipu Mi'kmaq First Nation, relevant communities, and other stakeholders regarding potential effects from the proposed Project changes during the engagement process.
- 5 Develop frameworks for community support and agreements, investments, and initiatives with local councils and organizations aimed at responding to the community needs and concerns related to the Project.



- 6 Compile closure plans for Capital Development and Commercial Production in advance of these phases and ensure that the financial assurance is in place per applicable legal requirements.

1.1.2.7 Budget

To move the Project forward, the following budget is proposed, as shown in Table 1-1.

Table 1-1: Proposed Work Budget

Item	Program	Cost (C\$000)
1	Advance Engineering, Procurement, and Pre-Construction Work Packages	2,500
2	Geotechnical and Hydrogeological Program	3,000
3	Establish Site Utilities and Power	1,500
4	Owner's Team Project Management and Permitting	325
	Total	7,325

It is noted that the capital costs described in the UFS are inclusive of items #1, #3 and #4, and exclusive of items #2.

1.1.2.8 Project Execution Plan

It is recommended that the core GAS Project team be resourced and established as soon as possible to advance the Project execution planning following the completion of the UFS. The key activities of the Project team will be the following:

- 1 Appoint remaining members of the Integrated Project Delivery (IPD) group.
- 2 Establish a detailed short-term 100 day and 300 day plan.
- 3 Conduct updated geotechnical and hydrogeological programs along the revised centreline of the declines.
- 4 Develop a work package and award the early works construction package.
- 5 Establish site utilities, temporary services, and power in advance of construction.
- 6 Continue developing the environmental permitting documents for the capital phase, and in parallel, develop permits for commercial production phase.
- 7 Review existing safety plan and associated systems to ensure safe and successful project execution .
- 8 Further define the Procurement, Logistics, and Warehousing Plan in advance of construction commencement.
- 9 Advance and develop more detail to the UFS schedule and cost estimates, including updating work packages.
- 10 Execute applicable recommendations from the UFS in advance of the next phase of engineering.
- 11 Assign work packages to appropriate IPD partners, contractors, or vendors.



- 12 Identify early work package engineering and execution in advance of the boxcut construction and electrical substation installations.
- 13 Complete value-engineering studies on:
 - a) Mining development rates and methodologies.
 - b) Conveyor advancement with decline drives.
- 14 Update the Quality Management Plan, including QA/QC strategy, and document controls, based on the outcome of the FS.
- 15 Further develop and refine the Operational Readiness plan based on updates to the FS.
- 16 Update the long-lead equipment register and consider placing deposits on key long-lead items based on advanced engineering designs.

The purpose of the recommended tasks is to reduce the risk to safety, schedule, cost and quality during the project execution period.

1.2 Economic Analysis

The economic analysis contained in this Technical Report is based on information available to SLR as of Q3 2025. For the purposes of the cash flow model and applying escalation, SLR has assumed that the Project would commence construction in the year following the base date, and have a four year construction period. There is no certainty that these dates are achievable.

An after-tax cash flow projection has been generated from the life of mine (LOM) production schedule and capital and operating cost estimates. A summary of the key criteria is provided below.

1.2.1 Economic Criteria

1.2.1.1 Revenue

- Three-year ramp-up to achieve steady state production, with Year 1 production of 1.6 Mtpa, Year 2 production of 2.6 Mtpa, Year 3 production of 3.7 Mtpa, followed by 4.0 Mtpa from Year 4 onward to Year 22, and ramp down for the last 2.25 years of operations.
- Product grade maintained greater than 95% NaCl for the entirety of operations, with no premium applied for higher grade material.
- Average price per tonne FOB Turf Point - C\$81.67 (Q3 2025 basis).
- Price escalated at 4% from the base date for a period of five years and 2% per year thereafter, which is a consistent approach to other publicly available technical reports and publicly available pricing information on major North American rock salt mines.
- 3% net production royalty (gross revenue less certain operating costs and deductions) payable to Vulcan Minerals Inc. (Vulcan Minerals).
- Revenue is recognized at the time of production.



1.2.1.2 Costs

- Pre-production period: 48 months based on the commencement of engineering, procurement of long-lead items, and early-works construction, and formal final investment decision (FID).
- Mine life: 24.25 years.
- LOM production plan as summarized in Table 1-3.
- Capital and operating costs that have a Q3 2025 basis.
- Capital and operating costs escalated at 2% per year from the base date.
- Pre-production capital cost of C\$589.1 million (including escalation).
- LOM sustaining capital of C\$609.1 million (including escalation).
- Reclamation and closure cost of C\$27.1 million (including escalation).
- Average operating cost over the mine life is C\$28.17 per tonne shipped FOB Turf Point (including escalation).

1.2.1.3 Taxation and Royalties

The cash flow includes a 3% net production royalty to Vulcan Minerals calculated as 3% of the gross revenue less port charges, processing costs, and the NL Mining Tax. Taxes include the NL Mining Tax plus federal and provincial income taxes. The QP has relied on Atlas and its advisors for the calculation of taxes.

1.2.2 Cash Flow Analysis

Considering the Project on a stand-alone basis, the undiscounted pre-tax cash flow totals \$6,663 million over the initial 24.25-year mine life. A summary of economic results such as net present value (NPV) and internal rate of return (IRR), both pre-tax and after-tax, is presented in Table 1-2. The annual cash flow is shown in Table 1-3. The annual pre-tax cash flow is shown in Figure 1-1.

Table 1-2: Summary of Economic Results

Metric	Units	Value
Pre-Tax Payback Period	yrs	3.6
Pre-Tax IRR	%	27.1%
Pre-tax NPV at 5% discounting	C\$000	2,758,831
Pre-tax NPV at 8% discounting	C\$000	1,682,806
Pre-tax NPV at 10% discounting	C\$000	1,219,722
After-Tax Payback Period	yrs	4.2
After-tax IRR	%	21.3%
After-tax NPV at 5% discounting	C\$000	1,574,169
After-tax NPV at 8% discounting	C\$000	920,433
After-tax NPV at 10% discounting	C\$000	609,418

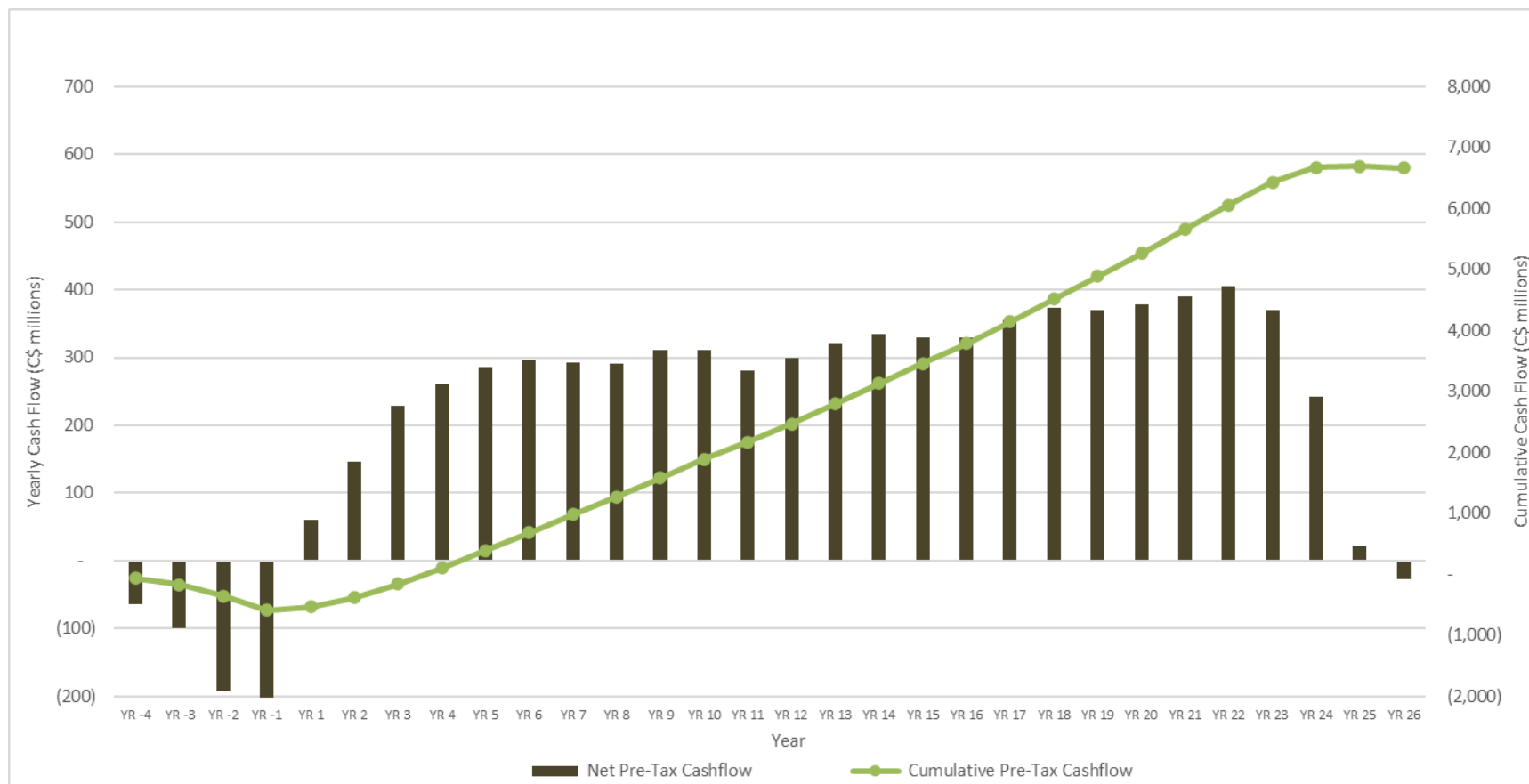


Table 1-3: After-Tax Cash Flow Summary

SLR - Cash Flow Summary																				
Atlas Salt - Great Atlantic Salt																				
Date: Sep 2025	UNITS	TOTAL	YR -4	YR -3	YR -2	YR -1	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	Total/Avg YR 11-15	Total/Avg YR 16-20	Total/Avg YR 21-25	
MINING																				
Years of Production	Yrs	24.3					1	1	1	1	1	1	1	1	1	1	5	5	4.25	
Underground																				
Production	Mtpa	95.03					1.70	2.78	3.91	4.19	4.20	4.20	4.20	4.20	4.20	4.21	20.99	21.02	15.21	
Minimum Grade	% NaCl	95.9%					97.3%	96.4%	95.7%	95.3%	95.7%	96.0%	95.9%	95.8%	95.2%	95.3%	95.6%	95.9%	96.5%	
Waste	Mtpa	0.72					0.03	0.09	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.05	0.36	0.09	0.06	
Total Moved	Mtpa	95.75					1.73	2.87	3.92	4.20	4.21	4.20	4.21	4.22	4.21	4.26	21.35	21.11	15.27	
Cumulative Salt	MT						1.70	4.48	8.40	12.58	16.79	20.99	25.20	29.40	33.60	37.81	66.60	79.82	95.03	
PROCESSING																				
Material Processed	Mtpa	95.0					1.70	2.78	3.91	4.19	4.20	4.20	4.20	4.20	4.20	4.21	20.99	21.02	15.21	
Head Grade	% NaCl	95.9%					97.3%	96.4%	95.7%	95.3%	95.7%	96.0%	95.9%	95.8%	95.2%	95.3%	95.6%	95.9%	96.5%	
Contained NaCl	Mtpa	91.1					1.86	2.86	3.75	3.99	4.03	4.04	4.03	4.03	4.00	4.01	20.08	20.10	14.88	
Losses from Mine Face to Ship	%	5%					5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
Payable Rock Salt	Mtpa	90.3					1.82	2.84	3.72	3.98	3.99	3.99	3.99	3.99	3.99	4.00	19.94	19.97	14.45	
REVENUE																				
Market Price																				
Weighted Average Market Price (FOB Turf Point)	CS / t shipped	118.49					99.37	97.49	96.75	96.51	100.48	102.49	104.54	106.63	108.76	110.94	117.78	130.03	103.80	
Total Gross Revenue	CS '000	10,697,020					186,765	257,362	359,740	391,901	401,369	409,413	417,522	425,728	434,079	443,294	2,345,678	2,596,799	2,650,151	
Total Charges + Royalties	CS '000	822,928					13,255	19,314	26,562	29,706	30,366	30,973	31,590	32,216	32,853	33,532	177,824	196,470	189,258	
Net Revenue	CS '000	9,874,093					147,510	238,046	333,178	362,195	371,022	378,440	385,932	393,512	401,226	409,762	2,171,054	2,400,329	1,861,865	
Unit NR	CS / t milled	103.90					86.62	85.66	85.13	86.49	88.24	90.00	91.80	93.63	95.51	97.42	103.42	114.19	123.71	
OPERATING COST																				
Total Operating Cost (with escalation)	CS '000	1,985,764					48,008	57,352	67,746	69,236	70,589	71,689	74,204	74,688	76,047	77,714	419,580	467,841	413,044	
Total Onsite Costs	CS / t shipped	22.00					-	21.74	18.22	17.40	17.67	17.04	18.58	18.71	19.05	19.45	21.04	23.43	28.58	
Operating Cashflow	CS '000	7,888,328					101,502	180,696	265,432	292,959	300,433	306,771	311,728	316,823	326,179	332,048	1,751,468	1,932,488	1,468,841	
CAPITAL COST																				
Direct Cost																				
Mining	CS '000	203,486	39,343	40,129	61,388	62,626														
Processing	CS '000	42,133	-	-	16,653	25,480														
On-Site Infrastructure	CS '000	49,985	4,784	4,880	14,933	25,367														
Off-Site Infrastructure	CS '000	81,922	3,925	16,013	24,500	37,485														
Total Direct Cost	CS '000	377,536	48,052	61,023	117,485	150,977														
Other Costs																				
Indirect Costs	CS '000	83,724	8,054	16,430	29,327	29,914														
Owner's Costs	CS '000	50,352	4,834	7,396	17,602	20,519														
Subtotal Costs	CS '000	511,612	69,940	84,848	164,414	201,410														
Contingency	CS '000	77,487	3,716	15,161	27,063	31,547														
Initial Capital Cost	CS '000	589,100	64,656	100,009	191,477	232,958														
Sustaining (with escalation)	CS '000	609,094	-	-	-	-	41,796	34,444	37,538	32,314	15,082	10,778	19,707	27,420	14,922	20,542	187,039	126,736	40,776	
Reclamation and Closure	CS '000	27,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Capital Cost	CS '000	1,225,274	64,656	100,009	191,477	232,958	41,796	34,444	37,538	32,314	15,082	10,778	19,707	27,420	14,922	20,542	187,039	126,736	67,856	
CASH FLOW																				
Net Pre-Tax Cashflow	CS '000	6,663,054	(64,656)	(100,009)	(191,477)	(232,958)	59,707	146,212	227,894	260,646	285,351	295,993	292,020	291,403	310,257	311,506	1,564,429	1,805,751	1,400,985	
Cumulative Pre-Tax Cashflow	CS '000		(64,656)	(164,665)	(356,142)	(589,100)	(529,393)	(383,181)	(155,286)	105,359	380,710	686,703	978,723	1,270,126	1,580,383	1,891,889	3,456,318	5,262,069	6,690,135	
Taxes																				
NI Mining Tax	CS '000	999,871	-	-	-	-	-	8,932	29,329	33,853	35,657	37,554	38,906	40,117	43,276	44,604	230,356	259,566	197,723	
Income Tax (Federal, Provincial)	CS '000	1,718,565	-	-	-	-	-	-	2,325	61,894	65,825	69,728	72,523	74,920	76,512	78,892	408,895	457,783	349,698	
Total Taxes	CS '000	2,718,436	-	-	-	-	-	8,932	31,653	95,647	101,482	107,282	111,429	115,037	119,787	123,496	639,051	717,349	547,421	
After-Tax Cash Flow	CS '000	3,944,588	(64,656)	(100,009)	(191,477)	(232,958)	59,707	137,260	196,241	165,099	183,869	188,711	180,591	176,366	190,470	188,010	925,378	1,088,402	860,845	
Cumulative	CS '000		(64,656)	(164,665)	(356,142)	(589,100)	(529,393)	(392,113)	(195,872)	(30,773)	153,096	341,807	522,398	698,764	889,234	1,077,244	2,002,622	3,091,024	3,971,669	
PROJECT ECONOMICS																				
Pre-Tax																				
Payback Period	Yrs	3.6																		
Pre-Tax IRR	%	27.1%																		
Pre-tax NPV at 5% discounting	CS '000	2,758,831																		
Pre-tax NPV at 8% discounting	CS '000	1,682,806																		
Pre-tax NPV at 10% discounting	CS '000	1,219,722																		
After-Tax																				
Payback Period	Yrs	4.2																		
After-tax IRR	%	21.3%																		
After-tax NPV at 5% discounting	CS '000	1,574,169																		
After-tax NPV at 8% discounting	CS '000	920,433																		
After-tax NPV at 10% discounting	CS '000	609,418																		



Figure 1-1: Annual Pre-Tax Cash Flow



1.2.3 Sensitivity Analysis

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities:

- Salt price
- Production losses
- Operating costs
- Pre-production capital costs

Pre- and after-tax 8% NPV and IRR sensitivity over the base case has been calculated for -20% to +35% variations. The sensitivities are shown in Figure 1-2 to Figure 1-5 and Table 1-4.

Figure 1-2: Pre-Tax 8% NPV Sensitivity Analysis

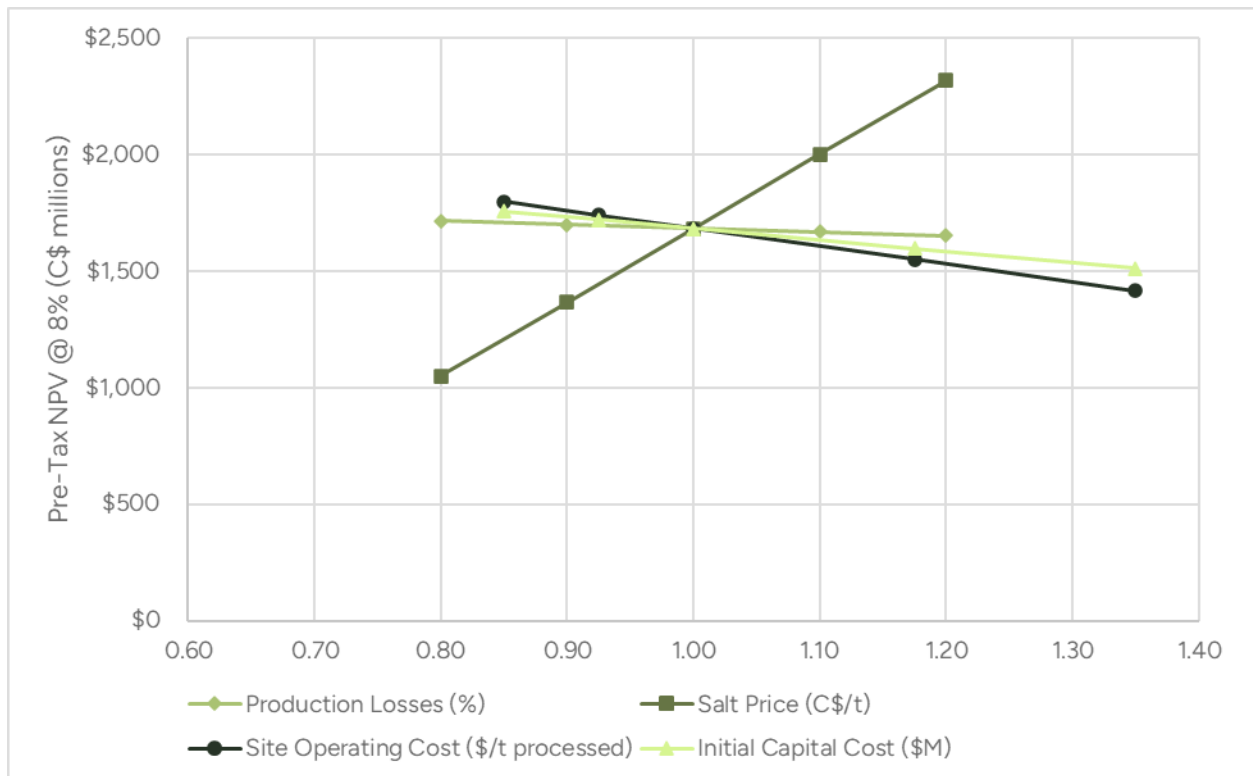


Figure 1-3: After-Tax 8% NPV Sensitivity Analysis

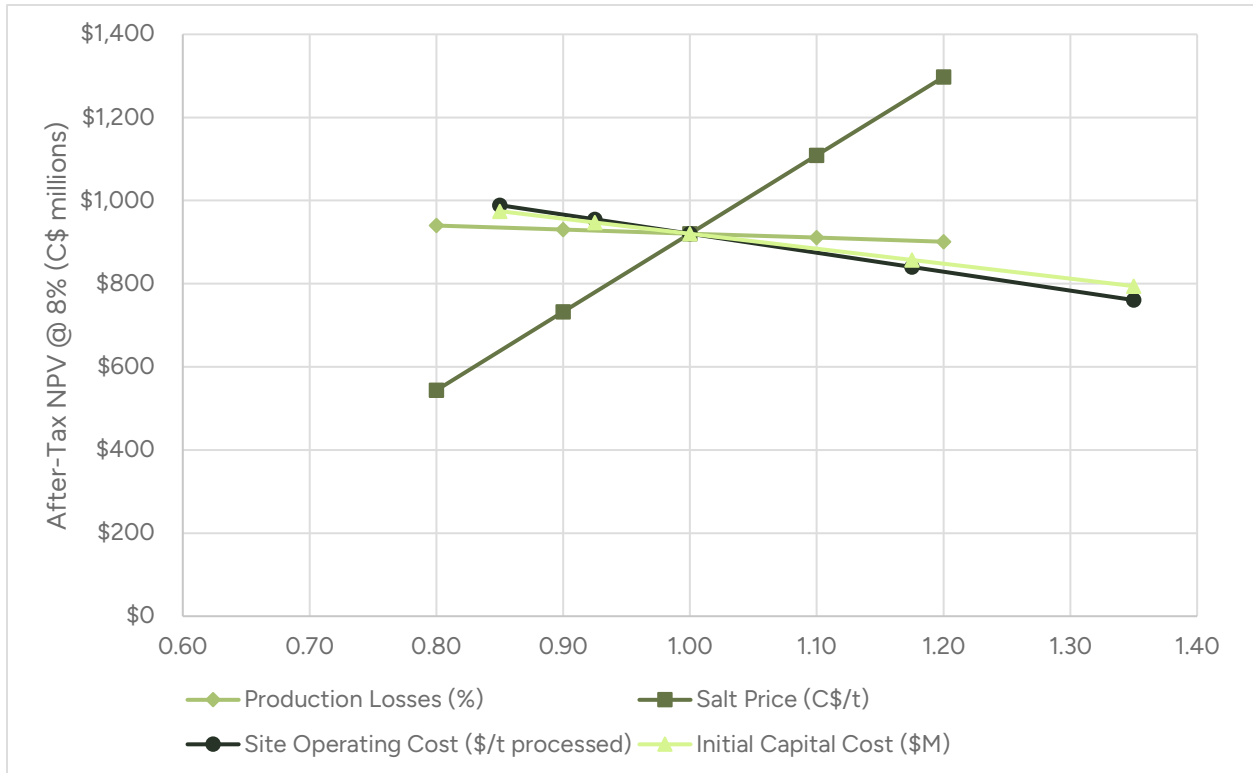


Figure 1-4: Pre-Tax IRR Sensitivity Analysis

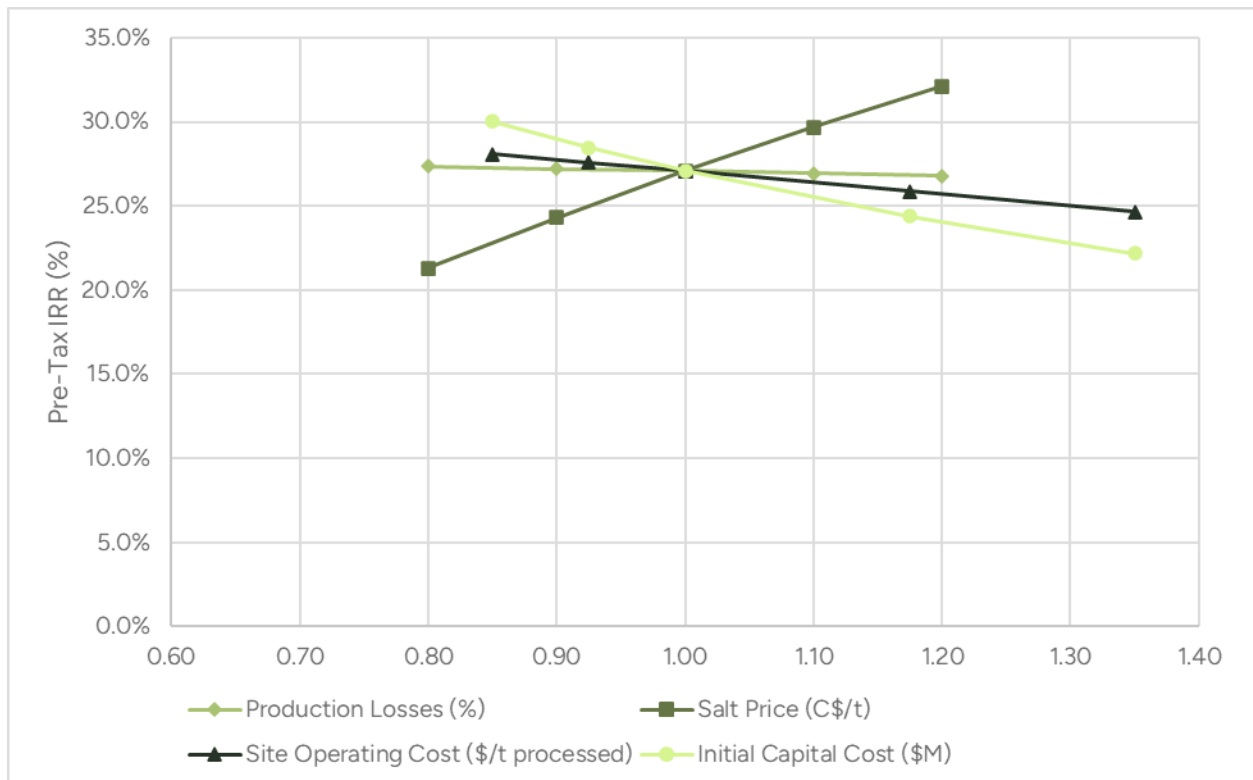


Figure 1-5: After-Tax IRR Sensitivity Analysis

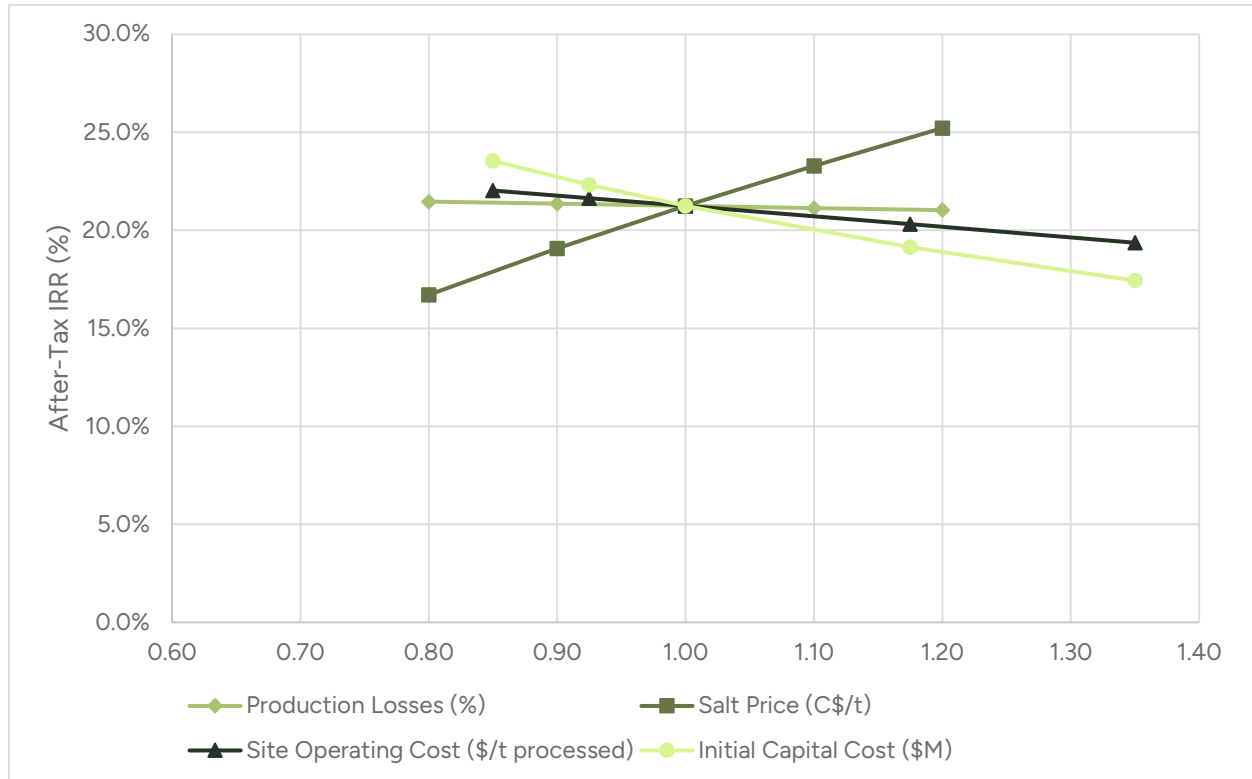


Table 1-4: Sensitivity Analyses

	Pre-Tax		After-Tax	
Production Losses (%)	NPV at 8% (\$M)	IRR	NPV at 8% (\$M)	IRR
4.00%	\$1,716	27.4%	\$940	21.5%
4.50%	\$1,699	27.2%	\$930	21.4%
5.00%	\$1,683	27.1%	\$920	21.3%
5.50%	\$1,666	26.9%	\$911	21.1%
6.00%	\$1,650	26.8%	\$901	21.0%
LOM Salt Price (C\$/t)	NPV at 8% (\$M)	IRR	NPV at 8% (\$M)	IRR
94.79	\$1,050	21.3%	\$544	16.7%
106.64	\$1,366	24.3%	\$732	19.1%
118.49	\$1,683	27.1%	\$920	21.3%
130.33	\$1,999	29.7%	\$1,109	23.3%
142.18	\$2,316	32.1%	\$1,297	25.2%
Operating Cost (\$/t processed)	NPV at 8% (\$M)	IRR	NPV at 8% (\$M)	IRR
\$23.94	\$1,798	28.1%		
\$26.06	\$1,740	27.6%	\$989	22.0%
\$28.17	\$1,683	27.1%	\$955	21.6%
\$33.10	\$1,548	25.9%	\$920	21.3%
\$38.03	\$1,414	24.6%	\$841	20.3%
Initial Capital Cost (\$M)	NPV at 8% (\$M)	IRR	NPV at 8% (\$M)	IRR
\$500.7	\$1,756	30.0%	\$975	23.5%
\$544.9	\$1,719	28.5%	\$947	22.3%
\$589.1	\$1,683	27.1%	\$920	21.3%
\$692.2	\$1,598	24.4%	\$857	19.1%
\$795.3	\$1,512	22.2%	\$794	17.4%



1.3 Technical Summary

1.3.1 Property Description and Location

The Project is located in Western Newfoundland, Canada, approximately 15 km south of the town of Stephenville, and in the vicinity of the town St. George's. The central point of the Project is at longitude 58.529, latitude 48.402, or 387,550 m East, 5,362,650 m North (NAD83 Zone 21 North).

1.3.2 Land Tenure

The GAS Project is located within a block of claims totalling 7,275 ha, with the GAS deposit specifically located on Mineral Licence 0227183M. Atlas is the 100% owner of the Project.

1.3.3 Existing Infrastructure and Local Resources

The deposit is located within the town limits of St. George's, a town incorporated in 1965. The St. George's area had been a fishing village dating to the seventeenth century. As of 2021, the town had a population of approximately 1,200 inhabitants. The town has a school, fire hall, community hall, minor commerce, a medical clinic, and a recreation centre. The town is located approximately 24 km by road from Stephenville, NL. Stephenville is one of the larger centres in western Newfoundland, with a direct population of 6,500 as of 2021. The services of Stephenville include a modern hospital, year-round port, government institutions, a community college (College of the North Atlantic), provincial detention centre, community centres, and more established commercial centre. Corner Brook is the largest community in western Newfoundland with a metro population of 30,000 as of 2021 and is approximately 90 km away from the deposit. St. George's, Stephenville, and Corner Brook are all situated in proximity to the Trans-Canada Highway (Hwy #1). The closest commercial airport to the Project is located in Deer Lake, NL, located approximately 140 km by road to the northeast.

An all-weather gravel haul road was constructed on the GAS Property during historical mining operations to connect the Flat Bay Gypsum Quarry with the Turf Point Port. Although the road is private, permission has been granted by the owner to Atlas to use for property access. Based on the three site visits SLR undertook, it appears that members of the public regularly use this private road.

The nearest power lines in relation to the deposit consist of the St. George's substation, owned by NL Power. This is located within the town of St. George's, approximately one kilometre away from the property.

1.3.4 History

Geological mapping of the Bay St. George Sub-Basin has been historically undertaken since the mid-1970s. Exploration drilling across the region was undertaken by numerous owners from the 1950s until the late 1990s. The focus of early exploration was on understanding the full extent and structure of Carboniferous strata of the Sub-Basin, later with a view to assessing hydrocarbon and mineral potential of the region. Geological mapping and geochemical surveying have been supplemented by numerous geophysical surveys including a range of airborne magnetics, gravity, radiometric, and most recently seismic surveying.

Within the current Atlas licences, historical exploration has largely been focused on gypsum quarrying, with the Flat Bay Gypsum Quarry having been operated since the 1950s. Other



gypsum quarries include those at Fischell's Brook during the 1990s and at Coal Brook during the early 2000s.

Red Moon Potash Inc. was incorporated on June 15, 2011, for the purpose of managing the industrial mineral exploration activities of Vulcan Minerals. As of August 15, 2012, Red Moon was a wholly owned subsidiary of Vulcan Minerals with 100%-owned mineral licences transferred to Red Moon for common shares and a 3% net production royalty in 2012. In August 2021, Red Moon was renamed Atlas Salt with 36% ownership held by Vulcan Minerals.

Production of gypsum has taken place within the GAS Property at the Flat Bay Quarry as well as at the nearby Fischell's Brook and Coal Brook quarries. The Flat Bay Quarry is located directly southwest of the GAS halite deposit, while Fischell's Brook is located approximately 18 km southwest of the deposit.

No historical halite Mineral Resource estimates have been prepared by previous owners, and no halite production has taken place within the GAS Property.

1.3.5 Geology and Mineralization

The GAS Project is located within the Bay St. George Sub-Basin and is underlain by a laterally extensive, stratiform sedimentary evaporite deposit formed in a restricted marine basin during the Carboniferous. The basin represents the northeastern extension of the regional Maritimes Carboniferous Basin of southwest Newfoundland. This basin is an extensive geological basin complex underlying the Gulf of St Lawrence and surrounding areas. During sub-basin formation, differential extension and deformation has resulted in varied tectonic features across the region, including the Flat Bay anticline. Sub-basins are commonly separated by basement highs/ridges, and sedimentation in depressions and fault-bound basins across the region has been irregular.

The Bay St George Sub-Basin has been interpreted to be approximately 130 km long and 20 km wide. The total sedimentary succession in the Sub-Basin is estimated to be approximately 10 km comprising Carboniferous strata. Depositional environments have predominantly been terrestrial, although the Bay St George Sub-Basin halite is a basin-wide, sedimentary salt deposit on the basis of its wide lateral extent and overall stratigraphy which includes sedimentary strata from a range of depositional environments including marine, shallow marine and salina, to fluvial and deltaic facies. Salt formation within sedimentary environments occurs through the evaporation of seawater within shallow enclosed or isolated basins. Basin-wide basin deposits typically result in thick accumulations of evaporites where minor fluctuations in seawater, freshwater, or terrigenous sediment influxes can result in major depositional changes.

Within the Project area, the Codroy Formation of the Codroy Group is the dominant stratigraphic unit and hosts the halite deposit that is the focus of the GAS Project. Bedrock exposures of the Codroy Formation occur across the Project area, including at the Flat Bay Gypsum Quarry approximately 3 km southwest of the GAS area. The halite is overlain by a thick succession of sandstones, siltstones, mudstones, and conglomerates (Red Beds) and is immediately underlain by a basal anhydrite; both contacts with the major halite horizons are relatively sharp. Two interburden layers are present, and the salt members are referred to as follows:

- 1-Salt is below the Red Beds and overlies the first interburden layer.
- 2-Salt is between the two interburden layers.
- 3-Salt is below the second interburden layer and overlies the basal anhydrite.



1.3.6 Exploration Status

Exploration of the GAS deposit by Vulcan Minerals (now Atlas) has comprised several phases of drilling informed by numerous seismic surveys. The first drill hole within the deposit was completed in 2002 and intended to test geological and geophysical interpretations of a massive halite deposit within the area after initial seismic surveying around the Flat Bay Gypsum Quarry in 1998. Further seismic surveying through the GAS deposit was completed in 2010 and interpretations of reflectors were subsequently tested through drilling of four drill holes in 2013 and 2014 by Vulcan Minerals. Data from this exploration was used for a maiden Mineral Resource estimate in 2016.

In 2022 and 2023, Atlas completed an additional four drill holes plus two that were terminated prior to reaching salt within the GAS deposit area. The data has been combined with previous drill hole and seismic survey data to inform an updated Mineral Resource estimate by SLR.

Other Vulcan Minerals drilling across the region has included four drill holes from 1999 to 2006 to evaluate the hydrocarbon potential within the regional Carboniferous strata, and a further eight holes between 2009 and 2012 around the Flat Bay Gypsum Quarry to test the gypsum thickness within the remaining extent of the quarry.

Of the 20 geotechnical holes drilled in 2024 and 2025, GT-18 and GT-19 partially intersected the upper portion of the Salt-1 horizon, confirming its contact with the overlying Red Beds at a slightly higher elevation than geological model interpretation. These intersections support the geological interpretation and do not materially affect the Mineral Resource estimate.

1.3.7 Mineral Resources

CIM (2014) definitions were used for Mineral Resource classification. Table 1-5 provides a summary of the Mineral Resource estimate by SLR, with an effective date of September 30, 2025. Indicated Mineral Resources are estimated to total 383 Mt averaging 96.0% NaCl containing 368 Mt of NaCl. In addition, Inferred Mineral Resources are estimated to total 868 Mt averaging 95.2% NaCl containing 827 Mt of NaCl. The estimate is unchanged from the previous estimate dated May 11, 2023.

Table 1-5: Summary of Mineral Resource Estimate – September 30, 2025

Category	Horizon	Tonnage (Mt)	Grade (NaCl %)	Contained NaCl (Mt)
Indicated	1-Salt	-	-	-
	2-Salt	160	95.9	154
	3-Salt	223	96.0	214
	Total	383	96.0	368
Inferred	1-Salt	195	95.3	186
	2-Salt	288	95.3	274
	3-Salt	385	95.0	366
	Total	868	95.2	827

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated without a reporting cut-off grade. Reasonable Prospects for Eventual Economic Extraction were instead demonstrated by reporting within Mineable "Stope" Optimised (MSO) shapes, with a minimum



height of 5 m, minimum width of 20 m, length of 40 m, and minimum grade of 90% NaCl, with a 5 m minimum pillar width between shapes.
3. Bulk density is 2.16 t/m ³ .
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Mineral Resources are inclusive of Mineral Reserves.
6. Salt prices are not directly incorporated into the Mineral Resource MSO minimum target grades, however, the mean Mineral Resource grades exceed the 95.0% NaCl (± 0.5%) specification outlined in ASTM D632-12.
7. Numbers may not add due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

1.3.8 Mineral Reserves

Mineral Reserves for the Project were estimated by SLR under the direction of the QP as part of the UFS. Table 1-6 summarizes the GAS Mineral Reserve estimate as of September 30, 2025.

Table 1-6: Summary of Mineral Reserve Estimate –September 30, 2025

Category	Salt Horizon	Tonnage (Mt)	Grade (%NaCl)	Contained NaCl (Mt)
Probable	2-Salt	39.3	95.9%	37.6
	3-Salt	55.8	95.9%	53.5
Total		95.0	95.9%	91.1

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a cut-off grade of 90% NaCl.
3. Salt prices are not directly incorporated into the Mineral Reserve designs, however, the mean Mineral Reserve grades exceed the 95% NaCl (±0.5%) specification outlined in ASTM D632-12.
4. A minimum mining height of 5.0 m and width of 17.0 m were used for production rooms.
5. Sterilization zones of 8.0 m below the top of salt and 5.0 m above the bottom of salt have been applied.
6. A mining extraction factor of 100% was applied to all excavations.
7. Bulk density is 2.16 t/m³.
8. Planned process recovery is 95%.
9. Numbers may not add due to rounding.

The QP is not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate.

Mineral Reserves were estimated by the application of mining factors to the Indicated Mineral Resources. A minimum mining thickness of five metres was used in the planning. The mine designs and economic considerations in the 2025 UFS support the Mineral Reserve estimates.

Only Indicated Mineral Resources were converted to Mineral Reserves. No Inferred Mineral Resources were converted to Mineral Reserves.

1.3.9 Mining Method

Mining designs, development plans, and schedules have been prepared for a 4.0 Mtpa mechanized room and pillar underground mining operation. Salt will be mined using CMs and hauled by truck to a feeder breaker and conveyor system to move material to a crushing and screening plant located within the underground mine. The mining equipment will be



mechanized using battery electric vehicles (BEV) to the extent possible. The underground mine consists of two declines, a plant and infrastructure level, and seven production levels. The initial mining level will be the 320 Level (approximately 320 m below surface) and the deepest level will be the 536 Level (approximately 536 m below surface).

Geotechnical test results support the assessment of the geotechnical conditions expected in the decline development through the Red Beds. The test work was completed on material from drill holes CC6, CC7, D1, TH1, and TH2. Geotechnical test results from holes CC8 and CC9 support the geotechnical analysis of the salt horizon. The selected pillar width/height ratio, initially taken from benchmarking with similar mines and rule of thumb estimates, have been confirmed by the updated analysis.

An assessment of the empirical pillar stress/strength calculation methods indicate that the pillars are sized appropriately for the upper four working levels. In lower levels the pillars may behave in a yielding manner, which can be accommodated and managed through instrumentation and support. The 425 m mining level and deeper are due to be mined later in the mine life, allowing for engineering improvements to the design as the ground characteristics and stresses are better understood. The conceptual predictions indicate that there will be minimal surface subsidence issues. Typical to low closure rates are expected, due to the low ground temperature gradient at GAS.

The twin declines from surface are approximately 1,400 m in length to the 240 Level and designed at a gradient of -16%. In 2024 and 2025, a geotechnical investigation program, which consisted of 20 boreholes, was completed that improved the geological and geotechnical knowledge along the mine access corridor and aided in mine access design. In the initial development the declines will be extended to the 320 Level and in the future the declines will be extended as needed to the subsequent six mining levels. The declines will require a finished face area of at least 42 m² based on mine ventilation requirements.

Room and pillar production mining will be executed in five metre high cuts, with up to three bench cuts taken below the first, resulting in a maximum room height of 20 m. The pillars will be 25 m square pillars separated by 17 m wide rooms cut in three passes with the CM. Each 20 m thick mining level will be separated from the next by 16 m thick horizontal sill pillars.

An eight metre salt pillar is left between the production heading roof and the overlying Red Beds or interburden and a five metre thick salt pillar is left between the floor of the production drive and the top of any interburden layers.

Each level will be mined using CMs that can work independently in different areas of a production level, permitting blending of the mine production to maintain the minimum head grade. The top mining level will be rock bolted. After the uppermost level is developed to an edge, the subsequent cuts can be mined without ground support.

The resource model was reviewed in mine planning software to assess the distribution of the tonnages by level and by grade to select an appropriate level upon which to commence mining. The estimated volume of mineable salt increases with depth from surface and the average grade of the deposit decreases with depth. Laterally the deposit is thinner to the southwest. As described above, there are three salt horizons, 1-Salt, 2-Salt, and 3-Salt separated from one another by interburden layers.

The 1-Salt horizon was found to have a “pillow” shape about the CC4 drill hole, which limited the horizontal extent of the salt at this level. The presence of low-grade NaCl through the centre of the horizon further reduced the potentially mineable volume when pillars above and below the



mudstone layer were considered. For these reasons, the 1-Salt remained in the Inferred Mineral Resource category and was therefore not included in the production plan.

The 2-Salt and 3-Salt horizons were evaluated using Deswik mine planning software and the tonnage per five metre interval was evaluated from the top of the horizons to the base. Above the 320 Level, there was insufficient tonnage to sustain the planned production rate for a reasonable period before development of the next level would be required. At the 320 Level, the tonnage available is slightly less than the first two years of planned operations. The 320 Level was selected as the uppermost mining level. There is mineable material above the 320 Level and it is recommended that mining above the 320 Level be re-evaluated in future studies.

The specification for production is to average 95% NaCl. A production schedule to maintain this specification was developed using a cut-off grade of 90% and blending the production to maintain a grade in excess of 95% NaCl. The LOM mine production totals 95.0 Mt mined at a grade of 95.9% NaCl.

The mining equipment will include drum style CMs capable of developing a 5.8 m wide by five metre high heading in a single pass. Salt will be loaded directly into 50 t capacity battery electric haul truck for transport to a feeder breaker and then by conveyor to the plant. The installation of rock bolts for the support of the uppermost cut of each mining level is included in the mining cycle. Initially four haul trucks, two CMs, a road header, two rock bolt jumbos, and a variety of service vehicles make up the initial mining fleet.

The pillar pattern represents extraction of 65% and the sill pillars represent approximately 56% extraction for an estimated 36% extraction before consideration of pillars above and below interburden layers and barrier pillars around permanent infrastructure. After the inclusion of barrier pillars and the interburden pillars, the mine plan has a 25% conversion of Indicated Mineral Resources to Probable Mineral Reserves.

Mining extraction at the face is assumed to be 100% followed by an allowance for 5% losses in transport from mine face to ship hold, mainly due to fines losses. Consequently, 90.3 Mt of road salt are produced over an initial 24.25 year mine life.

1.3.10 Mineral Processing

Salt from the mine will be processed to produce de-icing salt for road maintenance. Processing will be carried out in a processing plant located underground within the mine, on the 240 Level, and will consist of conventional dry screening and crushing using double roll crushers and inclined vibrating screens. The processing plant and associated conveyors and infrastructure have been designed for a throughput of 4.0 Mtpa.

A key constraint during processing is the minimization of fines generation, which could result in specification exceedances and consequently penalty charges. To minimize the production of fines, roll crushers and multiple crushing and screening stages will be used to minimize the reduction ratio at each stage of crushing, and product-size material will be screened out before each stage of crushing and directed to the product stockpile. A fines screening circuit within the processing plant will remove excess minus 600 µm material from the crushed salt if necessary. Though fines losses of 5% are included in the production schedule, an allowance for the rejection of up to 10% of plant feed as fines has been provided in the process circuit design.

After processing, the sized salt will be transported to the surface by conveyor via one of the mine access declines. Once on surface, the salt will be conveyed by overland conveyor to the port at Turf Point and stored in enclosed storage buildings prior to shipping. Reclaim feeders



and conveyors in tunnels beneath the storage buildings will be used to convey the salt to the ship loader.

1.3.11 Project Infrastructure

The Project is located within the town limits of St. George's, NL. To develop the Project, additional infrastructure will be required. The area around the mine declines and surface buildings demarcated by a fenced perimeter and gatehouse is referred to as "onsite infrastructure" and contained within a "site terrace" of approximately 40 ha, while the area outside this perimeter (including the overland conveyor, port, and transmission line) is referred to as "offsite infrastructure".

The area of the site terrace is categorized as gently sloping toward the north-northwest, with an elevation of from 40 m above sea level (masl) to 50 masl. The area of the site terrace requires further geotechnical ground investigations to enable further engineering to be undertaken related to the foundation of buildings and stockpiles. The site terrace will be accessed by a single road approximately 1,400 m in length connecting to Steel Mountain Road that connects the town of St. George's to the Trans-Canada Highway. The access road will be developed at a suitable gradient and width to maneuver heavy machinery required during construction and operations.

Electrical power is available from a substation owned by NL Power located approximately 1,000 m from the proposed mine site. It is proposed that a transmission line will connect from the Project to the NL Power substation via Steel Mountain Road and the proposed site access road. Discussions between Atlas and NL Power indicate that the grid has the capacity to accommodate the addition of an industrial consumer such as what is being proposed for the Project, however, further detailed planning is required. The existing NL Power substation will require upgrades to provide site with the necessary power. A site substation would receive the power from NL Power, and then step down the power and distribute to all the key areas of the Project including the mine, process plant, surface buildings, and overland conveyor.

It is envisaged that a connection to the town water and sewer supply would be established. Discussions with the St. George's town planner indicated that the town water systems have the capacity to accommodate a Project such as what is being proposed at Great Atlantic, however, further work is required in this area. Alternatively, the site could develop its own water and septic systems.

A series of ditches is proposed to be established around the perimeter to divert surface water away from contacting the site. These drainage ditches will be developed in a way that utilizes the natural topography of the area so that water collected in the ditches is redirected into localized streams and creeks in the area. It is proposed that water that has come in contact with the site will be collected in an effluent water treatment system. This water will mainly be made up of surface water runoff from the waste rock pile and temporary salt storage, and water that has been pumped to surface from the underground sump at the base of the declines. No chemical or mechanical treatments of the discharge water are planned at this time. It is recommended that further analysis be undertaken on the quality and quantity of water that is anticipated to be handled by this system.

The following buildings are planned for the Project: administration building; light vehicle parking; mine dry (change house); minor maintenance shop, with the main maintenance shop being in the underground mine; substation; warehouse; cold storage area; and gatehouse. A camp is not required for the Project, as it is assumed that the workforce would commute daily from the local area.



The salt conveyor system includes the following principal components: onsite salt transfer system; salt storage building; and overland conveyor from site to the port. Salt product will be conveyed up the decline from the 240 Level process plant to surface via two conveyor belts with a combined length of 1.7 km long by 914 mm (36 in.) wide belt. On surface the salt will be conveyed by covered 36 in. belts with 800 tph capacity to a salt storage building. The salt storage building on site is planned to have a capacity of nominally 11,700 t (approximately one day of production). The site salt storage serves a dual purpose: providing a buffer of capacity in the event that the overland conveyor requires planned maintenance; and serve as a location for selling salt to local markets via truck delivery. The site salt storage building will be fitted with an anti-caking spray system and will have the ability for a front end loader (FEL) to reclaim the salt into the conveyor system for delivery to the port. The initial salt stockpile could also be repurposed for use as a stockpile during operations.

A principal component of the Project is the planned 2.0 km overland conveyor connecting the site with the existing Turf Point Port. The alignment of the overland conveyor will generally follow the historical haul road and causeway that was built in the 1960s to serve the gypsum mine. Two portions of the overland conveyor require crossings of municipal infrastructure – the first is a buried crossing in the area of Main Street, and the second is a bridge crossing over Station Road and the T’Railway Provincial Park at the intersection with Beach Lane. A pedestrian crossing is planned near the municipal marina.

Turf Point Port is an existing aggregate exporting facility currently used by Atlas to ship gypsum to markets in North America. Turf Point is owned by a third-party. The GAS Project plans to use the port for the shipment of salt based on coming to a commercial agreement with the third-party. There is no certainty that such an agreement will be realized, and it is assumed that Atlas will work with the owners of the port to agree to a commercial arrangement for the eventual export of salt from Turf Point. The principal components of the port as it exists today include the following: aggregate storage building with a capacity of approximately 12,700 t; outdoor aggregate storage; reclaim system feeding onto a single conveyor; series of five concrete caissons extending into Bay of St. George’s connected by a structural steel trestle; ship loader mounted on the structural steel trestle with a loading rate of nominally 1,000 tph. Vessels up to 225 m long, 32.26 m in beam and an alongside depth of 10 m can be accommodated.

It is proposed that the existing facilities will be augmented to enable the port to be suitable for exporting 4.0 Mtpa of rock salt. The following key changes are proposed:

- Modification of the existing storage building to accommodate the delivery of salt via conveyor.
- Construction of a new 47,300 t storage building in the area of the current outdoor storage immediately adjacent to the existing storage building.
- Construction of reclaim tunnels, feeders, and conveyors underneath the new building to feed salt to the ship loader.
- Installation of YPS make-up, dosing, and addition point equipment, and salt sampling equipment.
- Refurbishment of the existing trestles and ship loader, and replacement and upgrade of the existing reclaim conveyor.
- Dredging of the dock area and the approaches to Turf Point to better accommodate larger vessels.
- Installation of one additional mooring caisson



With the addition of the new storage building, the total storage at the port will be 60,000 t. The ship loader would increase its capacity to load at a rate of 1,400 tph.

An area is included in the design with space for three piles. A waste pile is sized to accommodate the waste rock generated from the initial declines, boxcut, and excess site terrace excavations. A second pile is planned for salt excavated during the pre-production period. A third pile is planned for organics material removed during initial excavations. Notably, no tailings management facility is planned for the Project, as all processed material is either sold as product or returned to underground mined-out areas.

1.3.12 Market Studies

In order to establish a reasonable marketing plan and pricing data, SLR has reviewed publicly available information and relied on information and documentation commissioned specifically for Atlas and the Project. For this UFS, revenue generating products will be bulk road salt, packaged de-icing salt for the consumer market, and a minor amount of colour based (white) salt for specialty markets. At this time, no other types of salable salt (i.e., chemical salt, food salt, or industrial salt) are planned to be produced from the Project.

The North American highway de-icing market is divided into two primary end-users: government entities and commercial operators, accounting for approximately 70% and 30% of volume, respectively.

The annual consumption of markets that GAS has a high potential of penetrating is estimated to be approximately 11 Mtpa to 16 Mtpa. SLR notes that annual consumption varies, with some winters having more weather events necessitating the increased application of rock salt.

Atlas has based the UFS sales plan on the following markets:

- USEC – Maine to Baltimore ports, including states as far west as Pennsylvania and West Virginia.
- Québec – Montreal and St Lawrence downstream, entire province.
- Newfoundland and Labrador – entire province.
- Spot Sales – largely sales to government/municipalities, dependent on winter severity. Also, private companies that buy salt for use in de-icing operations on private property, and which typically pay a premium price due to the relatively low tonnages consumed.
- Commercial – via distributor.

Table 1-7 shows the Project allocation by destination or type of sale.

Table 1-7: Market Breakdown

Destination	Allocation	
	%	Tonnes
USEC	56.0%	2,240,000
Canada Maritime Provinces	8.5%	340,000
Québec	15.5%	620,000
Spot Sales and Commercial	20.0%	800,000
Total	100%	4,000,000



All salt prices and logistics costs are based on Q2 2025 estimates.

At 4.0 Mtpa, the rate of market capture would range from 25% to 36%. Atlas would supply approximately from one quarter to one third of total rock salt in the target market, which is similar to the current scenario with two to three companies operating in each sub-region of North America. Gaining this level of market penetration will require a ramp-up period as Atlas establishes itself in the market. To achieve market share, it is envisaged that Atlas would first displace production that originates from overseas markets, given the relative shipping advantage that GAS would have. Further, Atlas could potentially displace some production from the aging rock salt mines located in the region.

Atlas has assessed the costs of water borne transport and logistics costs to ship product from Turf Point at ports in the market areas listed in Table 1-7.

Although there exists a typical salt marketing “season” from April to December of each year, it is assumed that GAS can ship salt year-round since it has access to a generally ice-free port, and the high potential market is accessible year-round.

With the exception of the western Newfoundland market, it is assumed that Atlas would sell salt as far as the point of delivering it dockside at each of the destination ports. From that point, a distribution company would manage the unloading of the salt, salt storage, and delivery of salt to the final point of sale. This is generally known as CIF (Cost, Insurance, Freight).

It has been assumed that shipping would occur mainly via using 25,000 t to 30,000 t capacity self-unloaders and up to 50,000 t capacity grab unloaders. Smaller vessels could also be utilized for smaller ports. Shipping to USEC will be mainly by international flagged vessels.

For the west coast Newfoundland market, SLR has assumed that Atlas will use a Delivered at Place (DAP) pricing basis, in which Atlas will arrange for delivery of salt to the final point of sale determined by the customer (typically a municipality). Atlas will accomplish this either by truck for nearby municipalities, or vessels when appropriate.

Some sales could be conducted on a FOB basis, where salt purchasers would arrange for a vessel to be loaded with salt at Turf Point Port.

Regardless of the shipping terms (DAP, FOB, CIF), the pricing assumed by SLR in the financial model is FOB Turf Point Port.

SLR has developed a weighted average of the price that Atlas could reasonably expect to receive assuming FOB Turf Point of C\$81.67 per tonne. The weighted average is based on pricing data for individual ports in the markets listed in Table 1-7.

1.3.13 Environmental, Permitting and Social Considerations

The Project is located within the town limits of St George’s. The Qalipu Mi’kmaq First Nation has a community in St George’s. Engagement with communities has been undertaken and is ongoing and will continue as the Project progresses.

Baseline studies were initiated for the Project in 2022 and some protected and sensitive areas close to the Project area were identified. Additional baseline work has been conducted focused on avifauna, bats, and tree species as required by provincial regulators.

The IAAC confirmed in writing on December 6, 2023 that the Project was not subject to a federal EA. The Project did require registration under the NL EPA. Atlas Salt submitted an EA Registration document on February 28, 2024 to the NL ECC and received a release from conducting an EA on April 19, 2024 (Reg.#2290). Potential Project effects were assessed and mitigation measures defined in the EA Registration compiled for the Project. No significant



residual or cumulative effects were identified. Atlas is working to address the conditions of the EA release.

The Project has evolved since 2024. The production rate will increase from 2.5 Mtpa to 4 Mtpa. The EA Registration did state that there was potential to increase production up to 4 Mtpa. Other changes include adjustment to the decline positioning, shifting of the boxcut, and increases in waste and product stockpiles. The overall disturbance footprint area at the mine site will increase by 5 ha. Some changes will be made to offsite infrastructure which were not included in the EA Registration. The refurbishment of Turf Point will include adding a new concrete caisson or a pile structure. Dredging of the dock area and the approaches to Turf Point will be required.

These Project changes have the following environmental approval and permitting implications:

- **Federal:** Section 53 of the Physical Activities Regulations addresses the expansion of existing marine terminals. The activity is defined as “*The expansion of an existing marine terminal, if the expansion requires the construction of a new berth designed to handle ships larger than 25 000 DWT (dead weight ton) and, if the berth is not a permanent structure in the water, the construction of a new permanent structure in the water.*” In the QP’s opinion, the addition of a caisson or pile structure is unlikely to trigger an environmental review under the IAA. These changes will require in-water works, which may trigger permitting requirements under the *Fisheries Act*. This process could take 18 months or more. Under the Project execution schedule there is sufficient time to obtain approval prior to commencing work on the port terminal. The QP recommends that Atlas consult with the IAAC and the DFO to confirm what, if any, federal permitting action will be required.
- The QP further recommends that Atlas confirms with IAAC that the Project will not require review under the IAA due to the increase in production rate.
- **Provincial:** Atlas Salt will need to inform the NL ECC of these changes, and the regulator will determine whether a revised EA Registration is required or if an EPR is required to provide further information. Based on discussions with Project permitting consultant ICI, the QP is of the opinion that the changes at the mine site are not material and will not trigger additional environmental review via an EPR or EIS.
- A permit for dredging will need to be obtained by the port operator or their contractor.

In addition to the environmental approvals discussed above, several environmental permits will be required for the Project. Atlas has appointed a consultant to assist with these applications and there is a plan to apply for the required permits in a phased approach to first authorize Early Works, then Capital Development and Commercial Production. A permit register and high-level schedule have been developed for the Project.

Conceptual closure planning and a high-level closure cost estimate has been developed for Early Works and for the overall Project as part of this UFS. Closure plans and costs will need to be approved by the regulator and financial assurance provided prior to initiating Early Works, Capital Development and Commercial Production.

1.3.14 Other Relevant Information

1.3.14.1 Project Execution Plan

It is assumed that Atlas will establish an Owner’s Project Team responsible for managing all of the Project’s business, management and operations activities.



The Project execution strategy is based on an IPD model, outlined in Atlas Salt's Integrated Project Delivery Framework, appointing multiple specialized project delivery partners to collaboratively support the project delivery. The IPD provides that key stakeholders, including Atlas Salt, Lead Engineer, Construction Contractors, and Equipment Suppliers, are integrated into a single contractual agreement or a set of closely interlinked contracts with shared incentives, reducing contractual barriers that may impede collaboration and hinder efficient project execution.

The primary IPD partners will include but not be limited to the areas of Lead Engineer, Environmental and Permitting, Mining Equipment, Materials Handling, Construction Contractors, Project Delivery Support and Specialist Consultants, to complete the engineering, procurement, and construction management associated with the on and offsite infrastructure and all process and material handling facilities. In addition, the PEP assumes the appointment of a mining contractor for the design and construction of the boxcut and decline development.

To ensure a timely and cohesive implementation of this project, the team of Atlas Salt' Operational and Project staff will be required to be mobilized as soon as approval is given to proceed with the Project. The up-front work by the dedicated Owner's Project Team will potentially be supported by project staff from internal and external sources to assist with the calling of tenders for the Execution Phase Services Contracts, specifically for the IPD roles and Mining Contract.

It is proposed that the Owner's Project Team will be supported by a Project Steering Committee, which will report to the Vice President of Engineering and Construction, Project Director, and General Manager.

The Owner led IPD will carry overall responsibility for the execution of activities under the project mandate, including detailed engineering, procurement, logistics, construction, commissioning, and Project Controls.

A portion of Atlas' Operations Team will be required to be mobilized during the development phase of the Project to provide common services that will be required over the LOM (i.e., not limited to construction support). Atlas' Operations Team will provide staffing and be responsible for mining operations, including maintenance, health and safety, environmental management & monitoring, permitting, security (assumed to be contracted service), project accounting, warehouse management (IPD in execution and handover to Owner in operations) and community relations.

1.3.15 Capital and Operating Cost Estimates

The pre-production capital costs for the Project are based on Q3 2025 estimates. The unescalated capital costs total \$555.2 million. The capital cost estimate is at an AACE Level 3 basis.

For the economic analysis, the capital costs have been inflated by 2% per year from the base date. The construction was forecast to commence one year after the base date. The escalated pre-production capital totals \$589.1 million and is spent over four years as shown in Table 1-8.

Table 1-8: Escalated Pre-Production Capital Cost Estimate

Cost Area	Units	Total	YR-4	YR-3	YR-2	YR-1
Mining	C\$000	203,496	39,343	40,129	61,398	62,626
Processing	C\$000	42,133	-	-	16,653	25,480



Cost Area	Units	Total	YR-4	YR-3	YR-2	YR-1
Onsite Infrastructure	C\$000	49,985	4,784	4,880	14,933	25,387
Offsite Infrastructure	C\$000	81,922	3,925	16,013	24,500	37,485
Total Direct Cost	C\$000	377,536	48,052	61,023	117,485	150,977
Indirect Costs	C\$000	83,724	8,054	16,430	29,327	29,914
Owner's Costs	C\$000	50,352	4,834	7,396	17,602	20,519
Subtotal Costs	C\$000	511,612	60,940	84,848	164,414	201,410
Contingency	C\$000	77,487	3,716	15,161	27,063	31,547
Initial Capital Cost	C\$000	589,100	64,656	100,009	191,477	232,958

The escalated sustaining capital cost is \$609.1 million. Contingency was assessed on a line by line basis. The average contingency is 15.1%.

Operating cost estimates were built up from first principles. The operating cost basis is Q3 2025, and operating costs are escalated at a rate of 2% per year from the base date. The LOM escalated operating costs are summarized in Table 1-9.

The port is independently owned and an operating cost estimate for the storage and ship loading was generated from first principles on the assumption that the port would be operated by the third party. The port costs include operating costs, overhead, profit, and an allowance for ongoing repairs and are included in the processing and material handling line.

Table 1-9: LOM Operating Costs

Area	LOM- Plan (C\$ millions)	Steady State Annual Average (C\$ millions)	Unit Costs with Q3 2023 Basis (C\$/t shipped)	LOM Unit Costs (C\$/t shipped)
Mining	1,354	59.2	10.67	15.00
Processing and Material Handling	854	36.3	6.86	9.46
General and Administration	335	13.7	2.63	3.71
Total	2,543	109.2	20.17	28.17

Notes:

1. The columns LOM Plan, Steady State Annual Average, and LOM Unit Costs include escalation.
2. The column Steady State Annual Average only considers years of producing 4.0 Mtpa

Personnel requirements were estimated for each of the areas and wage rates and benefits were based on a comparison to hard rock and salt mines in the Maritime region. Mine operations personnel levels considered the mining productivity and equipment requirements.

The mine will operate 24 hours per day on a full 365 day year basis, with appropriate allowances for planned annual maintenance. The Project will be operated primarily by company employees, with service contracts in place for key mobile equipment. The total personnel requirements at peak are estimated to be 194 persons as summarized by department in Table 1-10. Port operations, which would be managed by a third party, are excluded from this total.



Table 1-10: Project Personnel

Department	Number of Personnel (initial)	Peak
Mine	52	80
Underground Maintenance	10	10
Technical Services	10	10
Contracted Mine Maintenance	27	31
Plant & Surface	37	37
Management & Administration	26	26
Total	162	194



2.0 Introduction

SLR Consulting Ltd (SLR) was retained by Atlas Salt Inc. (Atlas or the Company) to prepare an independent Technical Report on the Great Atlantic Salt (GAS) Project (the Project or GAS Project), located near the town of St. George's, Newfoundland, Canada. The purpose of this Technical Report is to present the results of an updated Feasibility Study (the 2025 UFS or the UFS) of the Project. This Technical Report conforms to National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

Atlas is a Canadian-based resource development company listed on the Toronto Venture Exchange under the trading symbol SALT (TSXV:SALT), and headquartered in St. John's, Newfoundland. Atlas is the 100% owner of the Project. The UFS is an update to a feasibility study carried out in 2023 (2023 FS; SLR 2023b). The principal difference between the two feasibility studies is that the 2023 FS considered a throughput of 2.5 Mtpa, while the 2025 UFS considers a throughput of 4.0 Mtpa.

2.1 Sources of Information

A site visit was carried out by SLR Qualified Persons (QP) Derek Riehm, M.A.Sc., P.Eng., Technical Director, David Robson, P.Eng., MBA, Principal Mining Engineer, and the previous QP responsible for geology from October 17 to 20, 2022. During the site visit, the QPs examined drill hole core, core logging, sampling, quality assurance and quality control (QA/QC), discussed the geological setting of the deposit, the geological interpretations with the site geologist, toured the area of St. George's, met with representatives of the town of St. George's, and toured the port at Turf Point. Lance Engelbrecht, P.Eng., Technical Manager - Metallurgy, and Mr. Robson visited the property on October 4 to 7, 2021. Mr. Robson also visited the property on April 17 to 20, 2023. During the site visit and in meetings throughout the study, discussions were held with personnel from Atlas, including:

- Patrick Laracy, former Chief Executive Officer, currently Chairman of the board of Atlas
- Rowland Howe, formerly President, currently board member of Atlas
- Colin Hayes, Geologist
- Bart Wilson, Geologist
- Andrew Smith, Project Director
- Doug Harris, Mining Lead
- Robert Booth, Vice President of Engineering and Construction

Table 2-1 presents a summary of the QPs responsibilities for this Technical Report.

Table 2-1: List of SLR Qualified Persons and Responsibilities

Qualified Person	Title/Position	Sections
Pierre Landry, P.Geo.	Principal Geologist	1.1.1.1, 1.1.2.1, 1.3.1 to 1.3.7, 4 to 12.1, 14, 23, 25.1, 26.1
David M. Robson, P.Eng., MBA	Principal Mining Engineer	1.1.1.2, 1.1.1.4, 1.1.1.7, 1.1.2.2, 1.1.2.4, 1.1.2.7, 1.1.2.8, 1.2, 1.3.8, 1.3.9, 1.3.11, 1.3.14, 1.3.15, 2, 3, 12.2, 15, 16, 18, 21, 22, 24, 25.2, 25.4, 25.7, 25.8, 26.2, 26.4, 26.7, 26.8



Qualified Person	Title/Position	Sections
Lance Engelbrecht, P.Eng.	Technical Manager – Metallurgy	1.1.1.3, 1.1.2.3, 1.3.10, 12.3, 13, 17, 25.3, 26.3
Graham G. Clow, P.Eng.	Strategy Director – Global Mining Advisory	1.1.1.5, 1.1.2.5, 1.3.12, 12.4, 19, 25.5, 26.5
Derek Riehm, M.A.Sc., P.Eng.	Technical Director	1.1.1.6, 1.1.2.6, 1.3.13, 12.5, 20, 25.6, 26.6
All	-	27.0

Mr. Landry, Mr. Robson, Mr. Engelbrecht, Mr. Clow, and Mr. Riehm are independent QPs as defined in NI 43-101. Additional contributions were made by Dr. John George Kelly, EurGeol, P.Geo., FIMMM, MIQ, James Catley, CGeol (UK); Huw Edmonds, CGeol (UK)., and Murray Dunn, P.Eng. of SLR. The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27.0 References.

2.2 List of Abbreviations and Acronyms

Units of measurement used in this Technical Report conform to the metric system. All currency in this Technical Report is Canadian dollars (C\$, or \$) unless otherwise noted.

Table 2-2: Units of Measurement

Abbreviation	Description	Abbreviation	Description
μ	micron	kW	kilowatt
a	annum	kWh	kilowatt-hour
A	ampere	L	litre
Btu	British thermal units	m	metre
°C	degree Celsius	M	mega (million); molar
C\$	Canadian dollars	m ²	square metre
cfm	cubic feet per minute	m ³	cubic metre
cm	centimetre	masl	metres above sea level
d	day	min	minute
dia	diameter	mm	millimetre
dmt	dry metric tonne	MMBtu	Million British thermal units
dwt	dead-weight ton	MVA	megavolt-amperes
g	gram	MW	megawatt
G	giga (billion)	MWh	megawatt-hour
g/L	gram per litre	ppm	part per million
g/t	gram per tonne	RL	relative elevation
ha	hectare	s	second
hp	horsepower	t	metric tonne
hr	hour	tpa	metric tonne per year
Hz	hertz	tpd	metric tonne per day
in.	inch	tph	tonnes per hour
in ²	square inch	US\$	United States dollar
k	kilo (thousand)	USgpm	US gallon per minute
kg	kilogram	V	volt
km	kilometre	W	watt
km ²	square kilometre	w.g.	water gauge
kPa	kilopascal	wmt	wet metric tonne
kVA	kilovolt-amperes	yr	year



Table 2-3: List of Acronyms

Acronym	Definition
3D	three-dimensional
Ai	Bond abrasion index
ARBCA	Atlantic Risk Based Corrective Action
ARD/ML	acid rock drainage / metals leaching
ASTM	American Society for Testing and Materials
BEV	battery electric vehicle
BRZ	Brazilian tensile strength testing
CAI	Cerchar Abrasivity Index
CEPA	Canadian Environmental Protection Act
CIF	Cost, Insurance, Freight
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CM	continuous miner
CNWA	Canadian Navigable Waters Act
CoA	Certificate of Approval
CP	Critical Path
CPS	counts per second
CRM	Certified Reference Material
DAC	Design Acceptance Criteria
DAP	Delivered at Place
DEM	Digital Elevation Model
DFO	Department of Fisheries and Oceans
DGPS	Differential Global Positioning System
DoT	Departments of Transportation
DS	direct shear strength testing
DSM	Digital Surface Model
EA	Environmental Assessment
EAR	Environmental Assessment Regulations (2003)
ECC	Environment and Climate Change
EIS	Environmental Impact Statement
EPCM	engineering, procurement, and construction management
EPP	Environmental Protection Plan
EPR	Environmental Preview Report
EQS	Environmental Quality Standards



Acronym	Definition
FEA	Finite Element Analysis
FEED	Front-End Engineering and Design
FEL	Front end loader
FOB	Free on Board
FoS	Factor of Safety
GAS	Great Atlantic Salt
GCMP	Ground Control Management Plan
HDPE	high density polyethylene
IAA	Impact Assessment Act
ICP-MS	Inductively Coupled Plasma-Mass Spectroscopy
ICP-OES	Inductively Coupled Plasma-Optical Emission Spectroscopy
IET	Industry, Energy and Technology
IPD	Integrated Project Delivery
IRR	internal rate of return
IRS	intact rock strength
ISRM	International Society for Rock Mechanics and Rock Engineering
LHD	load-haul-dump unit
LiDAR	light detection and ranging
LOM	life of mine
MBCA	Migratory Birds Conventions Act
MCC	motor control centre
MSO	Mineable Stope Optimizer
NaCl	sodium chloride
NL	Newfoundland and Labrador
NL EPA	NL Environmental Protection Act
NPV	net present value
PEA	Preliminary Economic Assessment
PCS	plant control system
PEP	Project Execution Plan
PGA	Peak Ground Acceleration
PGV	Peak Ground Velocity
PLC	programmable logic controller
PLT	point load test
PPD	Pollution Prevention Division



Acronym	Definition
QA/QC	quality assurance/quality control
QP	Qualified Person
RCP	Reclamation and Closure Plan
RIO	remote input/output
RMR	Rock Mass Rating
ROM	run-of-mine
RPEEE	Reasonable Prospects for Eventual Economic Extraction
RQD	rock quality designation
RTK	real-time kinematic
Sa	Spectral Acceleration
SAR	species at risk (
SARA	Species At Risk Act
SDT	slake durability testing
SEM	Sequential Excavation Method
SI	site investigation
SOCC	species of conservation concern
SPT	standard penetration test
SRC	Saskatchewan Research Council
STCS	Tunnel Consulting Services Ltd.
TCS	compressive strength testing
TVDSS	total vertical depth minus the elevation of the reference point
UCS	unconfined compressive strength
UFS	updated Feasibility Study (the 2025 UFS or the UFS)
USEC	US East Coast
USGS	U.S. Geological Survey
VOIP	voice over internet protocol
VWP	vibrating wire piezometer
WRMD	Water Resources Management Division



3.0 Reliance on Other Experts

This Technical Report has been prepared by SLR for Atlas. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this Technical Report.
- Assumptions, conditions, and qualifications as set forth in this Technical Report.

Except for the purposes legislated under provincial securities laws, any use of this Technical Report by any third party is at that party's sole risk.

3.1 Mineral Tenure, Surface Rights, Royalties and Encumbrances

For the purpose of this Technical Report, the QPs have relied on information provided by Atlas regarding property ownership, title, and mineral tenure. The reliance is limited to non-technical matters related to legal title and mineral licences. The following documents were reviewed and form the basis of this reliance:

- Hayes, C., 2023 Re: Mineral licenses Great Atlantic Salt: email from Atlas to David Robson, Project Manager, SLR Consulting Ltd., September 6, 2023.
- Stewart McKelvey, 2021 Re: Turf Point Property – Report on Title, memo from Justin Hewitt to Patrick Laracy, November 5, 2021.

The QPs have relied on this ownership and title information in Section 4 and the Summary of this Technical Report. This reliance is limited to the accuracy and completeness of the legal and tenure information contained in the above documents.

To support this reliance, the QPs reviewed the claims and mineral licences held by Atlas that encompass the GAS Project using the Newfoundland and Labrador Geoscience Atlas and confirmed that all licences and claims are active and in good standing as of the effective date of this report. The QPs did not independently verify legal title or ownership and express no legal opinion on these matters.

For Section 4, the QPs have relied on royalty and title information disclosed by Atlas in its public filings and has not independently verified the underlying royalty agreements or title instruments.

3.2 Taxation

For Sections 1 and 22 of this Technical Report, the QPs have relied on Atlas for guidance on applicable taxes, royalties, and other government levies or interests, applicable to revenue or income from the GAS Project. Information provided to the QPs includes the following:

- KPMG LLP, 2023, Ref: DRAFT Great Atlantic Salt Project – Thirty Year Cash Flow DRAFT Tax Considerations, from KPMG LLP to Patrick Laracy, Atlas Salt, January 19, 2023.
- Peterson, N., 2025 Re: Discussion on Salt Pricing: email from Atlas to David Robson, Project Manager, SLR Consulting Ltd., September 26, 2025.

3.3 Marketing

For Section 19 and the Summary of this Technical Report, the QPs have relied on third party expertise for the assessment of rock salt markets, rock salt pricing, and logistics considerations



for delivering salt from Turf Point to destination markets. Information provided to the QPs is described in Section 19.1.

The QPs have taken all appropriate steps, in their professional opinion, to ensure that the above information from Atlas is reliable.



4.0 Property Description and Location

4.1 Location

The Project is located in Western Newfoundland, Canada, approximately 15 km south of the town of Stephenville, and in the vicinity of the town of St. George's. The location of the Project is illustrated in Figure 4-1.

The central point of the Project is at longitude 58.529, latitude 48.402, or 387,550 mE, 5,362,650 mN (NAD83 Zone 21 North).

4.2 Land Tenure

The GAS Project is situated fully within Atlas Mineral Licences, which comprise 291 contiguous mineral claims covering approximately 7,275 ha and held under 18 mineral licences issued pursuant to Newfoundland and Labrador's Mineral Act. Each claim is a standardized 25 ha unit, and the claims are grouped administratively into licences. The GAS deposit is specifically located on Licence 027183M, one of the 18 licences held by Atlas, while the GAS Project extends onto nearby Atlas-held licences. A summary of the Atlas licences is included in Table 4-1 and shown in Figure 4-2. Portions that overlap the T'Railway Provincial Park are subject to provincial land-use restrictions.

The Flat Bay Gypsum Mine (Ace Gypsum), which has been operated intermittently over the past several years, is located approximately 3 km southwest of the GAS Project. The gypsum mine, including its open pits and associated waste rock and tailings, is located within the GAS Property and is fully contained within Mineral Licences 027059M, 027192M, 027060M, and the western portion of Licence 026448M.

Table 4-1: GAS Property Licences

Licence No.	Licence Holder	No. of Claims	Status	Date Issued (mm-dd-yyyy)	Renewal Date (mm-dd-yyyy)	Area (ha)
027333M	Atlas Salt	15	Active	9/12/2019	9/12/2029	375
027334M	Atlas Salt	1	Active	9/12/2019	9/12/2029	25
027335M	Atlas Salt	1	Active	9/12/2019	9/12/2029	25
027336M	Atlas Salt	1	Active	9/12/2019	9/12/2029	25
026448M	Atlas Salt	24	Active	9/13/2018	9/13/2028	600
027183M	Atlas Salt	22	Active	6/8/1998	6/8/2026	550
026248M	Atlas Salt	20	Active	8/16/2018	8/16/2028	500
026254M	Atlas Salt	1	Active	8/16/2018	8/16/2028	25
023781M	Atlas Salt	5	Active	3/4/2016	3/4/2026	125
027059M	Atlas Salt	2	Active	6/8/1998	6/8/2026	50
027060M	Atlas Salt	13	Active	4/12/2004	4/13/2026	325
027191M	Atlas Salt	16	Active	7/18/2019	7/18/2029	400
027192M	Atlas Salt	3	Active	7/18/2019	7/18/2029	75



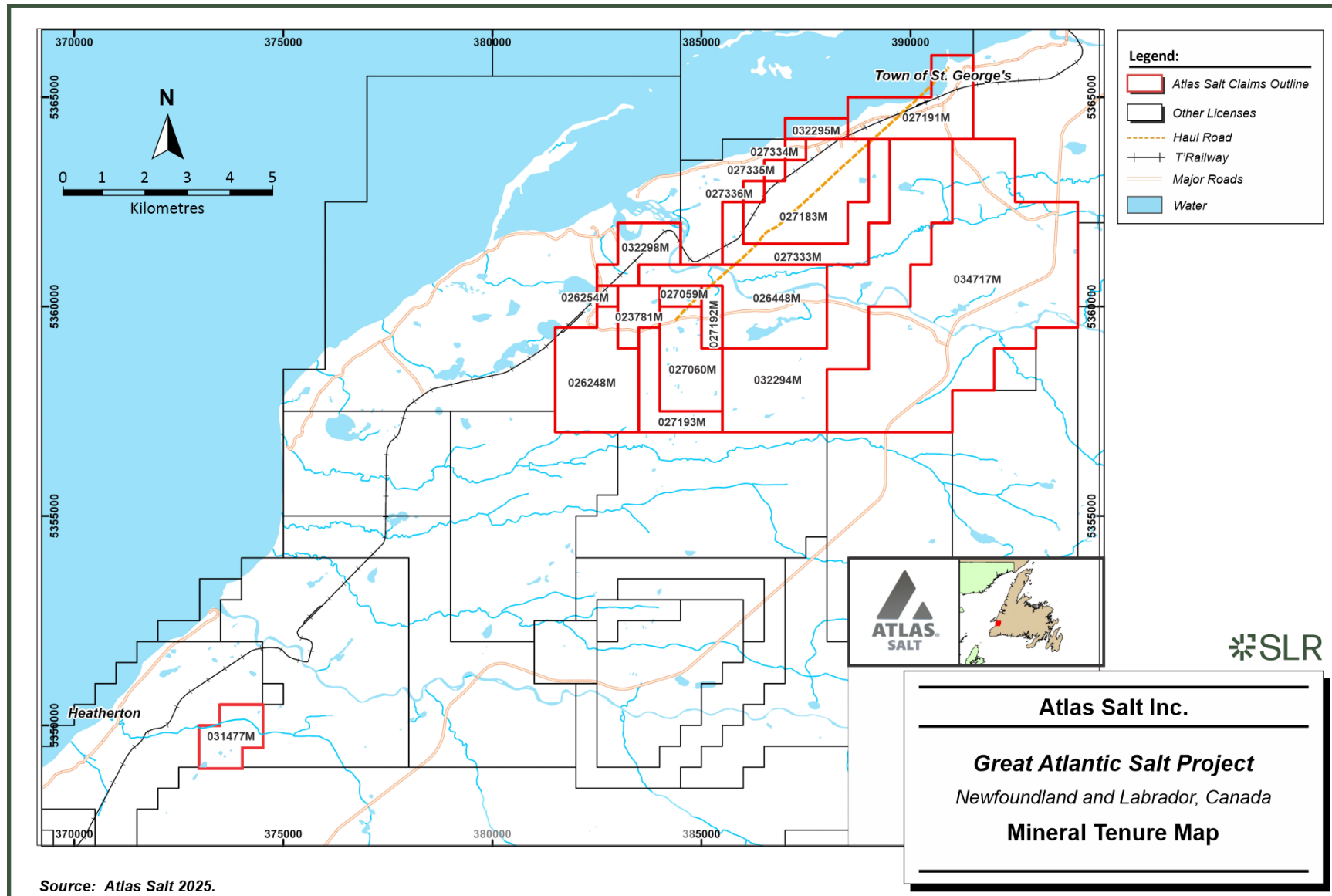
Licence No.	Licence Holder	No. of Claims	Status	Date Issued (mm-dd-yyyy)	Renewal Date (mm-dd-yyyy)	Area (ha)
027193M	Atlas Salt	8	Active	7/18/2019	7/18/2029	200
031477M	Atlas Salt	7	Active	5/10/2021	5/10/2026	175
032294M	Atlas Salt	52	Active	4/5/2021	4/5/2026	1,300
032295M	Atlas Salt	3	Active	4/5/2021	4/5/2026	75
032298M	Atlas Salt	8	Active	4/5/2021	4/5/2026	200
034717M	Atlas Salt	89	Active	6/19/2022	6/19/2027	2,225
Total		291				7,275



Figure 4-1: Location Map



Figure 4-2: Mineral Tenure Map



All mineral licences in the territory are staked using the online MIRIAD system and issued by the Newfoundland and Labrador (NL) Department of Natural Resources and registered with the Mineral Claims Records Office. Licences consist of 500 m² claim blocks based on one-quarter of a UTM grid square (25 ha). Licences may be grouped together if the total number of claims does not exceed 256 and provided that first-year assessment reports have been submitted and approved.

Fees associated with the claims include a C\$15/claim fee in addition to a C\$50/claim deposit, refunded after the first-year assessment requirements have been met including an assessment report. Licences are renewed for an initial five-year term but may be held for a maximum of 30 years. Renewal fees apply during assessment years 5, 10, 15, 20, and 30 (Table 4-2).

Table 4-2: Licence Renewal Fees and Expenditures

Year	Renewal Fees (\$/claim)	Minimum Expenditure (C\$/claim)
1	-	200
2	-	250
3	-	300
4	-	350
5	25	400
6 – 10	50 (in Y10)	600
11 – 15	100 (in Y15)	900
16 – 20	-	1,200
21 – 25	200	2,000
25 – 30	200	2,500

Mineral licences provide exclusive rights to explore for minerals in, on, or under the designated area of land but do not include surface rights such as rights of way. The granting of surface rights, for example for the establishment of mining activities and related infrastructure, is allowed for under the Mineral Act.

All licences are 100%-owned by Atlas, an affiliated company of Vulcan Minerals Inc. (Vulcan Minerals), which holds a 27.1% interest in Atlas.

4.3 Royalties and Encumbrances

The Project has the following royalties applied to it:

- 3% net production royalty payable to Vulcan Minerals.

The 3% net production royalty applies to all revenue, net of shipping, logistics, and Turf Point Port costs. SLR is not aware of any other encumbrances on the Project.

4.4 Environmental Liabilities and Permitting

The QP is not aware of any environmental liabilities related to the GAS Project. Atlas is in the Project permitting phase, having obtained release from the provincial environmental review process (Section 20.3). To date, the Company has obtained its approvals and permits in a timely fashion and the Project has generated no controversy in the local communities that would



suggest future difficulties. The QP is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program.



5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Trans-Canada Highway passes through the eastern portion of the GAS Property, extending from Channel-Port aux Basques on the east coast of Newfoundland to St. John's on the west coast. The coastal areas of the St. George's Bay region are serviced by all-weather paved roads. The town of Flat Bay, to the northwest of the property, is accessed via the secondary highway NL-403 (Flat Bay Road), which extends westwards through the property from the Trans-Canada-Highway. The town of St. George's, located in the northeast of the property, is accessed via Steel Mountain Road, which extends northwest from the Trans-Canada-Highway. The private Flat Bay gravel haul road extends northeast-southwest across the property, between Flat Bay Mine and St. George's, use of which to access the property has been granted by the owner.

The closest airport is located in Deer Lake, Newfoundland, approximately 135 km northeast of the property. The closest port is the Turf Point Port located in St. George's, however, this port is only capable of exporting bulk materials. A larger port, capable of importing and exporting cargo containers, is located in Stephenville. The historical Newfoundland Railway passes through the property, however, it ceased operation as a railway in 1988 and now is used as a recreational trail (known as the Newfoundland T'Railway Provincial Park).

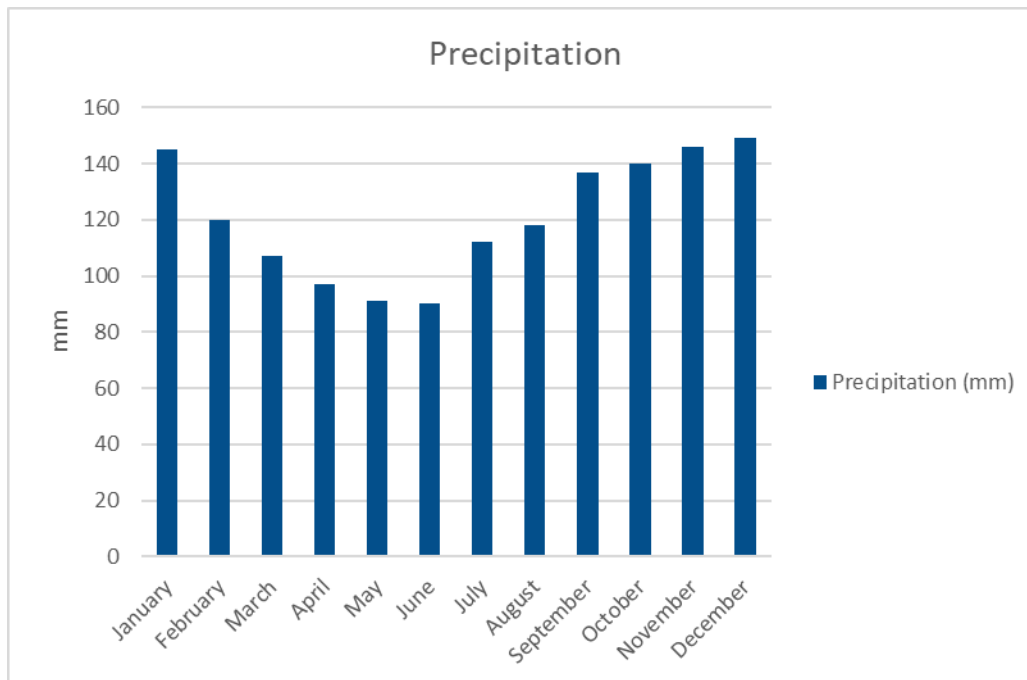
5.2 Climate

Climate data is available for the town of Stephenville, located approximately 15 km north of the Project and considered representative of the area. The area has a warm summer, fully humid, continental (Dfb) climate according to the Köppen–Geiger classification system (Climate-data.org 2023).. The Project's northern boreal climate has significant seasonal variations, modified by the near-ocean location (APEX 2016).

Daylight hours peak in July with an average of 16.0 hours per day, while December and January have a minimum of 8.4 hours per days (Climate-Data.org, 2023). Annual precipitation totals 1,452 mm. Mean monthly precipitation is shown in Figure 5-1, which reaches a high of 149 mm in December and a low of 90 mm in June. Mean monthly temperatures are shown in Figure 5-2, which reach a high of 19.1°C in August and a low of -5.9°C in February.

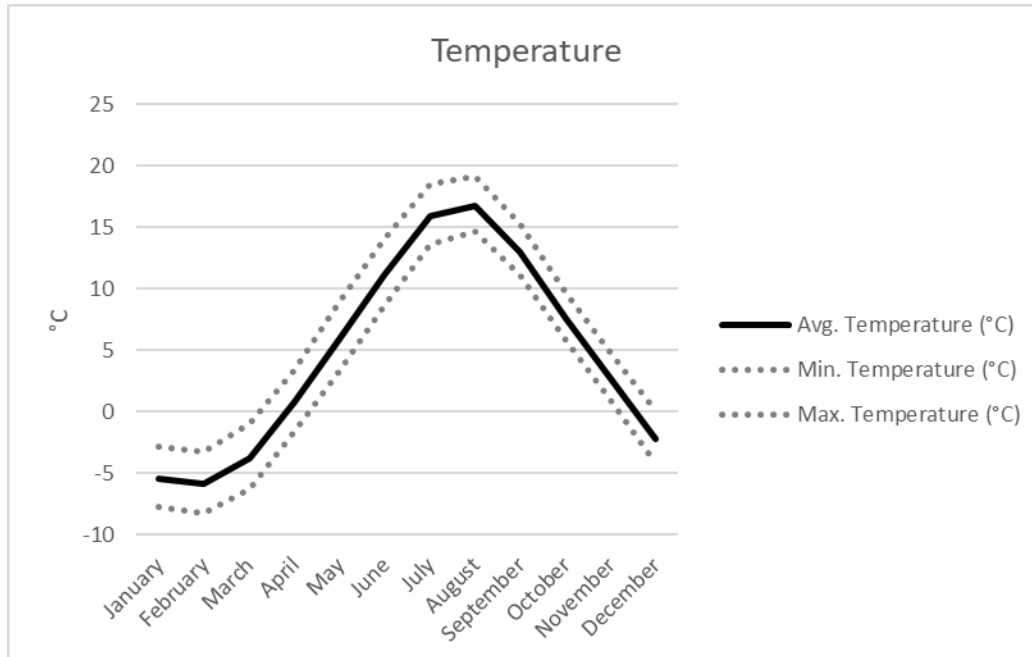


Figure 5-1: Stephenville Annual Precipitation



Source: Climate-Data.org 2023.

Figure 5-2: Stephenville Annual Temperature



Source: Climate-Data.org 2023.

It is not anticipated that the climate of the area would impact GAS Property access or prevent year-round operations. This has been demonstrated by the previous gypsum mining operations at Flat Bay Quarry, located within the property.



5.3 Local Resources

The deposit is located within the town limits of St. George's, a town incorporated in 1965. The St. George's area had been a French fishing village dating to the seventeenth century. As of 2021, the town had a population of approximately 1,200 inhabitants. The town has a school, fire hall, community hall, minor commerce, a medical clinic, and a recreation centre. The town is located approximately 24 km by road from Stephenville, Newfoundland. Stephenville is one of the largest centres in western Newfoundland, with a direct population of 6,500 as of the 2021 census. The services of Stephenville include a modern hospital, year-round port, government institutions, a community college (College of the North Atlantic), provincial detention centre, community centres, and more established commercial centre. Stephenville's international airport has an irregular flight service. Corner Brook is the largest community in western Newfoundland with a population of 30,000 as of 2021 and is approximately 90 km by road away from the deposit. St. George's, Stephenville, and Corner Brook are all situated in proximity to the Trans-Canada-Highway.

A camp is not envisioned for the Project as it is assumed that the operations workforce would commute daily from the local area. Personnel required during construction would be responsible for finding accommodations in the region.

5.4 Infrastructure

The deposit is located within the town limits of St. George's. An all-weather gravel haul road was constructed near the GAS Property by previous operators to connect the Flat Bay Gypsum Quarry with the Turf Point Port. Although the road is private, permission has been granted by the owner to Atlas to use it for property access. Based on SLR's site visits, it appears that members of the public regularly use this private road.

A water depth draft survey at the Turf Point Port was conducted in September 2015, determining a draft of 11.6 m to 13.7 m. Infrastructure at the Turf Point Port includes a large, graveled dockside area of approximately 7,000 m²; a large, steel-clad storage facility of approximately 50 m x 65 m; and a conveyor system connecting the storage facility and the main port ship-loading terminal.

The storage and conveyor were constructed by Teck Resources Ltd. to load and ship base metal concentrate from their Duck Pond and Boundary Deposit operations, both of which have since ceased operations. The conveyor system is operational and currently used to load outgoing aggregate shipping. The Turf Point Port is capable of loading Handymax bulk ship carriers (40,000 dwt to 50,000 dwt), Handy bulk ship carriers (<40,000 dwt), as well as barges carrying nominally 10,000 dwt.

Port Stephenville (formerly known as Port Harmon) provides a larger port facility with year-round operations, located approximately 15 km north of the deposit. The port has 7,500 m² of paved dockside area and provides berthage and turning room for ships up to 385 m in length with 10 m depth.

The nearest suitable power supply in relation to the deposit consists of the St. George's substation, owned by NL Power. This is located within the town of St. George's, less than two kilometres away from the GAS Property.

Areas suitable for site infrastructure have been identified within the Project footprint, including space for waste management facilities. The principal area under consideration, referred to in this report as the 'site terrace,' appears to offer adequate space and access for development;



however, additional geotechnical investigations have been recommended to confirm its suitability for infrastructure siting.

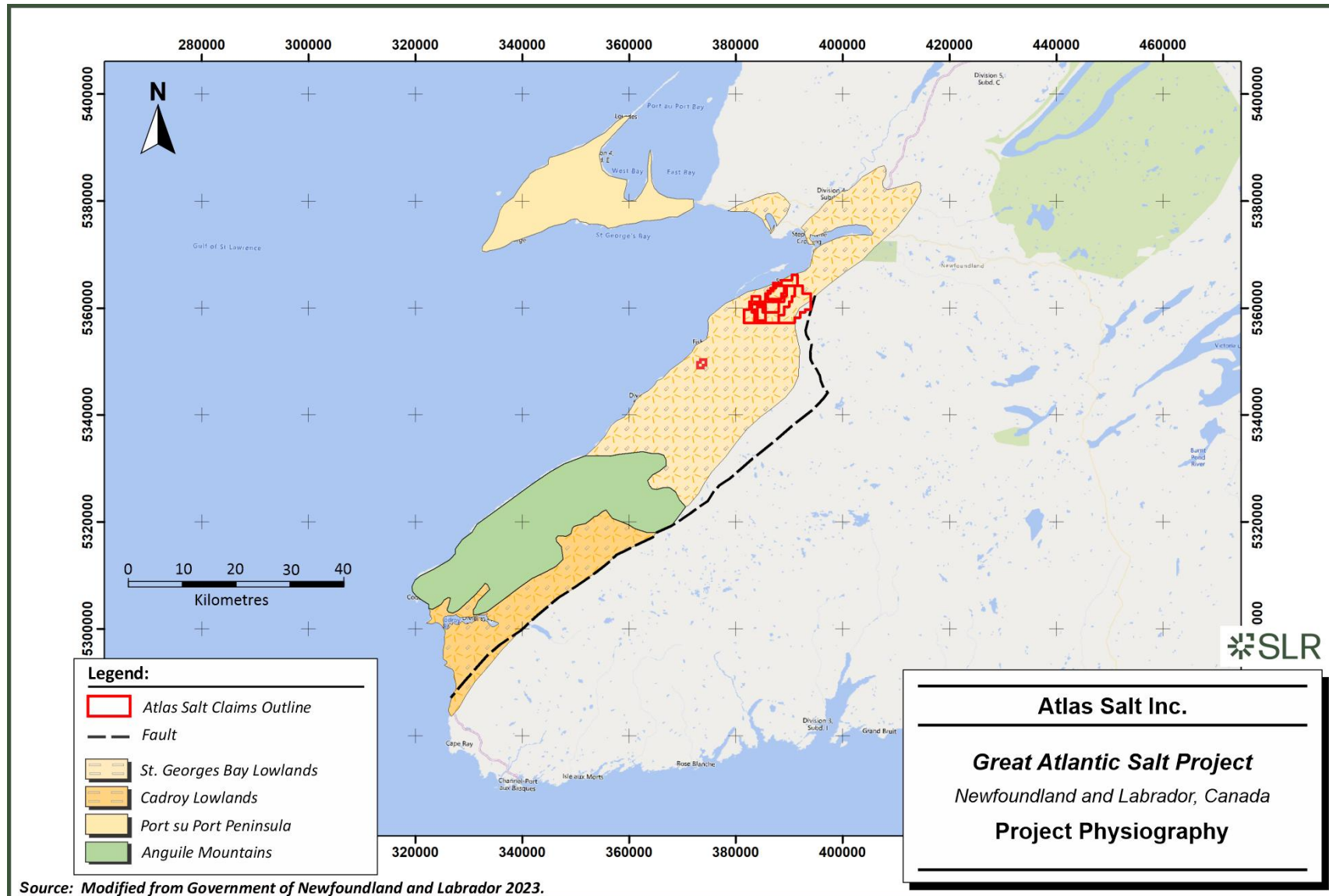
5.5 Physiography

The Bay St. George Sub-Basin area contains three distinct topographical areas; the St. George's Bay Lowlands, the Uplands of the Anguille mountains, and the Codroy Lowlands (Figure 5-3). The Project is located within the St. George's Bay Lowlands and consists of a gently rolling coastal plain at an elevation of approximately 60 masl. The Uplands are located further southwest along the south coast of St. George's Bay and form steep flanked mountains with an average elevation of 525 masl, while the Codroy Lowlands are situated immediately southeast of these. Coastal portions of the GAS Property consist of sandy beaches.

The St. George's Bay Lowlands are located within the Western Newfoundland Forest and are characterized by forests of balsam fir, with an understorey of wood ferns (PAA 2008). Other typical vegetation of the area includes trembling aspen, white birch, alder thicket, and grasses. Within the property, there are numerous streams, ponds, and bogs. To the southeast of the property, the lower mountain slopes flatten northwards towards the coast and form extensive Plateau Bogs. Significant local variations in vegetation result from hills and valleys.



Figure 5-3: Project Physiography



6.0 History

6.1 Prior Ownership

Red Moon Potash Inc. (Red Moon) was incorporated on June 15, 2011, for the purpose of managing the industrial mineral exploration activities of Vulcan Minerals Inc. (Vulcan Minerals). As of August 15, 2012, Red Moon was a wholly owned subsidiary of Vulcan Minerals with 100%-owned mineral licenses transferred to Red Moon for common shares and a 3% net production royalty.

In August 2021 Red Moon was renamed Atlas Salt. As of the effective date of this report, Vulcan Minerals holds a 30.5% interest in Atlas Salt.

6.2 Exploration and Development History

Information regarding exploration and development history has been excerpted and modified from APEX, 2016.

6.2.1 Mapping

Government-led mapping was completed in the St. George's Bay area by Fong in 1974 and 1977 (APEX 2016). In 1975, Fong and Douglas also mapped various portions of the Bay St. George Sub-Basin. In 1983, previous research related to the Carboniferous Bay St. George Sub-Basin was synthesized by Knight (1983). Regional mapping was conducted for the southwestern Long Range Mountains, forming the basement to the east of the Carboniferous strata and thought to locally underlie the basinal rocks of the Project.

6.2.2 Drilling

Historical drilling has been completed within the Project and surrounding area since 1952, as summarized in Table 6-1 and shown in Figure 6-1.

Table 6-1: Summary of Historical Drilling

Drill Hole ID	Owner	NAD83 Z21 N		Year Drilled	Total Depth (m)
		Easting	Northing		
NLGS-OR-52-1A	NFLD Geological Survey	334832	5303405	1952	254.81
NLGS-OR-53-2A	NFLD Geological Survey	334374	5303388	1953	274.78
NLGS-SF-53-1	NFLD Geological Survey	366599	5331219	1953	518.17
NLGS-SF-53-3	NFLD Geological Survey	366789	5331389	1953	124.97
NLGS-SF-53-2	NFLD Geological Survey	366809	5331389	1953	151.11
NLGS-SF-53-4	NFLD Geological Survey	367099	5330119	1953	271.28
HOOKE#1	Hooker Chemical Ltd	383889	5351219	1968	1,098.82
H-ROB	Hooker Chemical Ltd	368117	5346209	1972	694.95
H-SF	Hooker Chemical Ltd	361949	5339649	1973	459.00
ST-1-76	AMAX Exploration Ltd	375639	5358519	1976	1,044.24

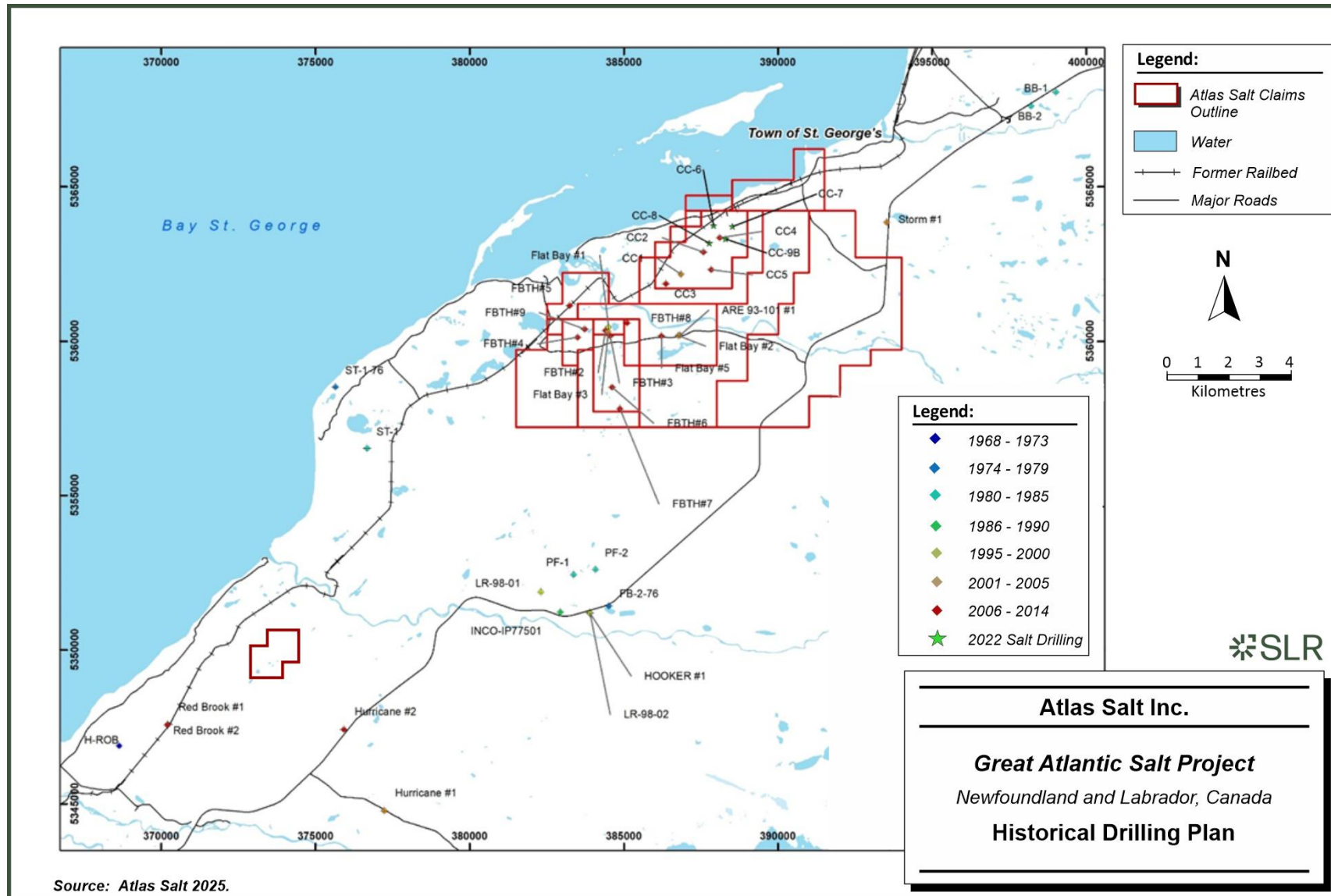


Drill Hole ID	Owner	NAD83 Z21 N		Year Drilled	Total Depth (m)
		Easting	Northing		
FB-2-76	AMAX Exploration Ltd	384509	5351419	1976	915.93
PF-1	Pronto Exploration Ltd	383359	5352439	1980	879.96
PF-2	Pronto Exploration Ltd	384069	5352599	1980	641.91
ST-1	Pronto Exploration Ltd	376659	5356529	1981	411.49
BB-1	Pronto Exploration Ltd	398999	5368079	1981	701.04
BB-2	Pronto Exploration Ltd	398199	5367619	1982	1,025.66
CT-1	Rio Algom Exploration Inc	334119	5297519	1984	384.50
INCO-IP77501	INCO	383209	5351419	1988	925.00
LR-98-01	Leeson Resources Inc	382309	5351869	1998	771.23
LR-98-02	Leeson Resources Inc	383889	5351269	1998	358.38
ARE 93-101	American Reserve Energy	386096	5360183	2000	660.94
Total					12,568.17

According to the Environmental Assessment Registration document for the Ace Gypsum Project, submitted by Red Moon Resources Inc. in 2017, at least 540 drill holes have been documented within the greater Flat Bay gypsum area. While some of these drill holes may be located within the boundaries of the GAS Property, they are not considered material to the GAS Project, which is situated approximately 3 km to the northeast.



Figure 6-1: Historical Drilling Plan



6.2.3 Geophysical Surveying

Historical geophysical surveying has been conducted across the Project area by both the government and private companies. These surveys are summarized in Table 6-2:

Table 6-2: Summary of Historical Geophysics

Year	Company	Report	Area	Method	Line (km)
1951	Photographic Survey Corporation Ltd.	NFLD/0150	Bay St. George, Stephenville Crossing to Sandy Point	1, 3	n/a
1968	Hooker Chemical Corp	012B/0103	Fischell's Brook	8, 10	n/a
1968	Hooker Chemical Corp	012B/0100	St. Fintans	12	n/a
1971	Hooker Chemical Corp	012B/0147	Stephenville, Codroy, Fischell's Brook	8	n/a
1975	GSC	NFLD/1769	Bay St. George	3	
1978	Hooker Chemical Corp	012B/0225	St. Teresa, Fischell's Brook	10	n/a
1981	Noranda Exploration Co. Ltd	12B/0253	Highlands-Lochleven	8	48
1981	Pronto Exploration Ltd	012B/0245	Fischell's Brook	8	93
1982	Chevron Standard Limited	012B/0258	Robinsons	8	95
1982	Shell Canada Resources (Westfield)	012B/0260	Crabbes River	8	88
1983	Westfield Minerals Ltd	012B/0267	Crabbes River	8	42.6
1984	GSC	N00153	Southwestern Newfoundland	1, 3	
1986	Duration Mines Ltd	012B/0287	Robinsons	11	n/a
1987	INCO	012B/0304	Fischell's Brook	5	29
1988	INCO	012B/0307	Fischell's Brook	5	n/a
1999	Leeson Resources	012B/0441	Fischell's Brook	5	n/a
2002	Vulcan Minerals Inc.	012B/0480	Flat Bay	5	19
2005	Vulcan Minerals Inc.	012B/0510	Flat Bay	5	57.5
2006	Vulcan Minerals Inc.	012B/0525	Flat Bay	5	69.5
2006	Vulcan Minerals Inc.	012B/0558	Robinsons	5	38.6
2010	Altius Resources Inc.	012B/0598	Flat Bay	8	545
2011	Vulcan Minerals Inc.	unpublished	Flat Bay	2	1,496

Source: updated from APEX, 2016.

Notes:

1. Airborne Magnetic
2. Airborne Gravity
3. Airborne Radiometric
4. Airborne Electromagnetic
5. Seismic
6. Ground Magnetic
7. VLF/EM (+/- Magnetic)
8. Ground Gravity



9. Ground Radiometric (Scintillometer)
10. Ground IP-Resistivity
11. Max-Min (Hlem)
12. Downhole Gamma

6.3 Historical Resource Estimates

No halite Mineral Resource estimates have been prepared by previous owners.

6.4 Past Production

Production of gypsum has taken place within the GAS Property at the Flat Bay Quarry. Gypsum has been extracted from the Flat Bay mines area since the 1950s, with reported historical production estimated at approximately 15 million tonnes prior to the cessation of operations in 1990. Three main open-pit quarries were active over an area of roughly 3 km².

Outside of the current Project licence areas, gypsum has also been produced at the Fischell's Brook and Coal Brook mines. The Flat Bay Mine is located directly southwest of the GAS halite deposit, while Fischell's Brook is located approximately 18 km southwest of the deposit. Historical gypsum operations within the GAS Property area are listed in Table 6-3

No halite production has taken place within the GAS Property.

Table 6-3: Previous Gypsum Operations

Company	Mine	From	To
Atlantic Gypsum Ltd.	Flat Bay	1952	1961
Flintkote Mines Ltd./Genstar	Flat Bay	1961	1987
Domtar Inc. (St George's Gypsum Mines Inc.)	Flat Bay	1988	1990
Atlantic Gypsum Resources Inc.	Fischell's Brook	1996	1998
Lafarge Gypsum Canada Inc.	Fischell's Brook	1999	2001
Galen Gypsum Mines Limited	Coal Brook	1999	2009

Source: APEX 2016.



7.0 Geological Setting and Mineralization

Information presented in Section 7.0 regarding geological setting and mineralization has been modified from APEX (2016).

7.1 Regional Geology

The Project is located within the Bay St. George Sub-Basin, which represents the northeastern extension of the regional Maritimes Carboniferous Basin of southwest Newfoundland. This basin is an extensive geological basin complex underlying the Gulf of St. Lawrence and surrounding areas. The numerous sub-basins of the Maritimes were formed through extensional tectonics in proximity to the northeast trending Long Range Fault, a major strike-slip fault within the Cabot Fault system. Fault movement is interpreted to have commenced in the Late Devonian-Early Carboniferous. These northeast-southwest orientated fault systems are characteristic of the Carboniferous sub-basins of western Newfoundland, with individual sub-basin formation, structure, and deposition determined by the local variations in scale and extent of fault activity.

During sub-basin formation, differential extension and deformation has resulted in varied tectonic features across the region, including the Snake's Bight Fault, St. George's coalfield syncline, and the Flat Bay and Anguille anticlines. As a result, sub-basins are commonly separated by basement highs/ridges, and sedimentation in depressions and fault-bound basins across the region has been irregular. Figure 7-1 shows the regional geology of the Bay St. George Sub-Basin and the relative position of the major geological structural features.

The Bay St. George Sub-Basin has been interpreted to be approximately 130 km long and 20 km wide, although from the sedimentary record it is suspected to have once stretched 60 km wide. The total sedimentary sequence in the sub-basin is estimated to be approximately 10 km comprising Devonian – Carboniferous strata including the Famennian-Tournaisian Anguille Group, Viséan Codroy Group, and Namurian-Westphalian Barachois Group. Depositional environments have predominantly been terrestrial, although the Codroy Group contains marine strata including localized evaporites.

Figure 7-2 illustrates a schematic stratigraphical column of the main formations of the Bay St. George Sub-Basin, which can also be described as follows:

- Anguille Group: the oldest strata in the Bay St. George Sub-Basin overlying a pre-Carboniferous basement, the Group varies in thickness across the Snakes Bight Fault from approximately 2 km to 4.9 km to the northwest and southeast, respectively. Siliciclastic strata include red and green sandstones, black shales, grey sandstones, and conglomerates across four sub-groups, namely:
 - Kennels Brook Formation red beds
 - Snake's Bight Formation lacustrine black shale, mudstone, turbidite, and deltaic sandstone
 - Friars Cover Formation of fluvial-deltaic sandstone and shale
 - Spout Falls Formation conglomerate
- Codroy Formation: immediately overlying the Anguille Group, the Codroy Formation comprises between 4 km and 6 km of marine and non-marine strata including siliciclastics, evaporites, and calcareous sedimentary rocks across four sub-formations, namely:



- Woody Cape Formation
- Robinsons River Formation
- Codroy Road Formation
- Ship Cove Formation
- The Codroy Road Formation consists of mixed red siltstone and sandstone, evaporitic shales, minor carbonates (bituminous dolomite and mudstone-dolomite), and grey-black mudstones and siltstones. Evaporites are predominantly gypsum and blue-grey anhydrite. The Codroy Road Formation is the main salt bearing formation and the current focus of exploration for Atlas.
- Barachois Group: overlying the Codroy Formation, this group represents the youngest strata of the Bay St. George Sub-Basin and comprises thick succession up to 2.5 km of grey sandstone, red siltstone, grey-black mudstone, and minor coal. These strata are interpreted to have originated from fluvial and floodplain depositional environments.



Figure 7-1: Regional Geology

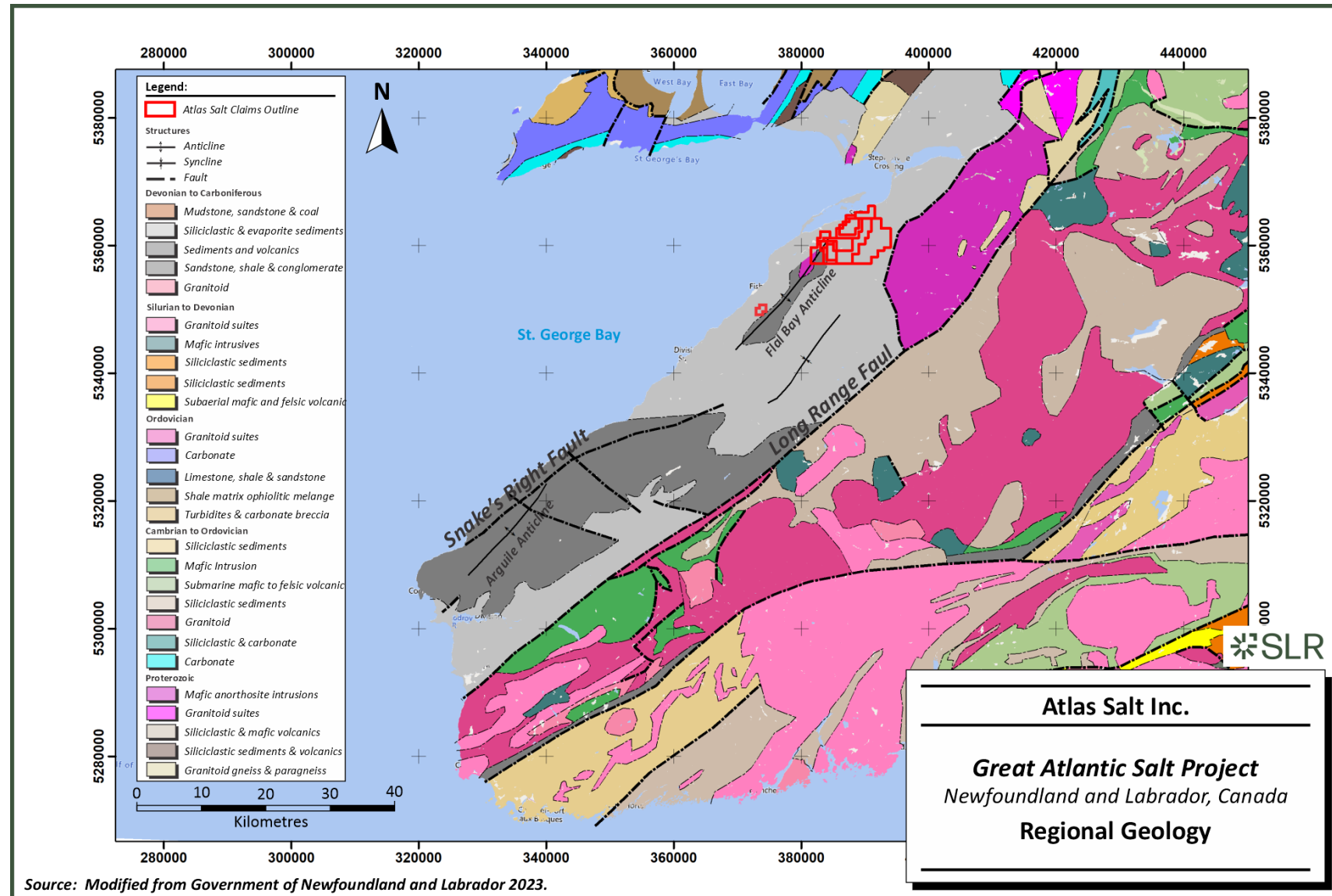
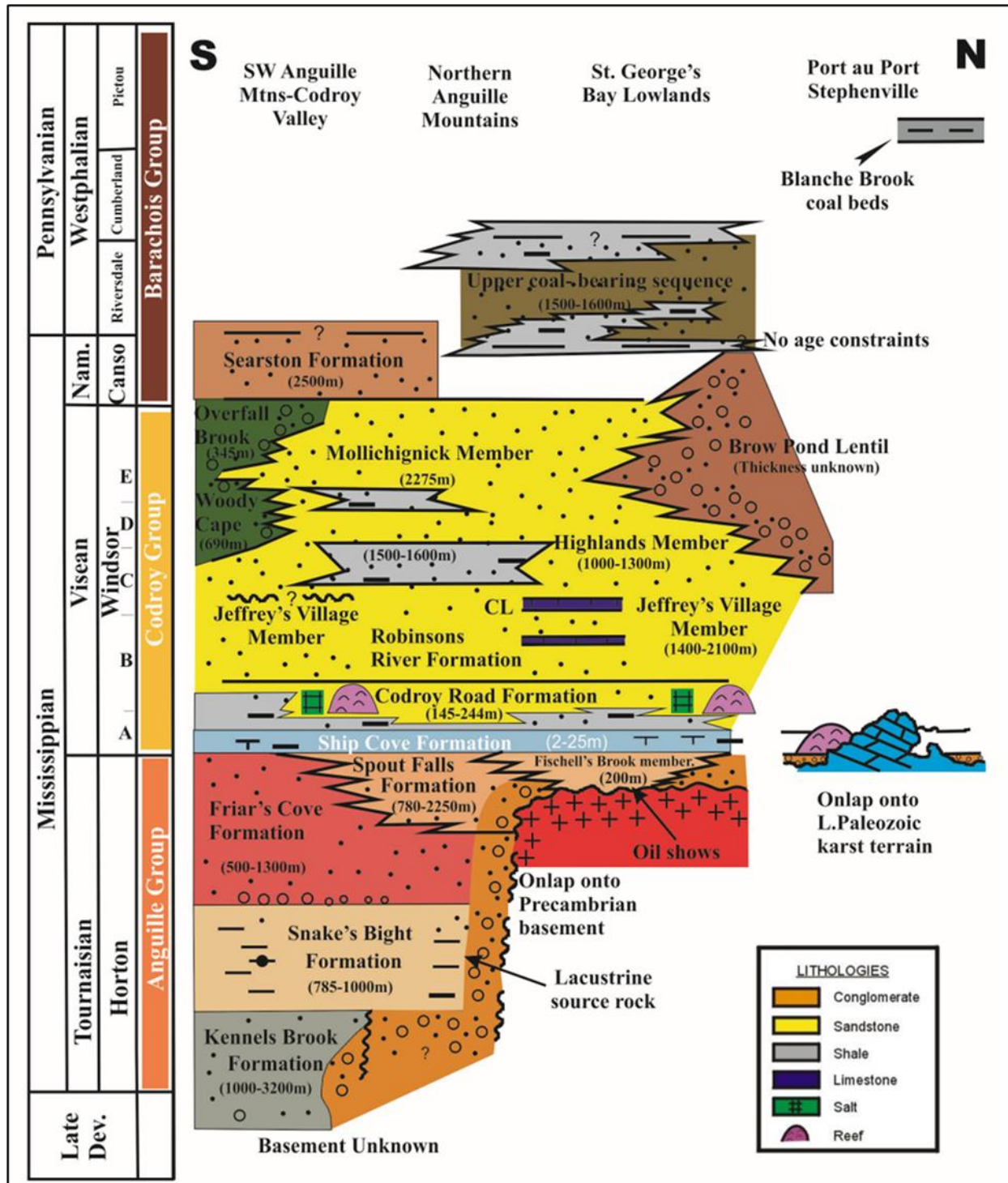


Figure 7-2: Stratigraphic Column of the Bay St. George Sub-Basin Area



Source: Newfoundland and Labrador, Department of Industry, Energy and Technology, after Knight 1992



7.2 Property Geology

The Codroy and Robinsons River formations represent the dominant stratigraphic units within the Project area, with bedrock exposures observed across the Project area including at the quarry workings of the Flat Bay Gypsum Quarry, approximately 3 km southwest of the Project. The mine extracted gypsum and anhydrite of the Codroy Road Formation in the northern portion of the Bay St. George Sub-Basin, including massive and sugary crystallite gypsum, coarse to needle-like and fibrous gypsum, and massive crystalline anhydrite. These evaporites, originating in shallow salinas (salt flats), are found interbedded with fine grained grey to red siliciclastic rocks of shallow marine and lagoonal settings.

Figure 7-3 illustrates the property geology for the Project. The stratigraphy of the Project is entirely hosted within the Carboniferous Codroy Group.

Exploration drilling to date has tested the geological succession beneath the Project to a maximum depth of approximately 630 m (in drill hole CC-5), which represents the most complete stratigraphic profile of the GAS halite deposit. The halite deposit has been intersected in a total of seven drill holes between depths of approximately 180 m and 395 m. Excluding two drill holes terminated shorter than planned, the thickness of the halite deposit has been observed to vary between 68 m in the southwest and 340 m in the northeast.

The halite is overlain by a thick succession of sandstones, siltstones, mudstones, and conglomerates, referred to as Red Beds, and is immediately underlain by a basal anhydrite, both of which form relatively sharp boundaries with the major halite horizons (Table 7-1). The Red Beds have been intersected to a maximum depth of 394 m in CC-5 with the strata thickening to the north and southeast. Drill holes have generally been terminated after intersecting the base of the halite, and as such the information on the total thickness of this unit in the Project area is limited, although it was intersected to a maximum depth of 604 m in drill hole CC-1.

Discrete interbeds of primarily mudstone with minor potash and anhydrite exist across the Project area and have been intersected in multiple drill holes. These interbeds range from 2 m to 27 m thick and exhibit varying degrees of lateral continuity across the Project area. SLR has opted to correlate these across the deposit for the purpose of excluding this material from the Mineral Resource estimate. SLR has interpreted two major interbed units across the Project as having greater lateral continuity, referred to herein as IB-1 and IB-2, thereby splitting the halite into three main horizons, referred to herein as 1-Salt, 2-Salt, and 3-Salt.

Thinner interbeds with a lower degree of lateral continuity also exist within each of the three halite horizons, interpreted as occurring over localized areas only. It is not possible to confidently correlate these between drill holes and as such these are considered as internal dilution in the Mineral Resource estimate.

Figure 7-4 shows a northeast-southwest vertical section through the SLR geological model including drill hole intersections in CC-1 to CC-4, CC-7, CC-8, and CC-9b illustrating the thickness of the halite deposit and relative position of the modelled interbeds.



Table 7-1: Simplified Stratigraphy

Stratigraphy	Min. Thickness (m)	Max. Thickness (m)	Avg. Thickness (m)
Overburden	9.0	37.2	21.0
Red Beds ^{1,3}	177.0	382.0	253.4
1-Salt	11.1	56.4	32.8
Interbed-1	3.9	27.1	14.6
2-Salt	20.3	100.8	65.7
Interbed-2	2.0	19.6	6.7
3-Salt	13.8	183.4	93.2
Anhydrite ²	3.7	246.5	43.4
Notes: - Excludes data from CC-9 and CC-9a which did not penetrate the full depth of Red Beds or intersect top of salt. - Maximum depth of penetration taken from CC-1 with all other drill holes terminated above or shortly after confirming base of salt.			

Although grouped under the collective term “Red Beds”, the individual lithologies are readily distinguishable within drill core based on colour, grain size, and sedimentary texture; however, they have been combined for convenience in the geological model.



Figure 7-3: Property Geology

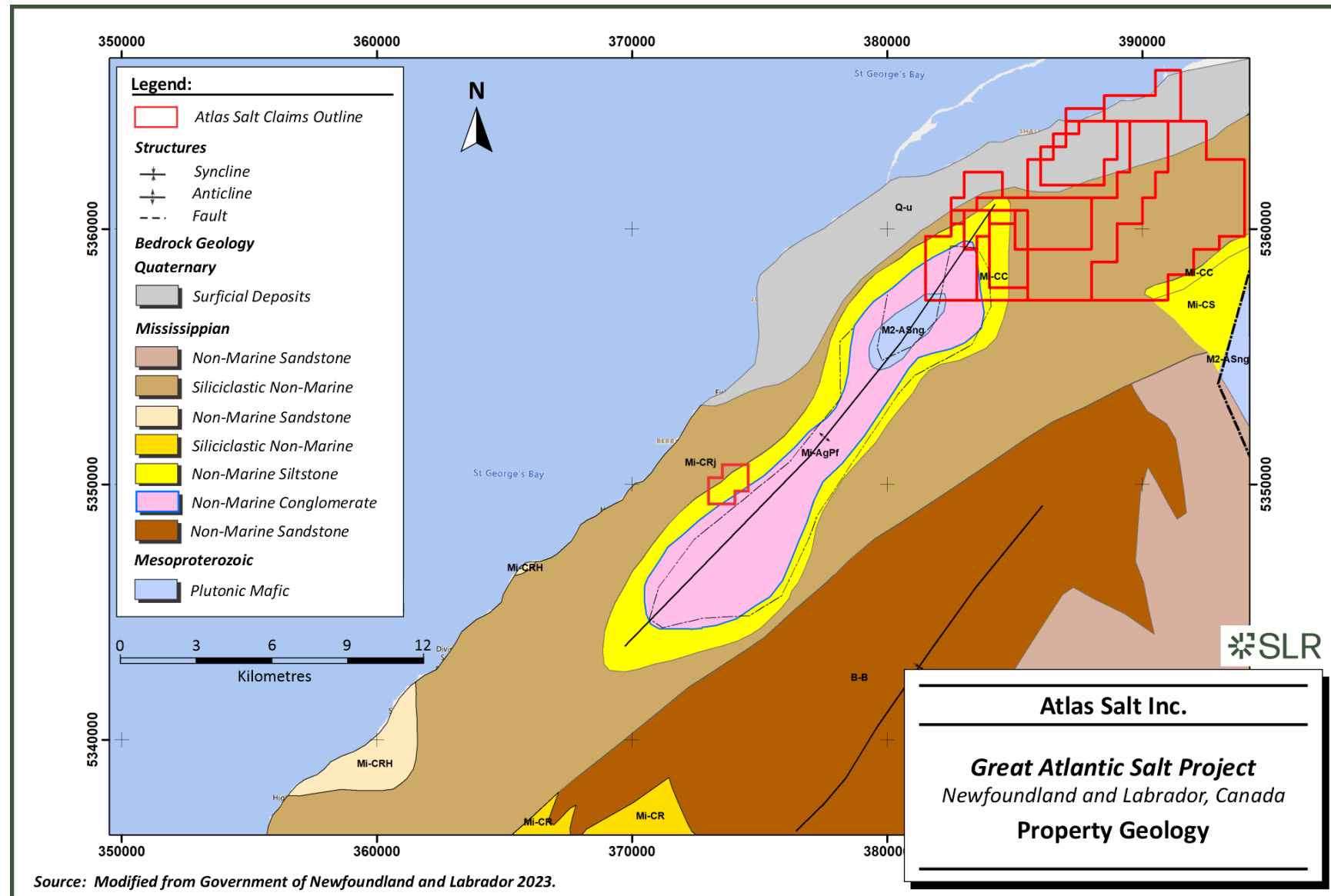
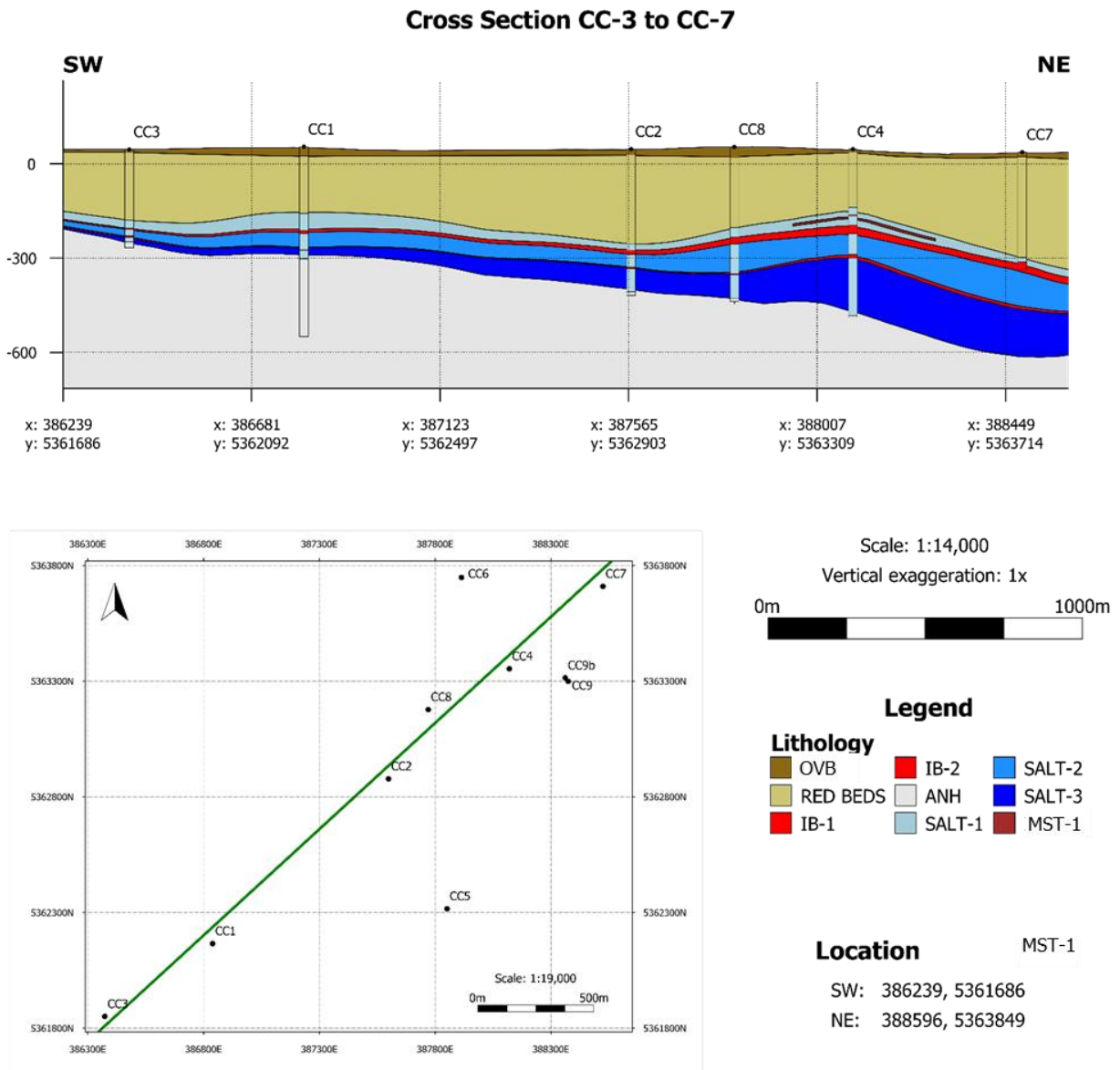


Figure 7-4: Northeast-Southwest Vertical Section (CC-7 to CC-3)



Source: SLR 2023



7.3 Mineralization

Potentially economic mineralization of gypsum, sodium chloride, and minor potassium chloride (potash) occurs within the Codroy Formation, in addition to minor coal measure accumulations within the Barachois Group. Economic extraction of gypsum has been undertaken locally since the 1950s, including at the Flat Bay Gypsum Quarry. The Project is, however, focused on the mineralization of thick, massive halite accumulations primarily of the Robinsons River Formation within the Codroy Group. As described in Section 7.2, the massive halite is known to contain laterally continuous mudstone interbeds up to 27 m thick. These interbeds have the effect of separating the halite into three horizons, a sub-division which is also known to exist within the regional Maritimes Basin. Within each of the halite units other minor interbeds of mudstones, shales, potash, and anhydrite also exist but lack lateral continuity.

The GAS halite has been shown from drill core observations to exhibit varying colouration ranging between white, beige, brown, orange, champagne, medium grey, and dark grey. Except for brown and orange colouration, which is attributable to an increased proportion of potash and/or mudstone content, colouration has not been shown to be a reliable indicator of halite quality, with grades typically ranging from 95% NaCl to 99% NaCl.

Sampling of the GAS halite has shown it to range from fine to very coarsely grained, but more commonly medium coarse. Recrystallization of salt within the deposit is evident from drill core with small, centimetre-scale, clear glass-like halite occurring perpendicular or sub-perpendicular to core axes indicating lateral salt flow having occurred after deposition. Another indicator of potential salt flow or deposition is the presence of centimetre-scale inclusions which are common through the drill core and particularly prevalent either near the top or base of the deposit proximal to the overlying Red Beds or underlying anhydrite. Inclusions of salt fragments occurring within interbedded mudstones is also commonly observed in drill core. Fine, millimetre-scale inclusions of gypsum within the halite have also been observed and interpreted as secondary to original halite formation.

Potash interbeds within the deposits typically consist of a mixture of mudstone, salt, and potash. Potash typically occurs as fine to coarse, clear white to pale orange sylvite disseminated in a halite matrix. Distinct potash beds are less common across the deposit but generally comprise sylvinite with disseminated carnallite.



8.0 Deposit Types

Salt deposits generally occur in two main forms: (i) bedded or stratiform evaporites, and (ii) diapiric or remobilized salt derived from those original beds. Diapiric salt may form domes, pillows, tongues, and ridges through halokinesis.

Based on drilling, stratigraphy, and the lateral continuity of the halite units at the GAS Project, the deposit is interpreted as a bedded evaporite system rather than a diapiric or remobilized salt body. The halite occurs in relatively flat-lying, laterally continuous horizons with interbedded mudstone, potash, and anhydrite, consistent with stratiform evaporite models within the Codroy Group of the Maritimes Basin.

The Bay St. George Sub-Basin halite is considered to be a basin-wide, bedded evaporite based on its wide lateral extent and overall stratigraphy which includes sedimentary strata from a range of depositional environments including marine, shallow marine, and salina, to fluvial and deltaic. Other examples of large-scale Carboniferous evaporite deposits in North and South America include:

- Upper Carboniferous Paradox Formation, Paradox Basin, Colorado-Utah, USA.
- Upper Carboniferous Caurauri Formation, Amazon Basin, South America.
- Carboniferous Otto Fiord Formation, Sverdup Basin, Canadian Arctic Islands.
- Lower Carboniferous Windsor Group, Maritime Basin, Atlantic Canada.

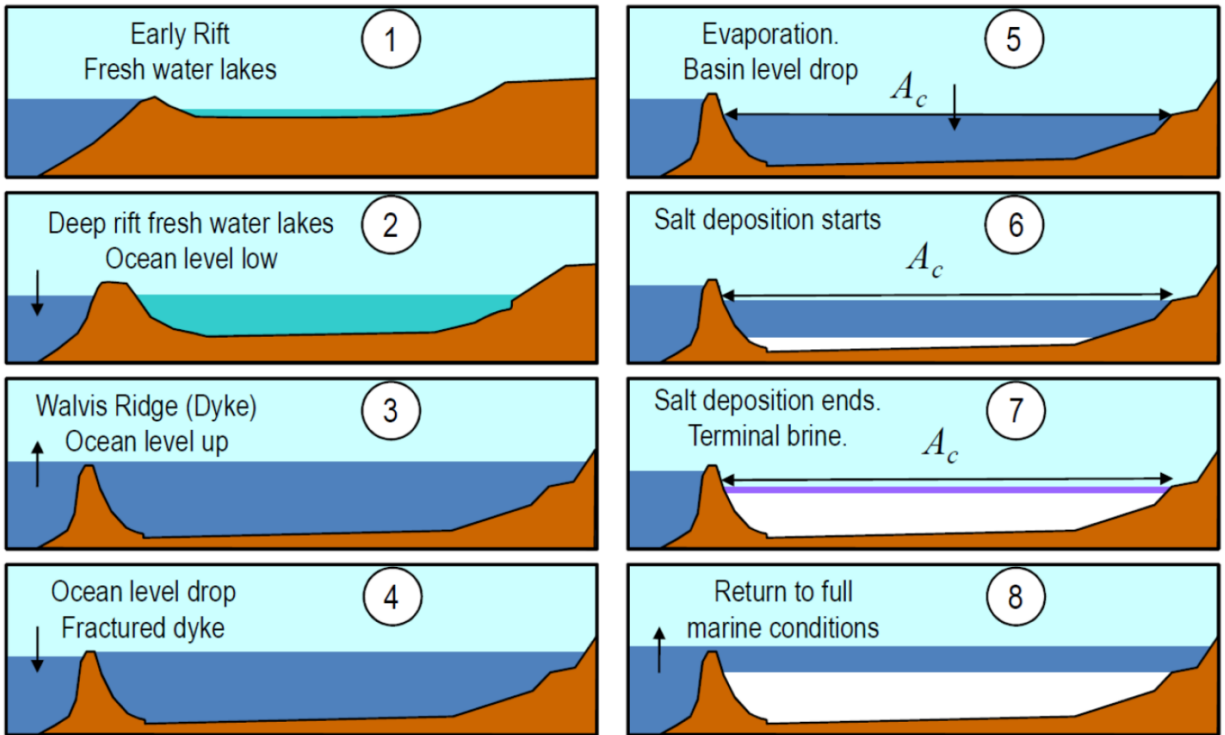
Salt formation within sedimentary environments comprises the evaporation of seawater within shallow enclosed or isolated basins, as illustrated in Figure 8-1. Key characteristics of such basins required for the formation of evaporite deposits include:

- Overall basin geometry amenable to evaporation, i.e., wide, flat, and shallow relative to offshore marine environments.
- Structural barriers to isolate or enclose the basin allowing for a stable setting over extended periods.
- Limited or periodic recharge of the basin with seawater.
- Climate with a sufficient rate of evaporation for mineralization to occur.
- Water intake proportional to basin accommodation space.

Basin-wide deposits typically result in thick accumulations of evaporites where minor fluctuations in seawater, freshwater, or terrigenous sediment influxes can result in major depositional changes. Cyclical deposition of evaporites is also common including gypsum, anhydrite, halite, and potash (primarily sylvite and carnallite), indicating that such sedimentary successions form as the result of numerous phases of deposition and basin geometries change through time. This is in contrast to marginal marine platform or shelf-type deposits.



Figure 8-1: Evaporite Deposit Model



Source: Montaron and Tapponnier 2010.



9.0 Exploration

Exploration work on the Project has included drilling, field investigations, and multiple phases of geophysical surveying by Vulcan Minerals and Atlas Salt. The following subsections summarize the work relevant to understanding the deposit.

9.1 Exploration Potential

The full lateral extent of the GAS halite deposit has not been fully defined and therefore remains open to further exploration, which is warranted. The Mineral Resource estimate prepared by SLR includes geological and analytical data from four drill holes completed in 2022 and 2023 by Atlas, namely CC-6, CC-7, CC-8, and CC-9b.

Two earlier holes (CC-9 and CC-9a) were drilled near the CC-9b location during the 2022 drilling program. Both were terminated within the overlying Red Beds strata due to drilling difficulties.

Of the 20 geotechnical holes drilled in 2024 and 2025, GT-18 and GT-19 partially intersected the upper portion of the Salt-1 horizon, confirming its contact with the overlying Red Beds at a slightly higher elevation than geological model interpretation. These intersections support the geological interpretation and do not materially affect the Mineral Resource estimate or exploration potential of the GAS Project.

In the QP's opinion, the primary exploration potential of the Project lies in extending the deposit to the east, where geophysical interpretation indicates continued extension of the salt horizons. Step-out drilling along a northeast-southwest fence parallel to the eastern margin of the current Inferred Resource boundary is warranted. The interpreted seismic surfaces of the top and base of the salt horizons provide reasonable confidence in continuity and thickness at the scale of tens of metres; however, additional drilling is required to confirm both grade and geological continuity. As the salt horizon is interpreted as dipping toward the east-southeast, any resource expansion in this direction is expected to occur at greater depths below surface relative to the current Mineral Resources.

9.2 Geophysical Surveying

In 2005, Vulcan Minerals commissioned Aeroquest Limited of Ontario to survey a 4,420 line-km high resolution airborne magnetic survey of the Bay St. George property. The survey was flown with 200 m spaced east-west lines and 1,000 m spaced northeast-southwest lines.

Between 1998 and 2010, Vulcan Minerals acquired approximately 341 km of two-dimensional seismic line data. This included a 6 line-km seismic line (98-106) along the access road between the Flat Bay Gypsum Quarry towards St. George's. Drill holes CC-1 to CC-4 were subsequently positioned along this seismic line. Interpretations of line 98-106 (Laracy 1999) included the delineation of evaporitic deposits thickest around the area of CC-4. Seismic line VUL-2010-01 orientated approximately east-west bisecting drill holes CC-1 and CC-5 also provides subsurface information in the Project area. Both seismic sections indicated the presence of a well-defined reflector towards the base of the evaporite sequence where a thick anhydrite horizon is known to underly the GAS halite.

In 2011, Vulcan Minerals completed a 1,496 line-km airborne gravity gradiometer and aeromagnetic survey over the Bay St. George area that now includes the Project and an additional block north of Stephenville. Line spacing was 300 m orientated northeast-southwest, with variable spaced lines averaging 3,000 m orientated northwest-southeast. The survey



indicated a decrease in density from southeast to northwest, consistent with a crystalline basement in the southeast.

In 2022, Atlas commissioned further reprocessing and interpretation of the seismic survey data from seismic lines 98-106 and VUL-2010-01, in addition to seismic line SR-4 south of the deposit area. Reprocessing was undertaken by independent consultant A. Bernard in May 2022. The study included re-evaluation of the time-depth conversions to be applied to existing seismic line data including:

- Line 98-106: orientated northeast-southwest along the Project access road. Drill holes CC-1 to CC-4 and CC-7 have subsequently been drilled along this line.
- Line VUL-2010-01: orientated approximately east-west north of CC-1. Drill hole CC-5 was subsequently drilled to the east of CC-1 along this line.
- Line SR-4: orientated approximately east-west but with a varying path, this line traverses drill holes FB-2 and FB-5 to the south of the GAS deposit area.

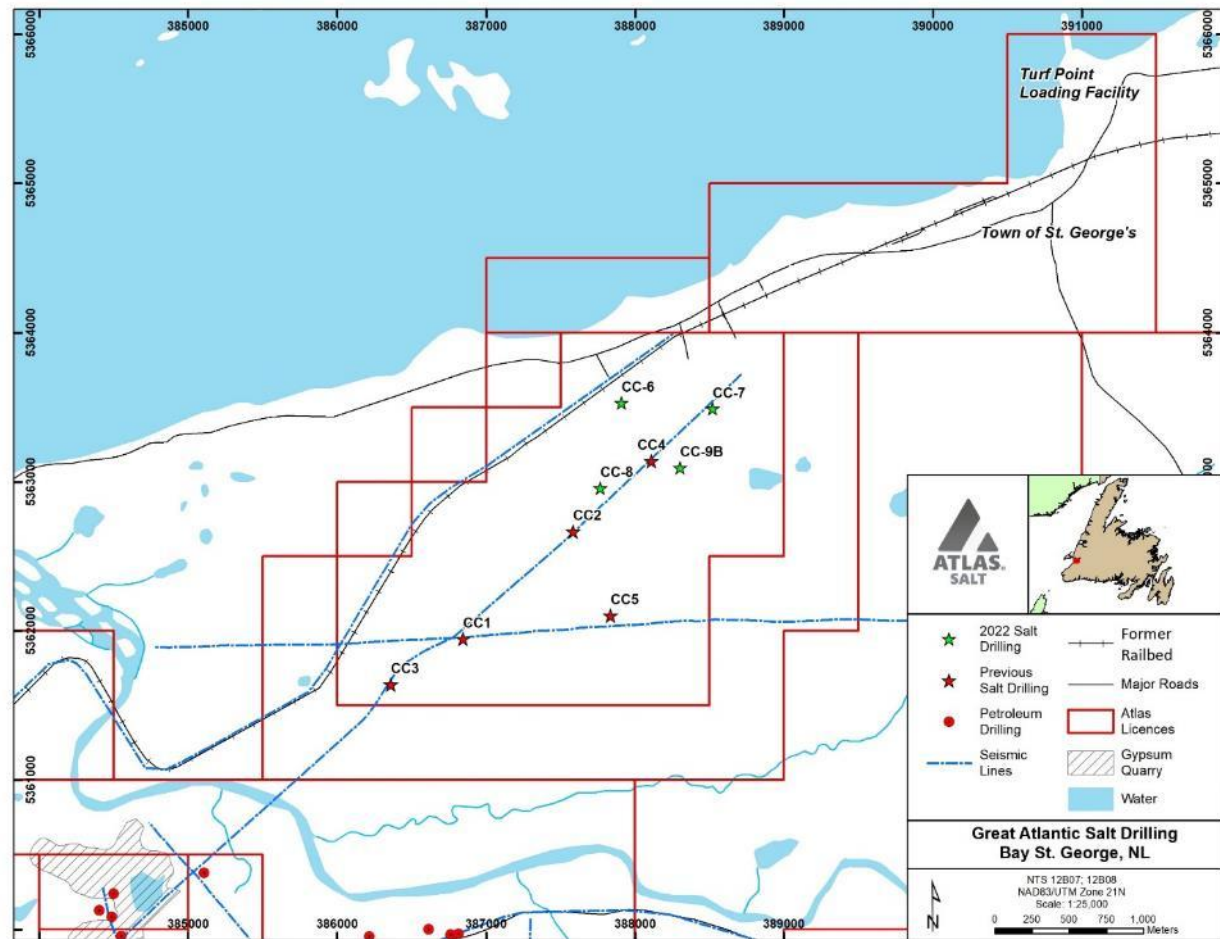
From the seismic line re-interpretations, a new conversion between two-way-time (TWT) and total vertical depth minus the elevation of the reference point, referred to as TVDSS, was derived. The QP was provided with contours representing the top and basal surfaces of the Codroy Formation. In addition to drill hole intersections, these were subsequently used by the QP to inform geological interpretation and modelling of the halite, as discussed in Section 14.

The QP has not independently verified the reprocessing or interpretation of the seismic survey data described above but considers the interpreted seismic line contour surfaces to be reliable at the scale of tens of metres for the purposes of geological interpretation and exploration planning.

Figure 9-1 presents the Project drilling plan overlayed on the regional seismic lines.



Figure 9-1: Regional Seismic Lines and Project Drilling Plan



Source: Atlas 2023.

9.3 Remote Sensing/LiDAR/Satellite Imagery

In 2021, Leading Edge Geomatics completed a light detection and ranging (LiDAR) survey over the GAS Project to support resource-model development, topographic validation, and infrastructure-siting studies. The survey covered approximately 90 km² using a fixed-wing aircraft equipped with a RIEGL LMS-Q780 sensor.

9.3.1 Survey Specifications

- Acquisition Dates: October 12–14, 2021
- Platform: Fixed-wing aircraft (Cessna 208 Caravan)
- Average Point Density: ≈ 8 points/m²
- Swath Overlap: ≥ 50 %
- Vertical Accuracy (as delivered): ± 0.10 m (RMSE z)
- Horizontal Accuracy (as delivered): ± 0.20 m



- Coordinate System/Datum: UTM Zone 21 N (NAD83 CSRS/CGVD2013 Canadian Geoid Model)

9.3.2 Ground Control and Quality Assurance

Ground control was established using real-time kinematic (RTK) Global Positioning System (GPS). A total of 16 control points were surveyed to calibrate and validate the LiDAR dataset. Vertical and horizontal accuracy were confirmed by comparison with surveyed benchmarks and drill collar locations, yielding residuals within ± 0.10 m vertical and ± 0.15 m horizontal. The QP considers this level of accuracy suitable for elevation modelling, collar positioning, and terrain analysis.

9.3.3 Data Processing

The raw LiDAR data were processed by Leading Edge Geomatics to generate:

- A bare-earth Digital Elevation Model (DEM) at 1 m resolution
- A Digital Surface Model (DSM) and classified point cloud identifying ground, vegetation, and surface features
- Contour mapping at 1 m intervals

Final deliverables were provided in LAS and GeoTIFF formats and projected to UTM Zone 21 N (NAD83 CSRS/CGVD2013).

9.3.4 Interpretation and Relevance

The LiDAR data were used to verify surface topography for drill-platform siting, integrate terrain into the three-dimensional (3D) geological model, and guide preliminary infrastructure layout for mine planning purposes. The high-resolution elevation data have been incorporated into Sections 14 and 18 of this Technical Report as appropriate.

The QP's review of the LiDAR control points and spot-checks against surveyed collar elevations confirmed differences within a reasonable tolerance. The QP considers the LiDAR survey to provide reliable topographic control and accuracy that is adequate for ongoing exploration and project development at the GAS Property.



10.0 Drilling

10.1 Summary

Drilling completed within the Project licences by Atlas Salt and its predecessor Vulcan Minerals has been grouped into three categories: hydrocarbon exploration, halite exploration, and geotechnical drilling. Table 10-1 summarizes drill holes completed between 1999 and 2012 for hydrocarbon exploration and to assess the extent of the gypsum deposit near the Flat Bay Gypsum Quarry to support quarrying activities. Table 10-2 summarizes halite exploration drilling on the Project, consisting of 11 drill holes completed between 1999 and 2022. Table 10-3 summarizes geotechnical drill holes completed between 2023 and 2025.

10.1.1 Hydrocarbon and Flat Bay Gypsum Quarry Drilling

From 1999 to 2006, Vulcan Minerals completed four drill holes in the Flat Bay area for evaluation of hydrocarbon potential within the Carboniferous strata, referred to as the Flat Bay (“FB”) wells. The drill holes generally intersected mainly gypsum and anhydrite, stratigraphically underlying the GAS halite deposit, except for FB-2 and FB-5 drilled in 2004 and 2006, respectively, which intersected salt and potash. FB-2 and FB-5 are located approximately 1,700 m south of the southernmost CC drill hole (CC-3). FB-2 and FB-5 drill holes intersected halite, although, due to their location relative to the Project and absence of analytical data, neither has been used in the previous Mineral Resource estimation and has similarly not been used by SLR.

Between 2009 and 2012, Vulcan Minerals completed eight test holes located in proximity to the Flat Bay Gypsum Quarry, located approximately 2 km southwest of CC-3, referred to as the Flat Bay Test Holes (“FBTH”). These were drilled to provide stratigraphic information within the lower Codroy Formation and upper Anguille Groups and to test the gypsum thickness within the remaining extent of the quarry.

The remaining FB and FBTH holes did not intersect the GAS halite and are therefore not included in the drill hole database for the Project.

Table 10-1: Summary of Hydrocarbon and Flat Bay Gypsum Quarry Drilling

Drill Hole ID	Owner	Year Drilled	NAD83 Z21 N ¹		Elevation (masl)	Total Depth (m)
			Easting	Northing		
FB-1	Vulcan Minerals	1999	384494	5360457	47.00	286
FB-2	Vulcan Minerals	2004	386756	5360182	55.45	845.4
Hurricane-1	Vulcan Minerals	2005	377221	5344869	138.32	876
Hurricane-2	Vulcan Minerals	2005	375913	5347414	145.70	935.2
Storm-1	Vulcan Minerals	2005	393519	5363857	111.75	880.3
FB-3	Vulcan Minerals	2007	384481	5360303	45.36	370.5
FB-5	Vulcan Minerals	2006	386211	5360171	68.63	719
Red Brook-1	Vulcan Minerals	2006	370175	5347603	56.44	186.5
FBTH-2	Vulcan Minerals	2009	384396	5360345	43.64	213.5
FBTH-3	Vulcan Minerals	2009	384543	5360173	46.89	249



Drill Hole ID	Owner	Year Drilled	NAD83 Z21 N ¹		Elevation (masl)	Total Depth (m)
			Eastings	Northing		
Red Brook-2	Vulcan Minerals	2009	370184	5347564	57.10	1,965
FBTH-4	Vulcan Minerals	2011	383490	5360124	20.41	187
FBTH-5	Vulcan Minerals	2011	383232	5361153	7.37	350
FBTH-6	Vulcan Minerals	2011	384614	5358513	65.99	202
FBTH-7	Vulcan Minerals	2011	384869	5357809	80.45	220
FBTH-8	Vulcan Minerals	2011	385099	5360598	18.46	349
FBTH-9	Vulcan Minerals	2011	383725	5360395	16.39	159
Total						8,993.4
Notes: - Coordinates converted from UTM NAD27 Z21 to NAD83 by SLR - Drill hole information obtained from publicly available records of Newfoundland and Labrador, Industry, Energy, and Technology (www.gov.nl.ca/iet/publications)						

10.1.2 Halite Exploration Drilling

Drill hole CC-1 was completed in 2002 by Vulcan Minerals for the purpose of testing geological and geophysical interpretations of a massive halite deposit within the Project area. Following a 10-year gap in exploration, Red Moon (now Atlas) subsequently completed four drill holes (CC-2 to CC-5) in 2013 and 2014. Data from CC-1 to CC-5 served as the basis for the Inferred Mineral Resource estimate in 2016 (APEX 2016). Exploration restarted at the Project in 2022 by Atlas that has to date comprised four drill holes, plus two that were terminated prior to reaching salt, due to drilling difficulties (Table 10-2).

Table 10-2: Summary of Project Drilling

Drill Hole ID	Owner	Year Drilled	UTM NAD83 Z21		Elevation (masl)	Total Depth (m)
			Eastings	Northing		
CC-1	Vulcan Minerals	2002	386838.9	5362165.6	54.20	605.2
CC-2	Red Moon	2013	387598.9	5362877.7	47.45	466.0
CC-3	Red Moon	2013	386373.4	5361850.9	46.55	313.0
CC-4	Red Moon	2014	388120.8	5363353.0	47.41	536.0
CC-5	Red Moon	2014	387851.6	5362316.1	58.79	632.0
CC-6	Atlas Salt	2022	387914.1	5363747.8	24.86	362.0
CC-7	Atlas Salt	2022	388525.0	5363709.5	38.09	374.0
CC-8	Atlas Salt	2022	387770.4	5363177.0	54.67	491.6
CC-9 ¹	Atlas Salt	2022	388374.8	5363298.8	47.55	158.3
CC-9a ¹	Atlas Salt	2022	388367.5	5363307.7	47.11	116.0
CC-9b ²	Atlas Salt	2022	388381.1	5363303.8	47.20	580.0
Total						4,634.10



Notes:

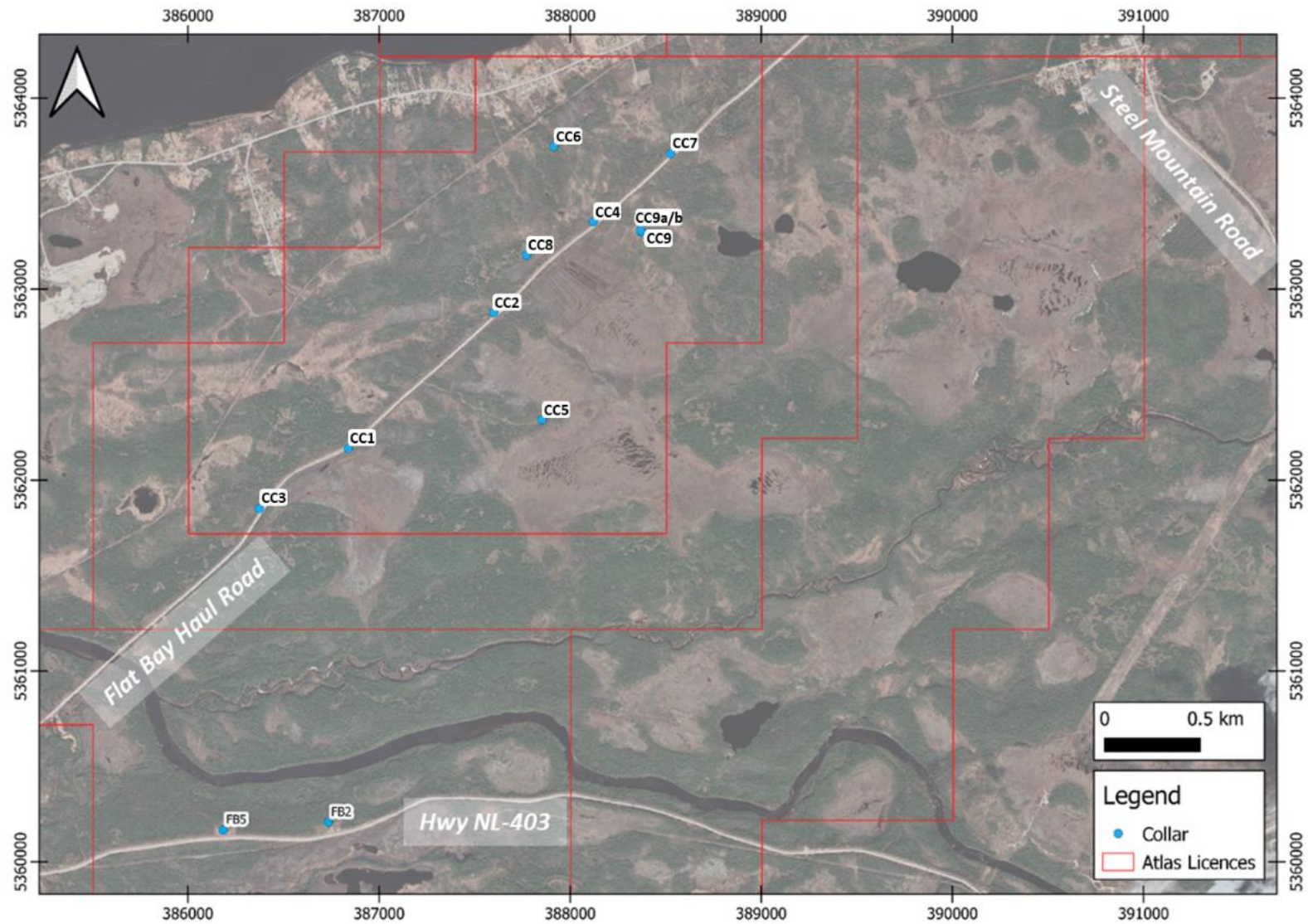
1. CC-9 and CC-9a were terminated prior to reaching salt.
2. CC-9b was a redrill of 9/9a and intersected the full thickness of salt. A follow-up survey of drill hole collars was completed by Yates & Wood Limited in April 2023, including the collar for drill hole CC-9b. However, a handheld GPS coordinate was used for CC-9b at the time of the Mineral Resource estimate, as the professional survey results were not yet available.

Figure 10-1 illustrates a drill hole plan of the Project showing the relative position of all drilling through 2022. CC-1 to CC-4 were all positioned along an existing access road/track orientated northeast-southwest through the Project area. In addition to providing ease of access for drilling, this layout was primarily to allow comparison of intersections to seismic line 98-106, also positioned along the road (see Figure 9-1). CC-5 is located approximately 600 m southeast of the road and is positioned along seismic line VUL-2010-01 that also bisects CC-1.

Drill hole spacings across the deposit range from approximately 270 m between CC-4 and CC-9b up to 1,030 m between CC-1 and CC-2, and 1,120 m between CC-9b and CC-5.



Figure 10-1: Project Drill Hole Plan



Source: SLR 2023.



10.1.3 Geotechnical Drilling

In addition to the holes used for Mineral Resource estimation, a total of 24 holes have been drilled for geotechnical investigation purposes. Hole D-1 was a cored drill hole completed in 2023 near the mid-point of the decline alignment to support decline design. TH1, TH2, and TH4 were short bullnosed holes completed in the vicinity of the proposed 2023 boxcut for overburden characterization. An additional 20 cored geotechnical holes were completed in 2024 and 2025 to support decline design work in the 2025 UFS. A summary of the completed geotechnical holes is presented in Table 10-3. The holes were geologically and geotechnically logged. A plot showing the hole locations in relation to the mine access is presented in Figure 16-7.

A geological model was created using the data collected in the 2024 and 2025 drill campaign to facilitate updated mine access designs. This mine access model was primarily focused on characterizing the Red Beds above the salt deposit and along the planned decline alignment. Consequently, the Red Beds are modelled to a higher level of detail in the mine access model than in the Mineral Resource model. The detail included in the mine access model may offer insights useful to further refine the Mineral Resource model and vice versa. The QP recommends that the geological model developed for mine access design work be reconciled with the geological model developed for salt modelling and Mineral Resource estimation.

SLR notes that drill holes GT-18 and GT-19 intersected the upper portion of the Salt-1 horizon earlier than anticipated within the geological model. These holes were terminated before fully intersecting the Salt-1 horizon and were not assayed, as they were designed to collect geotechnical data rather than compositional samples. The core from both holes is stored on site in the core shack and could be sampled in the future.

Table 10-3: Summary of Project Geotechnical Drilling

Drill Hole ID	Year Drilled	UTM NAD83 Z21		Total Depth (m)
		Easting	Northing	
D-1	2023	389025.0	5363558.0	159.5
TH1	2023	389640.1	5363916.0	12.2
TH2	2023	389602.3	5364048.5	12.2
TH4	2023	389646.5	5363815.1	29.0
GT-01	2025	389527.4	5363916.6	26.0
GT-02	2025	389520.1	5363824.7	32.0
GT-03	2025	389458.2	5363893.4	35.0
GT-04	2025	389366.0	5363842.2	62.0
GT-05	2025	389306.3	5363743.3	71.0
GT-06	2025	389234.9	5363761.0	86.0
GT-07	2025	389176.7	5363780.7	90.0
GT-08	2025	389132.6	5363671.5	107.0
GT-09	2025	388996.8	5363708.1	121.0
GT-10	2025	388936.2	5363627.6	131.0



Drill Hole ID	Year Drilled	UTM NAD83 Z21		Total Depth (m)
		Easting	Northing	
GT-11	2025	388797.0	5363618.4	152.0
GT-12	2025	388765.8	5363523.1	167.0
GT-13	2025	388629.3	5363557.7	117.5
GT-14	2024	388604.3	5363500.6	185.0
GT-15	2025	388551.5	5363432.9	135.0
GT-16	2024	388443.6	5363486.2	215.0
GT-17	2024	388398.9	5363373.3	230.0
GT-18	2025	388288.2	5363417.9	178.0
GT-19	2025	388349.5	5363395.2	179.0
GT-20	2025	388431.8	5363421.8	146.0
Total				2,678.4

10.2 Drilling Methods

FB2 and FB5 were drilled in 2004 and 2006 by Vulcan Minerals for the purpose of evaluating oil and gas potential of the Carboniferous strata of the basin. Both were drilled by percussion methods at 216 mm and 165 mm diameter with chip samples taken, and therefore simplified geological logs to the nearest five metres are available. Both intersected thick evaporitic sequences of gypsum, halite, and anhydrite, underlain by anhydrite, limestone, and conglomerates, confirming the lateral extent of halite mineralization across the property area.

Drill hole CC-1 was drilled in 2002 by Vulcan Minerals. Drill holes CC-2 to CC-5 were all drilled by Logan Drilling Group of Nova Scotia for Atlas. All CC-1 to CC-5 drill holes were completed as continuous cored diamond holes at HQ size (63.5 mm core diameter) through the overlying clastic (Red Beds) strata, followed by NQ size (47.6 mm core diameter) through the halite. To maintain high core recoveries within the halite to allow core sampling, the overlying clastic strata were drilled then cemented at the base, after which a closed-circulation saturated brine fluid was used for drilling through halite.

Drilling of CC-6, CC-7, CC-8, CC-9, and CC-9a in 2022 was undertaken by Cabo Drilling Corporation using a Marcotte 2500 drilling rig and 9b was drilled by Logan Drilling Group. Drill holes were similarly completed as continuous cored diamond holes at HQ size through the overlying clastic strata, changing to NQ size prior to drilling through the halite.

After drilling, CC-1 was surveyed using a Differential Global Positioning System (DGPS) unit by Enos Fudge Surveys of Newfoundland on behalf of Vulcan Minerals on February 4, 2002. Drill holes CC-2 to CC-5 were surveyed using a handheld GPS unit. Due to coordinate discrepancies identified by SLR during the 2022 exploration program, CC-2 to CC-9/9a were surveyed by Yates & Wood Limited (Yates & Wood) surveyors of Newfoundland, on October 27, 2022.

A follow-up survey of drill hole collars was completed by Yates & Wood on April 20, 2023, including the collar for drill hole CC-9b. The updated coordinates were provided to SLR in September 2023, after completion of the Mineral Resource estimate. Comparison of the newly surveyed collar position with the location previously used in the model indicates a horizontal



difference of approximately 22 m and an elevation difference of approximately 0.5 m. The QP considers these differences to be within acceptable tolerances for the purposes of Mineral Resource estimation and geological modelling of halite deposits.

Given the stratigraphic nature of the halite deposit, all drill holes have been drilled vertically. Only CC-1 has been subject to downhole deviation surveying, conducted at four downhole depths and all confirming 0° deviation from vertical. No downhole deviation surveys have been completed in any of the remaining resource drill holes. All drill holes have assumed to be vertical and modelled as such.

The geotechnical holes drilled in 2024 and 2025 were subject to collar surveys using a DGPS by Yates & Wood surveyors. Downhole deviation surveys were completed by Logan Drilling.

10.3 Core Logging and Drilling Results

Geological logging of core has been undertaken by company geologists of Vulcan Minerals and Red Moon (now Atlas) for each of the drilling programs. Core logging includes recording of lithology and a geological description of each logged interval comprising commentary on colour, grain size, mineralogy, estimated core compositions, and any intervals of specific interest. Core was also photographed during logging. Logging in CC-2 and CC-3 in 2013 also included a more detailed description of colour and purity within salt intersections.

Based on the observations of exploration completed to-date, the GAS deposit has been drill tested over an extent of approximately 2,800 m in a northeast-southwest direction and a width of approximately 600 m in a northwest-southeast direction.

The halite has to date been drill tested a maximum depth of 625 m in CC-5. While generally considered as a massive halite deposit, drill core observations also show that interbeds of mudstone and potash – often containing salt inclusions or fragments – occur across the deposit with varying degrees of lateral continuity. These vary in thickness from approximately 0.2 m lenses up to 27 m distinct interbeds. Two interbeds have been deemed to have lateral continuity across the full deposit being interpreted in all drill holes.

Drill hole intersections generally indicate that the overall halite deposit thickens towards CC-4 in the northeast. The intersection in CC-4 also indicates this location as a stratigraphic high, with the halite dipping away to surrounding intersections in CC-6, CC-7, CC-8, and CC-9b, all being between 60 m and 160 m deeper. The halite deposit is generally shown to dip shallowly (10°) to the southeast.

A site visit to the Project was conducted by Dr. John George Kelly, EurGeol, P.Geo., FIMMM, MIQ, an SLR employee and the QP for earlier phases of the work, from October 17 to 20, 2022. During that site visit, Dr. Kelly completed check logging of drill holes CC-2, CC-4, and CC-8 in the northeast of the deposit (SLR 2023). Combining the check logging observations with original logging from the other holes, SLR derived the following thicknesses (Table 10-4).

Table 10-4: Summary of Drilling Intersections

Drill Hole ID	Red Beds ¹ (m)	1-Salt (m)	Interbed-1 (m)	2-Salt (m)	Interbed-2 (m)	3-Salt (m)
CC-1	212.0	55.5	9.5	51.0	2.0	27.5
CC-2	303.0	19.1	12.9	41.4	4.1	73.8
CC-3	225.4	25.4	4.2	20.3	4.5	13.8



Drill Hole ID	Red Beds ¹ (m)	1-Salt (m)	Interbed-1 (m)	2-Salt (m)	Interbed-2 (m)	3-Salt (m)
CC-4	186.0	56.0	27.1	66.2	11.1	183.4
CC-5	394.0	11.1	3.9	85.8	2.5	127.4
CC-6 ²	314.0	25.5	21.7	0.8	-	-
CC-7 ²	335.0	15.0	24.0	-	-	-
CC-8	257.0	31.0	20.6	94.6	3.1	76.9
CC-9 ³	158.3	-	-	-	-	-
CC-9a ³	116.0	-	-	-	-	-
CC-9b ⁴	242.6	56.4	7.3	100.8	19.6	149.8

Notes:

- Includes superficial overburden.
- CC-6 and CC-7 did not intersect the bottom of the salt horizons.
- CC-9 and CC-9a were terminated prior to reaching salt.
- CC-9b was a redrill of 9/9a and intersected the full thickness of salt.
- Geological interpretation is discussed in more detail with respect to geological modelling and Mineral Resource estimation in Section 14.0.

10.4 Core Recovery

For drill hole CC-1 completed in 2002, drill core recovery is stated as being 100% (Vulcan Minerals 2004). For drill holes CC-2 to CC-5, core recovery was not explicitly recorded unless encountered, however, from these records SLR has evaluated core loss intervals against the three halite horizons intersected. For CC-6 to CC-9b, a separate core recovery log was provided for each hole indicating the actual recovered core from each drill run.

The combined core recovery records have been used by SLR to evaluate recovery within each of the three halite horizons, results of which are shown in Table 10-5. Core recovery was lowest in the uppermost salt horizon (1-Salt), generally attributable to dissolution at the boundary between the Red Beds and halite. Core recovery in the remaining halite intersections were high except for the lowermost horizon (3-Salt) in CC-8 with a core recovery of 75%.

Table 10-5: Summary of Core Recovery

Drill Hole ID	Core Recovery (%)		
	1-Salt	2-Salt	3-Salt
CC-1	100	100	100
CC-2	77	100	100
CC-3	88	100	100
CC-4	84	100	100
CC-5	82	100	100
CC-6	98	100	-
CC-7	98	-	-
CC-8	88	98	75



Drill Hole ID	Core Recovery (%)		
	1-Salt	2-Salt	3-Salt
CC-9b	90	96	92

The QP is of the opinion that core recoveries are sufficient for the purposes of obtaining representative samples. The 1-Salt was shown to be more susceptible to core loss which could be associated with an increased proportion of mudstone, potash, and anhydrite inclusions in comparison to the more massive halite of 2-Salt and 3-Salt. Reduced core recovery of 3-Salt in CC-8 was reviewed during the QP site visit in 2022. Core was observed as being more broken and disked in comparison to other drill holes and has been attributed to the experience of the drilling contractor. This result has therefore not influenced the QP's opinion of sample representativeness.

10.5 Downhole Geophysical Logging

Following drilling in 2013 and 2014, CC-2 to CC-5 were subject to downhole geophysical surveys for natural gamma. All downhole geophysical logging was undertaken internally by Red Moon (now Atlas) using a downhole poly-gamma probe manufactured by Mount Sopris Instruments. Natural gamma logs were subsequently used to validate the top and base of the halite horizons and lithological logging intervals as observed in drill core. Natural gamma geophysical logging has also been undertaken in CC-9b but not CC-8 due to hole size restrictions.

Geological interpretation and the use of downhole geophysics is discussed in more detail in Section 14.0

10.6 Core Sampling

Due to the massive and generally homogenous nature of the GAS halite, sampling in all drill core has not been undertaken continuously. Sampling of CC-1 to CC-5 has been based on a strategy of taking representative core samples dependent on drill core observations and geological logging. As a result, the total number of samples in these drill holes is a function of halite homogeneity and therefore the frequency of core samples is different within each hole. Sampling of CC-8 and CC-9b in 2022 was completed using more regularly spaced sampling strategy and therefore the frequency of sampling is higher than in CC-1 to CC-5 holes, i.e., not a function of halite homogeneity.

Sample intervals varied between drilling campaigns and were selected to balance representativeness with geological context. For the earlier drill holes (CC-1 to CC-5), half-core sampling intervals typically ranged from 0.2 m to 0.75 m, averaging approximately 0.4 m. For the 2022–2023 drilling (CC-6 to CC-9b), intervals were generally between 0.10 m and 0.30 m with an average of 0.18 m. Most samples were collected as half-core, although in portions of CC-8 where splitting of NQ-diameter core was impractical, whole-core intervals of approximately 0.10 m were taken.

Table 10-6 provides a summary of core samples and sampling frequency taken in each drill hole, including all check samples taken by SLR and Atlas in 2022 and 2023. No core samples for salt assaying were taken from CC-9 and CC-9a.



Table 10-6: Summary of Sampling

Drill Hole ID	Total Depth (m)	Halite + Interbed Thickness (m)	No. of Samples (Halite + Interbed)	Sample Frequency (m)
CC-1	605.2	145.5	66	2.20
CC-2	466	151.3	83	1.82
CC-3	313	68.1	44	1.55
CC-4	536	343.7	71	4.84
CC-5	632	230.7	81	2.85
CC-6	362	48.0	27	1.78
CC-7	374	39.0	12	3.25
CC-8	491.6	226.1	194	1.17
CC-9b	580.0	333.7	199	1.68
Total		1,586.11	777	2.04

Across all drilling programs, individual sample intervals ranged from 0.08 m to 0.75 m, with sampling frequencies varying from approximately one sample every 1.17 m in the most regularly sampled holes to one sample every 4.84 m in more homogeneous sections. Sampling intervals were selected based on core observations and geological logging to provide representative coverage of the GAS halite. The SLR QP has reviewed Atlas's drilling methods, collar and downhole survey procedures, and considers them consistent with industry standards for this deposit type. SLR has not identified any drilling, sampling, or recovery factors that could materially affect the accuracy or reliability of the Mineral Resource estimate.



11.0 Sample Preparation, Analyses, and Security

11.1 Sample Preparation and Analysis

11.1.1 Summary

Sampling and analysis on Project drill core has been undertaken in four distinct phases including:

- 1 Potash Analytical Testing of CC-1 to CC-5 drill holes in 2008, 2013, and 2014 using Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES).
- 2 Sodium Chloride Analytical Testing of CC-1 to CC-5 drill holes in 2014 and 2015 using either ASTM Designation D632-12 (2012) (ASTM D632-12) or ICP-OES.
- 3 Sodium Chloride Analytical Testing of CC-6 to CC-9b drill holes in 2022 and 2023 using ASTM D632-12.
- 4 Sodium Chloride Analytical Testing of check laboratory samples taken from CC-1, CC-4, CC-8, and CC-9b in 2022 and 2023 using British Standard BS 3247:2011 + A1:2016.

Table 11-1 summarizes the analytical data available for the Project and used by SLR for Mineral Resource estimation. It should be noted that for those samples analyzed at Saskatchewan Research Council (SRC) for K₂O, NaCl values were also calculated from the geochemical results and, as such, there are a total of 162 NaCl results analyzed by ICP-OES.

Table 11-1: Summary of Analysis

Drill Hole ID	K ₂ O Analysis				NaCl Analysis					
	ICP-OES	Lab	ICP-OES	Lab	ASTM D631-12	Lab	BS 3247:2011 + A1:2016	Lab	ICP-OES	Lab
CC-1	8	SRC	-	-	34	Actlabs	2	Sandberg	24	SRC
CC-2	22	SRC	-	-	48	Actlabs	-	-	17	Actlabs
CC-3	16	SRC	-	-	24	Actlabs	-	-	10	Actlabs
CC-4	6	Actlabs	3	SRC	37	Actlabs	2	Sandberg	34	Actlabs
CC-5	7	Actlabs	3	SRC	64	Actlabs	-		18	Actlabs
CC-6	-	-	-	-	27	Actlabs			-	-
CC-7	-	-	-	-	12	Actlabs			-	-
CC-8	-	-	-	-	174	Actlabs	23	Sandberg	-	-
CC-9b					179	Actlabs	22	Sandberg	-	-
Total	59		6		599		49		103	

Notes:

1. Both SRC, in Saskatchewan, and Activation Laboratories Ltd. (Actlabs), in Ontario, are accredited under the Standards Council of Canada (SCC) and operate in accordance with ISO/IEC 17025:2017 General Requirements for the Competence of Mineral Testing and Calibration Laboratories. At the time of analysis, both laboratories operated in accordance with the preceding ISO/IEC 17025:2005.
2. Sandberg LLP (Sandberg) in the UK is an accredited laboratory in accordance with International Standard ISO/IEC 17025:2017 under the UK Accreditation Service (UKAS).
3. All laboratories are independent of Atlas.



11.1.2 Potash Analysis

In 2008, CC-1 was originally sampled and analyzed by Vulcan Minerals to evaluate the potash potential of the deposit. Core samples from potash rich horizons ranged in length from 0.2 m to 0.75 m. A total of eight half core samples were taken from CC-1 and sent to the SRC laboratory for assaying using the SRC Potash Exploration Package for K_2O and MgO , in addition to other constituents. Results for K_2O were generally low, between 4.4% K_2O and 10.1% K_2O with one sample (CC#7) returning 20.4% K_2O .

In 2013, Red Moon continued testing the potash potential of the deposit through assaying of potash interval samples from CC-2 and CC-3. A total of 38 half core samples ranging from 0.3 m to 0.5 m in length were taken and again analyzed at the SRC laboratory. Results for K_2O were low, between 0.07% and 9.5% K_2O , averaging 0.86% K_2O .

Samples sent to SRC were initially crushed to 60% at -2 mm from which a 100 g to 200 g sample was taken using a riffle splitter. The sub-sample was further pulverized to 90% at -106 microns using a grinding mill. For assaying the pulverized sample was added to 15 mL of 30°C deionized water and shaken with the solution then analyzed by ICP-OES/Mass Spectrometry (MS). While the analytical method is deemed appropriate for potash mineralization, it is not considered suitable for determination of insoluble salt minerals e.g., anhydrite. The SRC Potash Exploration Package has a detection limit of 0.01% K_2O .

In 2014, an additional nine half core samples from potash intervals from CC-4 and CC-5 ranging from 0.2 m to 0.75 m in length were analyzed by Actlabs using the Actlabs Code 8 Potash Package. Results for K_2O were very low, between 0.05% K_2O and 0.42% K_2O .

Samples sent to Actlabs were analyzed as a 0.5 g sample digested in aqua regia then diluted to 250 mL with purified water. The sample was then analyzed by dissolution in 30°C deionized water. Potassium-chloride was dissolved along with soluble salts with the residual insoluble dried and weighed. The Actlabs Code 8 Potash Package has a detection limit of 0.01% K_2O .

Overall, potash grades within the GAS deposit are variable although predominantly low grade (less than 1% K_2O) with isolated high-grade intervals up to 20% K_2O . As a result, analytical protocols were subsequently changed to focus on sodium chloride (NaCl) potential.

11.1.3 Sodium Chloride Analysis (CC-1 to CC-5)

Sodium chloride assaying was undertaken using two different analytical methods including ASTM D632-12 titration and ICP-OES. Analysis by ICP-OES was undertaken using the SRC Potash and Actlabs Code 8 Potash packages. ASTM D632-12 determines the total amount of chlorides in the sample expressed as NaCl using a titration method with a silver nitrate ($AgNO_3$) solution. This method applies to the standard specification for sodium chloride for intended use as a de-icer and for road construction or maintenance.

For measuring the insoluble residue and moisture content, ASTM E534-13 was used to determine the free moisture in the salt by heating and using the gravimetric method, i.e., excluding moisture within salt crystals.

11.1.4 Sodium Chloride Analysis (CC-6 to CC-9b)

All halite samples taken from CC-6 to CC-9b were sent to Actlabs in Ancaster, Ontario, and analyzed for NaCl by ASTM D632-12 analytical package.

Core samples in CC-6, CC-7, and the upper section of CC-8 were initially taken as half core samples after cutting by Atlas, ranging in length from 0.1 m to 0.3 m, averaging 0.18 m. During



sampling of CC-8, due to difficulties experienced with splitting the NQ diameter core longitudinally, Atlas decided to take shorter, whole core samples for the remainder of the drill hole. The remaining samples were predominantly 0.1 m in length.

11.1.5 Sodium Chloride Analysis (Check Laboratory Samples)

In 2022 and 2023, a total of 49 samples taken from CC-1, CC-4, CC-8, and CC-9b were sent to Sandberg in the UK and analyzed using British Standard BS 3247:2011 + A1:2016 for NaCl, SO₄, and insoluble residue as the “specification for salt for spreading on highways for winter maintenance”. The QP considers this suite comparable to ASTM D632-12.

Samples ranged in length from 0.08 m to 0.20 m, averaging 0.12 m, and were taken as whole core samples. While not representing true field duplicates, check samples were taken adjacent to existing Atlas samples for validation purposes, described in Section 11.0

11.1.6 Density

In addition to geochemical analysis, 22 core samples were tested by gas pycnometer for density determination in 2015. The results from these samples, and other density samples taken in 2015, are described in Section 14.9.

11.1.7 Moisture and Insoluble Matter

While market requirements are principally based on sodium chloride grade and grading, i.e., particle size distribution (discussed in Section 19.0), some specific jurisdictions may also require information with respect to moisture content and insoluble matter contents. For example, the Ontario Provincial Standard Specification for Sodium Chloride (OPSS.PROV.2502, 2017) requires a moisture content not more than 1.5% and insoluble matter (dry basis) of not more than 4.0%¹.

Table 11-2 and Table 11-3 present basic statistics of 99 moisture and 122 insoluble assays with sodium chloride content greater than or equal to 95%. Moisture and insoluble analytical suites were not included in the 2022 analytical program for CC-6, CC-7, CC-8, or CC-9b, however, check laboratory samples analyzed at Sandberg included analysis for insoluble matter.

The results indicate that samples with greater than 95% sodium chloride contents average 0.12% moisture and 0.78% insoluble matter, both of which are well below expected specification limits.

¹ Standards (roadauthority.com) Ontario Provincial Standards, Volume 6, Division 25



Table 11-2: Moisture Assay Statistics for NaCl > 95%

Drill Hole ID	Moisture (%)					
	Count	Minimum	Maximum	Mean	Median	Std. Dev.
CC-1	22	0.05	3.27	0.31	0.13	0.68
CC-2	24	0.05	0.2	0.09	0.05	0.06
CC-3	4	0.05	0.1	0.09	0.10	0.03
CC-4	37	0.05	0.2	0.06	0.05	0.03
CC-5	12	0.05	0.1	0.06	0.05	0.02
Total	99	0.05	3.27	0.12	0.07	0.33

Table 11-3: Insoluble Assay Statistics for NaCl > 95%

Drill Hole ID	Insoluble Matter (%)					
	Count	Minimum	Maximum	Mean	Median	Std. Dev.
CC-1	22	0.02	2.72	0.59	0.29	0.76
CC-2	24	0.1	2.82	0.99	0.81	0.79
CC-3	4	0.6	1.88	1.32	1.41	0.58
CC-4	37	0.09	1.78	0.60	0.47	0.45
CC-5	12	0.23	1.88	0.68	0.57	0.5
CC-8	12	0.4	2.4	0.97	0.9	0.52
CC-9b	11	0.5	2.4	1.05	0.8	0.57
Total	122	0.02	2.82	0.78	0.62	0.64

11.1.8 Conclusion

In the QP's opinion, the analytical methods and sampling procedures employed are appropriate for the purposes of Mineral Resource estimation. The QP considers that the use of whole-core sampling by Atlas in the lower portions of drill holes CC-8 and CC-9b is justified and does not materially affect sample representativeness, given the massive and homogeneous nature of the halite. The QP recommends that, where practicable, future drilling be completed using a larger core diameter to provide greater sample mass and to minimize challenges associated with core splitting and sampling. The QP further recommends maintaining the more regular sampling spacing applied in holes CC-8 and CC-9b.

11.2 Sample Security

All core samples were initially logged by Vulcan Minerals (CC-1), Red Moon (CC-2 to CC-5), and Atlas (CC-6 to CC-9b).

For CC-1 sampling in 2008, core was transported for storage at the Mines Branch Core Storage Library in Pasadena, Newfoundland. Samples were taken as half core after dry sawing, then placed in sealed plastic bags and sent by courier to the SRC laboratory in Saskatoon, Saskatchewan. Potash samples taken from CC-2 and CC-3 in 2013 were also sampled in the same manner and sent to SRC.



Samples from CC-4 and CC-5 core and those from CC-1 to CC-3 analyzed for NaCl were also dry sawed, then placed in sealed plastic bags and sent by courier to Actlabs in Ancaster, Ontario.

Core from CC-1 remains at the Government Core Storage Facility in Pasadena. Halite intersections from CC-2 to CC-9b are currently being stored at a warehouse in St. John's leased by Atlas. This includes pulp sample splits returned from the laboratories and samples of unanalyzed halite cores. Non-halite intersections from CC-2 to CC-9b are currently being stored at a separate storage site in Stephenville, approximately 25 km north of the Project.

For the 2022 drilling program, drill core was collected from the drilling site by Atlas geological staff. Drill core is then transported to a secure core storage facility in Stephenville for logging and sampling. Core sample tags are placed in the core box and sample bags, with a third tag placed in a record book. All sample record books are stored at the Atlas offices.

Samples are placed in individual sealed and labelled plastic bags and sample shipments are accompanied by sample inventory sheets. Atlas geological staff deliver sample batches to the courier and receive tracking details, after which samples are transported by courier to the Actlabs laboratory in Ontario.

Overall, the QP is satisfied that the sample security and chain of custody measures are reasonable and appropriate for the purposes of a Mineral Resource estimate.

11.3 Quality Assurance and Quality Control

11.3.1 Summary

Quality Assurance (QA) is necessary to demonstrate that the assay data has precision and accuracy within generally accepted limits for sampling and analytical methods used to have confidence in the resource estimation. Quality Control (QC) consists of procedures used to ensure that an adequate level of quality is maintained in the process of sampling, preparing, and assaying the drill core samples. In general, QA/QC programs are designed to prevent or detect contamination and allow analytical precision and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling – assaying variability of the sampling method itself.

QA/QC programs typically include the insertion of different control sample types including blanks, duplicates, and standards (Certified Reference Material, or CRM). However, given the deposit type and style of mineralization, previous QA/QC programs have only included duplicate samples for several reasons:

- Duplicates: Drill core from halite is more likely to be homogenous, i.e., it does not suffer from a nugget effect and therefore the potential for bias in obtaining field duplicates typically associated with metalliferous deposits is reduced. The ability to take field duplicates has also been influenced by the ease of splitting halite cores of NQ diameter.
- As an alternative, SLR and Atlas have taken field check samples adjacent to primary samples. Some pulp duplicate analysis has also been completed internally by Actlabs.
- CRMs: There is no common standard/CRM for halite; even if a CRM based on commercial road salt material, it would still be expected to show a degree of variability between 95% NaCl and 100% NaCl, i.e., having insufficient precision for determining laboratory performance.



- Blanks: Atlas has not introduced blanks into the sample stream although a small number have been introduced as procedure by Actlabs.

Table 11-4 presents a summary of QA/QC sampling undertaken for CC-1 to CC-9b drill holes. All QA/QC samples comprise either field or pulp duplicates as reported by APEX (2016), Atlas, or the analytical laboratory (Actlabs).

The results from each of these duplicate types are discussed in the following subsections.

Table 11-4: Summary of QA/QC Samples

Drill Hole ID	Total No. Primary Samples	APEX QP Duplicates		Atlas Duplicates		Internal Lab Duplicates		Internal Lab Blanks	
		Count	%	Count	%	Count	%	Count	%
CC-1	66	2	3.0%	0	0.0%	4	6.1%		
CC-2	83	2	2.4%	2	2.4%	4	4.8%		
CC-3	44	2	4.5%	4	9.1%	3	6.8%		
CC-4	71	4	5.6%	4	5.6%	5	7.0%		
CC-5	81	6	7.4%	4	4.9%	7	8.6%		
Sub-Total	345	16	4.6%	14	4.1%	23	6.7%	12	3.5%
CC-6	27					2	7.4%		
CC-7	12					1	8.3%		
CC-8	197					14	7.1%		
CC-9b	201					5	2.5%		
Sub-Total	437					22	5.0%	14	3.2%
Total	782	16	2.0%	14	1.8%	45	5.8%	26	3.3%

11.3.2 CC-1 to CC-5

11.3.2.1 APEX Duplicate Samples (Field and Pulp)

In 2015, for the purpose of preparing a NI 43-101 Technical Report (APEX 2016), the APEX QP collected a total of 16 samples for analysis by ASTM D632-12 for comparison against original assay results obtained by Atlas using the Code 8 Potash ICP-OES/mass spectrometry (MS) method. Of the 16 samples collected during the APEX QP site visit, six were taken as quarter core field duplicates, with the remaining 10 based on existing pulp material obtained from the archived Atlas analytical program.

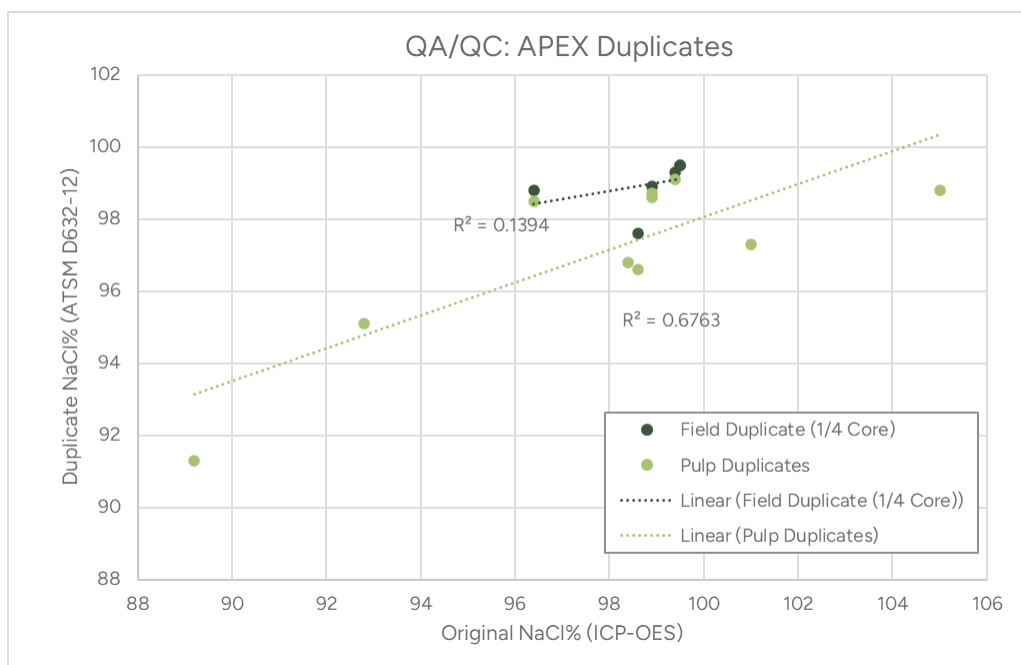
Table 11-5 presents the results of the QA/QC samples taken by APEX in 2015 which are further graphically shown in Figure 11-1.



Table 11-5: 2015 APEX Duplicate Sample Results

Drill Hole ID	Type	Original Sample ID	Original NaCl % (ICP-OES)	QP Sample ID	QP Sample NaCl% (D632-12)
CC-5	¼ Core	426489	98.9	15RER-RM001	98.9
CC-5	Pulp	426489	98.9	15RER-RM002	98.7
CC-5	¼ Core	426488	99.4	15RER-RM003	99.3
CC-5	Pulp	426488	99.4	15RER-RM004	99.1
CC-5	¼ Core	426524	98.6	15RER-RM005	97.6
CC-5	Pulp	426524	98.6	15RER-RM006	96.6
CC-2	Pulp	CC2-25	101.0	15RER-RM007	97.3
CC-2	Pulp	CC2-29	105.0	15RER-RM008	98.8
CC-3	Pulp	CC3-19	89.2	15RER-RM009	91.3
CC-3	Pulp	CC3-22	92.8	15RER-RM010	95.1
CC-4	¼ Core	426429	96.4	15RER-RM011	98.8
CC-4	Pulp	426429	96.4	15RER-RM012	98.5
CC-4	Pulp	426449	98.4	15RER-RM013	96.8
CC-4	Pulp	426462	98.9	15RER-RM014	98.6
CC-1	¼ Core	34947	98.9	15RER-RM017	99.5
CC-1	¼ Core	34960	99.6	15RER-RM018	99.5

Figure 11-1: 2015 APEX Duplicate Sample Results



Source: SLR 2023.



It is noted by the QP that a difference in the R^2 value for the pulp duplicate results between Figure 11-1 and that presented in the APEX Technical Report (APEX 2016) is due to the difference in NaCl% assays between a draft and final version of Actlabs laboratory certificate A13-13892. The QP has used those from the final version.

Figure 11-1 illustrates that correlation between the two analytical methods for both quarter core and pulp duplicates have low degrees of correlation (high variance), indicated by R^2 values of 0.10 and 0.67, respectively. This low correlation has previously been attributed to:

- Limited sample size.
- Imprecision in analyzing pseudo core samples collected by the APEX QP versus the original analysis.
- Narrow chemical distribution of halite that included only relatively pure halite greater than 90% NaCl, with the majority greater than 98% NaCl.
- The QP is of the opinion that while these duplicate results confirm the overall high grade of the halite at the Project, they also indicate overall low correlation between D632-12 and ICP-OES/MS analytical methods. APEX (2016) has previously suggested that as other salts associated with chloride may exist at lower sodium contents and the D632-12 method is based on a theoretical calculation of NaCl based on chloride from titration, NaCl could be slightly overestimated in instances where NaCl is less than 95%. The QP was unable to verify this explanation.

11.3.2.2 Red Moon Duplicate Samples

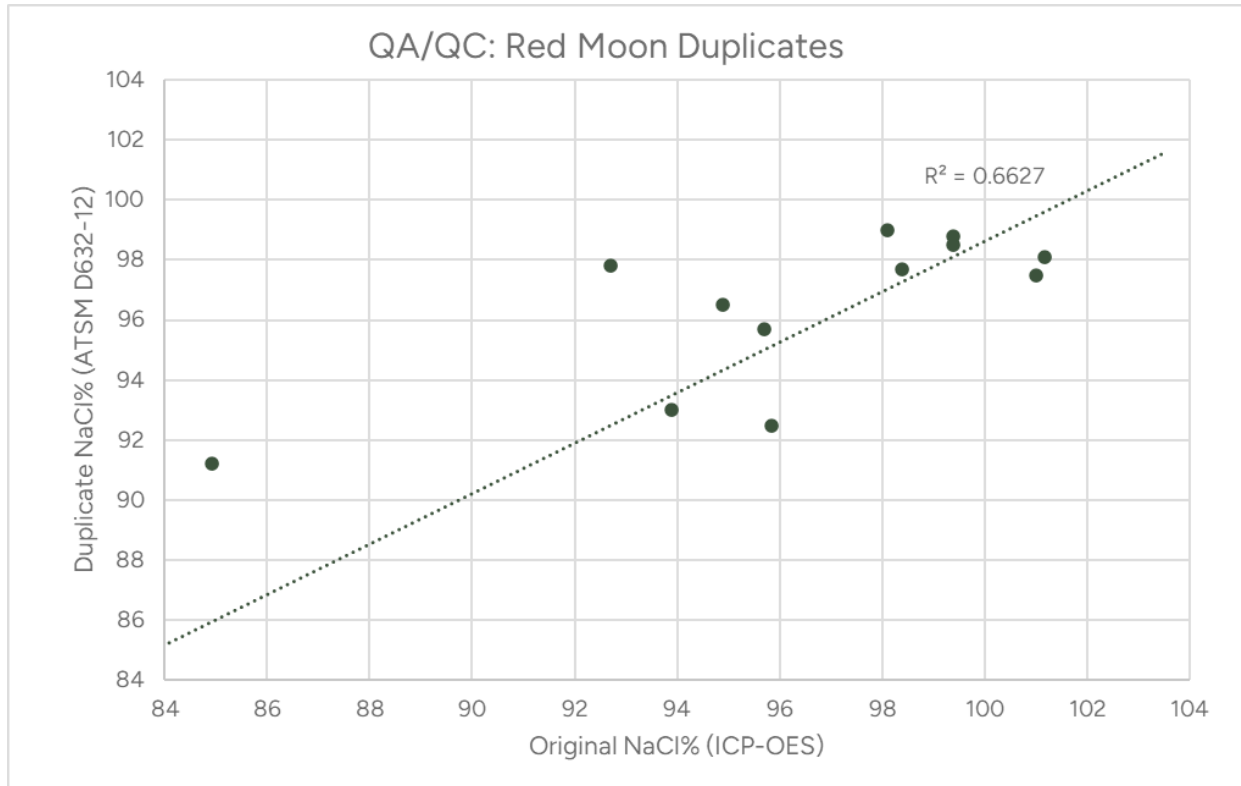
In addition to the 16 APEX samples, Atlas also analyzed an additional 14 samples using the ASTM D632-12 method for direct comparison to the Code 8 Potash ICP-OES/MS method. The results are summarized in Table 11-6 and illustrated in Figure 11-2.

Table 11-6: 2015 Atlas Salt Duplicate Sample Results

Drill Hole ID	Sample ID	NaCl % (ICP-OES)	NaCl % (D632-12)	Difference (Absolute NaCl%)	Difference (%)
CC-2	CC2-24	101.18	98.1	-3.08	-3%
CC-2	CC2-38	89.50	83.5	-6.00	-7%
CC-3	CC3-21	84.91	91.2	6.29	7%
CC-3	CC3-23	95.84	92.5	-3.34	-4%
CC-3	CC3-25	84.90	81.9	-3.00	-4%
CC-3	CC3-26	101.00	97.5	-3.50	-4%
CC-4	426409	99.40	98.5	-0.90	-1%
CC-4	426423	99.40	98.8	-0.60	-1%
CC-4	426459	92.70	97.8	5.10	5%
CC-4	426465	98.40	97.7	-0.70	-1%
CC-5	426490	98.10	99.0	0.90	1%
CC-5	426505	93.90	93.0	-0.90	-1%
CC-5	426523	95.70	95.7	0.00	0%
CC-5	426526	94.90	96.5	1.60	2%



Figure 11-2: 2015 Red Moon Duplicate Sample Results



Source: SLR 2023.

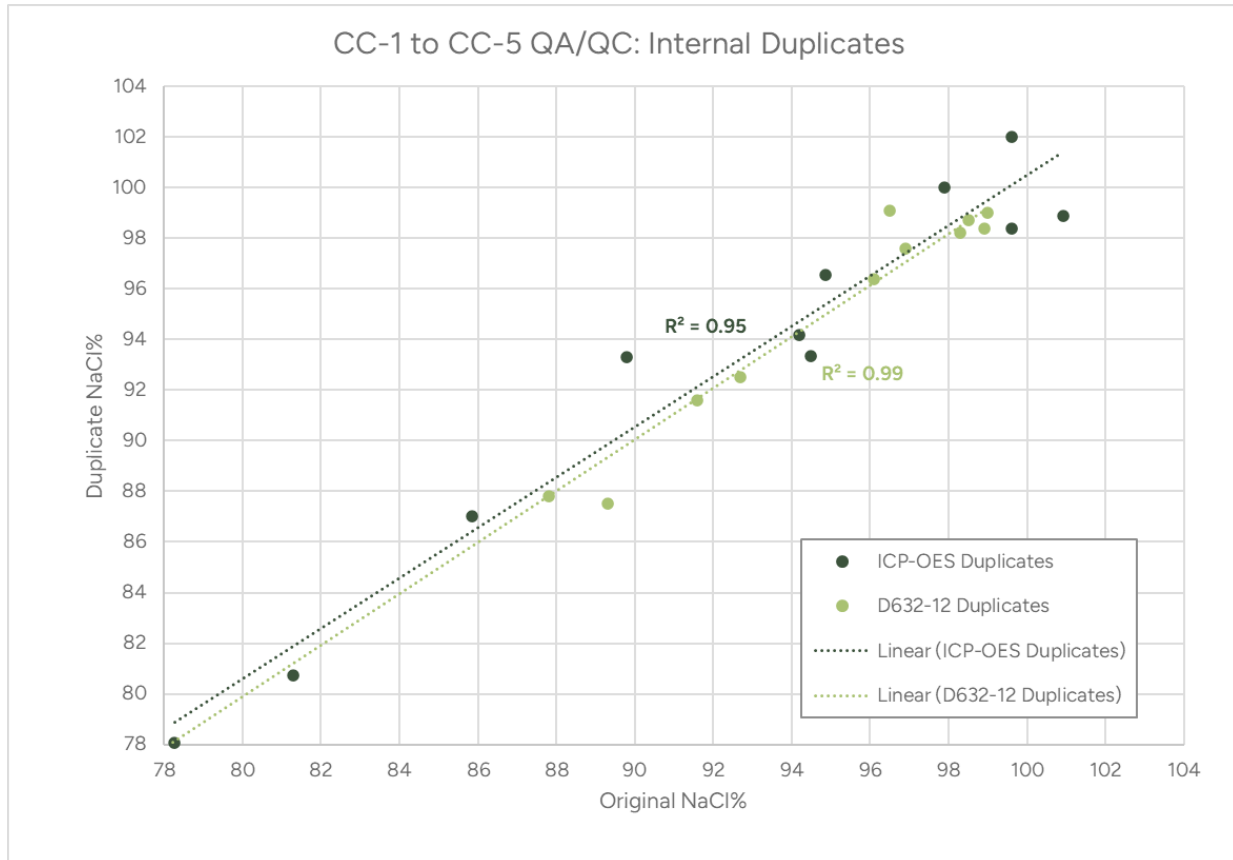
The duplicate sample analysis by Atlas demonstrates similar results to that by APEX, i.e., samples with lower NaCl concentrations generally less than 95% showed a slight overestimation from the D632-12 method. There is a closer degree of correlation between samples with grades greater than 95% NaCl.

11.3.2.3 Laboratory Repeats

In addition to duplicate sample assaying by APEX and Atlas, SRC and Actlabs also completed internal laboratory pulp duplicate assays. SRC assayed four repeat/duplicate samples between 2008 and 2014, and Actlabs assayed 23 samples between 2013 and 2023. Collectively these included 11 samples assayed by ICP-OES and 12 by D632-12 (Figure 11-3), which is equivalent to 7% of the database. The QP is of the opinion that both sets of results indicate good laboratory performance through repeatability as indicated by the high degrees of correlation observed between original and repeat assay results.



Figure 11-3: CC-1 to CC-5 Laboratory Internal Duplicate Sample Results



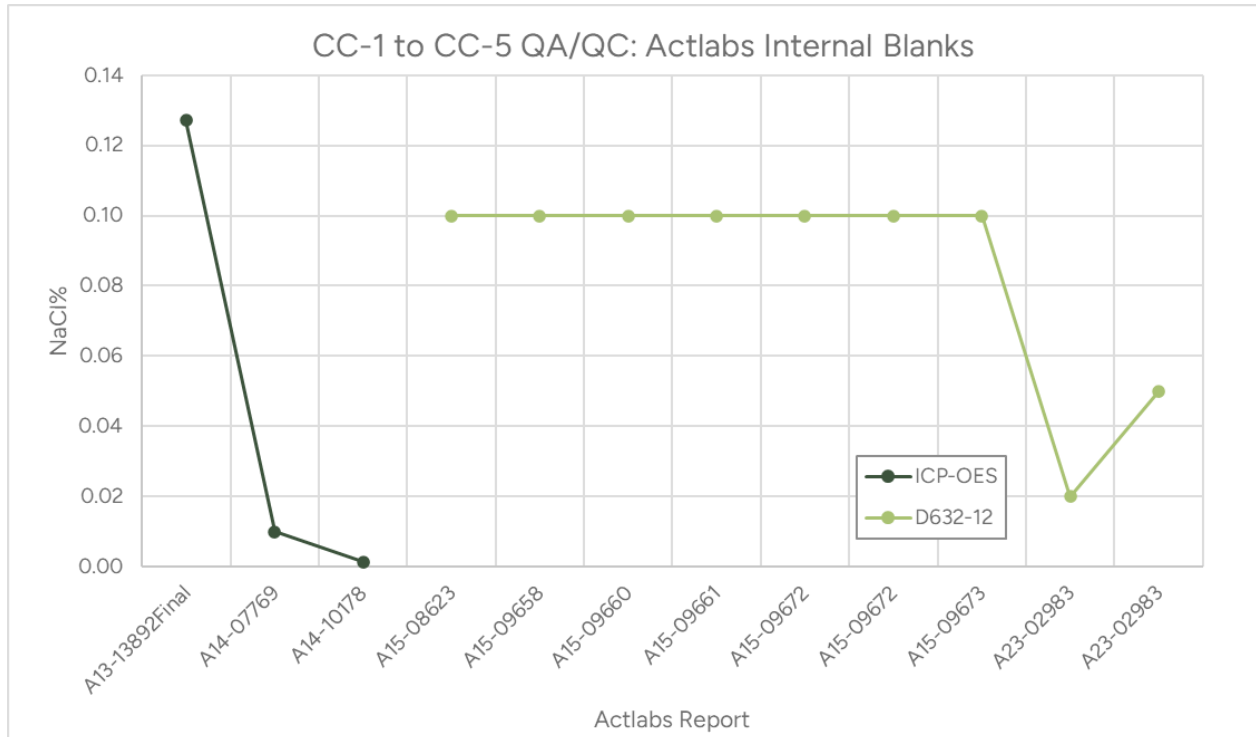
Source: SLR 2023.

11.3.2.4 Laboratory Blanks

A total of 12 blank samples were introduced into the analytical programs completed by Actlabs between 2013 and 2023. While only representing a small portion of the total number of samples for CC-1 to CC-5 (approximately 4%), the results, as expected, show either very low or detection level NaCl grades (Figure 11-4).



Figure 11-4: CC-1 to CC-5 Actlabs Internal Blank Sample Results



Source: SLR 2023.

The QP is of the opinion that overall laboratory performance by Actlabs has been reasonable and sufficient for the purpose of Mineral Resource estimation.

11.3.3 CC-6 to CC-9b

11.3.3.1 Atlas QA/QC Samples

No QA/QC samples were introduced into the 2022-2023 sample stream by Atlas. The evaluation of laboratory performance is therefore based on the results of internal laboratory repeats and blanks, in addition to the SLR QA/QC samples taken by the QP (refer to Section 12.1.4).

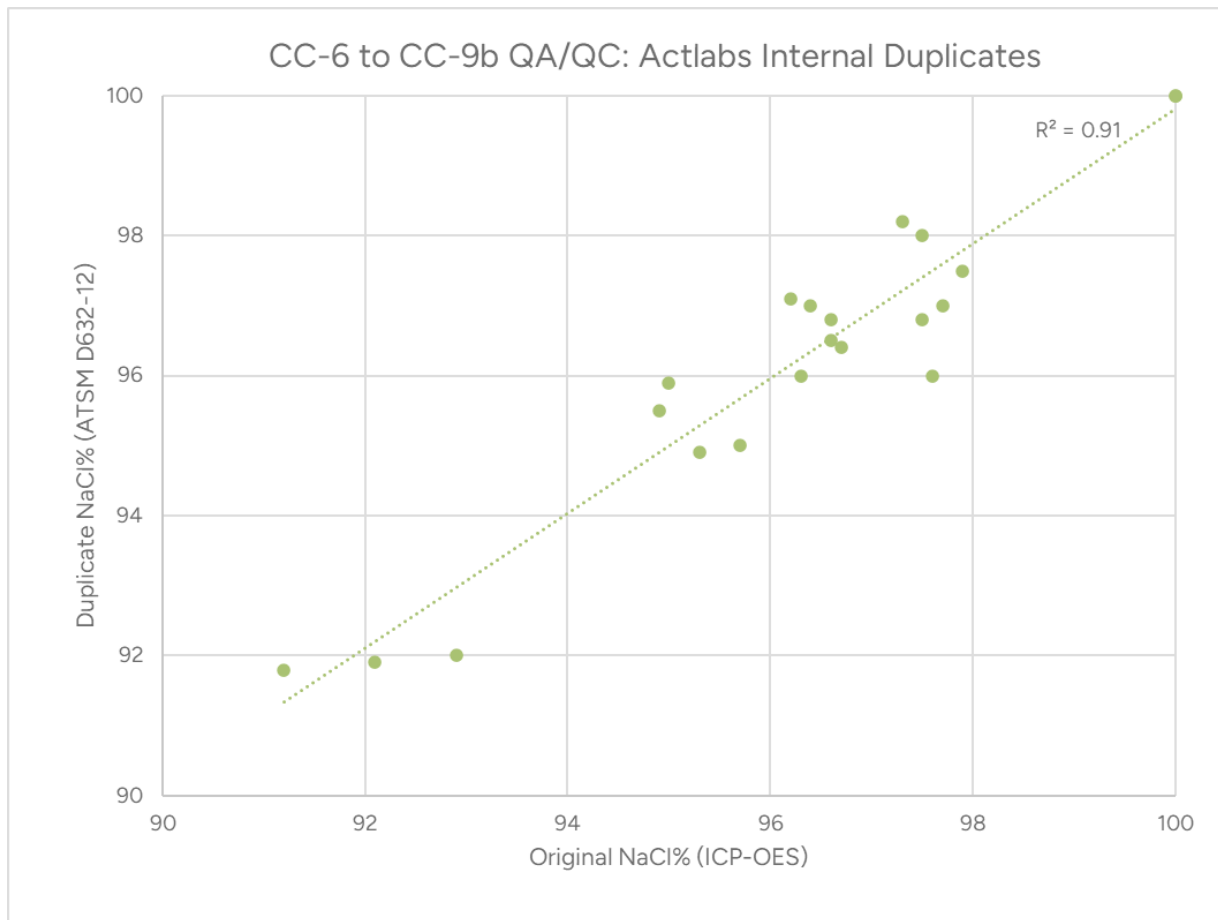
Due to the core diameter used in 2022 drill holes and difficulties experienced with longitudinally splitting/cutting core, Atlas modified the sampling from taking 0.1 m to 0.3 m length, half core samples in CC-6, CC-7, and the upper section of CC-8, to taking 0.1 m length full core samples for the remainder of CC-8 from approximately mid-way through 2-Salt, and CC-9b. As a result, no field duplicate samples were taken by Atlas in 2022 and 2023.

11.3.3.2 Laboratory Repeats

Actlabs completed a total of 22 internal laboratory duplicate assays in 2022 and 2023 from samples of CC-6 (2), CC-7 (1), CC-8 (14), and CC-9b (5) equivalent to 5% of the 2022-2023 assay database. The results are illustrated in Figure 11-5. The QP is of the opinion that both sets of results indicate good laboratory performance through repeatability as indicated by the high degrees of correlation observed between original and repeat assay results.



Figure 11-5: CC-6 to CC-9b Actlabs Internal Duplicate Sample Results



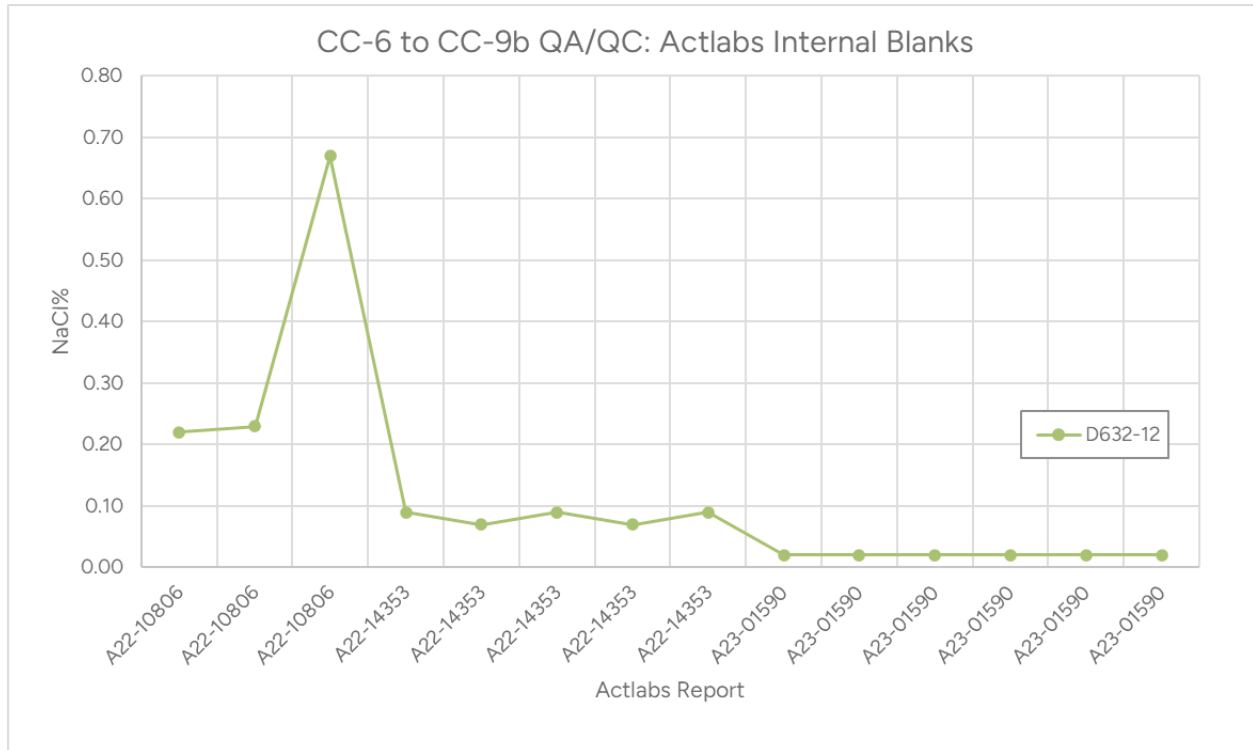
Source: SLR 2023.

11.3.3.3 Laboratory Blanks

A total of 14 blank samples were introduced into the 2022-2023 analytical program completed by Actlabs. While representing only a small portion of the total number of samples for CC-6 to CC-9b (approximately 3%), the results, as expected, show very low NaCl grades (Figure 11-6). While a single blank analyzed with CC-6 and CC-7 core samples returned an elevated grade of 0.67% NaCl, this is immaterial in comparison to expected halite sample assays.



Figure 11-6: CC-6 to CC-9b Actlabs Internal Blank Sample Results



Source: SLR 2023.

The QP is of the opinion that overall laboratory performance by Actlabs has been reasonable and sufficient for the purpose of Mineral Resource estimation.

11.3.4 Conclusions

The QP recognizes that the QA/QC strategy for the GAS deposit does not follow typical convention for other metal and mineral deposits primarily due to the style of mineralization and the general homogenous nature of the halite. For example, the absence of any CRMs in the QA/QC programs is recognized by the QP as being due to the lack of commercially available halite samples, where even industrial road salt material may return NaCl grades ranging from 95% to 100%, not deemed sufficient for assessing laboratory performance.

With regard to duplicate samples, field duplicates were previously taken by both Red Moon and the APEX QP in 2015, however, due to limitations in core diameter in the latest drilling program, no such duplicates were taken in 2022. As a result, opinion on laboratory performance in 2022 has primarily been formed based on the results of internal laboratory repeats and QP's samples (see discussion in Section 12.1.4).

CC-1 to CC-5

- The QP is satisfied that, with consideration for the deposit type and style of mineralization, the overall insertion rates for duplicate samples in CC-1 to CC-5 analytical programs are appropriate.
- APEX duplicate results indicate overall low repeatability, albeit significantly higher for pulp duplicates compared to quarter core field duplicates. The QP is satisfied that pulp duplicate performance is adequate to support Mineral Resource estimation. Differences



in field duplicates have been attributed to sampling discrepancies between original and APEX QP sampling, and the overall small sample size.

- The results from duplicate samples taken by Atlas show a closer degree of correlation between higher grade samples greater than 95% NaCl. The QP is satisfied that the results indicate overall reasonable repeatability sufficient to support Mineral Resource estimation.
- The QP is of the opinion that the internal laboratory repeats show high degree of correlation with both ICP-OES and D632-12 analytical methods.
- Laboratory blanks returned negligible or detection limit NaCl grades, also indicating good laboratory performance.

CC-6 to CC-9b

- The results of internal laboratory repeats show a reasonable degree of correlation, considered by the QP to be sufficient to confirm laboratory accuracy and reliability.
- Similarly, laboratory blanks returned negligible NaCl grades, indicating overall good laboratory performance with no evidence of contamination.
- Following recommendations made in 2022 to appoint a second check laboratory to validate Actlabs results, Atlas subsequently sent check samples to Sandberg in the UK (see discussion in Section 11.3).

In the QP's opinion, the sample preparation, analysis, and security procedures at the GAS Project are adequate for use in the estimation of Mineral Resources. The QP offers the following recommendations with respect to QA/QC:

- Increase the frequency of laboratory repeats to account for the difficulty in the collection of reliable field duplicates.
- Obtain appropriate blank material, for example equivalent material used internally by Actlabs, for blind insertion into the sample stream by Atlas. This could be a commercially available blank or inert material obtained locally and crushed by Atlas.



12.0 Data Verification

The following section describes the data audit and verification steps undertaken by the QPs for the purposes of preparing a Mineral Resource estimate, a Mineral Reserve estimate, and Feasibility Study for the Project.

12.1 Data Verification for the Mineral Resource Estimate

The data verification steps for the current Mineral Resource estimate were originally undertaken by the QP for preparation of the previous Mineral Resource estimates (effective date January 6, 2023 and May 11, 2023) and have subsequently been reviewed and validated for the current Mineral Resource estimate (effective date September 30, 2025).

12.1.1 Collar Coordinates

During the 2022 exploration program, discrepancies were identified by SLR when comparing between the various sources of information including drill hole maps/plans, collar coordinate tables, and tables from the APEX report (APEX 2016). Also, drill holes were slightly relocated during the program due to accessibility issues with originally planned coordinates.

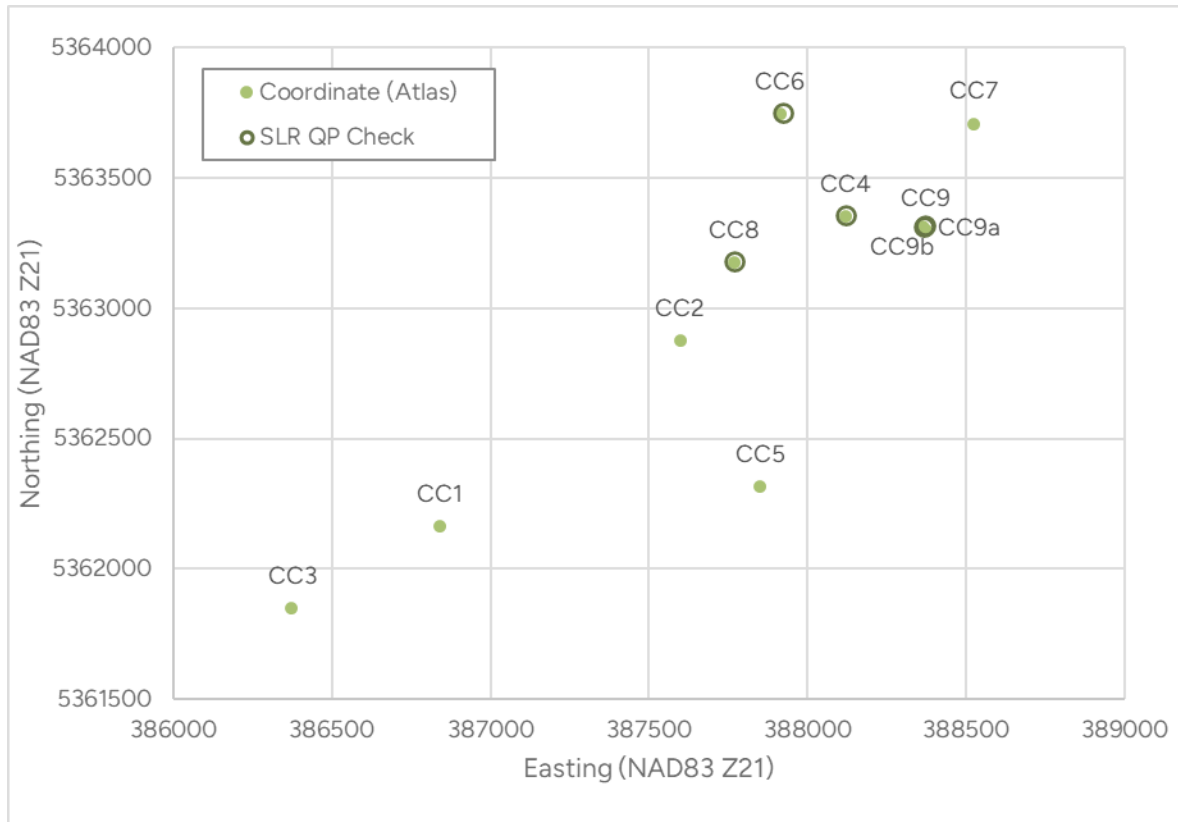
Considering that only CC-1 had previously been located by a qualified surveyor, with all others located using a handheld GPS, the QP recommended that all drill hole collars be re-surveyed by an independent, qualified surveyor. This survey was completed by Yates & Wood surveyors of Newfoundland, on October 27, 2022. A second survey including CC-9b was completed by Yates & Wood on April 20, 2023.

A site visit to the Project was conducted by Dr. John George Kelly, EurGeol, P.Geo., FIMMM, MIQ, an SLR employee and the QP for earlier phases of the work, from October 17 to 20, 2022. During this visit, collar locations for five drill holes (CC-4, CC-6, CC-8, CC-9, and CC-9a) were verified using a handheld GPS for the purposes of data validation. The coordinates collected by Dr. Kelly were later compared with the 2022 Yates & Wood survey results, showing negligible differences within the expected accuracy of handheld GPS readings (Figure 12-1).

The first drill hole collar survey and the QP site visit both pre-date the siting and completion of drill hole CC-9b. For the current Technical Report, the signing QP has reviewed and validated the collar survey datasets, and photographs from the 2022 verification and is satisfied that the information is accurate and suitable for use in Mineral Resource estimation.



Figure 12-1: Collar Coordinate Validation



Source: SLR 2023.

Further to collar coordinate verification, the QP also compared the surveyed collar elevations against the topography surface from LiDAR to identify any material discrepancies. The differences between the two sets of elevations are shown in Table 12-1. The QP considers the discrepancies to be within acceptable limits, indicating the suitability of the supplied LiDAR survey data.



Table 12-1: Collar Elevation Verification

Drill Hole ID	Surveyed Elevation (masl)	Topography Elevation (masl)	Difference (m)
CC-1	54.20	54.53	-0.33
CC-2	47.45	47.13	0.32
CC-3	46.55	46.00	0.55
CC-4	47.41	47.00	0.41
CC-5	58.79	58.59	0.20
CC-6	24.86	24.38	0.48
CC-7	38.09	37.46	0.63
CC-8	54.67	54.00	0.67
CC-9	47.55	47.15	0.40
CC-9a	47.11	46.82	0.29
CC-9b	47.20	46.70	0.50

12.1.2 Lithological Data

SLR initially conducted a desktop review of the geological logging information provided for CC-1 to CC-9b. This review included comparison between lithological logging and assay sample intervals to evaluate their representativeness and to identify potential interval (overlapping or missing) errors. No errors were found. Where available, SLR also conducted a review of lithological descriptions, core photographs, and downhole geophysical logs as a validation of halite intersections. No discrepancies were observed between the halite–Red Beds and halite–anhydrite contacts, and the halite intersections are considered well defined and vertically constrained.

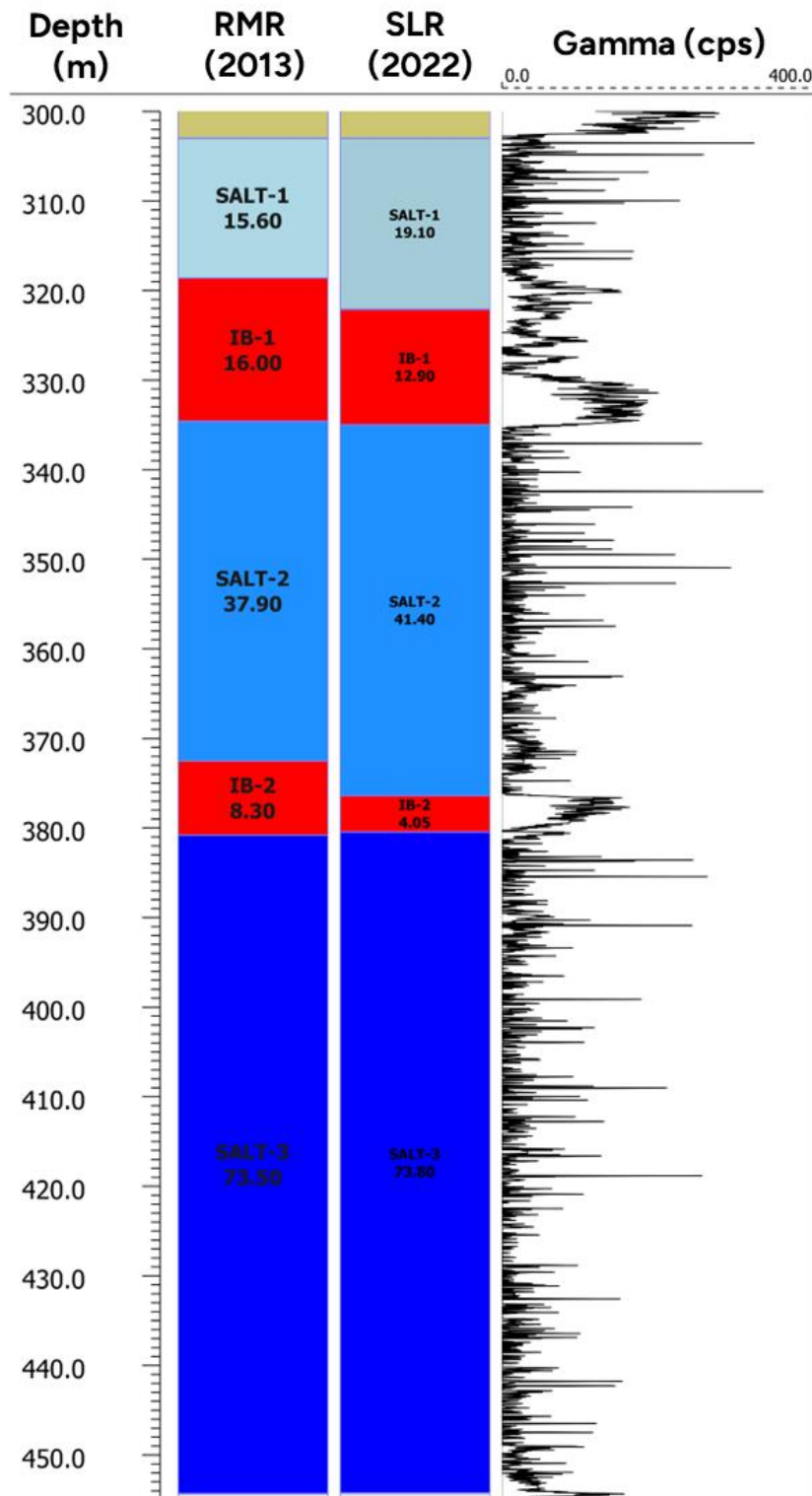
During a site visit from October 17 to 20, 2022, Dr. Kelly also completed independent logging of the halite intersected in CC-2 and CC-4, and check logging of CC-8. Figure 12-2 and Figure 12-3 illustrate comparison between original Red Moon logging with modelled interbeds (APEX 2016) and independent logging in CC-2 and CC-4 by Dr. Kelly, respectively, alongside natural gamma logs. Both sets of logs are broadly comparable, although for the purposes of producing an updated Mineral Resource SLR has used the independent logging conducted by Dr. Kelly in October 2022.

In CC-8, geological logging provided by Atlas included lithological descriptions but no existing interpretation of halite or interbeds. During the site visit, Dr. Kelly completed a check log of the halite interval and subsequently interpreted intervals for the three halite horizons and separating interbeds. The same interpretation procedure was repeated for CC-9b using a combination of lithological descriptions, core photos, and gamma logs, subsequently validated using assay results.

The QP has reviewed and accepted the verified datasets, logs, and supporting documentation from both site and desktop sources and is satisfied that the lithological and assay data are accurate and reliable for Mineral Resource estimation.



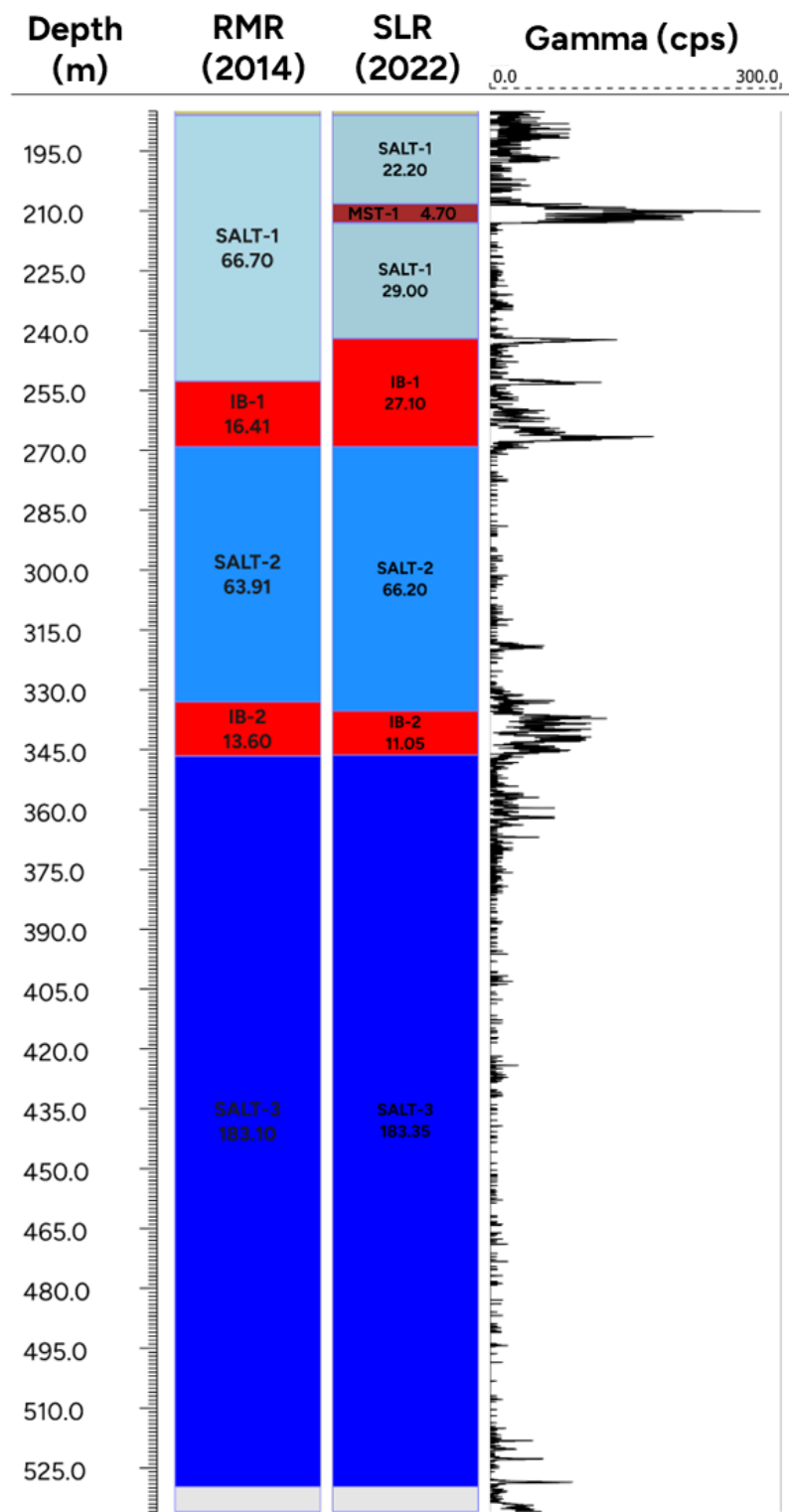
Figure 12-2: SLR Check Logging Comparison (CC-2)



Source: SLR 2023.



Figure 12-3: SLR Check Logging Comparison (CC-4)



Source: SLR 2023.



12.1.3 Assay Results

SLR was provided with laboratory assay certificates from SRC and Actlabs for CC-1 to CC-5 drill holes, Actlabs for CC-6 to CC-9b drill holes, and Sandberg for CC-1, CC-4, CC-8, and CC-9b. All certificates were provided in electronic (.XLSX and .PDF) file format to allow for cross-checks to be made against the Mineral Resource database. A summary of the available certificates is presented in Table 12-2.

Table 12-2: Summary of Assay Certificates

Drill Holes	Laboratory	Certificate	Year	No. of Samples	Analytical Suite
CC-1	SRC	2006-8003	2006	24	SRC Potash Package: Ca, Mg, K, NaCl, sulphate, Moisture and Insolubles
CC-1	SRC	G-08-1192	2008	8	ICP1 Soluble, Moisture and Insolubles
CC-2 and CC-3	Actlabs	A13-13892-Final	2013	27	Code 8 Potash Package ICP-OES and Insolubles/Moisture, Code 9 XRD
CC-2 and CC-3	SRC	G-13-1220	2013	38	ICP2 Soluble, Moisture
CC-4 and CC-5	Actlabs	A14-10178	2014	13	Code 8 Potash Package ICP-OES and Insolubles/Moisture, Code 9 XRD
CC-4 and CC-5	Actlabs	A14-07769	2014	52	Code 8 Potash Package ICP-OES and Insolubles/Moisture, Code 8 Potash ICPMS Pkg ICPMS
CC-4 and CC-5	SRC	G-2014-2162	2014	9	SRC Potash Package: Ca, Mg, K, NaCl, sulphate, Moisture and Insolubles
CC-1 to CC-5	Actlabs	A15-08623	2015	18	NaCl as per ASTM D632-12 Titration
CC-1 to CC-5	Actlabs	A15-08623 SG	2015	20	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer
CC-5	Actlabs	A15-09658	2015	33	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer, Code 8-Potash ICPMS Pkg ICPMS
CC-4	Actlabs	A15-09660	2015	34	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer, Code 8 Potash Package ICP-OES and Insolubles/Moisture



Drill Holes	Laboratory	Certificate	Year	No. of Samples	Analytical Suite
CC-3	Actlabs	A15-09661	2015	21	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer, Code 8 Potash Package ICP-OES and Insolubles/Moisture, Code 8 Potash ICPMS Pkg ICPMS
CC-2	Actlabs	A15-09672	2015	47	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer, Code 8 Potash Package ICP-OES and Insolubles/Moisture, Code 8 Potash ICPMS Pkg ICPMS
CC-1	Actlabs	A15-09673	2015	21	Code Specific Gravity-Pycnometer (Nitrogen) Pulp by Nitrogen Pycnometer, Code 8-Potash ICPMS Pkg ICPMS
CC-6 and CC-7	Actlabs	A22-10806	2022	39	NaCl as per ASTM D632-12 Titration
CC-8	Actlabs	A22-14353	2022	174	NaCl as per ASTM D632-12 Titration
CC-4	Sandberg	73645c	2022	2	BS 3247:2011 + A1:2016
CC-8	Sandberg	73645c	2022	23	BS 3247:2011 + A1:2016
CC-9b	Actlabs	A23-01590	2023	179	NaCl as per ASTM D632-12 Titration
CC-1	Actlabs	A23-02983	2023	9	NaCl as per ASTM D632-12 Titration
CC-5	Actlabs	A23-02983	2023	28	NaCl as per ASTM D632-12 Titration
CC-9b	Sandberg	74186c	2023	10	BS 3247:2011 + A1:2016
CC-1	Sandberg	74286c	2023	2	BS 3247:2011 + A1:2016
CC-9b	Sandberg	74286c	2023	12	BS 3247:2011 + A1:2016

All results were checked against the original laboratory certificates and no material discrepancies were identified, enabling the QP to conclude that the analytical database used for grade interpolation was sufficiently robust and reliable.

The following miscellaneous changes were made by SLR:

- A small number of samples returned NaCl% assays greater than 100% and were therefore modified by SLR to 100%.
- Interval for sample 922044 in CC-8 was corrected by SLR using core photos to prevent overlapping with the adjacent sample.
- Intervals for samples 922171 and 922172 were corrected through consultation with Atlas to prevent overlapping with adjacent samples.



- Interval for sample 922174 corrected in consultation with Atlas.
- Assays for sample CC9 in drill hole CC-1 added by SLR from certificate G-2008-1192.
- Assays for samples CC2-23 to 39 in drill hole CC-2 and samples CC3-17 to 26 in drill hole CC-3 from the draft ("rev1") certificate were replaced by those in the final version of certificate A13-13892.

12.1.4 2022 Check Assay Results

During the site visit, Dr. Kelly selected 25 check samples from CC-4 and CC-8 drill holes for analysis to provide further independent validation of analytical results. A summary of these samples is provided in Table 12-3, with results described in subsequent sections. This is in addition to those check assays completed previously as described in Section 11.3.2.1 QA/QC.

Table 12-3: SLR QP Check Samples

Drill Hole	SLR Sample ID	From (m)	To (m)	Thickness (m)	Description	Adjacent GAS Sample
CC-4	39847	360.00	360.10	0.10	Muddy Salt	
CC-4	39848	369.00	369.10	0.10	Muddy Salt	
CC-8	39833	278.15	278.30	0.15	Mudstone	
CC-8	39834	279.55	279.70	0.15	Salt	
CC-8	39824	284.28	284.38	0.10	Salt – Check	922022
CC-8	39832	291.90	292.00	0.10	Mudstone	
CC-8	39827	296.00	296.20	0.20	Mudstone	
CC-8	39831	298.60	298.75	0.15	Mudstone	
CC-8	39829	298.80	298.93	0.13	Mudstone	
CC-8	39828	300.61	300.78	0.17	Mudstone	
CC-8	39835	302.28	302.41	0.13	Muddy Salt	
CC-8	39830	307.83	308.00	0.17	Mudstone	
CC-8	39825	313.48	313.58	0.10	Salt – Check	922035
CC-8	39826	321.07	321.17	0.10	Salt – Check	922042
CC-8	39836	342.21	342.38	0.17	Salt – Check	922060
CC-8	39843	364.87	364.99	0.12	Salt – Check	922162
CC-8	39838	373.77	373.87	0.10	Salt – Check	922089
CC-8	39837	392.21	392.31	0.10	Salt – Check	922069
CC-8	39839	398.61	398.71	0.10	Salt – Check	922111
CC-8	39840	404.30	404.40	0.10	Salt – Check	922117
CC-8	39841	422.20	422.30	0.10	Salt – Check	922132
CC-8	39842	429.77	429.87	0.10	Salt – Check	922139



Drill Hole	SLR Sample ID	From (m)	To (m)	Thickness (m)	Description	Adjacent GAS Sample
CC-8	39845	470.43	470.58	0.15	Mudstone	
CC-8	39844	472.65	472.78	0.13	Salt – Check	922167
CC-8	39846	487.84	487.92	0.08	Anhydrite	

Given previous sampling strategies and difficulty with core splitting, Dr. Kelly opted to take check samples as whole core intervals for assaying. Samples were placed in sealed and labelled plastic bags for transport for assaying by Sandberg. Samples were analyzed for chloride, sulphate, and insoluble residue using the method as detailed BS 3247: 2011 and A1:2016.

Sandberg is an accredited laboratory in accordance with International Standard ISO/IEC 17025:2017 under UKAS.

The 2022 check assay results have been incorporated into the assay database used for the updated Mineral Resource estimate.

12.1.4.1 Salt Check Assays

In 12 instances in CC-8, Dr. Kelly took check samples adjacent to an existing sample in the same lithology, each of which was deemed visually identical from core inspection by Dr. Kelly. The QP has evaluated the NaCl results as equivalent to field duplicates to assess the overall representativeness of original sampling.

Table 12-4 and Figure 12-4 show the results of Dr. Kelly's check samples as analyzed by Sandberg in comparison to their respective adjacent samples analyzed by Actlabs. Overall, the results indicate the results from Sandberg returned NaCl values all greater than 95%, whereas many Actlabs results were below 95%.

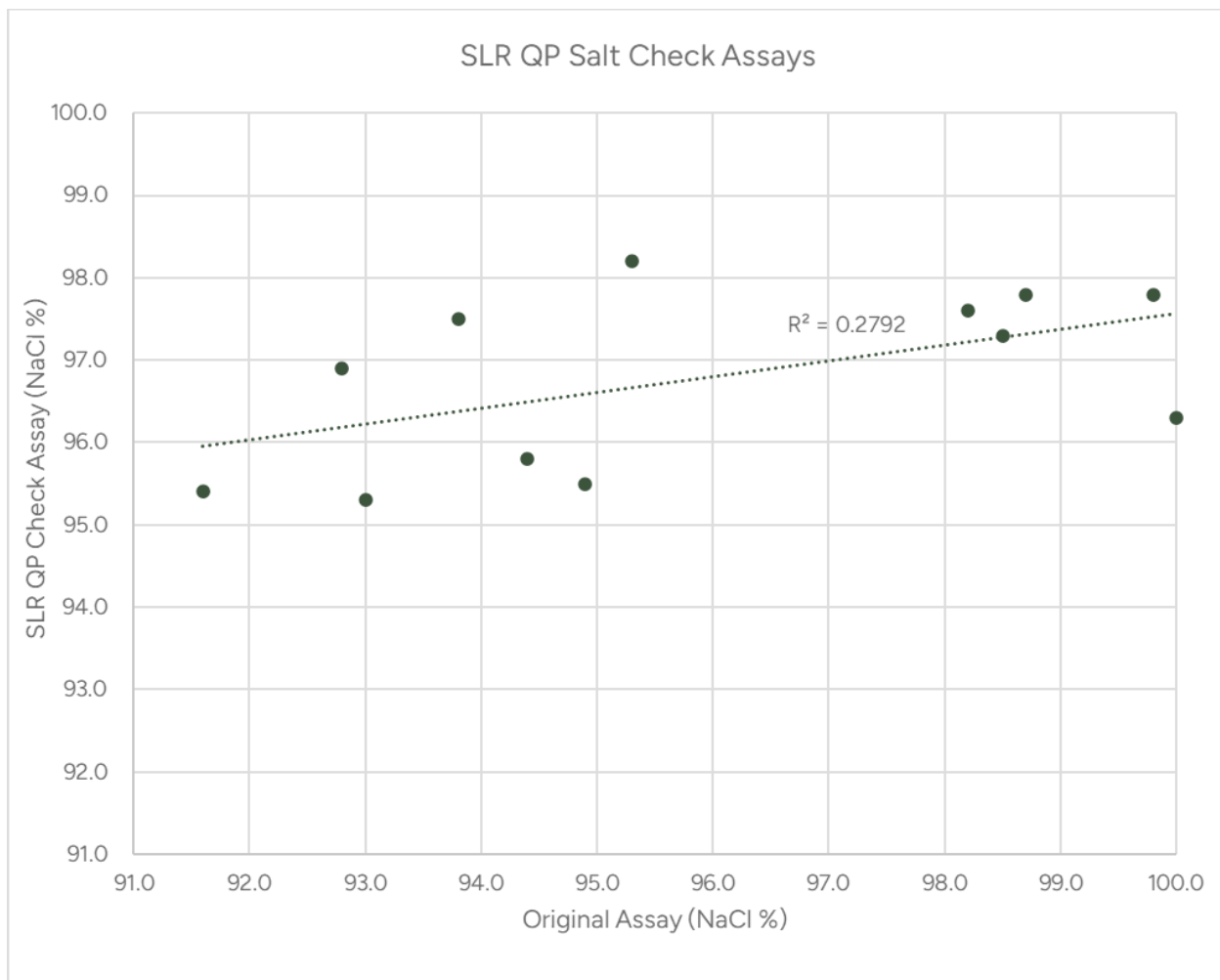
Table 12-4: SLR QP Salt Check Samples

SLR Sample ID	Description	Adjacent GAS Sample ID	Actlabs NaCl (%)	Sandberg NaCl (%)	Difference (NaCl %)	Percentage Difference (%)
39824	Pale Orange Salt	922022	93.8	97.5	3.7	3.9
39825	White salt	922035	91.6	95.4	3.8	4.1
39826	Dark grey salt	922042	94.4	95.8	1.4	1.5
39836	White to dark grey salt	922060	92.8	96.9	4.1	4.4
39843	Massive banded dark grey, mid grey and white salt	922162	100.0	96.3	-3.7	-3.7
39838	Massive grey salt	922089	98.7	97.8	-0.9	-0.9
39837	Massive white salt	922069	94.9	95.5	0.6	0.6
39839	Massive grey salt	922111	95.3	98.2	2.9	3.0
39840	Massive light grey salt	922117	98.5	97.3	-1.2	-1.2



SLR Sample ID	Description	Adjacent GAS Sample ID	Actlabs NaCl (%)	Sandberg NaCl (%)	Difference (NaCl %)	Percentage Difference (%)
39841	Massive white to pale grey salt	922132	93.0	95.3	2.3	2.5
39842	Massive banded dark and light grey salt	922139	99.8	97.8	-2.0	-2.0
39844	Massive mid grey salt	922167	98.2	97.6	-0.6	-0.6
Average			95.9	96.8	0.9	1.0

Figure 12-4: SLR QP Salt Check Sample Results



The QP's review indicates moderate variability between Actlabs and Sandberg assays. Based on visual core inspection, higher correlation would be expected; however, Actlabs results appear conservative and are therefore considered suitable for use in the Mineral Resource estimate. The QP notes, however, that the overall range of NaCl values in check samples is narrow.



12.1.4.2 Mudstone Assay Results

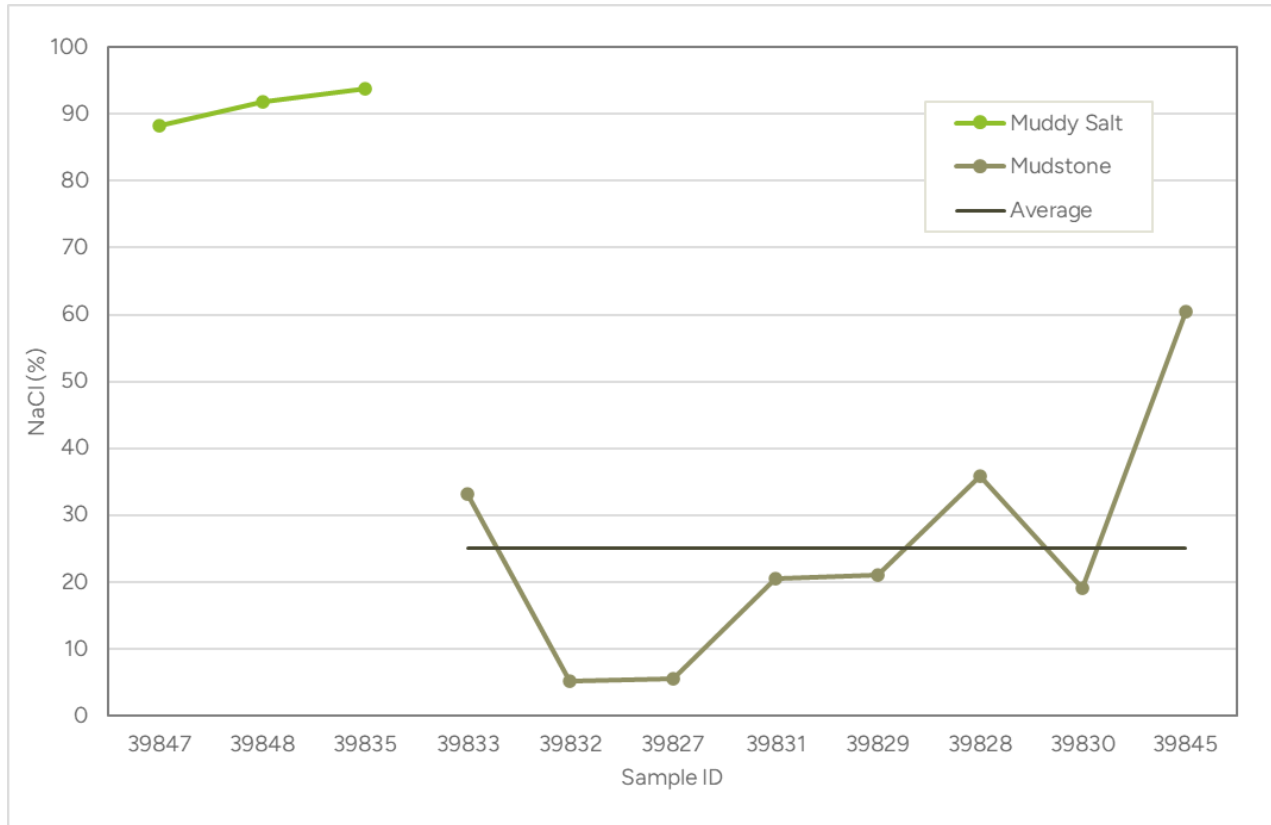
In addition to check samples taken within halite intersections, Dr. Kelly also obtained samples from drill core sections with varying proportions of mudstone interbeds or inclusions, i.e., interpreted as muddy salt, salty mudstone, or mudstone. A total of 11 samples were taken and analyzed by Sandberg using the same analytical methods as for salt samples. The results are listed in Table 12-5 and shown in Figure 12-5.

Table 12-5: SLR QP Salt Check Samples

SLR Sample ID	Description	Classification	Sandberg NaCl (%)
39847	Muddy salt with green mudstone inclusions	Muddy Salt	88.2
39848	Red muddy salt with minor red mudstone and anhydrite inclusions	Muddy Salt	91.9
39835	Muddy salt (4)/(5)	Muddy Salt	93.8
Average		Muddy Salt	91.3
39833	Mudstone and orange remobilised salt (3)	Mudstone	33.1
39832	Red weak mudstone with minor green mudstone bands	Mudstone	5.1
39827	Dark grey green to dark brown mudstone	Mudstone	5.4
39831	Siltstone, mudstone, and rare salt	Mudstone	20.4
39829	Green and brown banded mudstone, rare salt	Mudstone	21.0
39828	Salty mudstone (2)	Mudstone	35.8
39830	Silty Mudstone	Mudstone	19.1
39845	Red, weak, salty mudstone (1)	Mudstone	60.5
Average		Mudstone	25.1



Figure 12-5: SLR QP Mudstone Sample Results



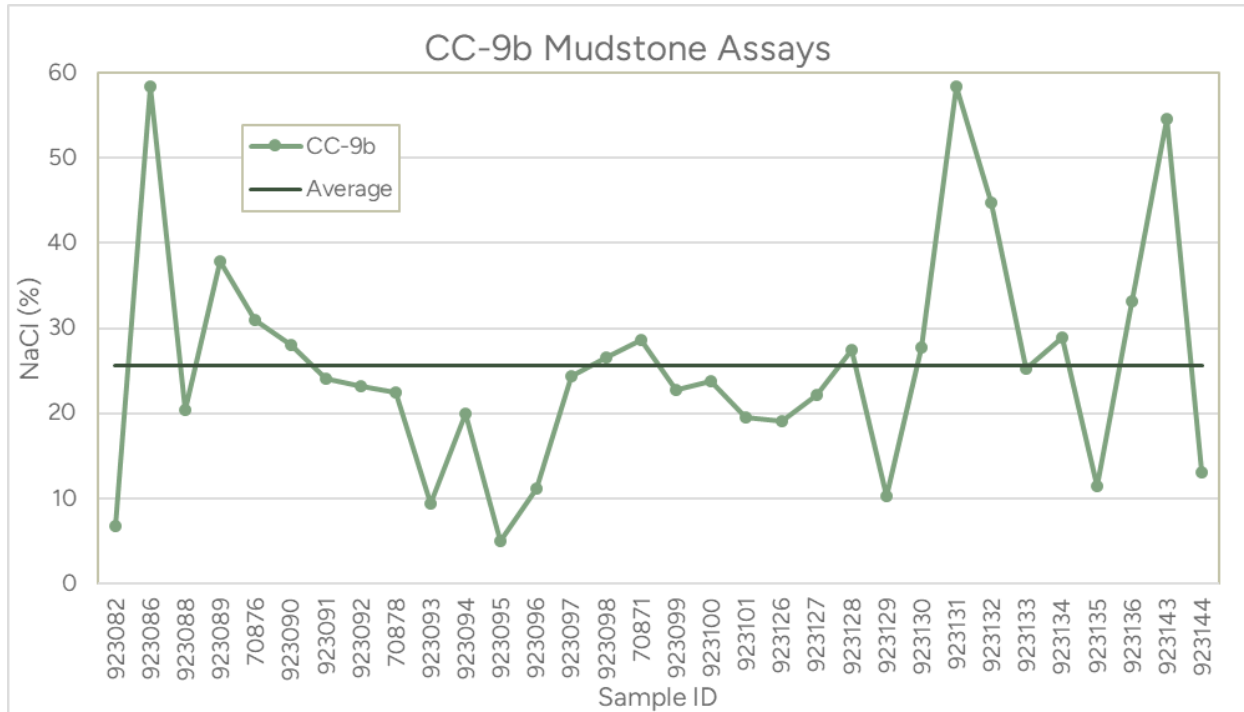
The results indicate that while three instances of muddy salt – predominantly halite with mudstone bands or interbeds – returned values below the typical road salt specification of 95% NaCl, these samples generally showed NaCl contents of approximately 90%.

The eight samples observed as being from mudstone lithologies returned results varying from 5% NaCl to 60% NaCl, averaging 25% NaCl. Excluding one instance observed to have a greater salt content (Sample 39845), the samples averaged approximately 20% NaCl.

These results have been further corroborated by 2023 assay results from CC-9b. A total of 32 samples taken within interbed or well-defined mudstone intervals returned grades between 5% NaCl and 59% NaCl, averaging approximately 26% NaCl (Figure 12-6).



Figure 12-6: Atlas CC-9b Mudstone Sample Results



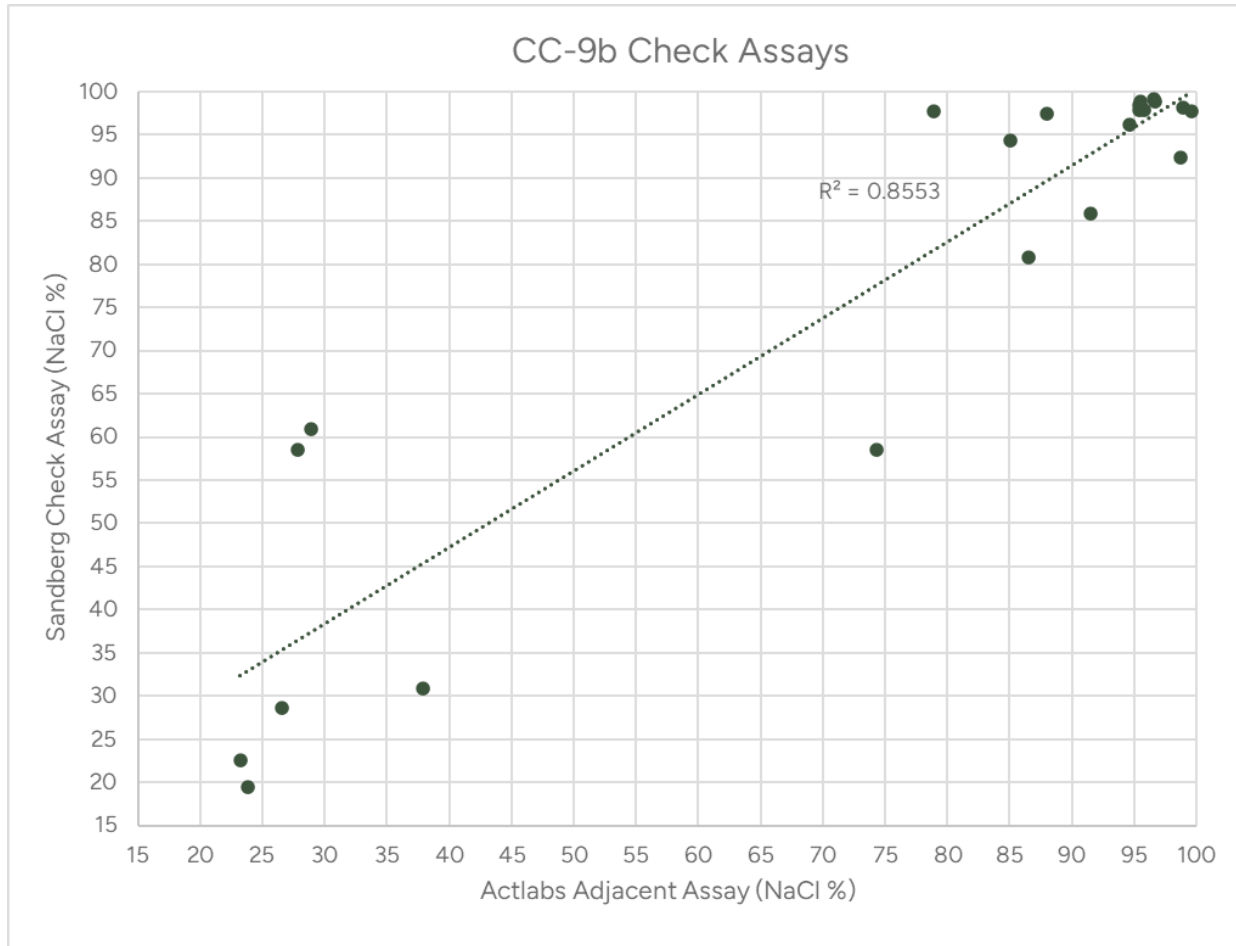
As described in Section 14.6 (Compositing), the QP has accounted for unsampled mudstone intervals by using a diluting grade of 0% NaCl when calculating composite grades.

12.1.5 2023 Check Assay Results

In 2023, a total of 22 check samples from halite and muddy salt intervals were taken from CC-9b and analyzed by Sandberg. Similar to the check samples taken by the Dr. Kelly in 2022, all samples were taken immediately adjacent to an existing Actlabs sample in the same lithology to enable validation of results. A comparison between the two sets of results is shown in Figure 12-7.



Figure 12-7: CC-9b Check Assay Results



The QP is of the opinion that the CC-9b results indicate overall good correlation – greater than that shown by 2022 check assays. Considering the samples do not represent true field duplicates, this further validates the assays from Actlabs and Sandberg.

An additional two check samples were taken in CC-1 and analyzed by Sandberg although neither was adjacent to an Actlabs sample and therefore no direct comparisons for validation purposes have been made. All check sample results from CC-1 and CC-9b have been included in the database used for the updated Mineral Resource estimate.

12.1.6 Conclusions of Mineral Resource Data Verification

Data verification undertaken by SLR has included validation of both spatial and analytical datasets through collar coordinate checks, laboratory certificate reviews, and independent check assays completed during and following the 2022 site visit. The QP has reviewed and relied upon verification work completed by Dr. John George Kelly, EurGeol, P.Geo., FIMMM, MIQ, an SLR employee and QP for the previous Technical Report.

The QP is not aware of any limitations affecting the verification of data and considers that the procedures applied are consistent with industry best practice and appropriate for the purpose of Mineral Resource estimation under NI 43-101. The check analyses performed in both 2022 and 2023 provide adequate confirmation of assay reliability and support the validity of the primary laboratory results.



With respect to the findings of the data verification undertaken for the Project, the QP offers the following additional recommendation:

- 1 Obtain additional infill and/or check samples in drill hole CC-5. Current Mineral Resource classifications consider that grade continuity between CC-5 and CC-2, spaced at approximately 600 m, is more variable than observed between other closely spaced drill holes, which warrants validation.

12.2 Data Verification for Mining, Mineral Reserves, Capital and Operating Costs, and Economic Analysis

The QP had oversight of the selected independent third parties who conducted the field programs in the areas of geotechnical and geochemical assessments, and hydrogeological assessments from July 2021 to the effective date of this report. The QP did not visit any of the laboratories that tested for geotechnical or geochemical inputs.

The QP engaged regularly with the personnel who developed the capital and operating cost estimates and financial model. As part of the data verification process, the QP reviewed budgetary quotes or input prices provided by prospective vendors, to ensure that they were being captured correctly within the capital and operating cost estimates, and financial model.

12.3 Data Verification for Metallurgical Assumptions

The QP engaged with the Project geologists and other personnel to ensure that rock salt samples chosen for analysis were representative of the grades and locations that could eventually be extracted. The QP selected the laboratory in which the samples were sent for analysis. The QP did not visit the laboratory.

12.4 Data Verification for Marketing

The QP was responsible for the selection of firms which carried out the marketing and logistics independent assessments that occurred from July 2021 to the effective date of this report. The QP met regularly with the people involved in delivering the marketing and logistics independent assessments to ensure that their work met the overall objectives of providing the QP with information related to rock salt prices that could be realized from the Project, as well as logistics considerations for delivering rock salt to destination markets.

12.5 Data Verification for Environmental Studies, Permitting, and Social or Community Impact

The QP relied on the data and analyses carried out by independent third parties hired by Atlas Salt. Based on the QP's experience and review of the data and analysis, these studies were appropriate for the stage of the Project.



13.0 Mineral Processing and Metallurgical Testing

13.1 Overview

Test work on salt samples from new drill holes was completed as the 2022-2023 drilling program progressed. The test work included unconfined compressive strength (UCS) tests, Bond abrasion index (Ai), and Cerchar Abrasivity Index (CAI) tests. Samples were selected from core from drill holes CC-7, CC-8, and CC-9b, and consisted of multiple intervals within two salt horizons intercepted, 2-Salt and 3-Salt, and the QP considers these to be indicative of salt to be mined on all mining levels.

UCS results for the 30 samples from drill holes CC-8 and CC-9b ranged from 14.7 MPa to 38.8 MPa and averaged 25.3 MPa. The results are summarized in Table 13-1. Since the core was smaller diameter (approximately 35 mm) than typically used for strength test analysis (50 mm) the results have been adjusted to normalize them for comparison to generally published results. In addition to UCS testing of salt samples, 16 samples of interbed material (material between salt horizons) were tested, and while this material should not reach the processing plant, it is nevertheless useful to characterize this material in the event that some of it does get included in feed to the plant. The interbed material is generally softer than the salt, with the UCS results averaging 16.2 MPa, with a total of 16 results, 15 of which ranged between 3.3 MPa and 24 MPa and one high result of 46.6 MPa.

Table 13-1: Summary of UCS Results for CC-8 and CC-9b

Sample ID	Drill Hole	Interval, From – To (m)	UCS, Adjusted (MPa)
778410, SA1	CC-8	281.41 – 281.65	34.1
778411	CC-8	281.26 – 281.41	28.6
778412, SA1	CC-8	284.42 – 284.6	28.5
778415	CC-8	355.27 – 355.54	25.8
778418, SA1	CC-8	364.79 – 365.09	31.7
778419	CC-8	365.3 – 389.3	28.7
778420, SA1	CC-8	367 – 367.33	26.8
778424, SA1	CC-8	416.22 – 416.6	26.4
778425	CC-8	388.58 – 389	28.4
778428, SA1	CC-8	415.52 – 416	26.6
778410, SA2	CC-8	281.41 – 281.65	34.4
778412, SA2	CC-8	284.42 – 284.60	38.8
778418, SA2	CC-8	364.79 – 365.09	30.7
778420, SA2	CC-8	367.00 – 367.33	26.9
778424, SA2	CC-8	416.22 – 416.60	32.1
778428, SA2	CC-8	415.52 – 416.00	23.0
912417	CC-9b	498.70 – 499.00	19.7



Sample ID	Drill Hole	Interval, From – To (m)	UCS, Adjusted (MPa)
912520	CC-9b	403.57 – 403.90	18.7
912521	CC-9b	408.59 – 408.93	17.5
912522	CC-9b	442.11 – 442.46	20.0
912523	CC-9b	516.19 – 516.52	24.2
912524	CC-9b	527.48 – 527.78	19.1
912525	CC-9b	536.69 – 537.01	18.5
912533	CC-9b	411.35 – 411.69	23.3
912537	CC-9b	534.20 – 534.52	14.7
912538	CC-9b	545.36 – 545.66	24.6
912539	CC-9b	428.32 – 428.67	23.5
912540	CC-9b	433.00 – 433.36	22.9
912541	CC-9b	539.38 – 539.72	17.7
912542	CC-9b	542.98 – 543.33	22.7
Average			25.3
75th Percentile			28.6

Source: SGS 2022.

Six Bond abrasion index (Ai) tests have been completed on six samples from drill holes CC-7 and CC-8 with Ai ranging from 0.001 g to 0.071 g and classified as very mild to mildly abrasive. The results are presented in Table 13-2.

Table 13-2: Bond Abrasivity Test Results

Sample ID	Drill Hole	Depth (m)	Salt Horizon	Ai (g)	Abrasivity Classification	Predicted Wear Rate ¹ (kg/kWh)
102	CC-7	339 – 340.5	1	0.071	Mild	0.016
778417	CC-8	354.1 – 356	2	0.002	Very Mild	-
778427	CC-8	420.65 – 422.08	3	0.001	Very Mild	-
912511	CC-9b	569.1 – 570.6	3	0.001	Very Mild	-
912512	CC-9b	453.7 – 455.2	3	0.001	Very Mild	-
912513	CC-9b	265 – 266.5	1	0.002	Very Mild	-

Source: SGS 2023

Notes:

1. For roll crusher shells

The CAI test is used to predict cutter wear during rock drilling or excavation, and six salt samples were tested. The CAI results ranged from 0.226 to 0.348, classifying the samples' abrasivity as very low.



Additional abrasivity testing was conducted on two samples from CC-7 by continuous miner (CM) manufacturers and the samples were assessed by the two manufacturers as “not abrasive” and “not very abrasive” to “slightly abrasive”.

13.2 Conclusions

Eighty percent of the UCS results for the salt samples tested were within the expected range of 10 MPa to 30 MPa, and the overall average of the results fell within this range at 25.3 MPa, with the 75th percentile value being 28.6 MPa.

Abrasivity testing of salt samples showed that the salt is very mild to mildly abrasive.

In the QP’s opinion, the test results provide adequate information on the properties of the salt to size crushers and estimate costs for replacement of wear items.



14.0 Mineral Resource Estimate

14.1 Summary

Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions) were used for Mineral Resource classification. Table 14-1 provides a summary of the GAS Project Mineral Resource estimate by SLR, with an effective date of September 30, 2025. This estimate is unchanged from the previous estimate for the Project, with an effective date of May 11, 2023.

Table 14-1: Summary of Mineral Resource Estimate – September 30, 2025

Category	Horizon	Tonnage (Mt)	Grade (NaCl %)	Contained NaCl (Mt)
Indicated	1-Salt	-	-	-
	2-Salt	160	95.9	154
	3-Salt	223	96.0	214
	Total	383	96.0	368
Inferred	1-Salt	195	95.3	186
	2-Salt	288	95.3	274
	3-Salt	385	95.0	366
	Total	868	95.2	827

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated without a reporting cut-off grade. Reasonable Prospects for Eventual Economic Extraction were instead demonstrated by reporting within Mineable "Stope" Optimized (MSO) shapes, with a minimum height of 5 m, minimum width of 20 m, length of 40 m, and minimum grade of 90% NaCl, with a 5 m minimum pillar width between shapes.
3. Bulk density is 2.16 t/m³.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Mineral Resources are inclusive of Mineral Reserves.
6. Salt prices are not directly incorporated into the Mineral Resource MSO minimum target grades, however, the mean Mineral Resource grades exceed the 95.0% NaCl (± 0.5%) specification outlined in ASTM D632-12.
7. Numbers may not add due to rounding.

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

14.2 Resource Database

Salt horizons correlated with the GAS deposit have been intersected in 13 drill holes, of which nine have been assayed. The four unassayed holes include two located outside the resource area (FB-2 and FB-5) and two geotechnical holes (GT-18 and GT-19 that were terminated shortly after entering the Salt-1 horizon.

The database for the Project Mineral Resource estimate consists of nine drill holes for 4,359.8 m of drilling, excluding CC-9 and CC-9a, as summarized in Table 14-2. CC-6 and CC-7 intersected the top of the uppermost halite horizon but did not drill through the complete salt



interval. CC-9 and CC-9a were terminated prior to reaching the salt horizon due to drilling difficulties and were therefore not directly used.

Table 14-2: Summary of Drilling

Drill Hole ID	Owner	Year Drilled	UTM NAD83 Z21		Elevation (masl)	Total Depth (m)
			Eastings	Northing		
CC-1	Vulcan Minerals	2002	386838.9	5362165.6	54.20	605.2
CC-2	Red Moon	2013	387598.9	5362877.7	47.45	466.0
CC-3	Red Moon	2013	386373.4	5361850.9	46.55	313.0
CC-4	Red Moon	2014	388120.8	5363353.0	47.41	536.0
CC-5	Red Moon	2014	387851.6	5362316.1	58.79	632.0
CC-6	Atlas Salt	2022	387914.1	5363747.8	24.86	362.0
CC-7	Atlas Salt	2022	388525.0	5363709.5	38.09	374.0
CC-8	Atlas Salt	2022	387770.4	5363177.0	54.67	491.6
CC-9 ¹	Atlas Salt	2022	388374.8	5363298.8	47.55	158.3
CC-9a ¹	Atlas Salt	2022	388367.5	5363307.7	47.11	116.0
CC-9b ²	Atlas Salt	2022	388381.1	5363303.8	47.20	580.0
Total						4,634.10

Notes:

1. CC-9 and CC-9a were terminated prior to reaching salt.
2. CC-9b was a redrill of 9/9a and intersected the full thickness of salt. SLR used a handheld GPS coordinate for CC-9b at the time of the Mineral Resource estimate.
3. Not included above are the four unassayed holes (FB-2, FB-5, GT-18 and GT-19) which intersected salt or potash.

14.3 Geological Interpretation

14.3.1 Halite

Geological interpretation of the GAS halite deposit has been based on a combination of geological and geophysical data from the following sources:

- Lithological boundary between the overlying Red Beds stratigraphy and the top of halite, as observed in drill core logs.
- Lithological boundary between the base of halite and the underlying anhydrite, as observed in drill core.
- Top and base of halite based on downhole geophysical logging of natural gamma in CC-2 to CC-5 and CC-9b drill holes, used to validate drill core observations and inform geological interpretations including correlation of mudstone interbeds.
- Re-processed seismic survey interpretations as contours/point data representing the top and base of salt reflector horizons.

Table 14-3 provides a summary of halite intersections observed in drill holes based on lithological logging undertaken by Vulcan Minerals and Atlas. The halite has been intersected to a maximum depth of approximately 625 m in CC-5.



Table 14-3: Summary of Intersections

Drill Hole ID	Total Depth (m)	Red Beds ¹ (m)	1-Salt (m)	Interbed-1 (m)	2-Salt (m)	Interbed-2 (m)	3-Salt (m)
CC-1	605.2	212.0	55.5	9.5	51.0	2.0	27.5
CC-2	466.0	303.0	19.1	12.9	41.4	4.1	73.8
CC-3	313.0	225.4	25.4	4.2	20.3	4.5	13.8
CC-4	536.0	186.0	56.0	27.1	66.2	11.1	183.4
CC-5	632.0	394.0	11.1	3.9	85.8	2.5	127.4
CC-6 ²	362.0	314.0	25.5	21.7	0.8		
CC-7 ²	374.0	335.0	15.0	24.0			
CC-8	491.6	257.0	31.0	20.6	94.6	3.1	76.9
CC-9b ²	580.0	242.6	56.4	7.3	100.8	19.6	149.8

Notes:

1. Includes superficial overburden
2. CC-6 and CC-7 were terminated shortly after intersecting the top of the halite. CC-9 and CC-9a were terminated prior to reaching salt. CC-9b was a redrill of 9/9a and intersected the full thickness of salt.
3. Not included above are the four unassayed holes (FB-2, FB-5, GT-18 and GT-19) which intersected salt or potash.

Following the review of geological logging intervals and lithological descriptions, SLR subsequently verified logging depths against downhole geophysical logging of natural gamma for CC-2 to CC-5 and CC-9b. In all cases the top of salt could be clearly identified due to the contrasting natural gamma responses between the overlying Red Beds and halite.

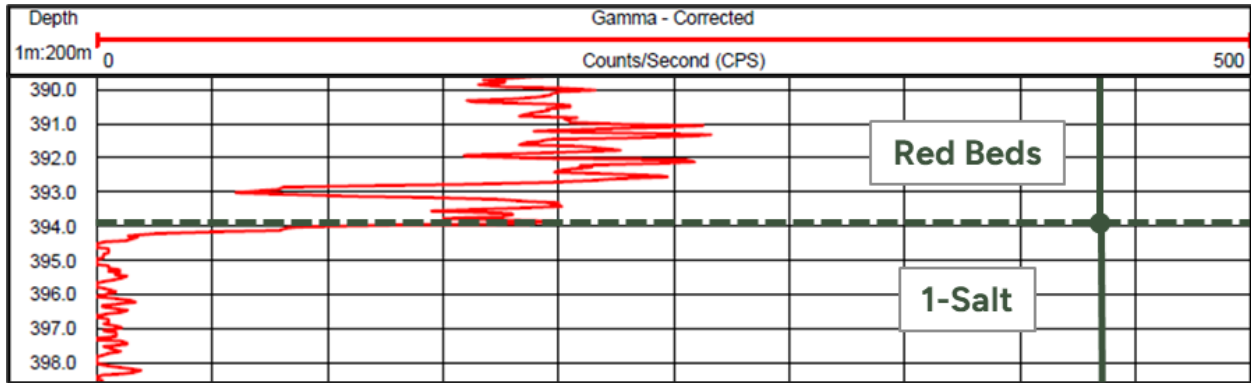
The Red Beds, typically comprising mudstones with varying proportions of sand, silt, and gravel, show a moderate to high natural gamma response (150 to 300 counts per second: CPS), illustrated in Figure 14-1, primarily due to the existence of naturally occurring radiation in shale and clay minerals. It is also possible to identify the occurrence of distinct sandstone intervals within the Red Beds which exhibit a moderate to low (50 to 150 CPS) natural gamma response, for example in CC-3 as shown in Figure 14-3.

Conversely, the top of salt can be determined by a characteristic drop in natural gamma response, typically below 25 to 50 CPS. The top of the halite has been generally shown to have a sharp contact with the overlying Red Beds, however, mudstone inclusions in the roof of the geological horizon can make geophysical log interpretation more difficult. For this reason, geological boundaries have been determined using a combination of geological and geophysical observations.

The boundary between the halite and underlying anhydrite is more challenging to determine from geophysical logging alone, although is generally characterized by a further reduction in natural gamma relative to the adjacent halite (Figure 14-2).

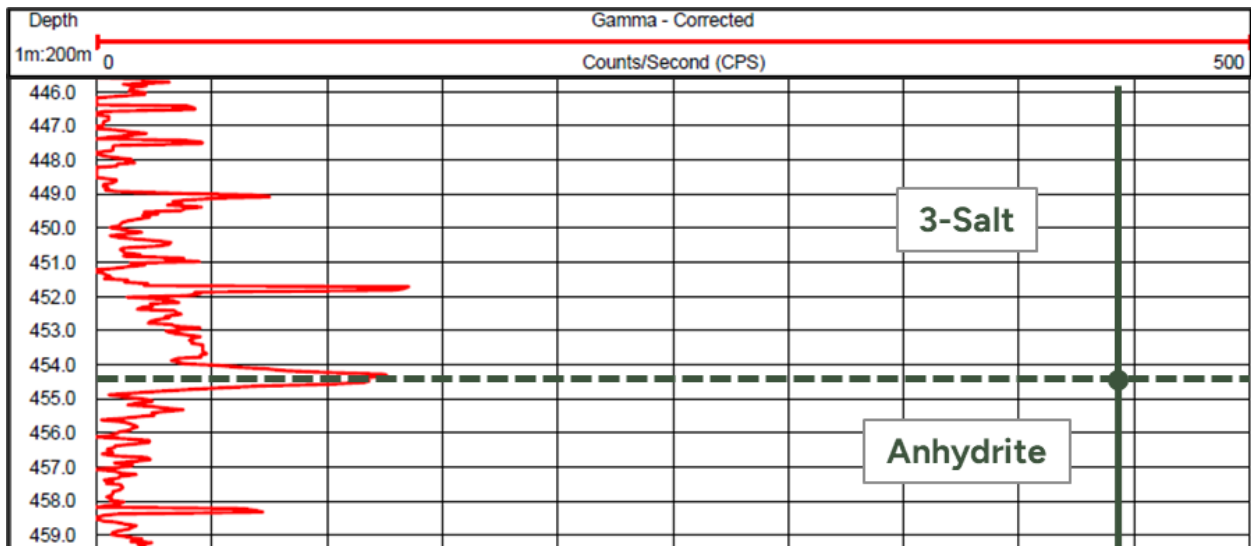


Figure 14-1: Geophysical Log Example: Halite Roof in CC-5



Source: SLR 2023.

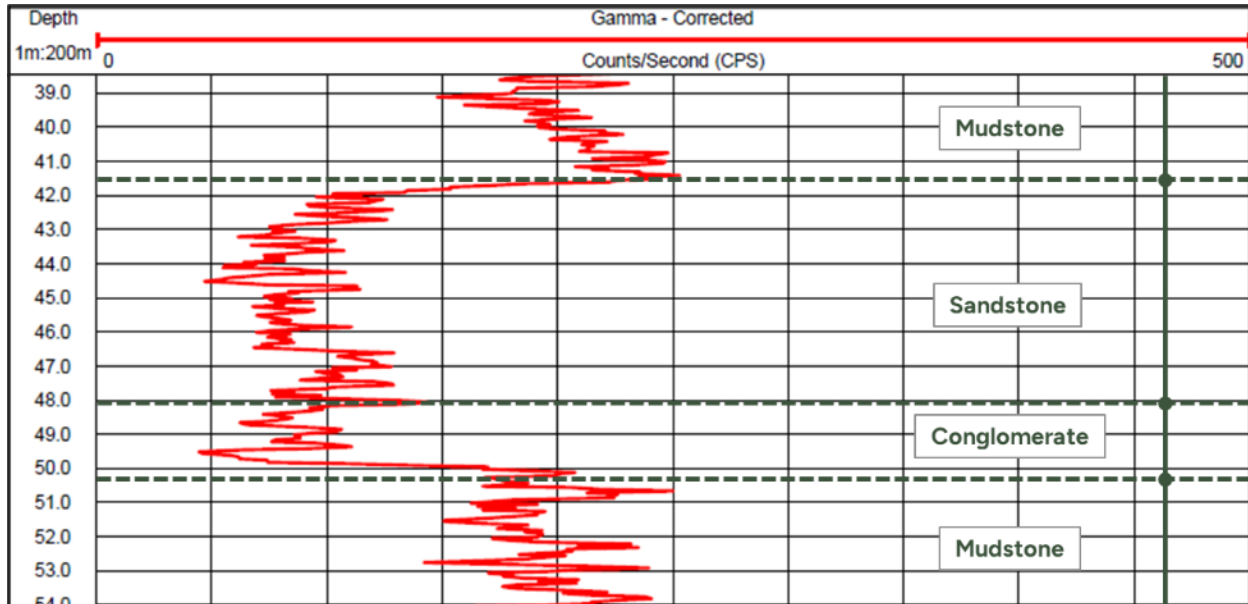
Figure 14-2: Geophysical Log Example: Halite Floor in CC-2



Source: SLR 2023.



Figure 14-3: Geophysical Log Example: Red Beds Sandstone in CC-3

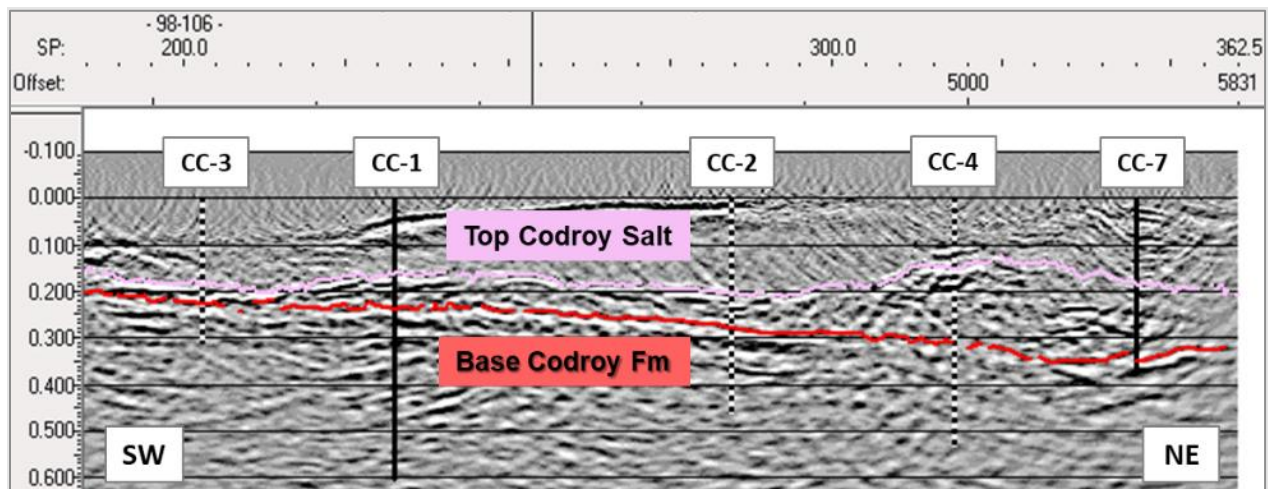


Source: SLR 2023.

As a further stratigraphic control on the halite, Atlas commissioned an independent geophysical predictive study in 2022, which was completed by an independent third-party consultant. The study involved re-evaluating the time-depth conversions to be applied to existing seismic line data including:

- Line 98-106: orientated northeast-southwest along the Project access road. Drill holes CC-1 to CC-4 and CC-7 have subsequently been drilled along this line (Figure 14-4).
- Line VUL-2010-01: orientated approximately east-west north of CC-1. Drill hole CC-5 was subsequently drilled to the east of CC-1 along this line (Figure 14-5).

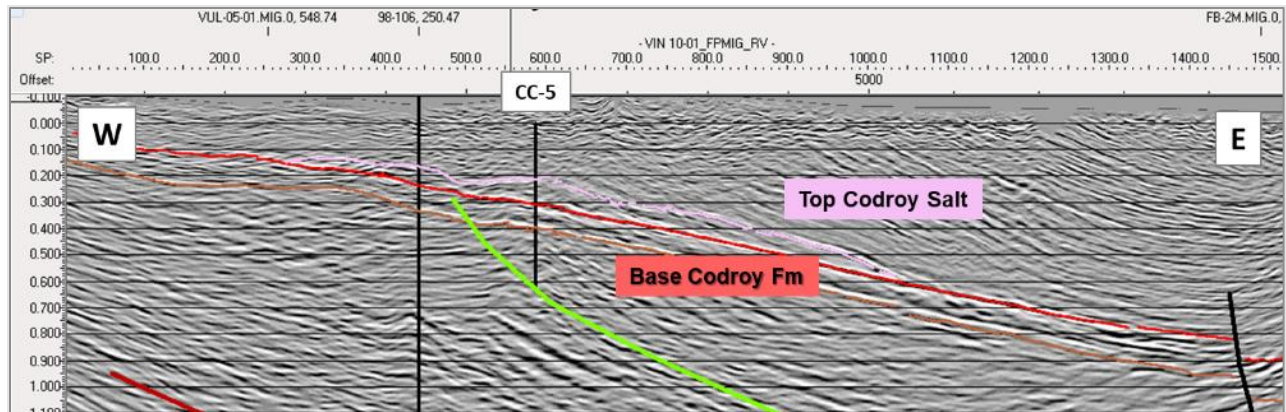
Figure 14-4: Seismic Line Interpretation 98-106



Source: Atlas 2022.



Figure 14-5: Seismic Line Interpretation VUL-2010-01

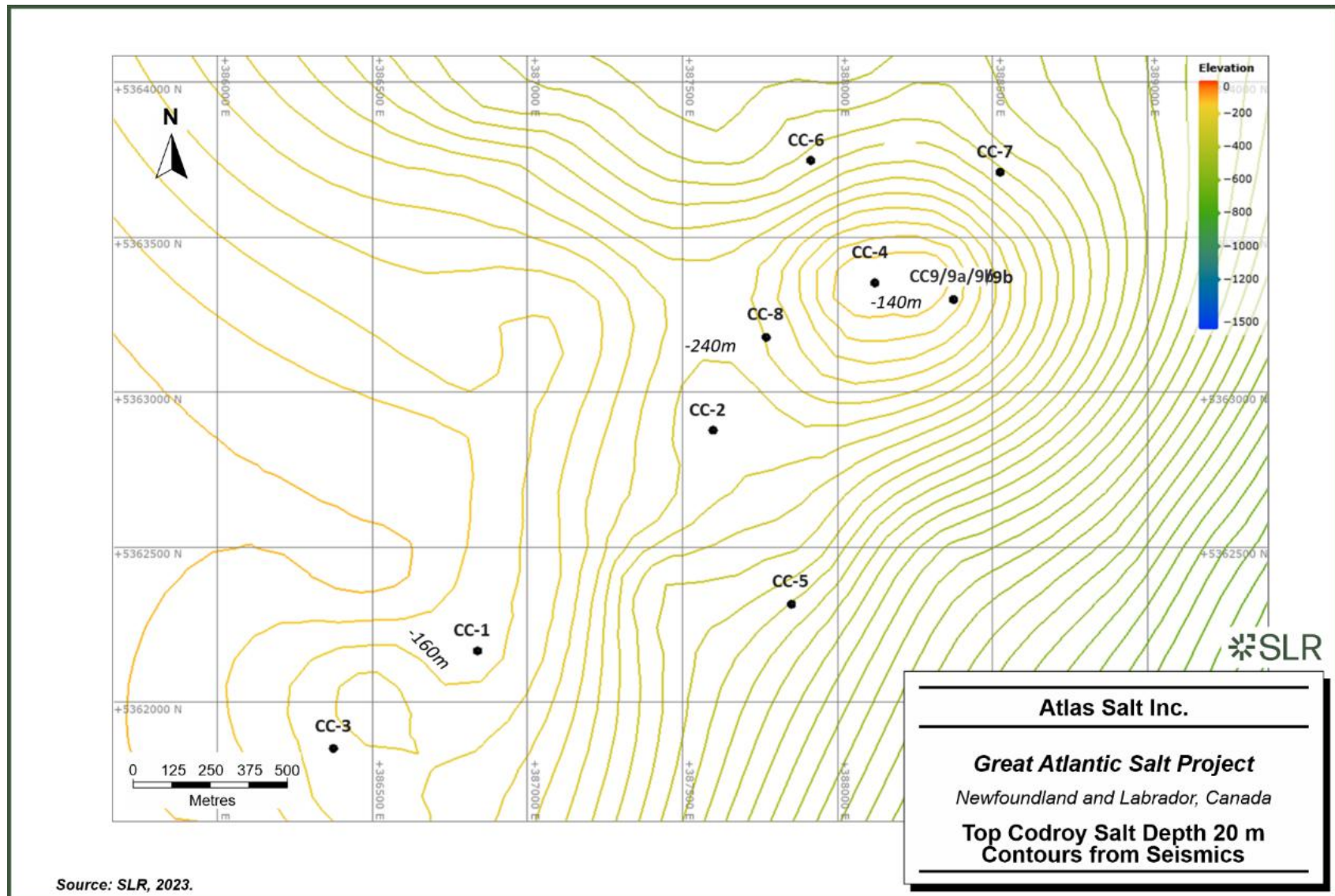


Source: Atlas 2022.

From the seismic line re-interpretations, a new conversion between TWT and TVDSS was completed using known salt roof and floor intersections from drill holes CC-1 to CC-7 and two Flat Bay drill holes FB-2 and FB-5. CC-8 and CC-9b drill holes were completed after the seismic re-interpretation. The Codroy Salt roof and floor reflector horizons are illustrated in Figure 14-6 and Figure 14-7, along with the resultant Codroy Salt isopach in Figure 14-8. The isopach illustrates the thick accumulation of halite confirmed by drilling at CC-4, thinning outwards in all directions. The halite is also shown to progressively thin towards a line of sub-crop in the west.



Figure 14-6: Top Codroy Salt Depth 20 m Contours from Seismics



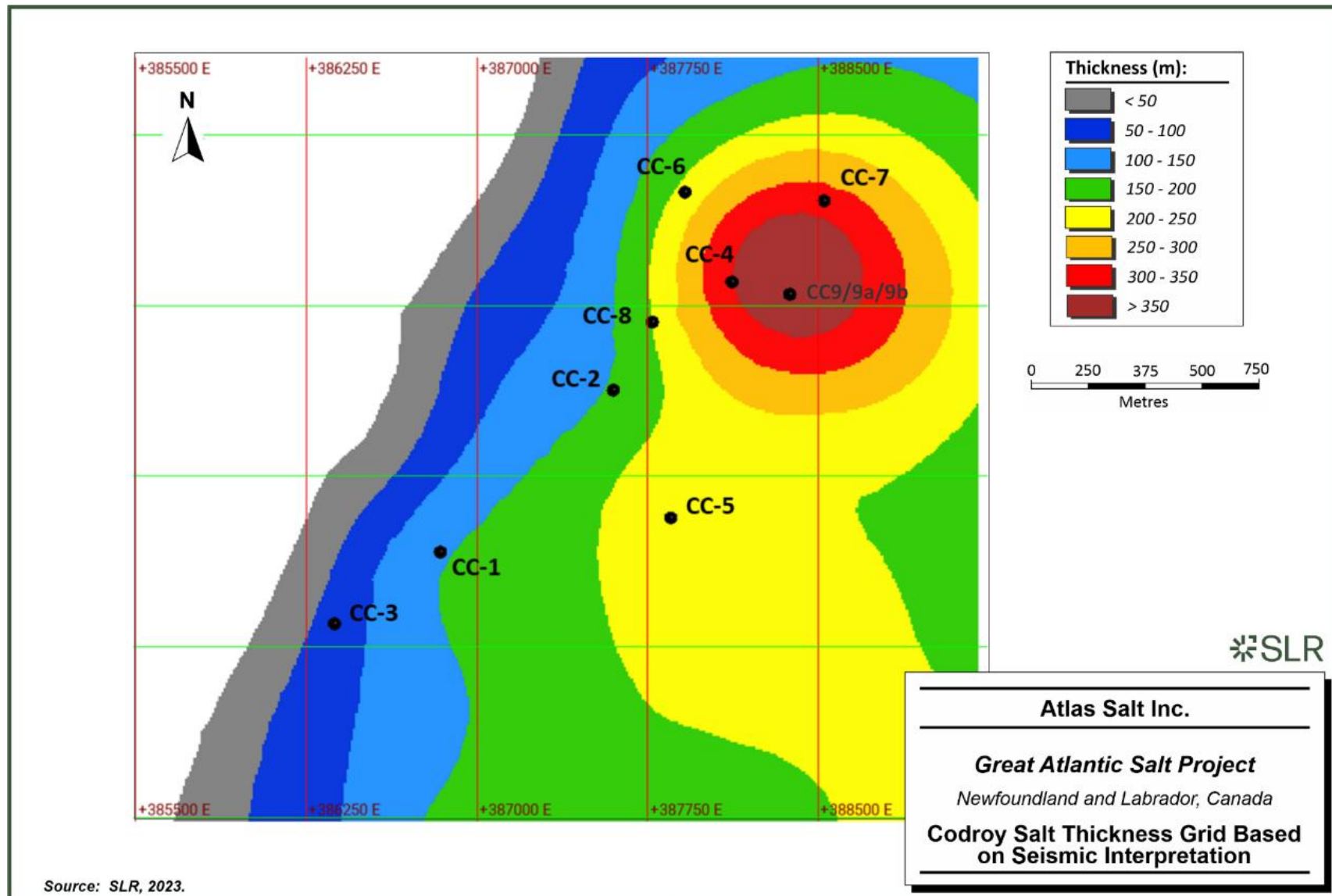
Atlas Salt Inc.

Great Atlantic Salt Project
 Newfoundland and Labrador, Canada

**Base Codroy Salt Depth 25 m
 Contours from Seismics**

Source: SLR, 2023.

Figure 14-8: Codroy Salt Thickness Grid Based on Seismic Interpretation



For geological modelling, SLR used the available roof and floor of the Codroy Salt reflector horizons as a guide for the ultimate roof and floor of the GAS halite deposit between drill hole intersections (i.e., to inform the position of the 1-Salt roof and 3-Salt floor between drill holes). In some cases, SLR opted to remove a selection of the seismic point dataset for the salt roof to prevent conflicts between actual drill hole points of intersections. This includes the area of closest drill spacings around CC-4, CC-8, CC-6, CC-7, and CC-9b where seismic data was used for model validation only. As mentioned previously, drill holes GT-18 and GT-19 intersected the upper portion of the Salt-1 horizon earlier than anticipated, due in part to the deactivation of a selection of the seismic point dataset for the salt roof.

Combining the available seismic data with drill hole intersections, Figure 14-9, Figure 14-10, and Figure 14-11 show thickness grids for the classified portions of 1-Salt, 2-Salt, and 3-Salt, respectively.

- The 1-Salt is the thinnest of the three halite horizons with a thickness of approximately 55 m in CC-1, CC-4 and CC-9b, thinning progressively outwards to 25 m to 30 m in CC-3, CC-6, and CC-8. The 1-Salt is found to be approximately 10 m to 20 m in the remaining holes and is the thinnest in CC-5 at approximately 11 m.
- GT-18 and GT-19 lack complete 1-Salt intersections and were not incorporated in the geological model that supports the current Mineral Resource.
- The 2-Salt thickens from southwest to northeast ranging between approximately 20 m in CC-3 and 100 m in CC-7 and CC-9b. CC-6 and CC-7 lack complete 2-Salt intersections and have interpolated thicknesses.
- The 3-Salt also thickens from southwest to northeast ranging between approximately 14 m in CC-3 and 180 m in CC-4. CC-6 and CC-7 lack 3-Salt intersections and have interpolated thicknesses.



Figure 14-9: Classified 1-Salt Thickness Grid

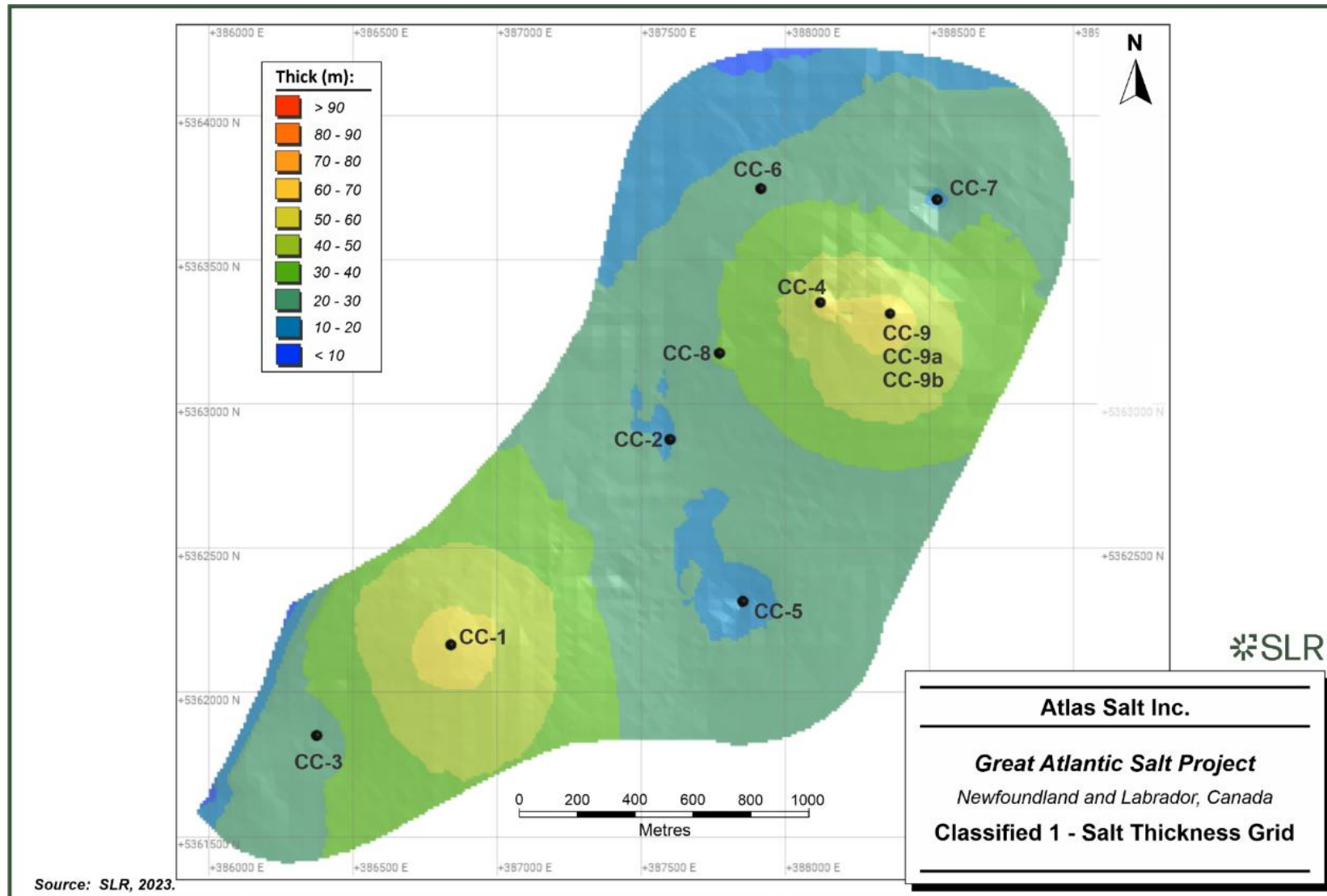


Figure 14-10: Classified 2-Salt Thickness Grid

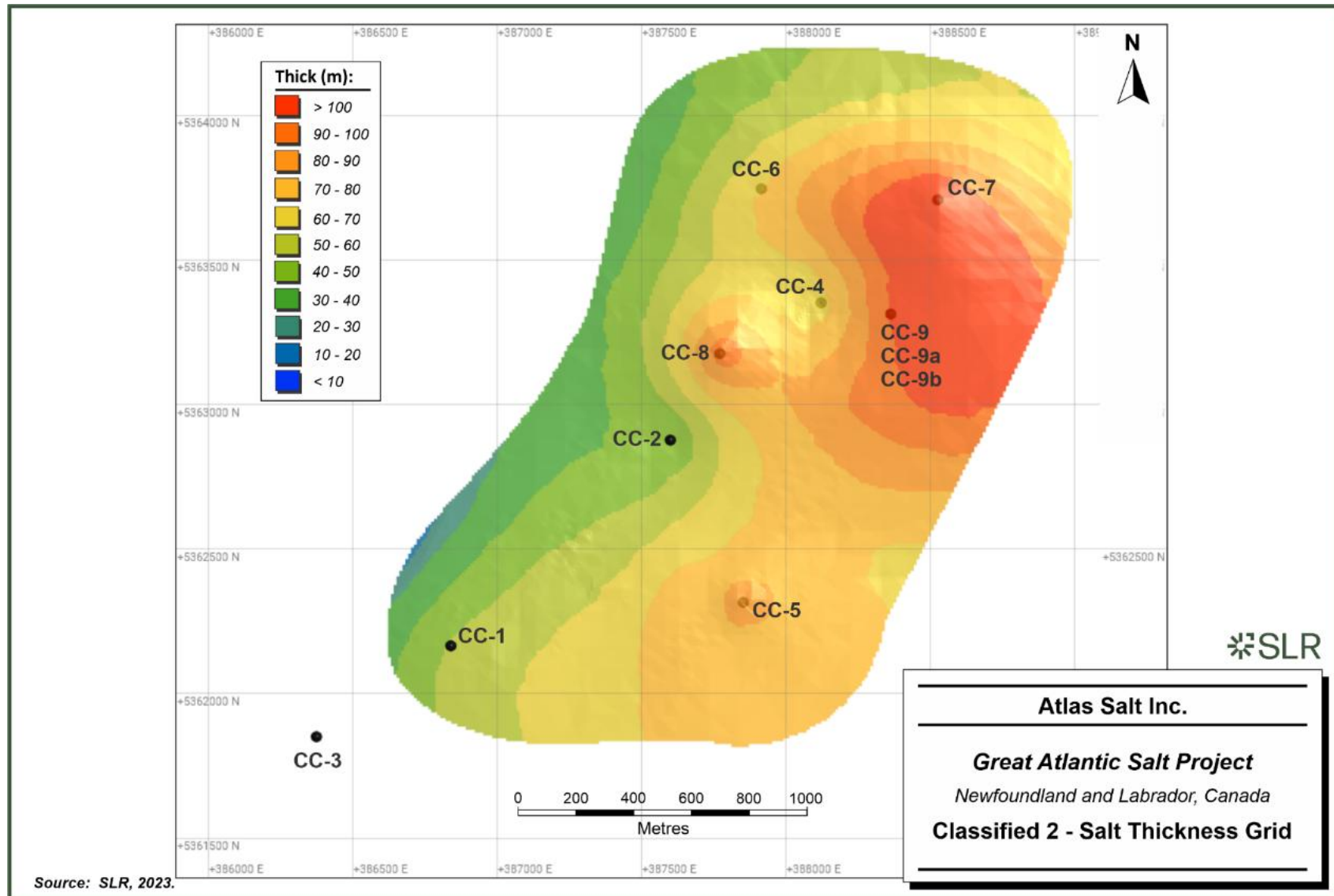
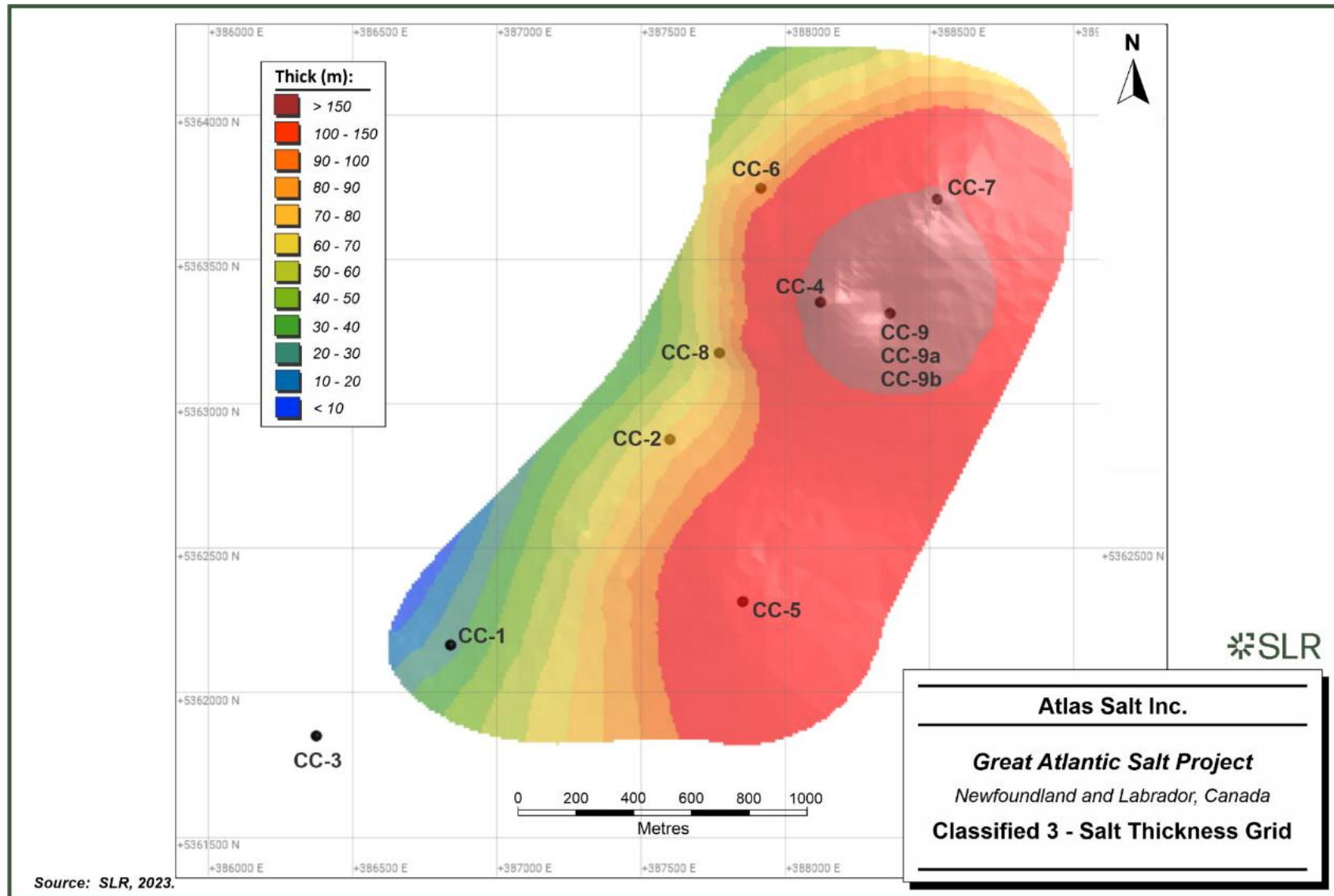


Figure 14-11: Classified 3-Salt Thickness Grid



14.3.2 Interbeds

As described in Section 7.2, the GAS halite deposit has been split into three main salt horizons separated by two distinct and laterally continuous interbeds intersected in most drill holes, referred to as Interbed-1 (IB-1) and Interbed-2 (IB-2). This interpretation is aligned with the evaporite basin stratigraphy elsewhere in the region and was adopted for the previous geological model constructed in 2016. The interpretation for the GAS deposit has been further corroborated by SLR through a detailed review of geological and geophysical data, in addition to check logging completed by Dr. Kelly in October 2022.

The geological and geophysical data considered by Dr. Kelly and the QP during re-evaluation of interbed interpretations has included:

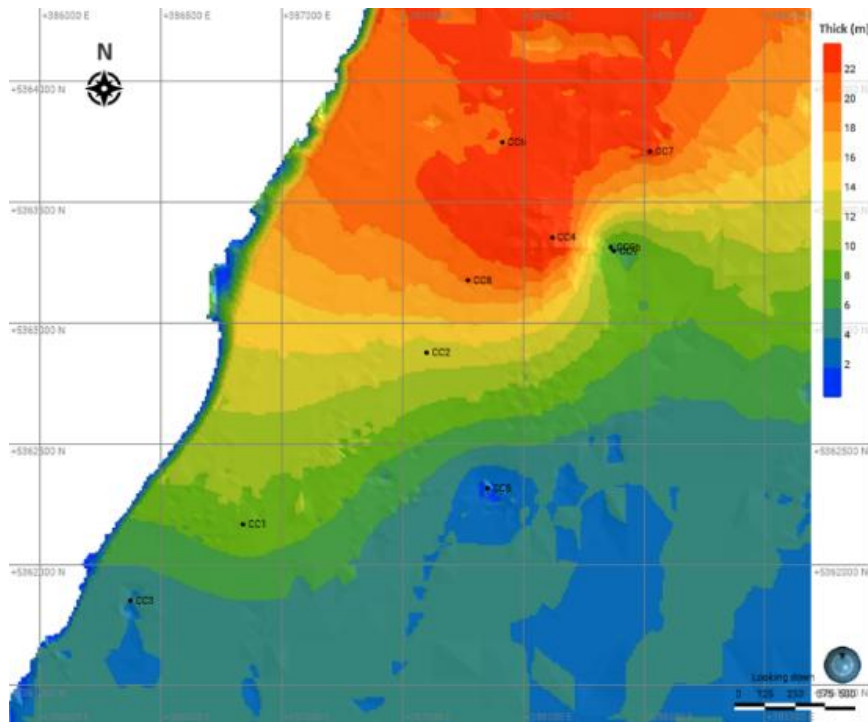
- Primary and secondary lithology codes based on original core logging available for all drill holes, and check logging undertaken by the Dr. Kelly.
- Detailed lithological descriptions providing the QP with an indication of the relative homogeneity of each logged drill core interval.
- Downhole wireline geophysical logging allowing the identification of horizons within higher natural gamma as an indicator of an increased proportion of interbed lithologies (e.g., mudstone, siltstone, sandstone, potash).
- Core recovery, noting any instances of material core loss which might affect interpretation, and the assigning of primary and secondary lithology codes.
- Sample frequency, i.e., the identification of unsampled intervals that could be indicative of or coincide with a higher proportion of interbed lithologies.

Following the verification and review of all available data pertaining to the stratigraphy of the GAS deposit, the QP updated and refined the previous interbed interpretations with consideration for new intersections in drill hole CC-9b.

The results of these interpretations are illustrated in Figure 14-12 and Figure 14-13 showing thickness grids for IB-1 and IB-2, respectively. Drill hole intersections indicate IB-1 is thickest in the northeast of the deposit in CC-4 at approximately 27 m, thinning in drill holes to the southwest. IB-1 has been found to be poorly developed in CC-9b but identifiable from core photos and gamma logging. In comparison, IB-2 is thinner than IB-1, thickest in CC-4 (approximately 11 m) and CC-9b (approximately 20 m) but generally less than 5 m elsewhere in the deposit. IB-2 has not been intersected in CC-6 and CC-7 and the QP manually manipulated the IB-2 floor to extrapolate a thickness of approximately 8 m to 12 m to the north to prevent underrepresentation.

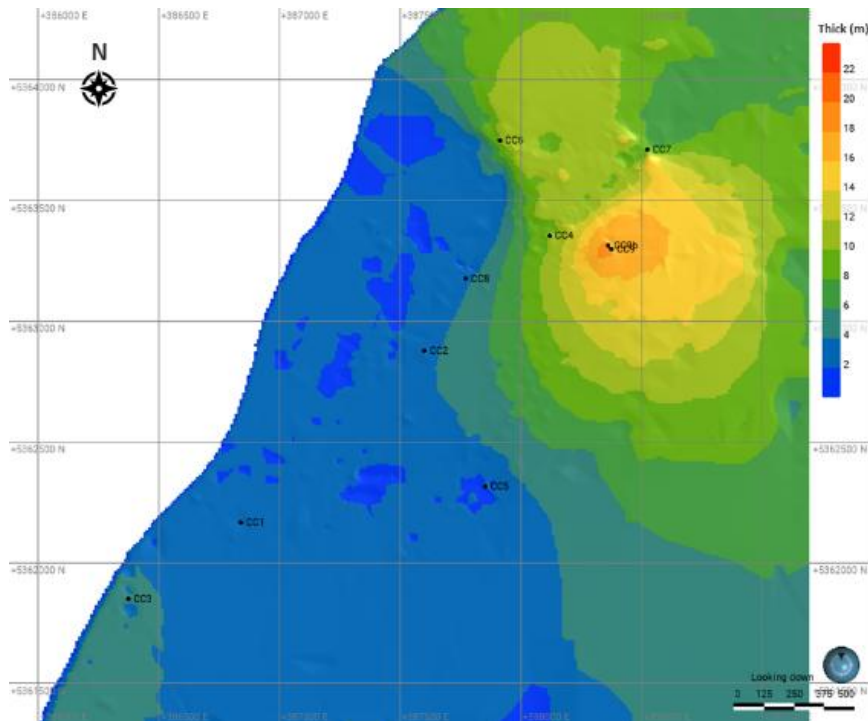


Figure 14-12: Interbed-1 Thickness Grid (m)



Source: SLR 2023

Figure 14-13: Interbed-2 Thickness Grid (m)



Source: SLR 2023



14.3.3 Isolated Mudstone Horizons

In addition to the interpretation of IB-1 and IB-2 showing a high degree of lateral continuity across the deposit, drilling at CC-4 and CC-9b has also indicated the potential for isolated mudstone/siltstone horizons or lenses to exist within the halite.

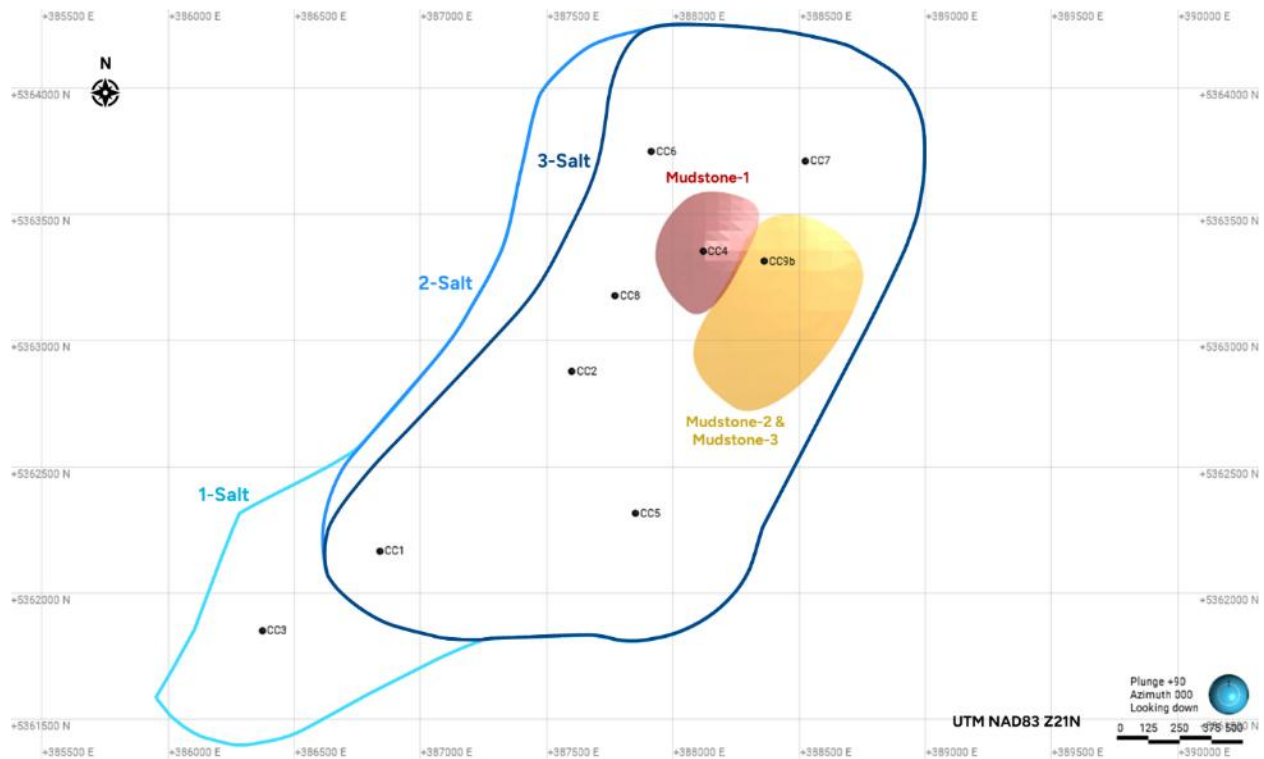
In CC-4, an interval of 4.8 m thickness logged as mudstone was intersected approximately mid-way through the 1-Salt, itself being approximately 56 m thick. Dr. Kelly visually inspected the core during the October 2022 site visit, and further validated the geological logging of this horizon using geophysical (natural gamma) logging. No representative samples have been taken within this interval to further validate it as non-halite. This discrete mudstone has not been identified in any of the adjacent drill holes including CC-8 (390 m southwest) and CC-9b (245 m east-southeast), leading to its interpretation as an isolated mudstone lens localized around CC-4. For reporting/descriptive purposes, this unit is herein referred to as Mudstone-1.

In CC-9b, two intervals of 11.3 m and 1.7 m thickness logged as siltstone, silty mudstone, and mudstone and separated by approximately 10 m of halite was intersected within the 3-Salt, itself being approximately 150 m thick. The QP validated the geological logging of these horizons using core photos and geophysical logging, with assay results also confirming their low halite content averaging 30% NaCl and 32% NaCl, respectively. As with the isolated mudstone intersected in the 1-Salt at CC-4, drill holes adjacent to CC-9b including CC-4 and CC-8 (610 m west-southwest) show no clear evidence of similar intervals within the 3-Salt contributing to their interpretation as isolated mudstone units localized around CC-9b. For reporting/descriptive purposes, these units are herein referred to as Mudstone-2 (upper 11.3 m) and Mudstone-3 (lower 1.7 m).

The extents of each isolated mudstone lens have been interpreted by the QP with consideration for mudstone lens thicknesses, available intersections, and the distance between adjacent drill holes. The QP has also considered overall geological (Mineral Resource) risk when determining the extents, adopting an approach of extending each mudstone to approximately the midpoint between adjacent drill holes. The extent of Mudstone-1 in CC-4 is approximately 0.14 km² (14 ha). Given their stratigraphic relationship being separated by only a thin interval of halite, Mudstone-2 and Mudstone-3 in CC-9b have been interpreted to have the same lateral extent of approximately 0.35 km² (35 ha). This is illustrated in Figure 14-14 compared to the classified extents of each halite horizon. A vertical section between CC-4 and CC-9b through the resultant geological model is shown in Figure 14-17.



Figure 14-14: Isolated Mudstone and Classified Salt Extents



Source: SLR 2023

The QP is of the opinion that the overall extent (and resultant volumes) of each mudstone, and the equivalent deduction of halite from the final Mineral Resource is more likely to be a conservative approach (i.e., an overestimate of the mudstone extent) on an individual mudstone basis. This is when considering the depositional environment and accumulation of siliciclastic, terrigenous sediments within a wide and largely flat closed basin where lateral extent is expected to be proportional or influenced by thickness and therefore potentially smaller than adopted, notwithstanding the potential for distinct depositional features such as channels. The final adopted extents are however deemed appropriate for accounting for their unknown lateral extents, and the potential for other isolated mudstones to exist elsewhere within the deposit.

14.3.4 Geological Model

After the review of all data relating to geological interpretations including geological logs, geophysical logs, SLR check logs, seismic survey data, and assay results, SLR subsequently constructed wireframes for each stratigraphic horizon within the deposit including:

- Overburden (OVB)
- Red Beds
- 1-Salt
 - Mudstone-1 (MST-1)
- Interbed-1 (IB-1)
- 2-Salt
- Interbed-2 (IB-2)



- 3-Salt
 - Mudstone-2 (MST-2)
 - Mudstone-3 (MST-3)
- Anhydrite (ANH)

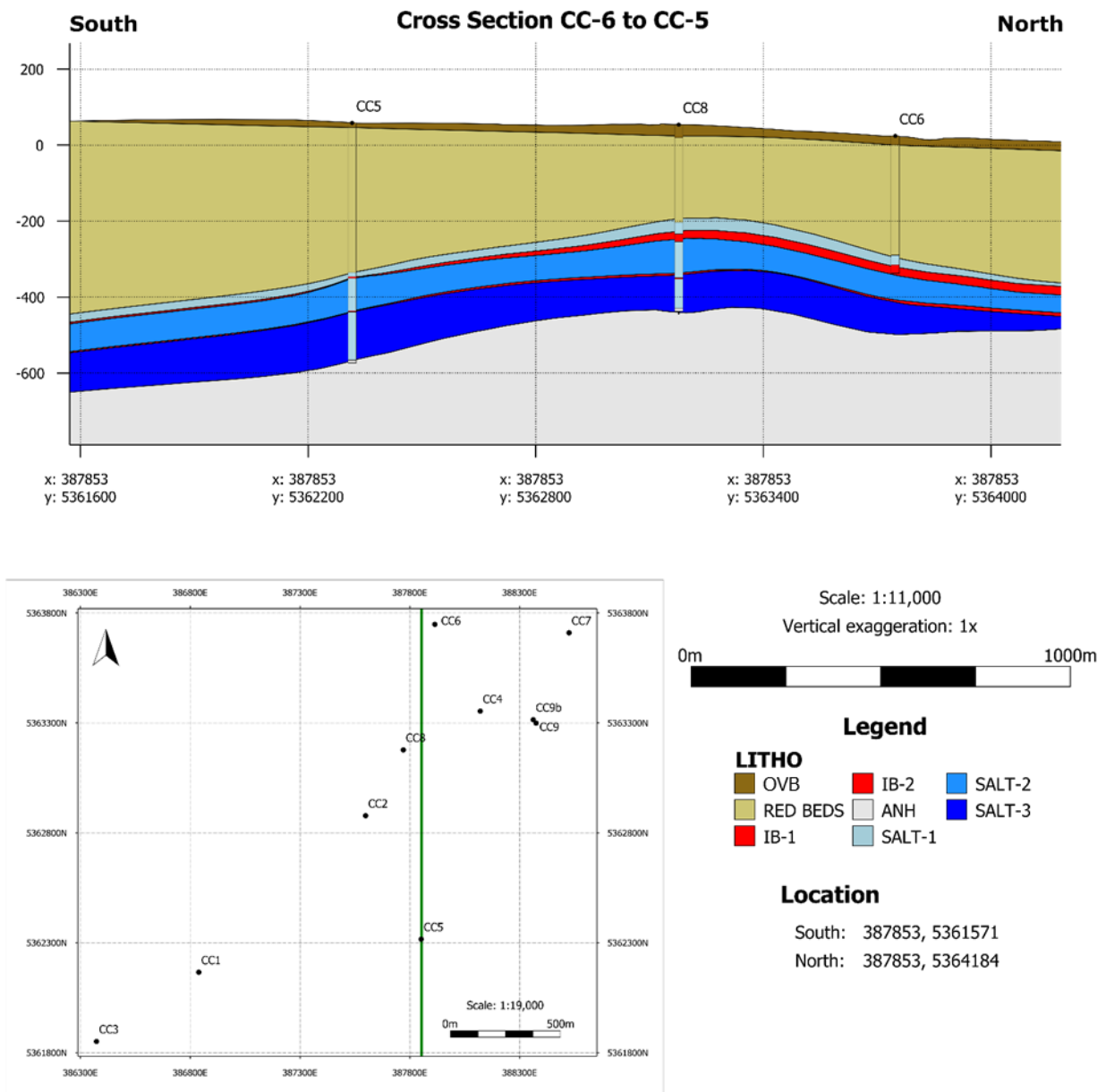
The geological model is constrained vertically by the topography surface utilizing LiDAR survey data obtained by Pioneer Exploration Consultants in 2022 on behalf of Atlas. The stratigraphic horizons were subsequently used to constrain block grade estimates to within the three halite horizons. Figure 14-15, Figure 14-16, and Figure 14-17 illustrate vertical cross-sections showing the drill hole intersections, seismic survey guide points for the salt roof and floor, and resultant geological model wireframes.

The QP is of the opinion that the interpreted seismic line contour surfaces are reliable at the scale of tens of metres for use in geological interpretation. Within the vicinity of closely spaced drill holes, these contour surfaces were intentionally deactivated, as the drill hole data were considered to provide more spatially accurate control on the positions of the salt horizon contacts. Accordingly, when drill holes GT-18 and GT-19 intersected the upper portion of the Salt-1 horizon earlier than anticipated within the geological model, this difference is attributed in part to the deactivation of the seismic surface in that area, which resulted in reduced local control where known lithological contacts did not align precisely with the broader geophysical interpretation.

Drill holes GT-18 and GT-19 were terminated before fully intersecting the Salt-1 horizon and were not assayed, as they were designed for geotechnical rather than compositional purposes. The core from both holes is stored on site in the core facility and could be sampled in the future to further confirm both salt grade and exact position of the Red Beds contact with the Salt-1 horizon. In the QP's opinion, had these holes been assayed and incorporated into the geological wireframes for the Salt-1 horizon, their inclusion would not materially affect the estimated tonnes or grade of the current Mineral Resource. Furthermore, as the Salt-1 horizon is not included within the current Mineral Reserves, their inclusion would have no impact on reported Mineral Reserves.



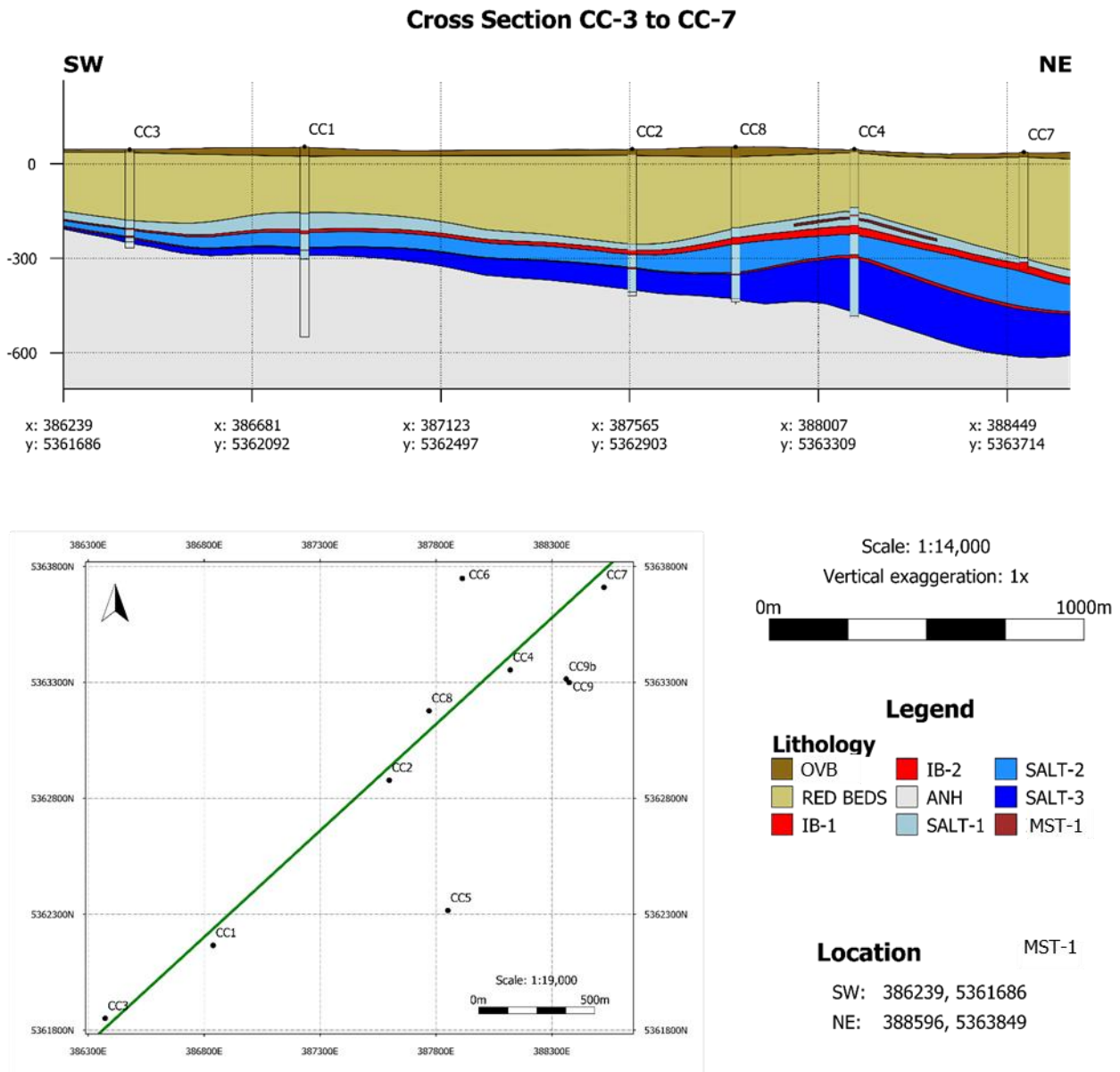
Figure 14-15: North-South Vertical Section (CC-6 to CC-5)



Source: SLR 2023



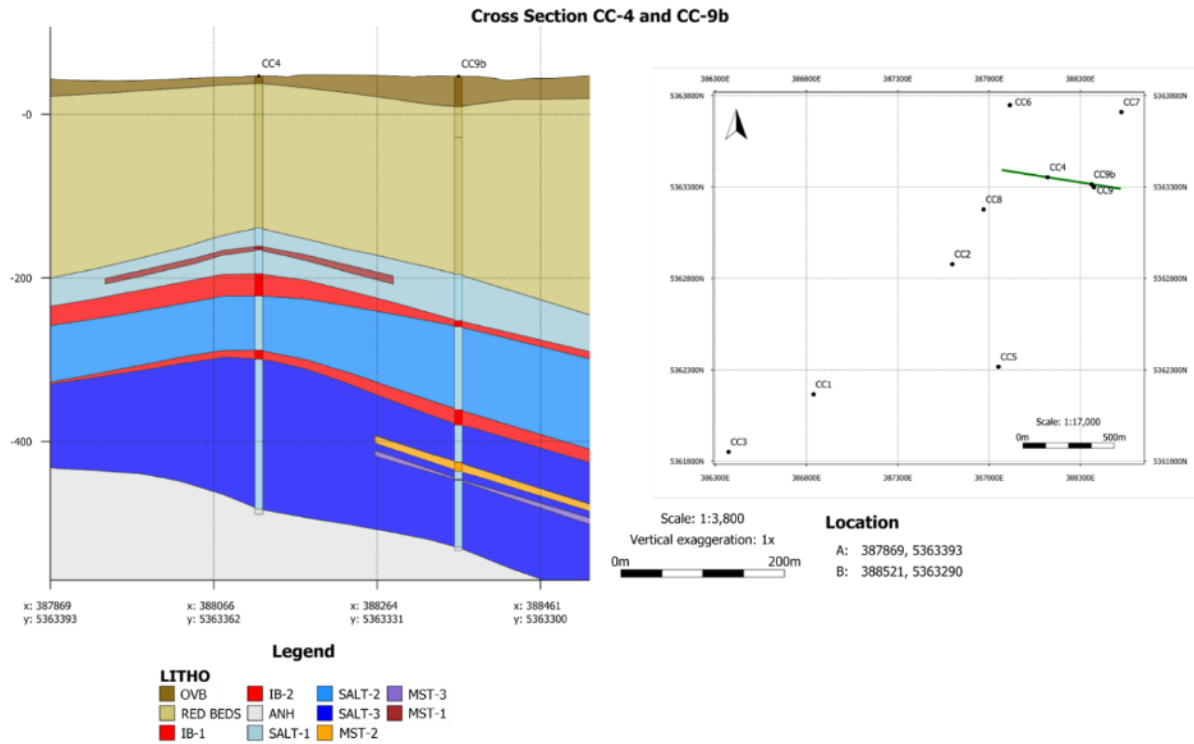
Figure 14-16: Southwest-Northeast Vertical Section (CC-3 to CC-7)



Source: SLR 2023.



Figure 14-17: West-East Vertical Section (CC-4 and CC-9b)



Source: SLR 2023.



14.4 Resource Assays

14.4.1 Summary

Table 14-4 presents summary statistics of salt assays used by SLR for the Mineral Resource estimate. These are also illustrated in Figure 14-18.

The assay database for the Project comprises 782 primary sodium chloride samples obtained from analytical programs by SRC, Actlabs, and Sandberg in 2008, 2013 to 2015, 2022, and 2023. This includes samples taken within all stratigraphic units.

Table 14-4: Summary of Length-Weighted Assays

Parameter	NaCl %					
	All1	1-Salt	IB-1	2-Salt	IB-2	3-Salt
Count	782	168	27	276	41	265
Minimum	0.6	74.7	5.1	28.4	4.9	10.3
Maximum	100.0	100.0	100.0	100.0	98.5	100.0
Mean	91.8	95.1	78.3	94.2	71.3	92.7
Median	95.7	95.9	95.4	95.9	83.6	96.2
Std Dev	14.1	3.9	30.8	7.1	27.5	12.2
CV	0.15	0.04	0.39	0.08	0.39	0.13
Notes:						
1. Total includes an additional three samples within the Red Beds and two samples within the Anhydrite.						

Of these samples, 709 are located within the three interpreted halite horizons of which 436 samples (61%) were shown to be not less than 95% NaCl and 629 samples (89%) not less than 90% NaCl. Histograms of samples within each halite horizon are illustrated in Figure 14-19 to Figure 14-21.



Figure 14-18: Histogram of All Salt Samples NaCl %

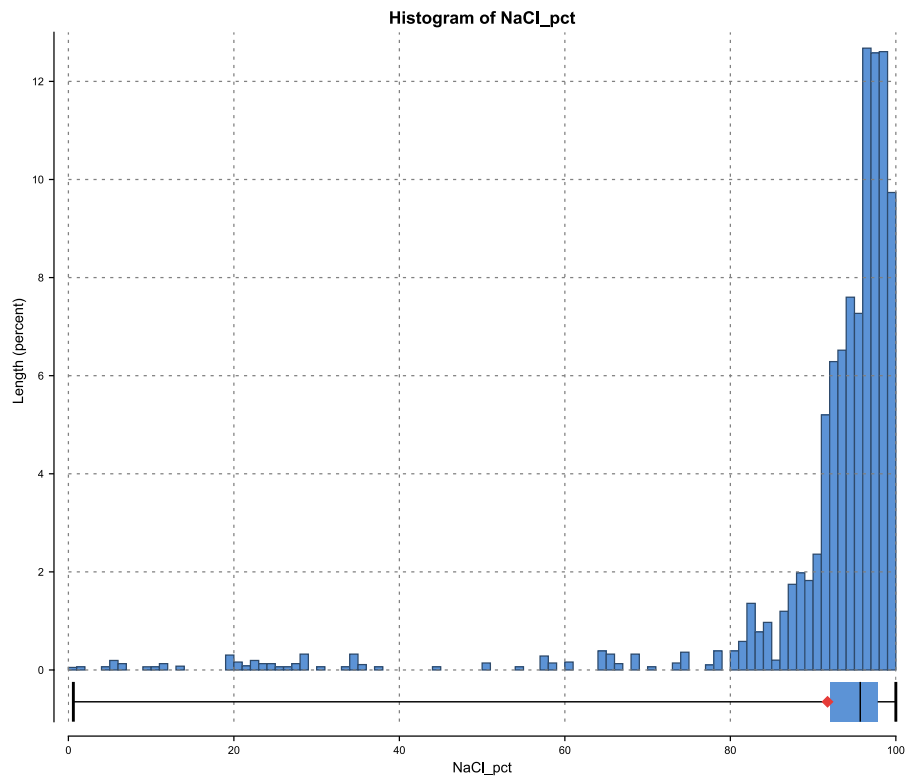


Figure 14-19: Histogram of 1-Salt Samples NaCl %

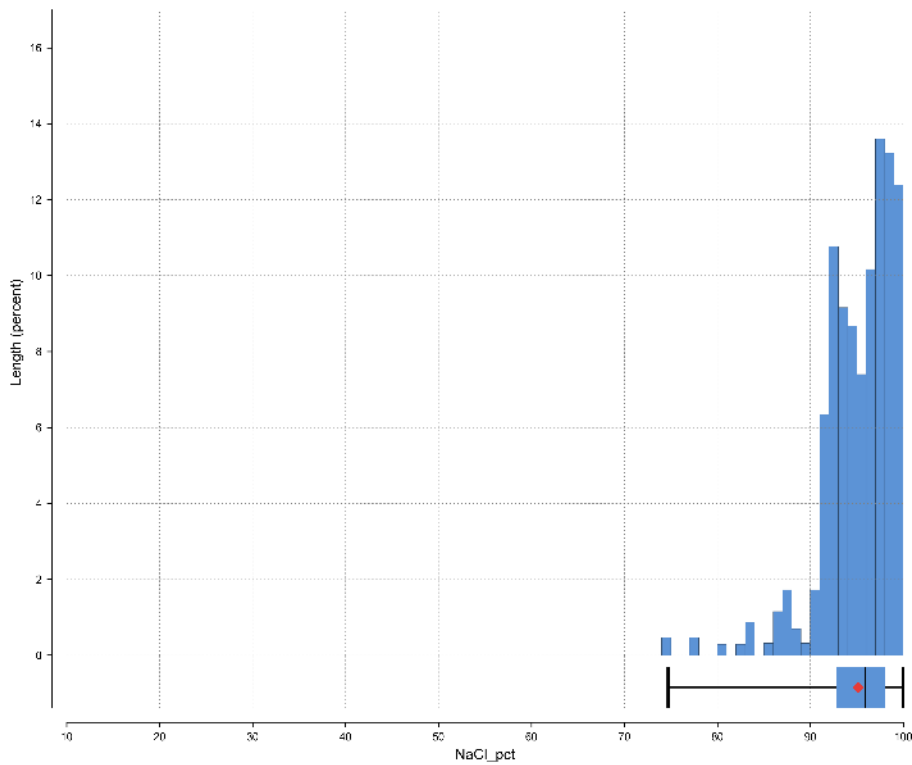


Figure 14-20: Histogram of 2-Salt Samples NaCl %

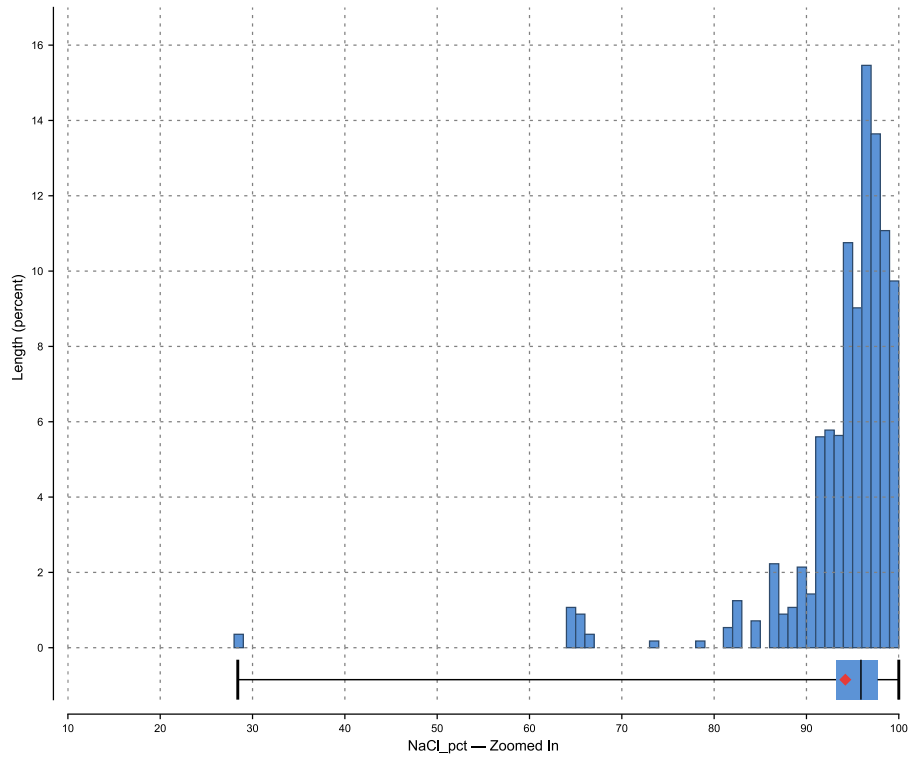
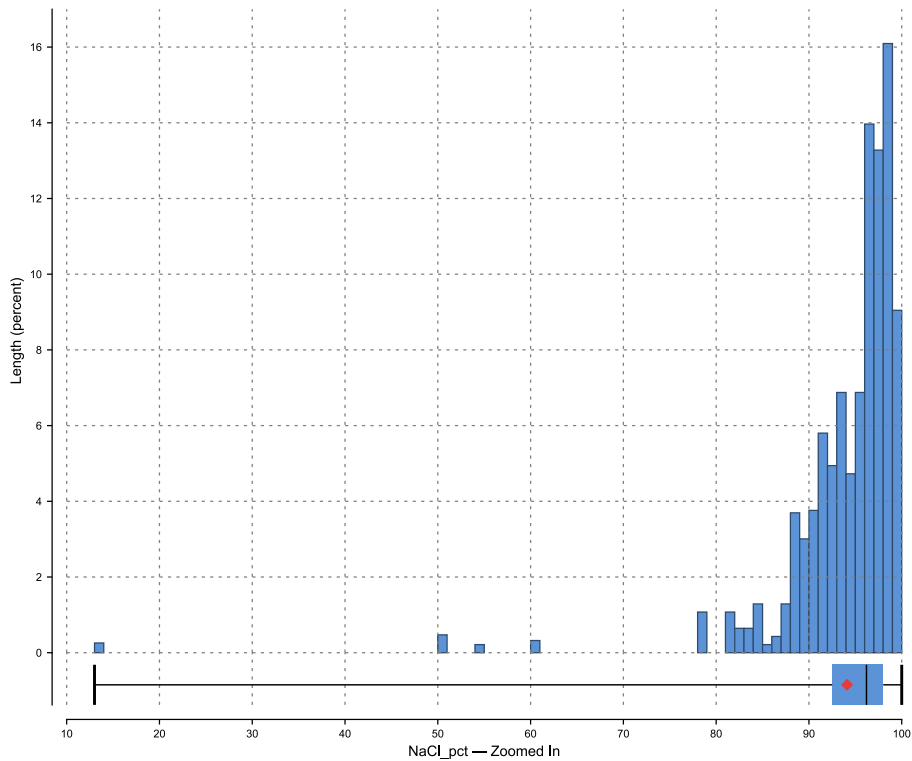


Figure 14-21: Histogram of 3-Salt Samples NaCl %



14.4.2 Sample Representativeness

Table 14-5 shows the total number of samples and sample lengths as a proportion of the total thickness of each halite horizon. The percentage sampled ranges from 5% to 30% in the 1-Salt, 5% to 33% in the 2-Salt, and 6% to 11% in the 3-Salt. Overall sampling from all drill holes is 12% in the 1-Salt and 2-Salt, and 7% in the 3-Salt.

The QP has reviewed sample representativeness and is of the opinion that while the overall sample coverage appears to be lower than expected or required for other mineral deposits, the overall sampling strategy implemented is sufficient given the massive and largely homogenous nature of the deposit. This opinion is informed by a review of sampling procedures and sample intervals during a site visit by Dr. Kelly in October 2022.

Generally, sampling has been observed as being representative of drill core, and while the QP is aware of instances where non-halite intervals have not been sampled, the modelling methodology and compositing approach implemented by SLR has sought to account for such instances in the final grade estimate, as described in Section 14.6. In 2022, the QP also collected additional infill samples in CC-8 to improve representativity in specific halite intervals. Additional infill check samples were taken by Atlas in 2023 in CC-9 (22).

Table 14-5: Sample Representativeness

Drill Hole	1-Salt		2-Salt		3-Salt		Total Sample Count	Total Sampled %
	Sample Count	Sampled %	Sample Count	Sampled %	Sample Count	Sampled %		
CC-1	23	10%	32	18%	10	8%	65	13%
CC-2	18	30%	39	30%	24	10%	81	13%
CC-3	21	25%	7	10%	3	11%	31	19%
CC-4	11	6%	15	7%	38	6%	64	17%
CC-5	4	12%	35	9%	41	8%	80	6%
CC-6	24	12%	2	33%	-	-	26	8%
CC-7	12	13%	-	-	-	-	12	13%
CC-8	26	15%	92	15%	60	8%	179	13%
CC-9b	29	5%	54	5%	89	6%	172	12%
Total	168	12%	276	12%	265	7%	709	10%

14.5 Treatment of High-Grade Assays

Due to the style of mineralization and overall purity of the GAS halite deposit, capping of high-grade assays is not considered by the QP to be appropriate and therefore no capping was applied. As described in Section 12.1.3, the QP adjusted six samples to 100% NaCl which were found to have returned NaCl grades greater than 100%. No other adjustments were made to the original analytical data.

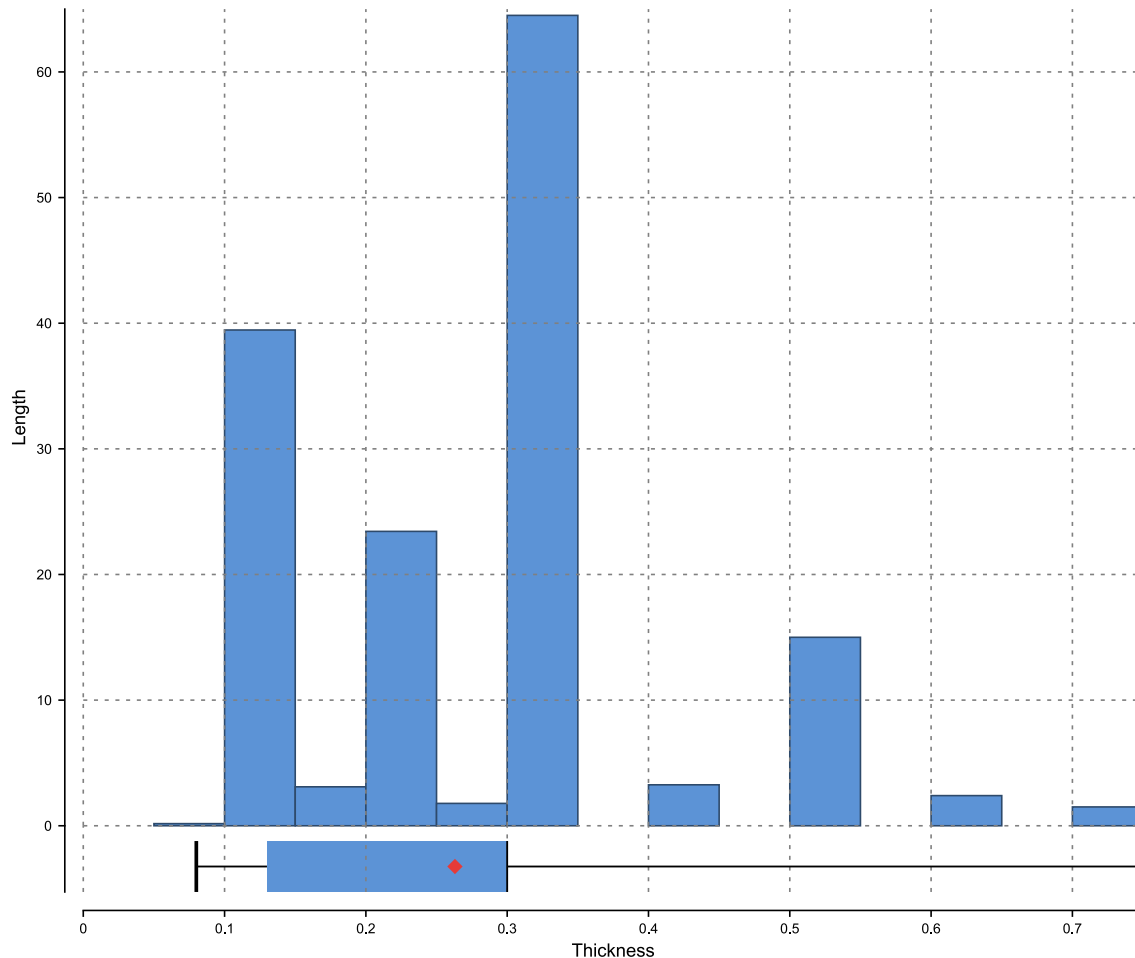


14.6 Compositing

Due to the sampling strategy adopted across all drilling programs with the objective of taking representative samples of lithological intervals downhole, samples are not contiguous, and their frequency is not consistent within or between each hole.

Figure 14-22 shows a histogram of all sample lengths within the three salt horizons. Sample lengths range from 0.09 m to 0.75 m, with the majority being between 0.3 m and 0.35 m. Samples greater than 0.3 m in length are generally those originally sampled for potash analysis.

Figure 14-22: Sample Length Histogram



Due to the overall massive and homogeneous nature of the halite, the QP is of the opinion that the core sampling has generally been systematic and is a reasonable representation of overall NaCl grade within the deposit. Where present, thicker mudstone interbeds have not typically been sampled and the QP has interpreted/correlated these interbeds between drill holes for the purpose of excluding their volumes and tonnage from the Mineral Resource estimate; thereby preventing overestimation of halite grade and tonnes.

Through a combination of geological log, core photo reviews, and independent core logging undertaken by the Dr. Kelly during the site inspection, instances of unsampled inclusions of thin, laterally discontinuous interbeds of mudstones, potash, and anhydrite have been identified



throughout the halite. Where such unsampled intervals exist, the QP considers that there is potential for localized overestimation of NaCl tonnage and grade.

Due to the presence of unsampled non-halite inclusions and the previous sampling strategy adopted, the QP does not consider it appropriate to undertake full length compositing within each of the three halite horizons. This would reduce overall grade resolution for downstream mine planning purposes and mask the potential impact of unsampled intervals. The QP instead opted to sub-divide horizontally each of the three halite horizons into numerous layers ('Zones') to allow compositing over smaller lengths. The objective of this approach is to maintain a higher degree of grade resolution within each halite horizon while simultaneously providing greater vertical control during grade interpolation and replicating the stratigraphic nature of the deposit.

The number of Zones within each salt was determined by the QP based on a review of salt thicknesses around the north-central portion of the deposit (i.e., around CC-8 and CC-4) as the area to be targeted during the initial mine life. SLR has targeted block heights of approximately 5 m in this area based on the anticipated minimum degree of selectivity from a room and pillar mining method. As a result, the 1-Salt has been sub-divided into 5 Zones, while 2-Salt has been sub-divided into 10 Zones. Due to the thickness of the 3-Salt as intersected in drilling, this horizon has been sub-divided into 19 Zones. SLR has subsequently undertaken sample compositing within each Zone.

The QP has not considered it appropriate to insert manufactured (dummy) assays with 0% NaCl to account for the full length of unsampled, non-halite intervals (e.g., mudstone, potash, anhydrite) as doing so would result in overly conservative composite grades due to the downhole frequency (refer to Table 14-5, Section 14.4.2) and thickness of actual halite samples, as shown in Figure 14-22. Alternatively, SLR has applied a dilution factor to the composited NaCl grade to account for the proportion of unsampled dilution material based on original lithological logging.

As described in Section 12.1.4.2, the samples taken by the QP samples in 2022 within mudstone intervals of CC-8 indicate that dilution material could have grades ranging from 5% NaCl to 60% NaCl, averaging 25% NaCl. Further sampling by Atlas in 2023 in CC-9b indicates that mudstone grades range from 5% NaCl to 59% NaCl, averaging approximately 26% NaCl.

The methodology for applying the dilution factor involves the following steps:

- 1 Calculate a 'Mudstone Indicator' for each logged interval based on lithological logging where non-halite = 1 (i.e., including where the Major Lithology is mudstone, siltstone, sandstone, potash, shale, anhydrite, etc.) and halite = 0.
- 2 Evaluate Zones against the original lithological logging database to back-flag the drill hole data.
- 3 Composite the original NaCl assays as analyzed and the Mudstone Indicator within each Zone.
- 4 Recalculate an 'adjusted' NaCl grade where $\text{Adjusted NaCl} = \text{NaCl} \times (1 - \text{Mudstone Indicator})$.

In some isolated instances modifications were made to the lithology model code or samples to ensure the best representation of observed lithology and grade. Modifications included:

- In CC-5, original lithological logging codes for two intervals of fully sampled potash inclusions were modified from 'potash' to 'salt' to prevent adjustment of actual NaCl grades.



- In CC-9b within the 3-Salt, the modelling code of a mudstone interval was modified to 'salt' to prevent adjustment of actual NaCl grades where sampling was considered by the QP to be representative.
- Ignoring a single 0.15 m mudstone sample of 33% NaCl in CC-8. By evaluating the scenarios of using an Adjusted NaCl with and without the inclusion of the sample, SLR determined that the best representation of the composite interval with a Mudstone Indicator of 0.2 was achieved by ignoring the mudstone sample and adjusting the composite.

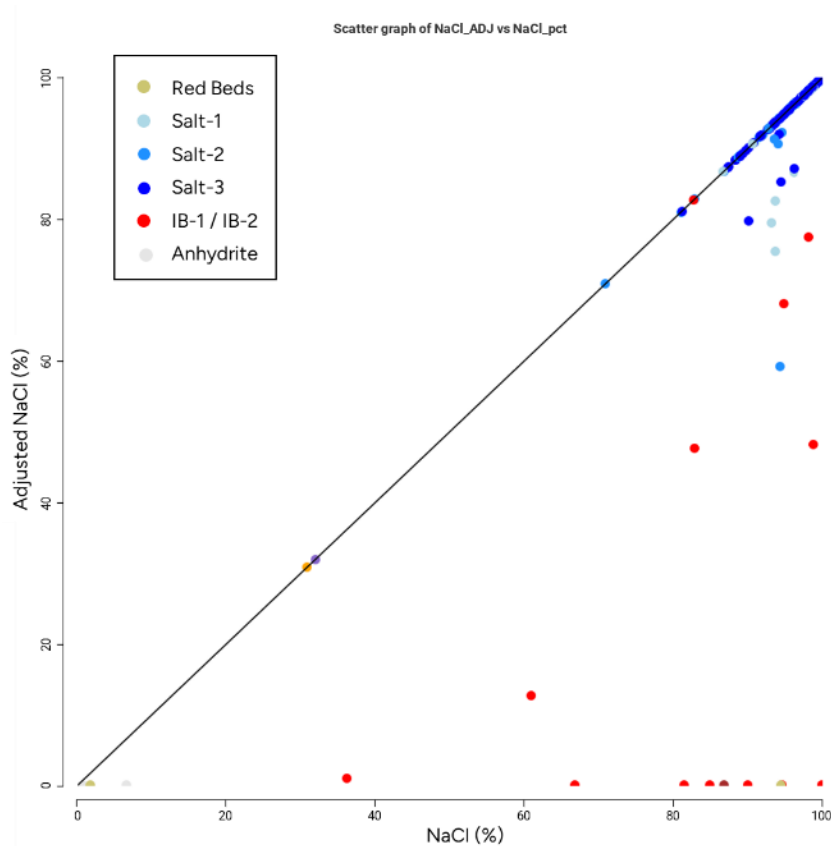
Figure 14-23 is a scatter plot of all NaCl composites and Adjusted NaCl composite grades illustrating instances where adjustments were made due to the presence of unsampled, non-halite material. Overall, only 18 composites have been adjusted, of which 12 are within the three salt horizons including four in the 1-Salt, four in the 2-Salt, and four in the 3-Salt. A summary of the adjusted NaCl composites is provided in Table 14-6.

Table 14-6: Adjusted NaCl Composite Grades in Salt

Drill Hole ID	Horizon	Composite (NaCl %)	Adjusted Composite (NaCl %)	Difference (NaCl %)
CC8	1-Salt	96.23	86.73	9.50
CC8		93.80	82.65	11.15
CC8		93.29	79.56	13.73
CC8		93.72	75.49	18.23
CC5	2-Salt	93.58	91.34	2.23
CC2		94.59	92.33	2.26
CC8		94.18	90.66	3.52
CC5		94.40	59.20	35.20
CC4	3-Salt	94.20	92.11	2.09
CC8		96.27	87.21	9.06
CC4		94.47	85.34	9.13
CC5		90.19	79.84	10.35



Figure 14-23: Composite NaCl% versus Adjusted Composite NaCl% by Domain



Source: SLR 2023

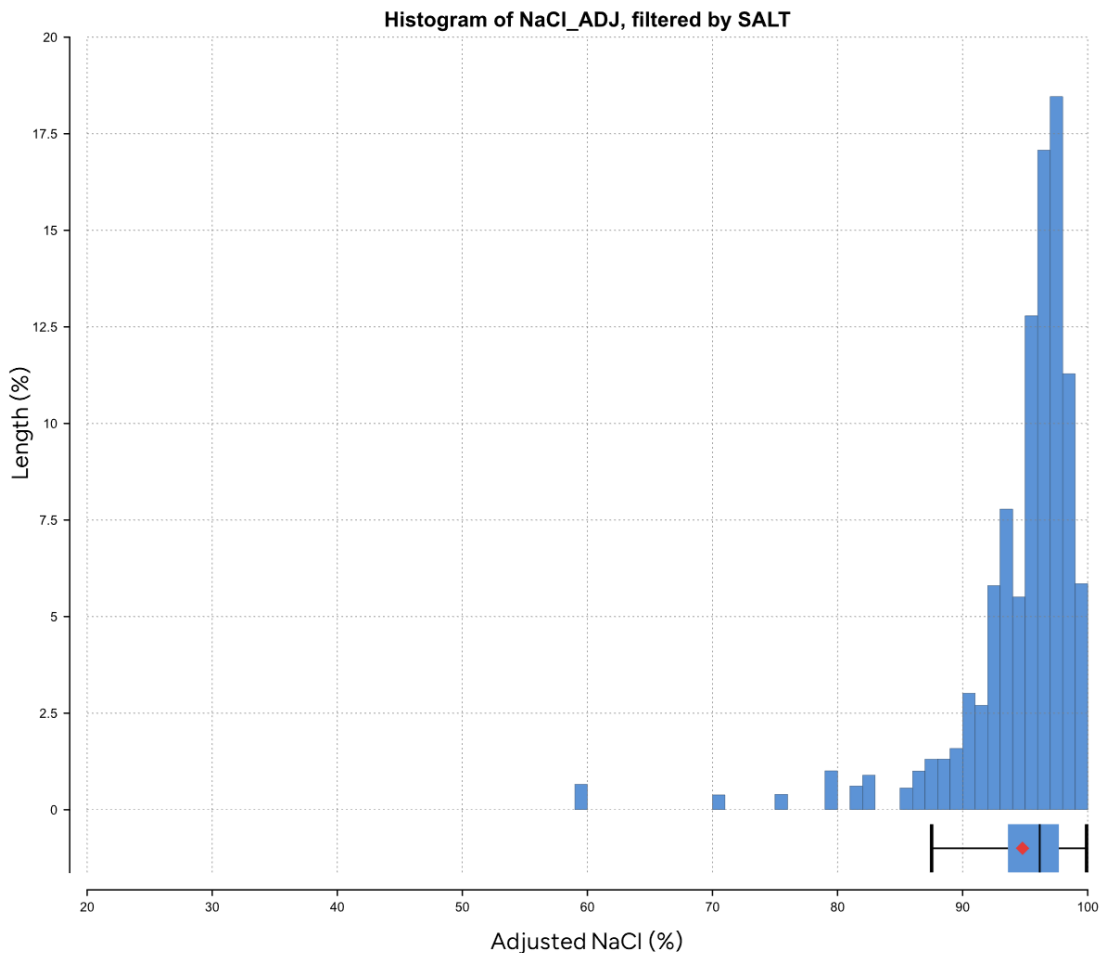
Table 14-7 presents summary statistics for the final Adjusted NaCl composites within each of the three salt horizons.

Table 14-7: Adjusted Salt Composite Statistics

Parameter	NaCl %			
	All	1-Salt	2-Salt	3-Salt
Count	198	41	64	93
Minimum	59.20	75.49	59.20	79.84
Maximum	99.91	99.91	99.90	99.88
Mean	94.79	94.68	94.35	95.19
Std. Dev.	5.07	5.09	6.39	3.78
CV	0.05	0.05	0.07	0.04
Variance	25.72	25.93	40.88	14.29



Figure 14-24: Histogram of Adjusted NaCl Composites



Source: SLR 2023

The QP is overall satisfied that the total number of composites requiring adjustment is small compared to the total number of salt composites (12 of 198; or 6%), which is an indication of the overall representativeness of the original sampling strategy.

During a site visit in October 2022, Dr. Kelly took core samples for independent QA/QC including eight samples taken within muddy salt or mudstone intervals. As described in Section 12.1.4.2, NaCl grades within mudstone intervals ranged from 5% NaCl to 60% NaCl, averaging 25% NaCl (20% NaCl when excluding the highest grade sample). These results have been further corroborated by 2023 assay results from CC-9b. A total of 32 samples taken within interbed or well-defined mudstone intervals returned grades between 5% NaCl and 59% NaCl, averaging approximately 26% NaCl. This validates the approach taken by SLR in adjusting a small number of composite grades using an assumed dilution grade of 0% NaCl.

To better understand the adopted approach and its impact on the final Mineral Resource estimate, the QP modified the assumed dilution density from 0% NaCl to 20% NaCl. The modification resulted in an approximate 1% increase in global tonnage which the QP considers to be immaterial. Considering the potential for non-halite intervals to exhibit very low grades below 5% NaCl, the QP opted to retain the assumed 0% NaCl dilution grade.



14.7 Trend Analysis

14.7.1 Variography

The QP has not deemed it appropriate to undertake variography of the Atlas assay database for the purposes of informing either grade interpolation or Mineral Resource classifications. This decision has been made with consideration for:

- The total number of drill holes, their relative positions, and that of halite intersections.
- Of the 11 drill holes, seven intersect the full stratigraphy of the deposit including all three halite horizons.
- Six drill holes are positioned along a northeast-southwest trending drilling fence line and, as a result, the ability to model a robust variogram to assess grade variability in multiple orientations would be limited. Only CC-5 provides an indication of grade continuity laterally away from this line, in addition to CC-6 for the 1-Salt only.
- Sampling strategies have resulted in a variable number and frequency of samples both between drill holes and downhole. Instances of unsampled, non-halite material have been managed through a dilution factor applied by SLR during compositing and therefore variography is not considered to be appropriate for assessing true grade continuity within the deposit at this stage.

14.7.2 Grade Contouring

Grade interpolation was constrained to numerous Zones, created by SLR as sub-divisions within each halite horizon. These were designed to have an average height of approximately 5 m, aligning with the minimum optimized mineable shape height used for Mineral Resource reporting. The final average composite lengths are 6.54 m, 7.50, and 6.09 m within the 1-Salt, 2-Salt, and 3-Salt, respectively.

14.8 Search Strategy and Grade Interpolation Parameters

Block model grade interpolation for the Mineral Resource estimate was completed using an Inverse Distance squared (ID^2) methodology, using three passes with three expanding search neighbourhoods. Only assays falling within the halite wireframes were used to estimate the blocks and SLR used soft boundaries between adjacent Zones. Table 14-8 summarizes the grade interpolation parameters used for block estimation.

Table 14-8: Grade Interpolation Parameters

Run	Minimum Samples	Maximum Samples	Search Range (m)
1	1	9	1,000 x 1,000 x 300
2	1	9	2,000 x 2,000x 300
3	1	9	3,000 x 3,000 x 300

14.9 Bulk Density

Of the primary core samples taken from CC-1 to CC-5 drill holes a total of 22 samples were tested for density by Actlabs. Results range between 2.12 t/m³ and 2.25 t/m³, averaging



2.16 t/m³ (Table 14-9). For 2016 Mineral Resource estimate, APEX adopted a density of 2.16 t/m³ for conversion of salt volumes into tonnages (APEX 2016).

Table 14-9: Density Results

Parameter	Density (t/m ³)
Count	22
Minimum	2.12
Maximum	2.25
Mean	2.16
Median	2.16
Std. Dev.	0.027

A further 18 samples were tested for density as part of the previous QP site visit by APEX from September 21-24, 2015 (APEX 2016). Results range between 2.15 t/m³ and 2.22 t/m³, averaging 2.17 t/m³ (Table 14-10).

Table 14-10: QP Sample Density Results

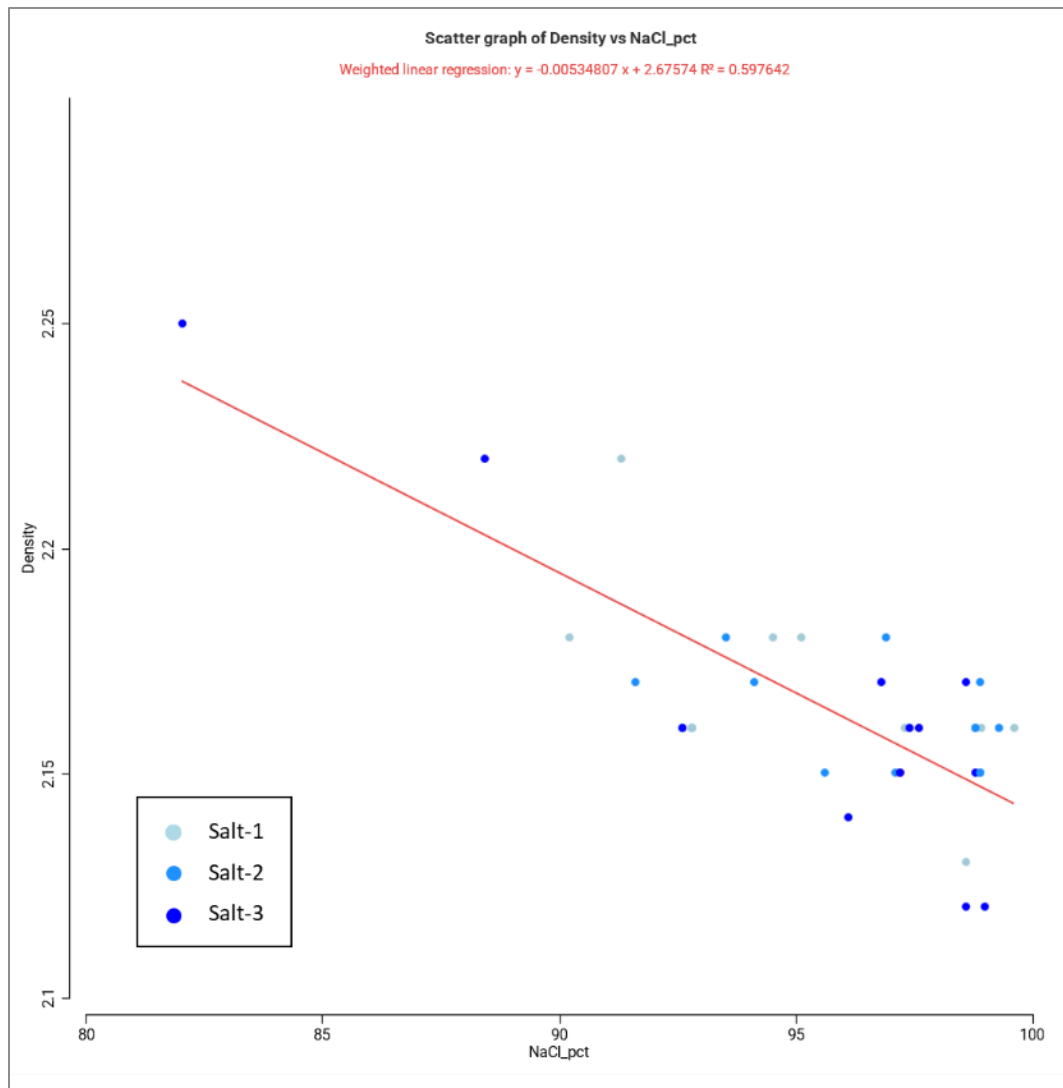
Parameter	Density (t/m ³)
Count	18
Minimum	2.15
Maximum	2.22
Mean	2.17
Median	2.16
Std. Dev.	0.019

No further core samples from drill holes CC-6 to CC-9b have been tested for density.

SLR tested the relationship between density and halite grade to demonstrate a reasonable correlation (Figure 14-25). Limitations of this regression are the overall limited number of results relative to the number of assays, and the overall high NaCl grades of assays which provides a limited spread over which to define a linear regression.



Figure 14-25: Density (t/m³) Regression with NaCl (%)



Source: SLR 2023

Given the overall number of density results and the observed variability, the QP did not consider it appropriate to interpolate density into the block model. Considering no new density data was available since the previous estimate, the QP similarly adopted an approach of using an average value for the estimation of Mineral Resources, also using 2.16 t/m³.

The QP tested the impact of using the above linear regression on the final Mineral Resource estimate and found it to be immaterial to the global tonnage estimate (<0.5% increase in global tonnage). The QP recommends that Atlas consider obtaining a sub-set of bulk density measurements using the Archimedes immersion method on intact core samples to cross-check the gas pycnometer results.

14.10 Block Models

SLR constructed a sub-blocked model using Leapfrog Geo software. The selected block sizes and block model frameworks are provided in Table 14-11. Parent block heights were specified



to enable the construction of single, full height sub-blocking within each of the Zones created during grade compositing.

Table 14-11: Block Model Parameter

	Easting	Northing	Elevation
Minimum	385600	5360900	-1850
Maximum	389200	5364300	150
Parent Block Size (m)	50	50	1000
No. of Parent Blocks	72	68	2
Sub-Block Size (m)	5	5	Variable

The QP is of the opinion that the block sizes are suitable for the style of mineralization and proposed mining method.

14.11 Cut-off Grade and RPEEE

No reporting cut-off grade was applied to the estimated block grades, however the blocks were constrained within Mineable “Stope” Optimizer (MSO)² shapes with a minimum target grade of 90% NaCl, as a means of demonstrating Reasonable Prospects for Eventual Economic Extraction (RPEEE). While this target grade is below the 95.0% NaCl ($\pm 0.5\%$) specification outlined in ASTM D632-12, the mean grade after application of the MSO exceeds 95% NaCl and is intended to allow for potential blending.

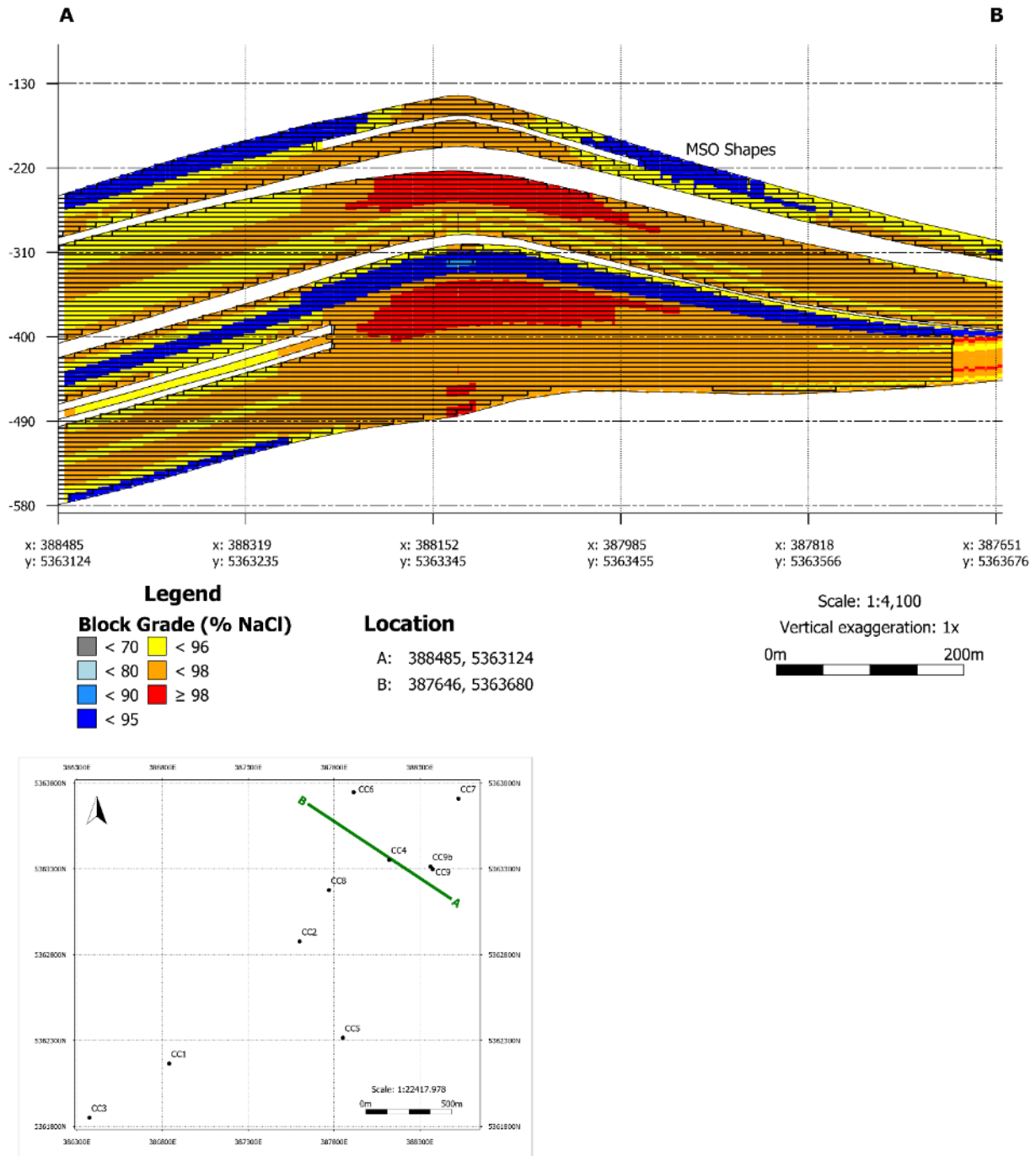
Mineral Resources have therefore been estimated within the MSO shapes (Figure 14-26) developed by SLR using Deswik software with the following parameters:

- Shape height of 5 m, with no variable height shapes.
- 20 m minimum width, no maximum, with a 5 m minimum pillar width between shapes.
- “Strike” length of 40 m.
- Fixed strike direction of 125°.
- Dip of 90°.
- No external dilution included.
- Minimum grade of 90% NaCl.
- Vertical panels.
- A post-script visual review to remove isolated blocks that could not reasonably be mined alone.

² Stope in this context refers to the process of developing a preliminary optimised underground mining layout, irrespective of anticipated mining method, as opposed to an open pit optimisation.



Figure 14-26: MSO Outline (Black) Shown with Estimated NaCl (%)



Source: SLR 2023



14.12 Classification

Definitions for resource categories used in this Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as “a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction”. Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the “economically mineable part of a Measured and/or Indicated Mineral Resource” demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories.

For the Project, the QP classified the deposit into Indicated and Inferred categories based on approximate distances from the “Point of Observation” i.e., the drill hole intersection with existing NaCl assays. The QP used a drill hole spacing of approximately 1,000 m for Inferred Mineral Resources and 700 m for Indicated Mineral Resources, although these were not applied strictly and included some modifications made based on the QP’s overall opinion of lateral continuity.

No minimum sampling coverage was applied (refer to Table 14-5) on the basis that under the sampling strategy the sample frequency in each hole is likely to be inversely proportional to halite homogeneity. The QP also reviewed the overall sample representativeness with consideration for the massive nature of the halite and made adjustments through compositing for a small number of unsampled non-halite intervals.

Figure 14-27 to Figure 14-29 illustrate the final Mineral Resource classification for the 1-Salt, 2-Salt, and 3-Salt, respectively. A cross-section through the final Mineral Resource classification is illustrated in Figure 14-30.

Based on drill hole spacings across the deposit, Indicated Mineral Resources have been defined around CC-2, CC-4, CC-8, and CC-9b, spaced at approximately 250 m to 400 m, and only within the 2-Salt and 3-Salt which show greater grade and thickness continuity between drill holes. The 1-Salt has been classified entirely in the Inferred category.

To the south and southwest, Inferred Mineral Resources have been defined around CC-5 and CC-1, which are approximately 600 m and 1,000 m from CC-2, respectively. The QP has opted not to include the 2-Salt and 3-Salt around CC-5 within the Indicated category based on more variable NaCl grades and therefore reduced grade continuity.

Inferred Mineral Resources have also been extended within the 1-Salt to include material supported by CC-3, located approximately 560 m further southwest of CC-1, however, the QP has opted not to do so for the 2-Salt and 3-Salt on the basis that this drill hole indicated more variable NaCl grades and material differences in salt horizon thicknesses compared to other intersections. In the northwest of the deposit, Inferred Mineral Resources have been extended to encompass both CC-6 and CC-7 on the basis that the top of the salt deposit has been confirmed through drill hole intersections, and that the base of the salt can be interpreted from and is constrained by the 2022 seismic survey re-interpretation.



Figure 14-27: 1-Salt Mineral Resource Classification Plan View

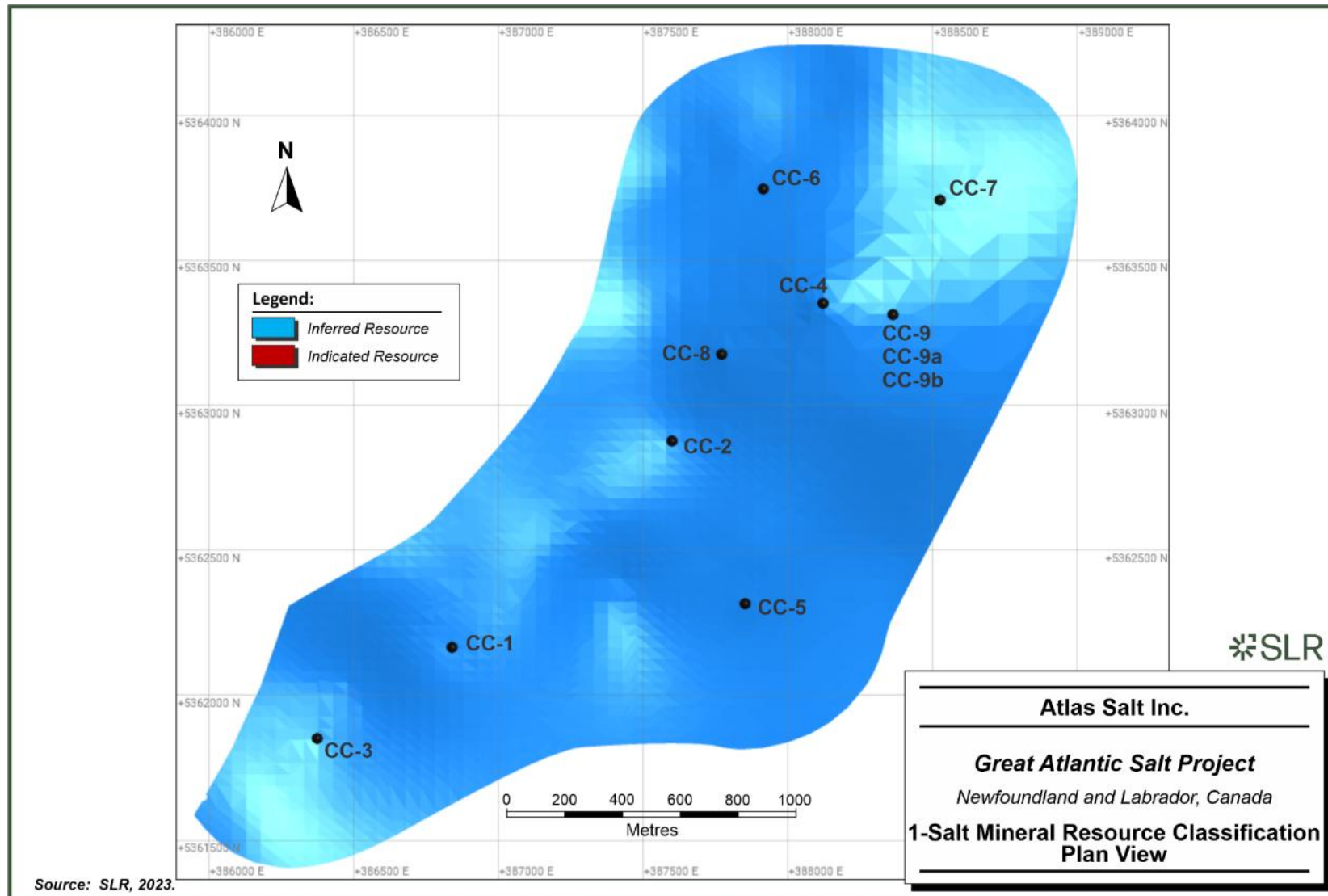


Figure 14-28: 2-Salt Mineral Resource Classification Plan View

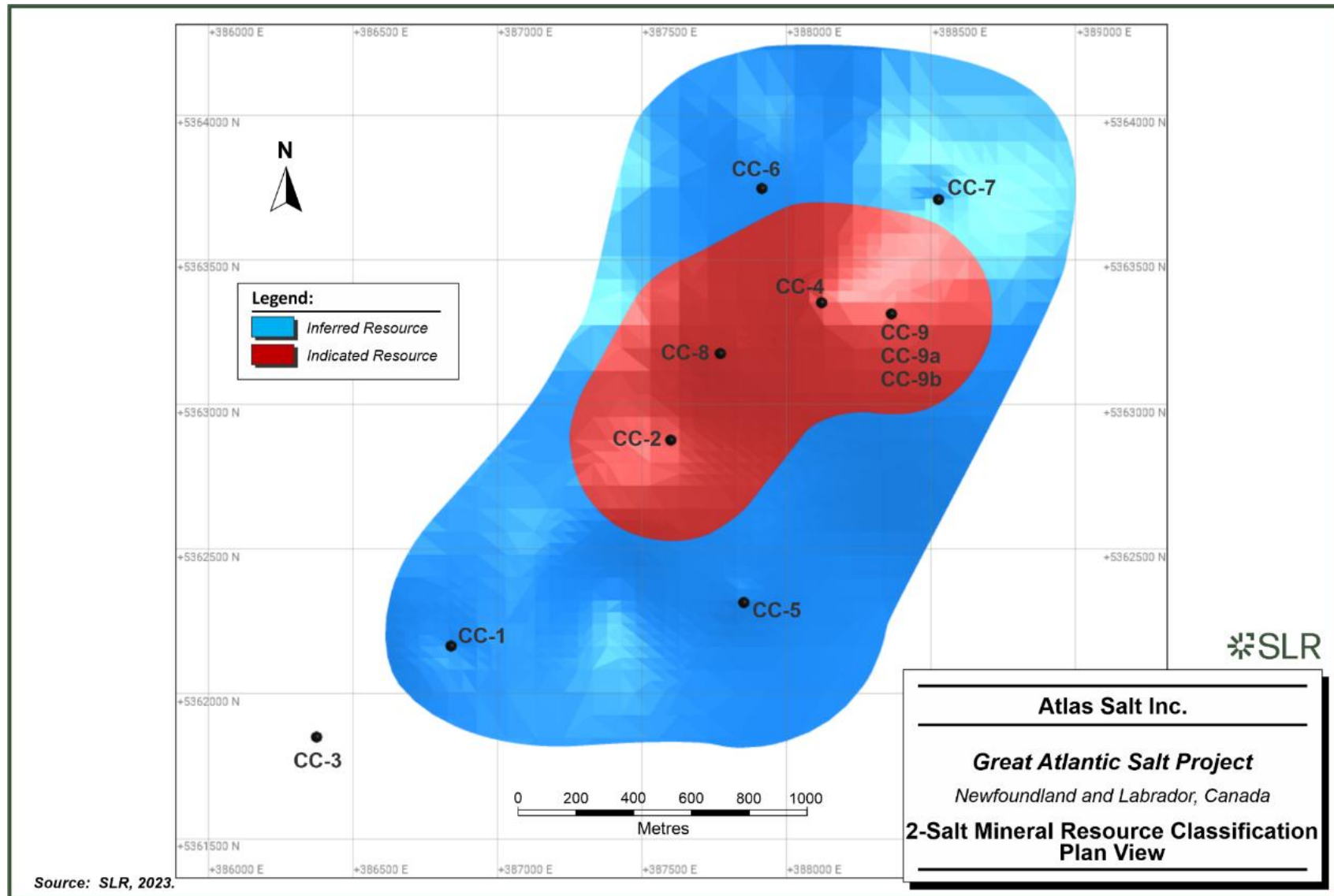


Figure 14-29: 3-Salt Mineral Resource Classification Plan View

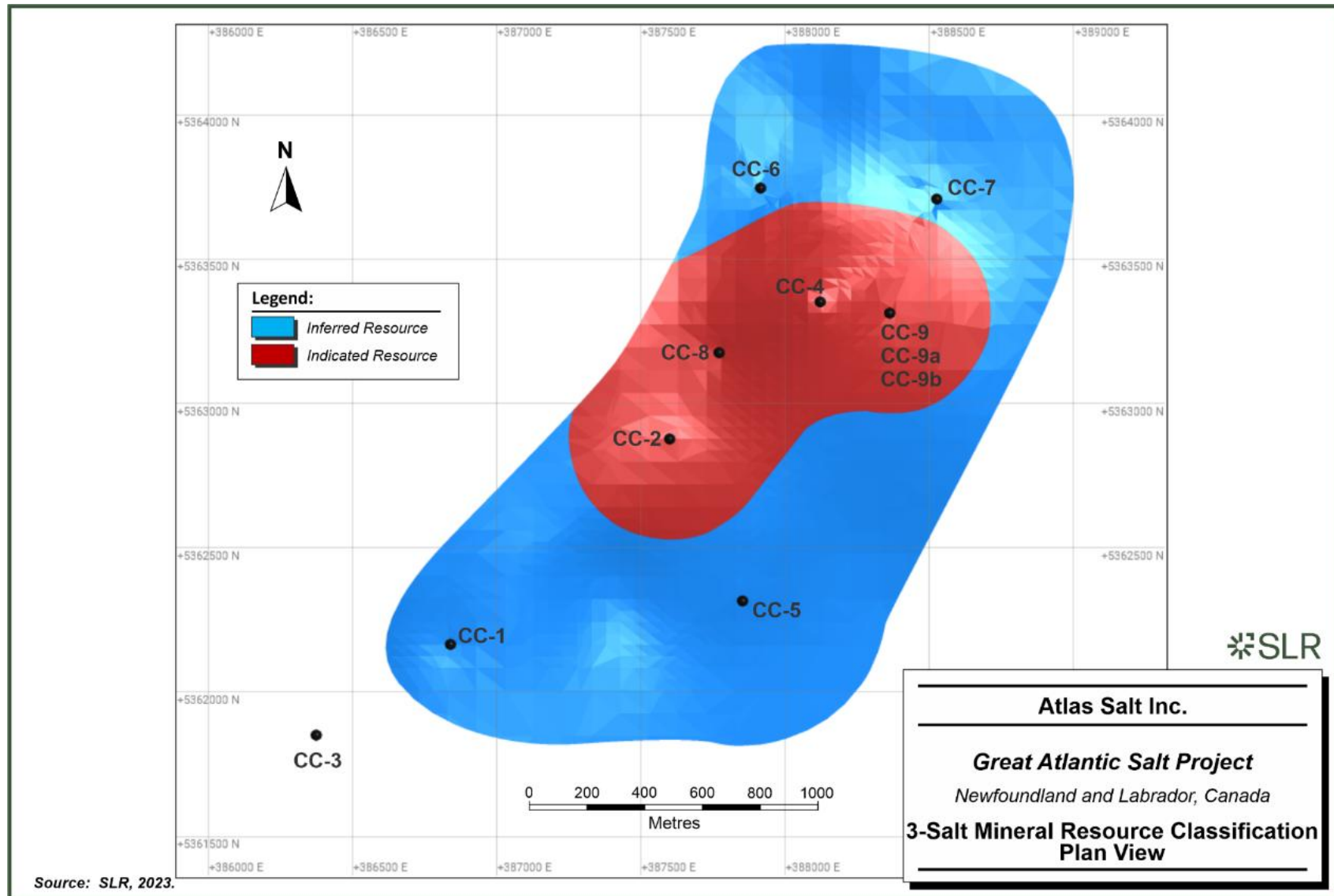
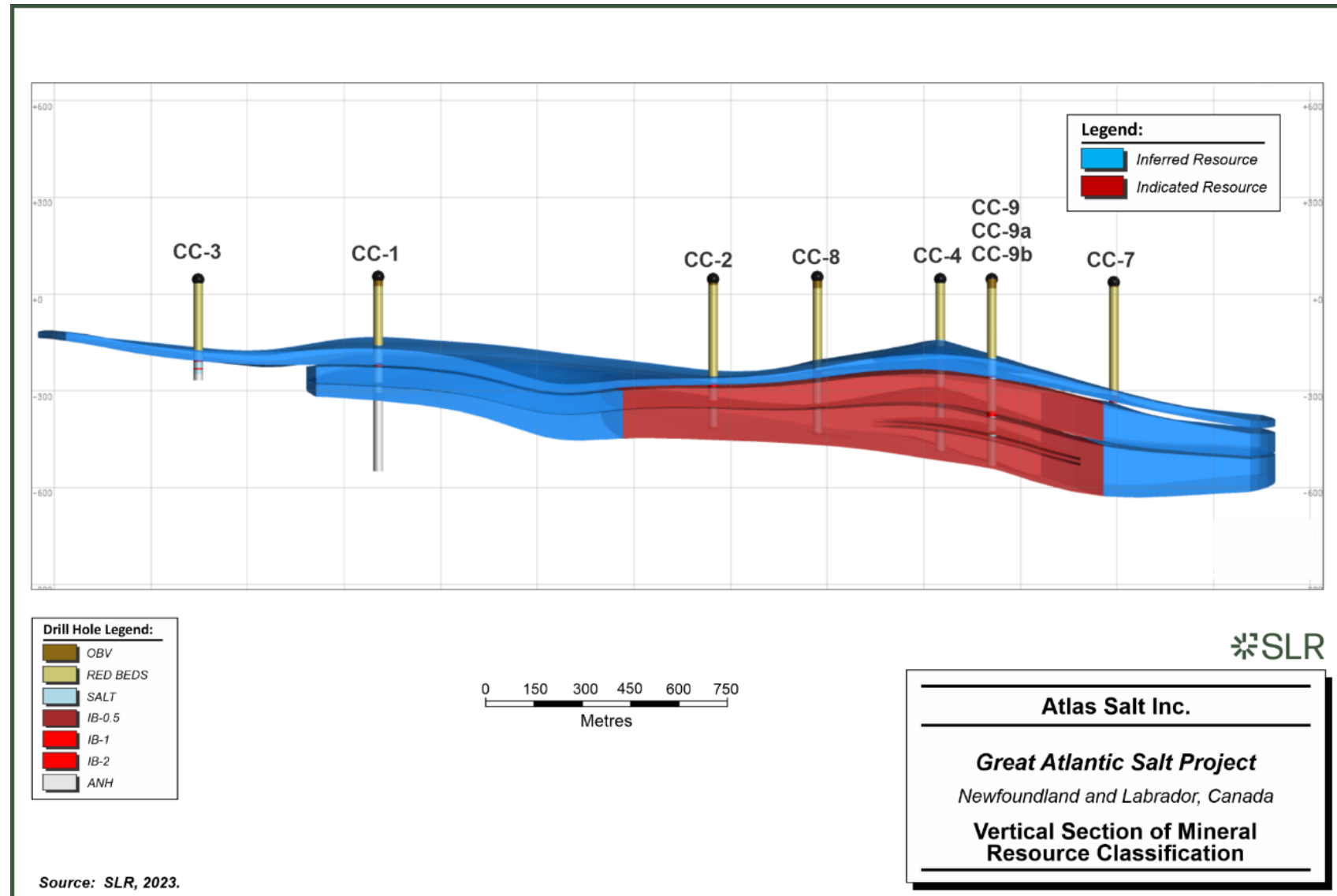


Figure 14-30: Vertical Section of Mineral Resource Classification



14.13 Block Model Validation

14.13.1 Volumetrics

SLR initially verified the volumetrics of the resultant block model showing close adherence of the block model to the underlying geological wireframes (Table 14-12).

Table 14-12: Block Model Volumetrics

Horizon	Wireframe (m ³)	Block (m ³)	Difference (%)
1-Salt	127,980,000	127,989,071	0.01%
2-Salt	259,750,000	259,390,852	0.14%
3-Salt	333,480,000	333,549,461	0.02%
Total	721,210,000	720,929,384	0.04%

14.13.2 Visual Validation

Visual validation has been completed on the GAS deposit block model with input assay data on sections, which were examined for reproduction of the input data in the block model. The QP has found that the model is a reasonable reproduction of grades, and that the methodology adopted by SLR during compositing to separate the halite horizons into numerous sub-horizons (Zones) has had the effect of reproducing the stratigraphic nature of the deposit and grade distributions.

Vertical sections through the block model showing the NaCl composites versus block model grades are provided in Figure 14-31 to Figure 14-33.



Figure 14-31: CC-2 and CC-4 Vertical Section of Block and Composite NaCl%

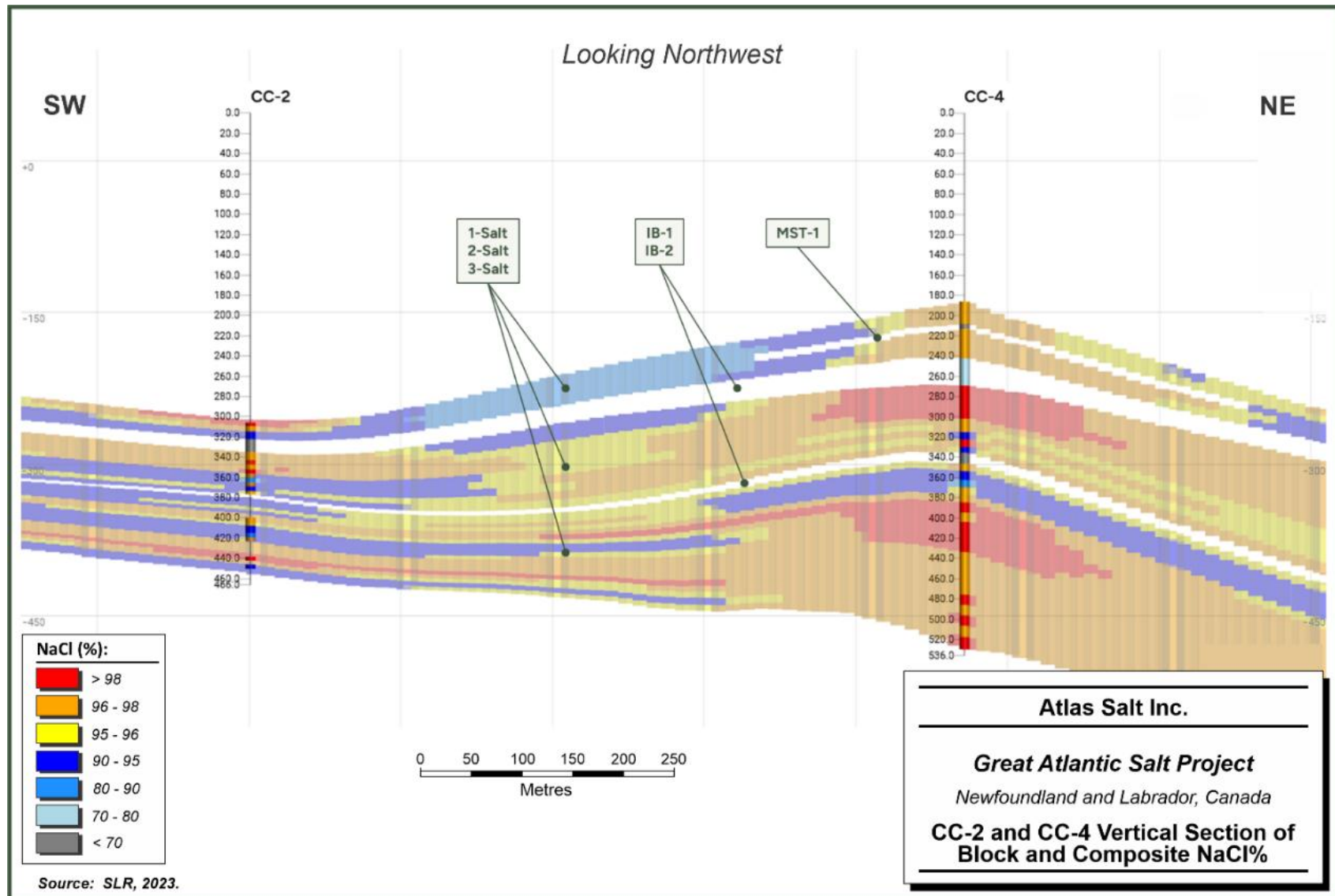


Figure 14-32: CC-4 and CC-9b Vertical Section of Block and Composite NaCl%

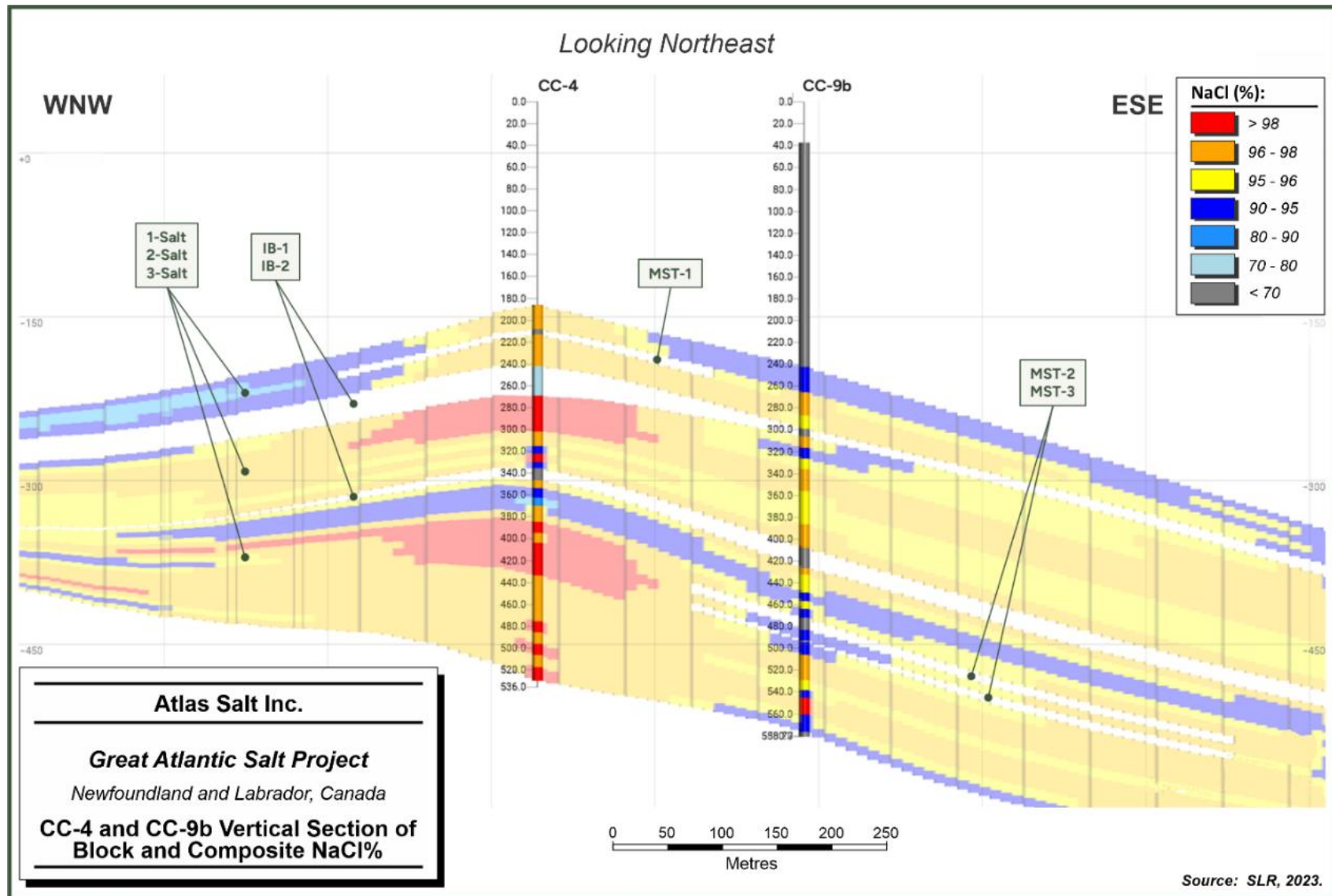
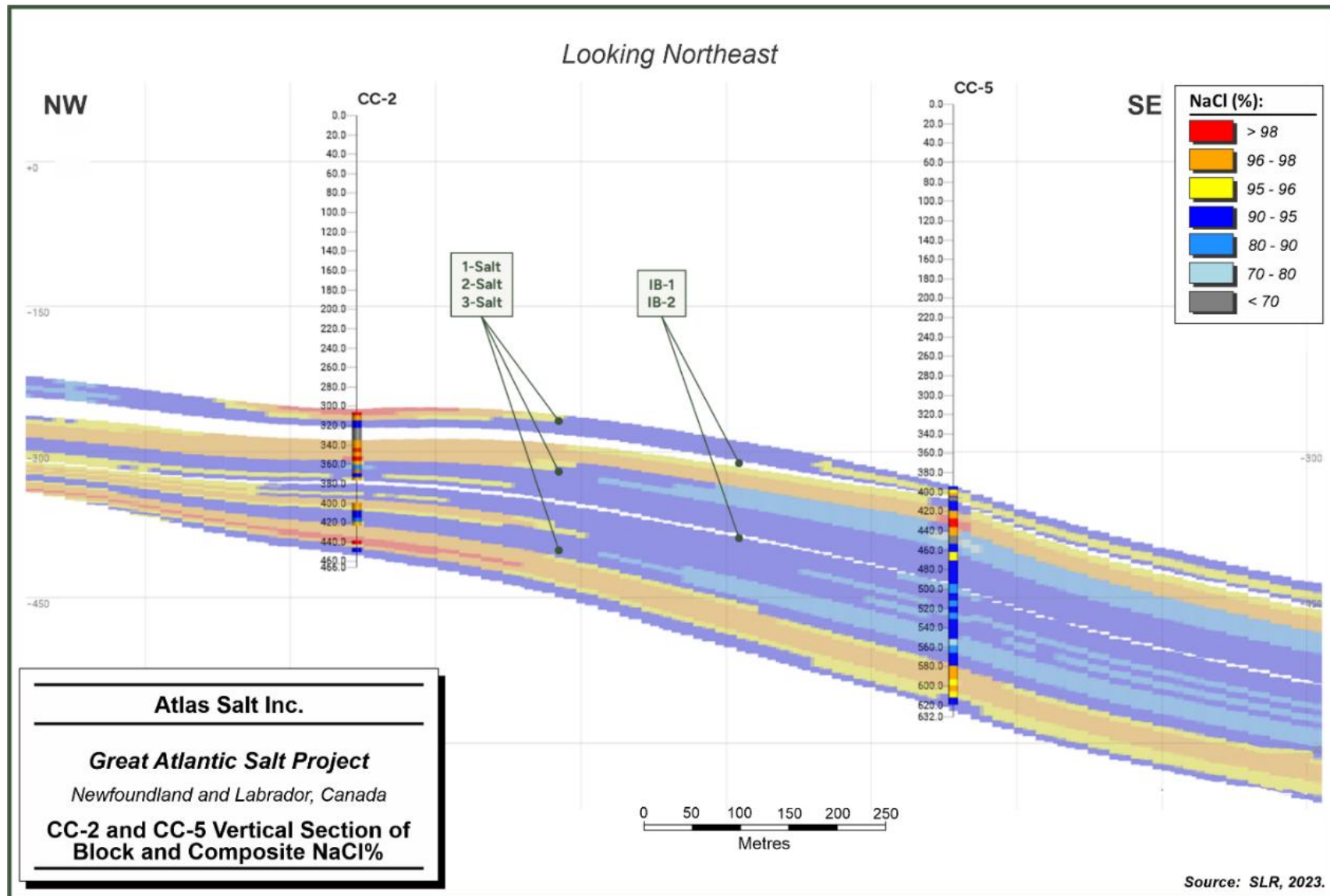


Figure 14-33: CC-2 and CC-5 Vertical Section of Block and Composite NaCl%



14.13.3 Statistical Validation

Table 14-13 provides summary statistics of the resultant block model, showing effective reproduction of composite grades by block grades for each salt unit.

Table 14-13: Block Model Statistics of Classified Blocks

Parameter	Block NaCl (%)				Composite NaCl (%)			
	All SALT	1-Salt	2-Salt	3-Salt	All SALT	1-Salt	2-Salt	3-Salt
Minimum	59.20	77.98	59.20	80.75	59.20	75.49	59.20	79.84
Maximum	99.91	99.91	99.76	99.80	99.91	99.91	99.90	99.88
Mean	94.70	94.66	94.44	94.91	94.79	94.68	94.35	95.19
Std. Dev.	3.10	2.79	3.70	2.66	5.07	5.09	6.39	3.78
CV	0.03	0.03	0.04	0.03	0.05	0.05	0.07	0.04
Variance	9.63	7.79	13.72	7.05	59.20	75.49	59.20	79.84

14.14 Mineral Resource Reporting

CIM (2014) definitions were used for Mineral Resource classification. Table 14-14 provides a summary of the Mineral Resource estimate by SLR, with an effective date of September 30, 2025.

Table 14-14: Mineral Resource Estimate – September 30, 2025

Category	Horizon	Tonnage (Mt)	Grade (NaCl %)	Contained NaCl (Mt)
Indicated	1-Salt	-	-	-
	2-Salt	160	95.9	154
	3-Salt	223	96.0	214
	Total	383	96.0	368
Inferred	1-Salt	195	95.3	186
	2-Salt	288	95.3	274
	3-Salt	385	95.0	366
	Total	868	95.2	827

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated without a reporting cut-off grade. Reasonable Prospects for Eventual Economic Extraction were instead demonstrated by reporting within Mineable "Stope" Optimized (MSO) shapes, with a minimum height of 5 m, minimum width of 20 m, length of 40 m, and minimum grade of 90% NaCl, with a 5 m minimum pillar width between shapes.
3. Bulk density is 2.16 t/m³.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Mineral Resources are inclusive of Mineral Reserves.
6. Salt prices are not directly incorporated into the Resource MSO minimum target grades, however, the mean Resource grades exceed the 95.0% NaCl (± 0.5%) specification outlined in ASTM D632-12.
7. Numbers may not add due to rounding.



14.15 Comparison to Previous Mineral Resource Estimate

The current Mineral Resource estimate with an effective date of September 30, 2025, remains unchanged from the previous, May 11, 2023 Mineral Resource estimate. Table 14-15 presents a comparison of the Mineral Resource estimate effective May 11, 2023, versus the estimate effective January 6, 2023. The SLR estimate consists of a 5% increase in tonnage and grade reduction of 0.3% NaCl. Changes to the Mineral Resource estimate from the previous estimate are attributable to:

- Additional drill hole data obtained by Atlas in 2022 after the effective date of the previous estimate, including drilling of CC-9b. Halite intersections from CC-9b have been used to update the geological interpretation of the halite.
- Updated interbed interpretations by SLR with the inclusion of the additional drill hole data and re-evaluation of interbed lateral continuity.
- Updated Indicated Mineral Resource classification criteria including an increase to the spacing criteria from 500 m to 700 m and the subsequent inclusion of CC-9b as an Indicated “Point of Observation” for the 2-Salt and 3-Salt.
- Slight expansion of the Inferred Mineral Resource classification using the same classification criteria with the inclusion of CC-9b.
- MSO shapes with a minimum 90% NaCl target grade were applied by SLR to constrain the Mineral Resource. The MSO shape optimizer was rerun by SLR using the updated geological model.

Table 14-15: Comparison to Previous Mineral Resource Estimate

Category	SLR, January 6, 2023			SLR, May 11, 2023		
	Tonnes (Mt)	Grade (NaCl%)	Tonnes NaCl (Mt)	Tonnes (Mt)	Grade (NaCl%)	Tonnes NaCl (Mt)
Indicated	187	96.4	180	383	96.0	368
Inferred	999	95.6	956	868	95.2	827

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Mineral Resources are estimated without a reporting cut-off grade. Reasonable Prospects for Eventual Economic Extraction were instead demonstrated by reporting within Mineable “Stope” Optimized (MSO) shapes, with a minimum height of 5 m, minimum width of 20 m, length of 40 m, and minimum grade of 90% NaCl, with a 5 m minimum pillar width between shapes.
3. Bulk density is 2.16 t/m³.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Mineral Resources are inclusive of Mineral Reserves.
6. Salt prices are not directly incorporated into the Mineral Resource MSO minimum target grades, however, the mean Mineral Resource grades exceed the 95.0% NaCl (± 0.5%) specification outlined in ASTM D632-12.
7. Numbers may not add due to rounding.



15.0 Mineral Reserve Estimate

Mineral Reserves for the Project consist of rock salt for road de-icing and were estimated by SLR as part of the 2025 UFS. Table 15-1 summarizes the GAS Mineral Reserve estimate as of September 30, 2025.

Table 15-1: Summary of Mineral Reserve Estimate - September 30, 2025

Category	Salt Horizon	Tonnage (Mt)	Grade (%NaCl)	Contained NaCl (Mt)
Probable	2-Salt	39.3	95.9%	37.6
	3-Salt	55.8	95.9%	53.5
Total		95.0	95.9%	91.1

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Mineral Reserves are estimated at a cut-off grade of 90% NaCl.
3. Salt prices are not directly incorporated into the Mineral Reserve designs, however, the mean Mineral Reserve grades exceed the 95% NaCl (+/-0.5%) specification outlined in ASTM D632-12.
4. A minimum mining height of 5.0 m and width of 17.0 m were used for production rooms.
5. Sterilization zone 8.0 m below the top of salt and 5.0 m above the bottom of salt have been applied.
6. A mining extraction factor of 100% was applied to all excavations.
7. Bulk density is 2.16 t/m³.
8. Planned process recovery is 95%.
9. Numbers may not add due to rounding.

The QP is not aware of any mining, metallurgical, infrastructure, permitting, or other relevant factors that could materially affect the Mineral Reserve estimate.

15.1 Estimation Methodology

Mineral Reserves were estimated by the application of mining factors to the Indicated Mineral Resources described in Section 14 of this Technical Report. The mine planning work was carried out using Deswik mine design software and the resulting mining shapes were scheduled using the Deswik scheduler software. Indicated Mineral Resource shapes were reviewed and modified to incorporate the mine designs, minimum mining thickness, pillar requirements, and cut-off grade criteria to develop the Mineral Reserve limits. A minimum mining thickness of five metres was used for mine planning. The mine designs and economic considerations in the 2025 UFS support the Mineral Reserve estimates.

Only Indicated Mineral Resources were converted to Mineral Reserves.

15.2 Cut-off Grades and Economic Factors

The road de-icing salt specification is a sodium chloride grade in excess of 95% as well as an associated particle size distribution. SLR used an average 95% NaCl grade requirement for Mineral Reserve classification. The normal terms for the sale of road de-icing salt are a 95% NaCl minimum, on a lot basis. There are not usually premiums for higher grade payment, though there may be penalties for lower grade lots.

Salt prices are not directly incorporated into the Mineral Reserve parameters. The mean Mineral Reserve grades exceed the 95% NaCl (+/-0.5%) specification outlined in ASTM D632-



12. To meet this target, SLR reviewed the block grades over a range of grades from 90% NaCl upwards. SLR determined that at a 90% NaCl cut-off grade applied to the Mineral Resources the average production grade remains above 95% NaCl. SLR applied a 90% NaCl cut-off grade to the Mineral Resource blocks for conversion to Mineral Reserves.

15.3 Dilution and Extraction

15.3.1 Dilution

All production excavations will be in salt and therefore zero dilution was assigned to production designs. Minor mudstone inclusions will be mined as part of production which will lower the average mined grade. This material will be blended as necessary to meet the product specification. Since it is included within the Mineral Resource wireframes it is captured in the production designs and reported in the mine plan and schedule outputs.

Development headings that are excavated within salt will be treated as production and processed. Some development will occur outside the Indicated Mineral Resource limits, including excavation of some interbed material, which is considered waste. This material will not be sent to the plant, but rather separated from the salt handling stream and stored underground in mined out openings.

Minimal overbreak is expected with the use of CMs for all salt production. Overbreak would in most cases not be waste and would not be dilutive.

15.3.2 Extraction

An extraction rate of 100% was applied for production salt excavations owing to the high flexibility and selectivity that CMs offer to the operation and the limits used in the mine design criteria. No underbreak should be expected within the rooms since the CMs will fully cut the design face. In the event that underbreak does occur, it will be identified by the operator during the cutting cycle and extracted at that time with the active CM.

The square room and pillar pattern represents an extraction rate of 65% on a plan basis, while the 16 m high sill pillars and 20 m high production levels represent a 56% extraction in the vertical dimension. This yields a nominal extraction rate of 36% before consideration of pillars above and below interburden layers and barrier pillars around permanent infrastructure and surface drill holes.

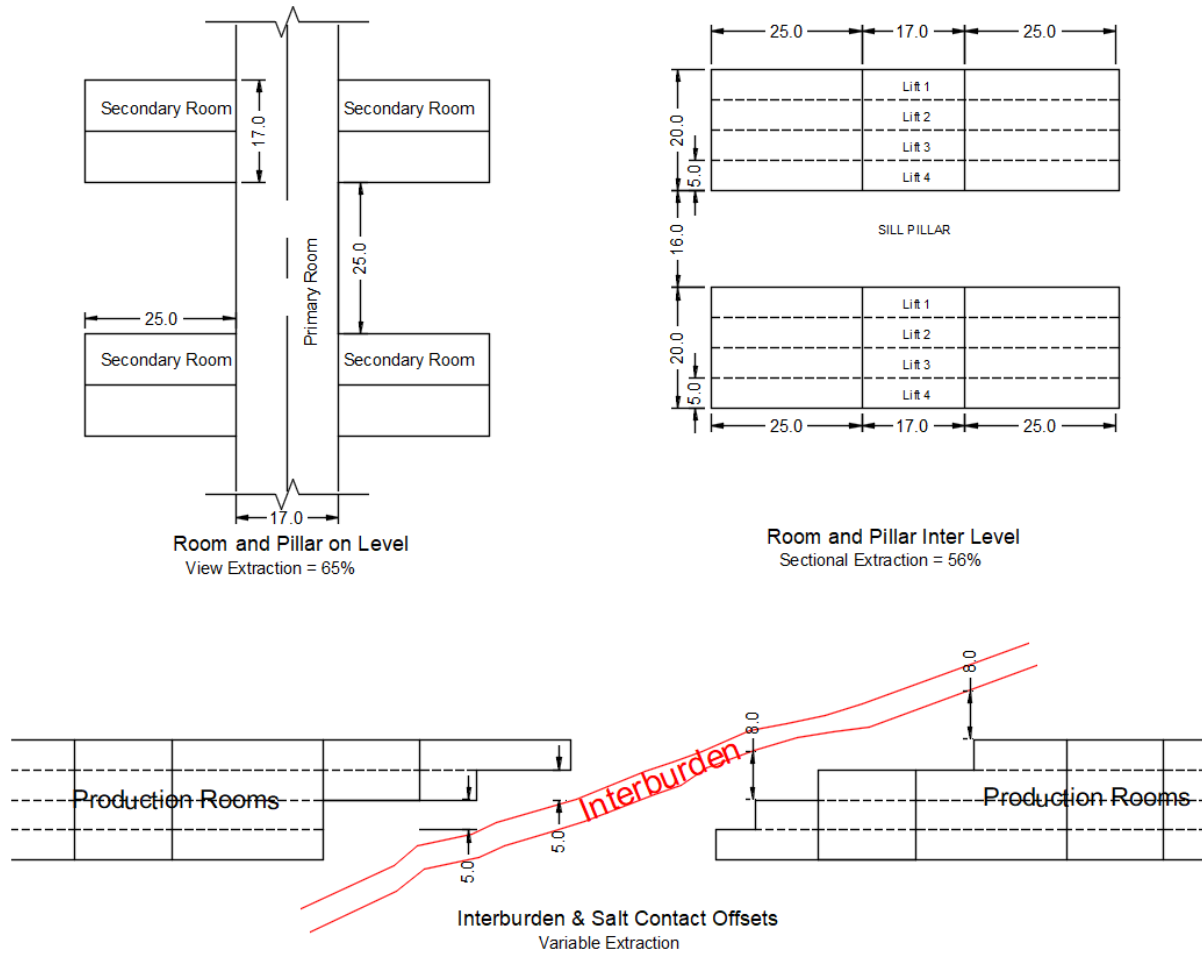
Exploration drill holes were completely cemented at the completion of drilling. Barrier pillars of 50 m radius are included around all drill holes from surface. For long-term stability of critical mine infrastructure, such as the access declines, 50 m barrier pillars are included around permanent excavations.

Roof and floor pillars, respectively eight metres thick and five metres thick, will be maintained between production excavations and non-salt material (interburden above and below 2-Salt, and interburden above 3-Salt). No floor pillar has been included between the salt and anhydrite below 3-Salt. The room and pillar geometry and interburden pillar geometry is presented in Figure 15-1.

After inclusion of these pillars the overall extraction rate of the Mineral Resource is less than 30%. The tonnage mined represents 25% of the Indicated Mineral Resources.



Figure 15-1: Mining Dimensions and Pillar Offsets



Source: SLR 2025

15.4 Classification

The Mineral Reserves are all classified as Probable Mineral Reserves as they have been converted from Indicated Mineral Resources by the application of mining parameters. The QP considers this classification to be appropriate.

15.5 Comparison with Previous Estimates

The 2025 Mineral Reserves represent an increase of 7.0 Mt (7.9%) of mined salt compared with the 2023 Mineral Reserve estimate. The overall Mineral Reserve grade decreased slightly from 96.0% to 95.9%. The increase in Mineral Reserves can primarily be attributed to changes in room and pillar dimensions, the removal of the 5 m buffer between the base of 3-Salt and anhydrite, and to minor changes in mining level elevations. Table 15-2 presents a comparison between the 2025 and 2023 Mineral Reserve estimates.



Table 15-2: Comparison to Previous Mineral Reserve

Category	Salt Horizon	Tonnage (Mt)	Grade (%NaCl)	Contained NaCl (Mt)
July 31, 2023 Probable Mineral Reserves				
Probable	2-Salt	37.7	95.9%	36.2
	3-Salt	50.3	96.0%	48.3
Total		88.1	96.0%	84.5
September 30, 2025 Probable Mineral Reserves				
Probable	2-Salt	39.3	95.9%	37.6
	3-Salt	55.8	95.9%	53.5
Total		95.0	95.9%	91.1



16.0 Mining Methods

The deposit is large with a Mineral Reserve surface area of approximately 106 ha and a vertical extent of over 300 m starting approximately 240 m below surface. The GAS deposit is not reasonably amenable to open pit mining but is considered to be amenable to bulk tonnage underground mining. The overall size of the GAS deposit, as initially understood, indicated that a relatively high production rate may be achieved with the Project still having an extended operating life.

Mining designs, development plans, and schedules have been prepared for a mechanized room and pillar mining operation. Salt will be mined using CMs and hauled by truck to a feeder breaker and conveyor system to move material to a crushing and screening plant located underground. The Mineral Reserve estimate is based upon the 2025 UFS completed by SLR. The mine is designed to produce 4.0 Mtpa of road salt.

16.1 Mine Design

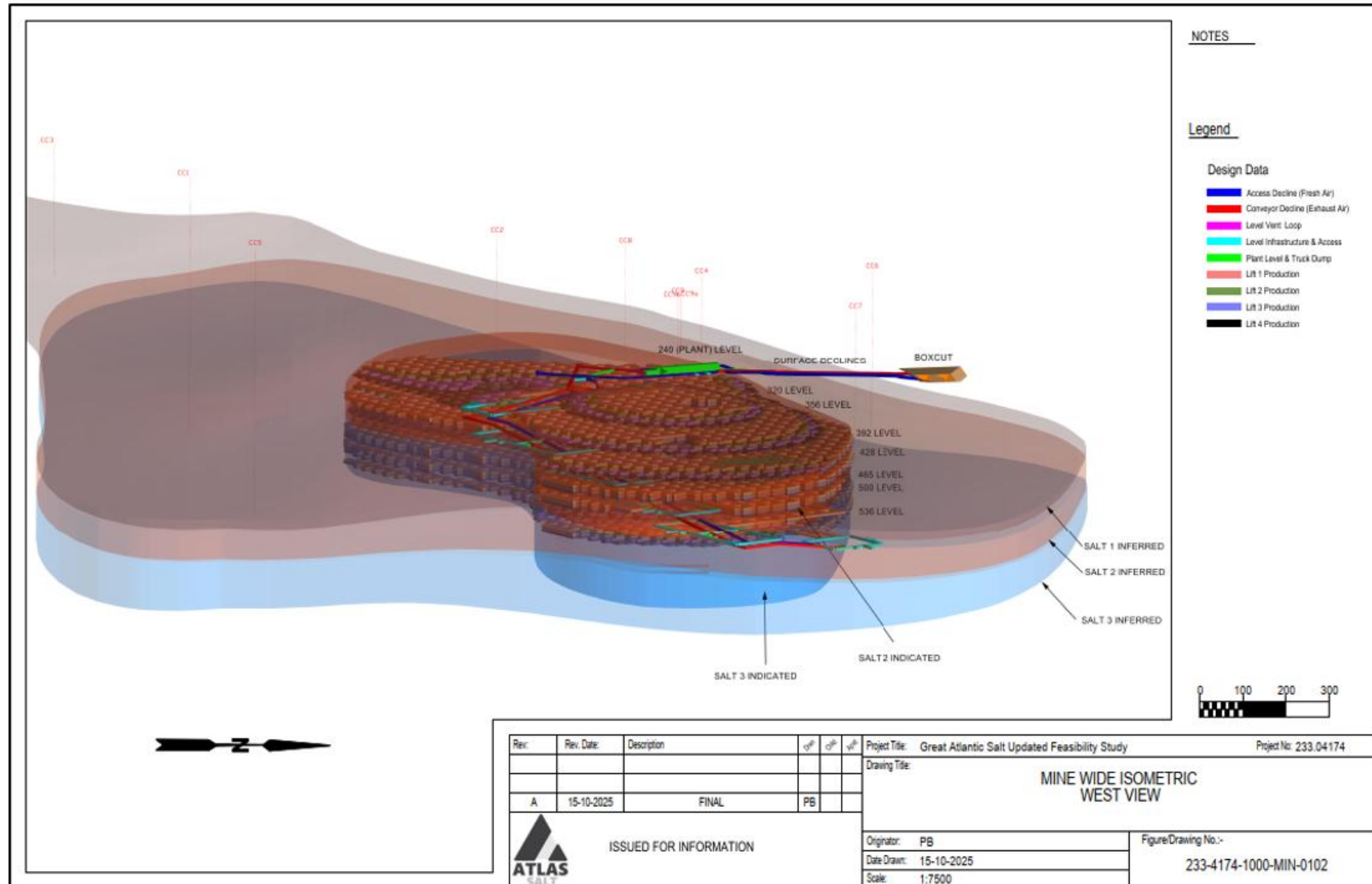
Mining equipment will be mechanized using battery electric vehicles (BEV) to the extent possible. The mine will utilize CMs for production mining and internal development. The underground mine consists of two declines, a processing plant and infrastructure level, and seven production levels. The initial mining level will be approximately 320 m below surface and the deepest level will be approximately 536 m below surface.

The two access declines will be driven to the initial production level and then extended as required to the lower mining levels. Each decline will have an open area of 42 m² to accommodate the ventilation airflow requirements. The declines will be 1,400 m long from surface to the 240 Level (nominally 240 m below surface) where the processing plant and related infrastructure will be located. Internal declines will then extend a further 700 m to reach the first production area on the 320 Level. One decline will provide fresh air into the mine and be used for vehicle access, while the other will exhaust air and contain an overhead conveyor to transport finished salt product to surface. The second decline will also serve as an emergency egress. The declines will be separated by a 40 m pillar. The processing plant will be constructed in an underground room that will be nominally 20 m wide, 187 m long, and up to 20 m high. The main mine related infrastructure including maintenance shops, vehicle charging bays, and gear storages will be located on the 320 Level, in salt, along with the access to the first production level.

The mine will be deepened as necessary to sustain the target production rate of 4.0 Mtpa through the 24 year mine life. A total of seven production levels will be developed and extracted over the life of mine (LOM) plan. An isometric view of the mine is presented in Figure 16-1.



Figure 16-1: Isometric View of Mine Workings



Source: Deswik Consulting 2025

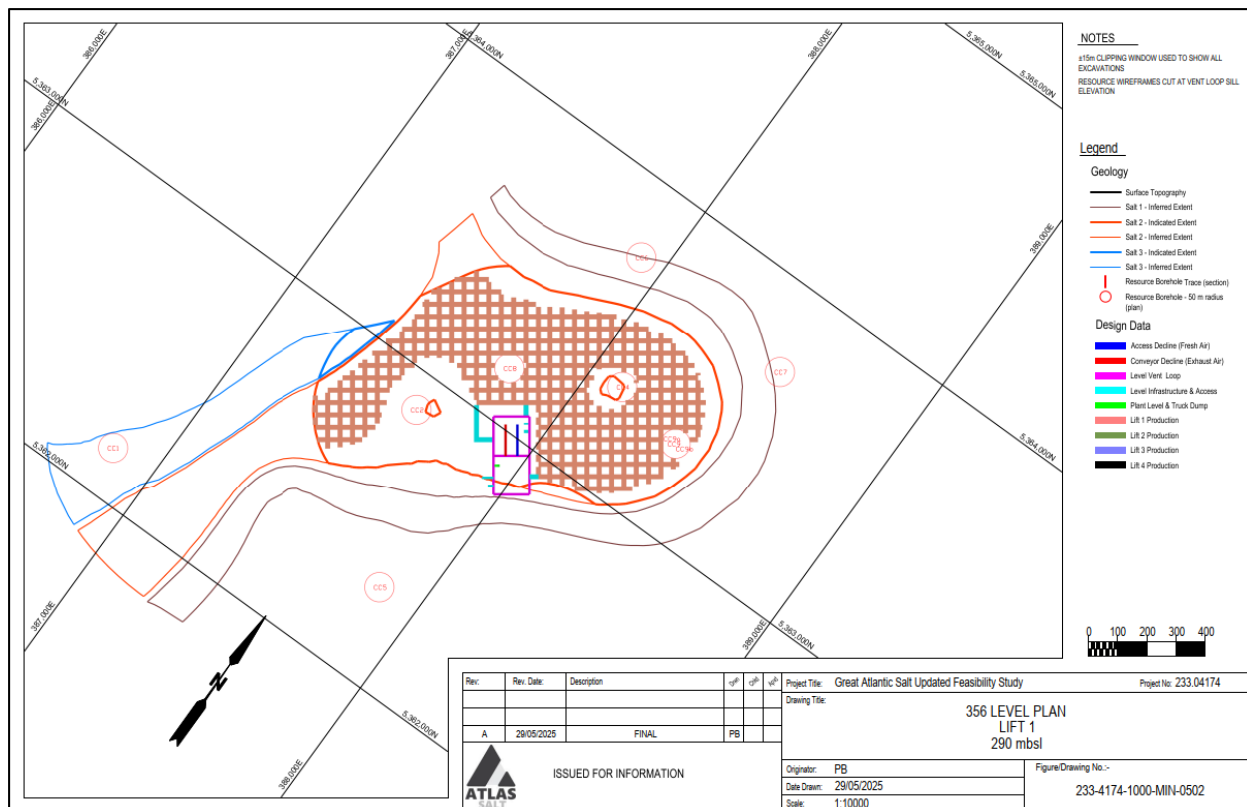


16.2 Mining Method

A square room and pillar underground mining method has been selected. Rooms and pillars will be arranged in regular patterns and the pillars will overlay one another from level to level. Room and pillar production mining will be executed in five metre high cuts, with up to three bench cuts taken below the first, resulting in a maximum room height of 20 m. The pillars will be 25 m square pillars separated by 17 m wide rooms. Each mining level will be separated from the next by 16 m thick horizontal sill pillars. Figure 16-2 is a generalized level plan showing lift 1 of the 355 Level.

Roof and floor pillars, respectively eight metres thick and five metres thick, will be maintained between production excavations and non-salt material (interburden above and below 2-Salt, and interburden above 3-Salt). No floor pillar has been included between the salt and anhydrite below 3-Salt.

Figure 16-2: Generalized Level Layout



Source: Deswik Consulting 2025

16.2.1 Tonnage and Grade Distribution

The Mineral Resource model was reviewed in mine planning software to assess the distribution of the tonnages by level and grade to select an appropriate level upon which to commence mining. The estimated volume of mineable salt increases with depth from surface and the average grade of the GAS deposit decreases with depth. Laterally the GAS deposit is thinner to the southwest. There are two interburden layers in the GAS deposit and the salt horizons have been named as follows:



- 1-Salt is below the Red Beds and overlies the first interburden layer.
- 2-Salt is between the two interburden layers.
- 3-Salt is below the second interburden layer and overlies the basal anhydrite.

16.2.2 1-Salt Horizon

In 2023, the 1-Salt horizon was observed to have a “domed” shape about the CC-4 drill hole, which limited the horizontal extent of the salt. Since then, further drilling has been completed along the alignment of the planned surface declines to improve the geological and geotechnical confidence in the design. Salt was intersected in two holes, GT18 and GT19, at a shallower depth than the intersection in CC-4. For the purposes of the mine design, the 1-Salt horizon was updated to align with these two new salt intersections. The 1-Salt horizon is all classified as Inferred Mineral Resources.

The presence of low-grade NaCl through the centre of the horizon further reduced the potentially mineable volume above the target cut-off grade when pillars above and below the mudstone layer were considered. For these reasons, coupled with the 1-Salt resource classification, no resources within the 1-Salt have been converted to Mineral Reserves. Further sampling of the mudstone may permit a re-evaluation of this decision at a later date. The QP recommends that the mining of the 1-Salt horizon be re-evaluated after the 1-Salt is exposed in the mine access development.

16.2.3 2-Salt and 3-Salt Horizons

The 2-Salt and 3-Salt horizons were evaluated using Deswik mine planning software and the tonnage per five metre interval was evaluated from the top of the horizons to the base. Above the 320 Level there was insufficient tonnage to sustain the planned production rate for a reasonable period before development of the next level would be required. Even at the 320 Level, the tonnage available is slightly less than the first two years of planned operations. To provide early production, the 320 Level was selected as the uppermost mining level. There is mineable material above the 320 Level, and it is recommended that mining above the 320 Level be re-evaluated in future studies. The Mineral Reserve tonnage per level is summarized in Table 16-1. The available tonnage increases with depth.

Table 16-1: Mineral Reserves by Level

Mine Level	Level #	Total Tonnes (Mt)	Average Grade (NaCl %)
320	1	3.8	97.1
356	2	15.4	96.0
392	3	16.7	95.2
428	4	19.0	95.8
464	5	17.4	95.8
500	6	13.1	96.2
536	7	9.7	96.0
Total		95.0	95.9
Note:			



1. Numbers may not add due to rounding.

16.2.4 Cut-Off Grade

The grade specification for production is to average 95% NaCl. To meet this target, SLR reviewed the block grades over a range of grades from 90% NaCl upwards. SLR determined that at a 90% NaCl cut-off grade the average production grade remains above 96% NaCl and applied this cut-off grade for blocks to be converted to Mineral Reserves. Production from the mine will be managed to blend the higher and lower grade materials to meet the necessary specification.

16.2.5 Level Sequencing

The mining of a level will commence with the establishment of level specific infrastructure. This will be completed by CM and include the extension of the internal declines from the level above, the excavation of a central ventilation and access loop surrounding the declines, and the excavation of level specific infrastructure such as truck dump, ore pass, vehicle charging bays, and ancillary cut-outs. Most of these drives are designed to be eight metres wide and five metres high such that they can be cut by a CM in two passes. During excavation of the access loop and ancillary cut-outs, the conveyor will be extended from the level above, and feeder breaker installed below the truck dump in the new level.

Mining will commence with driving production accesses that connect the ventilation loop to the first production areas on the level. A single mine access, mined at the full 17 m room width, has been scheduled, driven under auxiliary ventilation. Alternatively, two accesses could be driven in parallel at a lesser width. These could be periodically connected with a cross-cut to establish a ventilation circuit and allow for auxiliary fan advancement and shorter ducting runs.

Developing a production access will typically take between two and three months depending on the level size. The excavated material will almost exclusively be salt and will be trucked to the newly completed truck dump on this level. It is noted that balancing haul distances will become important, particularly on lower grade and larger levels, so production areas nearer to the ventilation loop may be mined earlier depending on haul truck utilizations and grade blending requirements. The associated scheduling detail will need to be investigated in future mine planning exercises.

Initially two, but up to three, CMs may be active on a single mining level through the mine life, and since a single CM will work a single area, up to three mining areas may be active simultaneously. The sequencing of areas within a level depends on the access, blending to maintain the production grade above 95% NaCl, and balancing of haulage distances such that the truck fleet does not become a production constraint.

A summary of the average haulage distance by mine level is presented in Table 16-2.

Table 16-2: Average Production Haulage Distance by Mine Level

Mine Level	320	356	392	428	464	500	536
Avg. Haul Distance (m)	340	640	820	810	1,000	1,460	1,060

Where the Mineral Resource shapes are sufficiently thick, a mining level is designed to be 20 m high, consisting of four 5 m high lifts. This is true through the majority of the GAS deposit, except where interburden cuts through the salt horizons or the top of 2-Salt or bottom of 3-Salt are encountered. The production cycle consists of advancing the five metre high top lift to the



Mineral Reserve extent and then benching down in three 5 m high benches, to achieve the full 20 m level height.

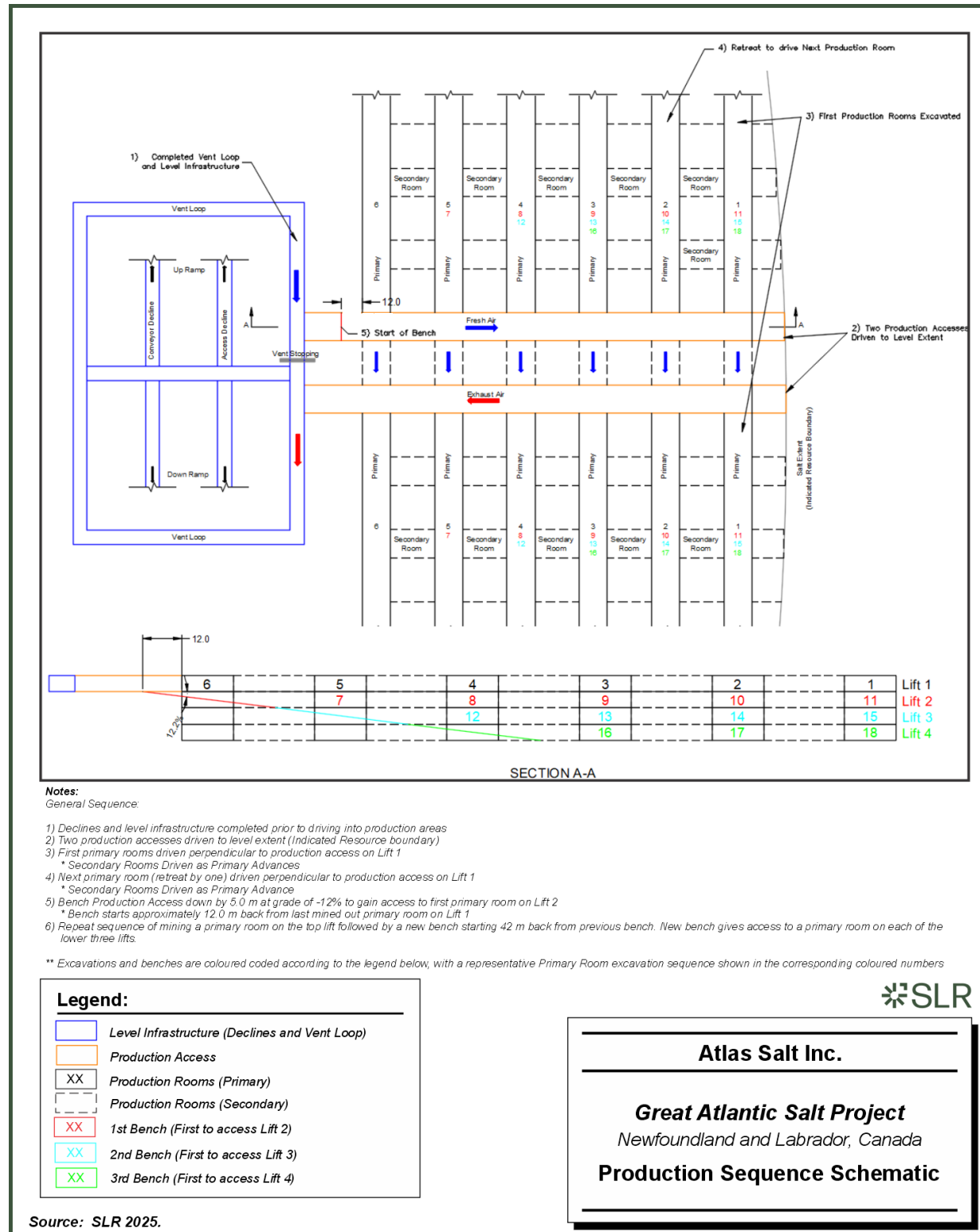
A schematic showing a standard room and pillar mining sequence is presented in Figure 16-3. Room and pillar designs are referred to as either primary or secondary headings. Primary headings (shown in solid black) are typically driven continuously from a mine access (shown in orange) to the Mineral Reserve extent. The secondaries (shown in dashed black) are designed perpendicular to the primaries, and are excavated after the primary heading has been advanced past the intersection by at least five metres. One or two primaries would be advanced at a time by a single CM depending on the number of available secondaries to mine, and the number of areas being mined that require ground support.

Once the top lift is mined out in a mining block, benching down to a lower lift can begin. This will typically consist of benching the mine access drives at -12% over a plan distance of 42 m, providing access to one bench below.

With several producing CMs, there will be a mixture of top lift and bench lift mining, resulting in averaging the ground support installation requirements over the mine plan as compared to fully mining out a top lift (the only lift requiring support) prior to benching.



Figure 16-3: Production Cycle Schematic



16.2.6 Mining Cycle

Production mining will be completed entirely using CMs. Several production scenarios were developed to assess the range of achievable production rates depending on the location of cutting, number of faces available to a CM, and support requirements. The scenarios considered were:

- Development productivity for development of the decline and other narrow headings.
- Multiple face productivity reflecting regular room and pillar mining.

The productivity of the CM in these scenarios has been calculated using the following assumptions:

- 12 hours shift duration, 10 hours worked per shift, 50 minute per hour (83% availability) and 60% CM utilization.
- Truck haulage of the salt to feed a feeder breaker at the main conveyor.
- 5.8 m wide by 5.0 m high initial cut followed by narrower, full height slashes to reach design width of 17.0 m.
- Uppermost lift is mined first.
- Uppermost cut is rock bolted for support. Bolting completed by bolter equipped CM.
- CM loads 50 t capacity truck (39 t load).
- Productivity estimates based on two trucks per CM and 600 m, average one way haul.

CM productivity is summarized in Table 16-3.

Table 16-3: CM Productivity Estimate

Timeline	Unit	Production Heading (17.0 m wide)	Single Development Heading (8.5 m wide)
Hourly Production	t	196	148
	m (single pass)	3.2	3.2
Daily Production	t	3,912	2,964
	m (full width)	21.3	32.3
Yearly Production	Mts	1.43	1.08

Annual production per CM is based on 365 operating days per year. One CM and three trucks have been deemed sufficient for initial production, with a second CM and fourth truck added in the first year of production to support mining rate ramp-up. A third CM and five total haul trucks will be required to support the full planned production rate in the initial mining locations.

In the 2023 Preliminary Economic Assessment (PEA), the designs were based on a CM with a four metre wide cutting drum, as this width fit well with the planned 16 m room size (SLR 2023a). These dimensions were carried into the 2023 FS though CM options with wider options had begun to be contemplated. In this UFS the room widths have been updated to mesh with the selected CM and available cutter heads. The 17.0 m wide rooms are designed to result in optimal mining extraction from three-pass mining with a 5.8 m wide cutter head. Primary cuts will be excavated at a 5.8 m width with second and third cuts (slash cuts) excavated at a 5.6 m width allowing for 0.2 m of cutterhead overlap into the excavation.

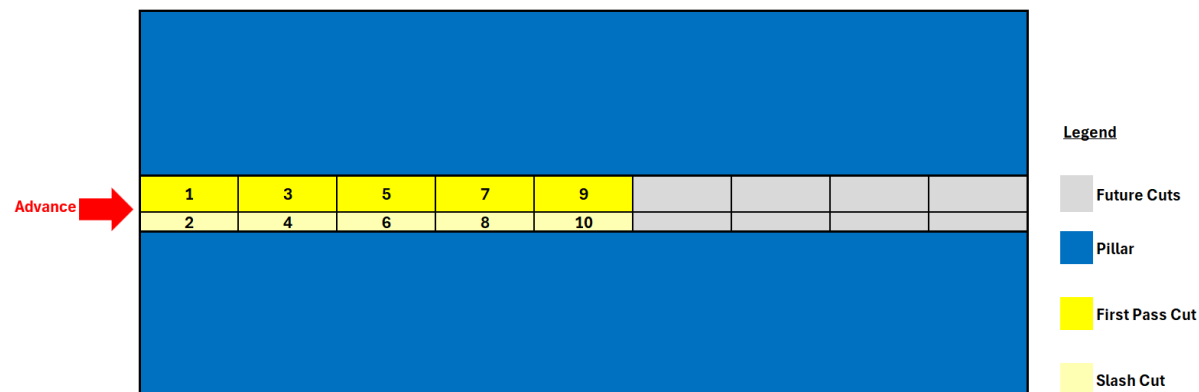


Another update to the mining cycle compared to the 2023 FS is the inclusion of an onboard bolting system on two of the CM. In previous studies, the production impact of bolting delays were minimized by moving the CM to a nearby available face while bolting was executed in the newly excavated face. This heading cycle required a high number of available faces in order to maintain high productivities where bolting was required on top lifts. The inclusion of onboard bolting on two CMs allows bolting to occur during the excavation cycle and thus removes bolting delays from the mining cycle. This changes means that multiple headings are no longer required to maintain high productivity rates on top lifts which will provide more operational flexibility to the operation.

16.2.6.1 Development Productivity

Development mining is based upon a single five metre high heading driven with CM in two passes to the required room width. Typical infrastructure is designed with a final width of 8.5 m consisting of a 5.8 m wide first cut, followed by a 2.7 m slash cut, however, this cycle is applicable for heading widths up to 11.4 m (two full cut widths less 0.2 m overlap) and includes in-cycle ground support installation using the on-board bolting system. A typical advance sequence is presented in Figure 16-4.

Figure 16-4: Development Mining Cycle



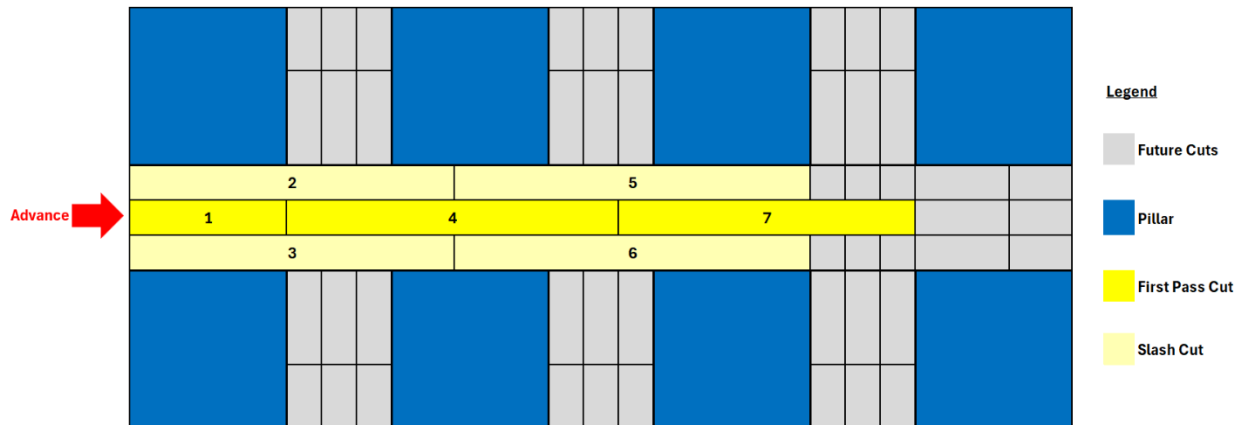
Source: SLR 2025

16.2.6.2 Production Access Productivity

Production access mining is used for opening up new mining areas when only one face is available to advance. This follows a similar sequence to the development mining described above but is applicable to rooms up to 17.0 m wide, excavated in three passes (a first cut, followed by two slash cuts). A typical advance sequence is presented in Figure 16-5.



Figure 16-5: Production Access Mining Cycle

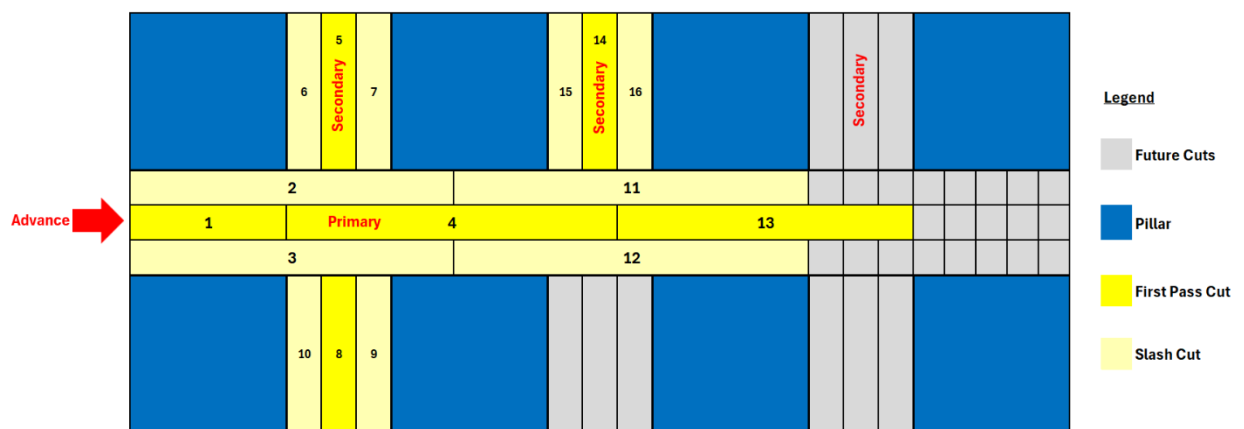


Source: SLR 2025

16.2.6.3 Multiple Face Productivity

After the targeted production area is accessed, there are multiple faces for a CM to work in and the productivity increases accordingly. A sequence of headings is presented in Figure 16-6 based upon a standard cut length of 50 m, equal to two times pillar width. The centre portion of rooms is mined out first, followed by slashing each wall out to the final 17 m width. A secondary room is started once the primary is advanced past the intersection by at least 5 m. There is a great deal of flexibility inherent to this mining method and sequence, and exact cut sequencing and scheduling can be varied based upon short-term production targets.

Figure 16-6: Multiple Face Mining Cycle



Source: SLR 2025

The QP recommends that as planning is advanced, the room and pillar dimensions be reconsidered and optimized in light of the mining equipment options available. The optimization and review should include:

- Efforts to maximize mining productivity through review of the mining and level development sequencing.



- Optimization of the square pattern dimensions considering the chosen mining equipment.
- Review of optimal cut lengths.
- Review of the mining level selection.
- Consideration of rectangular pillars.
- Geotechnical review of the need to overlay pillars from level to level.
- Consideration of alternative production patterns such as a herring bone pattern.
- Assessment of truck dispatch systems to maximize production.
- Assessment of automated control of CM alignment to maximize production.

16.2.7 Dilution

All production excavations will be in salt and therefore zero dilution has been assigned to production designs. Minor mudstone inclusions will be included as part of the production and material will be blended as necessary to meet the product specification. Interbed material will not be sent to the processing plant and will generally be separated from salt production by pillars left between the salt and interburden material. Minimal overbreak is expected with CMs for all salt production.

The QP recommends the development of procedures for:

- The identification of the salt grades to permit production planning and grade control to meet product specifications.
- The ongoing definition of the location and character of the interburden layers and larger mudstone inclusions.
- The assessment of the material being mined (salt quality and dilution materials).
- Identification and disposal of dilution materials that are not plant feed.

16.2.8 Extraction

An extraction rate of 100% was applied for production salt excavations owing to the high flexibility and selectivity that CMs offer to the operation.

The room and pillar pattern represents an extraction rate of 65% on a level, the 16 m sill pillars and 20 m mining level represent 56% extraction in the vertical dimension. This yields a nominal extraction rate of 36% before consideration of pillars above and below interburden layers and barrier pillars around permanent infrastructure and surface drill holes. After consideration for these additional pillars, the overall extraction rate of the whole mineable area is less than 30%. Losses from the face (mainly fines) to the final product are estimated to be 5%.

The QP recommends further analysis and review of the following design parameters:

- Planned room and pillar dimensions.
- Planned sill pillar thickness.
- Barrier pillar dimensions and requirements.



16.3 Geomechanics and Hydrology

The geomechanics of the Red Beds and halite units differ greatly, and each were characterized and analyzed independently. A summary of the data collection, analysis, and geotechnical design undertaken in the 2025 UFS for each unit follows in the subsequent subsections.

16.3.1 Red Bed Geomechanics

This section focuses on the units overlying the GAS deposit and is a summary of the work undertaken for the UFS geotechnical analysis and inputs into the decline design. A geotechnical investigation was undertaken by Terrane Geoscience Inc. (Terrane) incorporating previous studies and a 20 hole drilling and analysis program for the UFS boxcut and decline.

16.3.1.1 Geotechnical Data Collection

Geotechnical information used to characterize the rock and rock mass through which the decline will be constructed was obtained from the various drill hole campaigns that have been completed over the GAS deposit. The program consisted of 18 holes laid out along the FS proposed decline alignment. The drill program was modified after hole GT-18 intersected salt beyond the previously identified 1-Salt outline. A total of 20 holes were completed. The actual hole locations and depths as drilled are shown in Figure 16-7.

The site investigation program included:

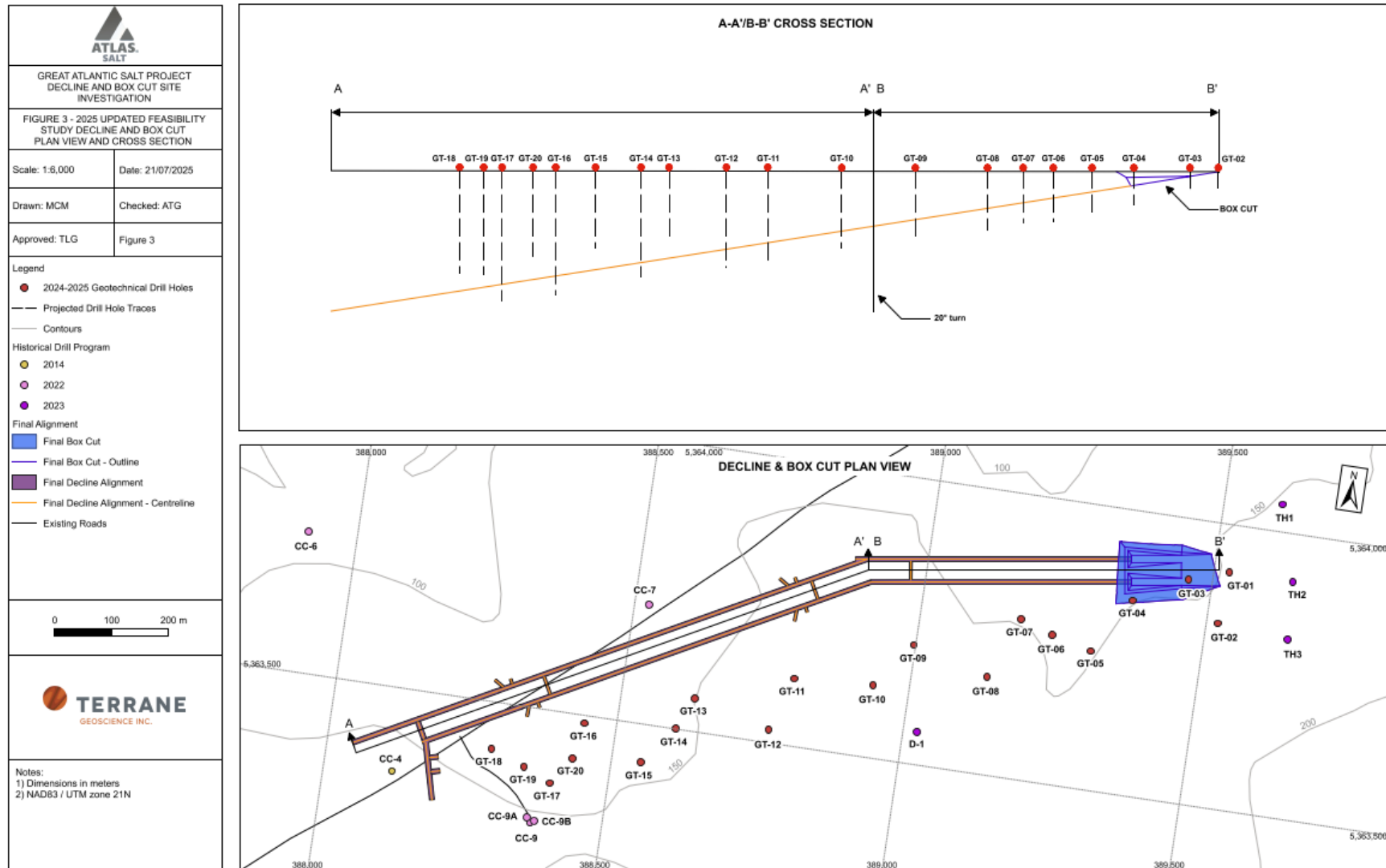
- 1 Soil logging
- 2 Geotechnical core logging
- 3 Index testing (point load testing)
- 4 Downhole televiewer surveys
- 5 Hydrogeology investigations and testing
- 6 Groundwater level measurement
- 7 Packer testing
- 8 Installation of vibrating wire piezometers

Geomechanical laboratory testing within the sedimentary units overlying the evaporites included uniaxial compressive strength testing (UCS), triaxial (confined) compressive strength testing (TCS), Brazilian tensile strength testing (BRZ), direct shear strength testing (DS), slake durability testing (SDT), and Cerchar abrasivity index testing (CAI). In total, 170 geomechanical laboratory tests were performed on core samples from 23 drill holes.

Laboratory index testing included moisture content, grain size distribution, and Atterberg limits testing. In 2023, index testing was conducted by GEMTEC Consulting Engineers and Scientists Ltd. (GEMTEC) in Moncton, New Brunswick (GEMTEC 2023c). In 2025, additional index testing was performed by Terrane in Halifax, Nova Scotia. In total, 110 index tests were performed on samples from 11 drill holes.



Figure 16-7: 2025 Site Investigation As Built



Source: Terrane 2025.



Terrane incorporated the information from the 2025 program as well as information collected from previous drilling and investigation campaigns. A total of 35 holes were drilled for geotechnical, exploration, and resource estimation purposes at the GAS Project totalling 7,312.5 m. Of the 35 drill holes, 31 were geotechnically logged and include the necessary descriptions to determine both the RMR76 (Bieniawski 1976) and Q-System (Barton 1974) rock mass classification. The Terrane 2024–2025 site investigation (SI) included 20 of the 35 drill holes, totalling 2,465.5 m.

Of the 35 drill holes, 22 have full to partial (mainly partial) downhole televiewer surveys including optical (OBI), acoustic (ABI), and natural gamma (GAM) totalling 2,880 m. The Terrane 2024–2025 SI included 17 of the 22 drill holes totalling 1,486 m of OBI and ABI surveying.

A total of 116 packer tests have been completed near the decline and boxcut over 23 drill holes. Of these 23 holes, two drill holes were completed as part of a well drill program for the town of St. George's, NL.

The Terrane 2024–2025 SI included packer testing on 18 of the 23 drill holes totalling 93 packer tests. Further, three multi-level vibrating wire piezometers (VWPs) were installed in the vicinity of the decline.

A total of 1,157 laboratory tests (inclusive of point load testing and index testing) have been completed within the sedimentary units and overburden overlying the evaporites at the GAS Project. The Terrane 2024-2025 SI included 29 geomechanical laboratory tests, 330 point load tests, and 56 index tests.

16.3.1.2 Geotechnical Model

Terrane prepared a geotechnical model consisting of a geology model, a structural model, a rock mass model, and a hydrogeological model as the foundation for excavation design.

Geology Model

The geology modelling work was completed in Leapfrog GeoTM, v. 2024.1.3, (Leapfrog) software. The geology of the GAS Project decline and boxcut area consists of an interbedded sequence of mudstones, sandstones, and conglomerate units overlying the evaporites that have been folded into an east-northeast trending open and upright antiformal structure. Table 16-4 and Figure 16-8 summarize the main lithologies modelled.

The rock mass at the GAS Project is complex and can be interbedded at the centimetre to metre scale. For continuity purposes, the modelled solids, for each lithology, represent the primary rock type within each solid.

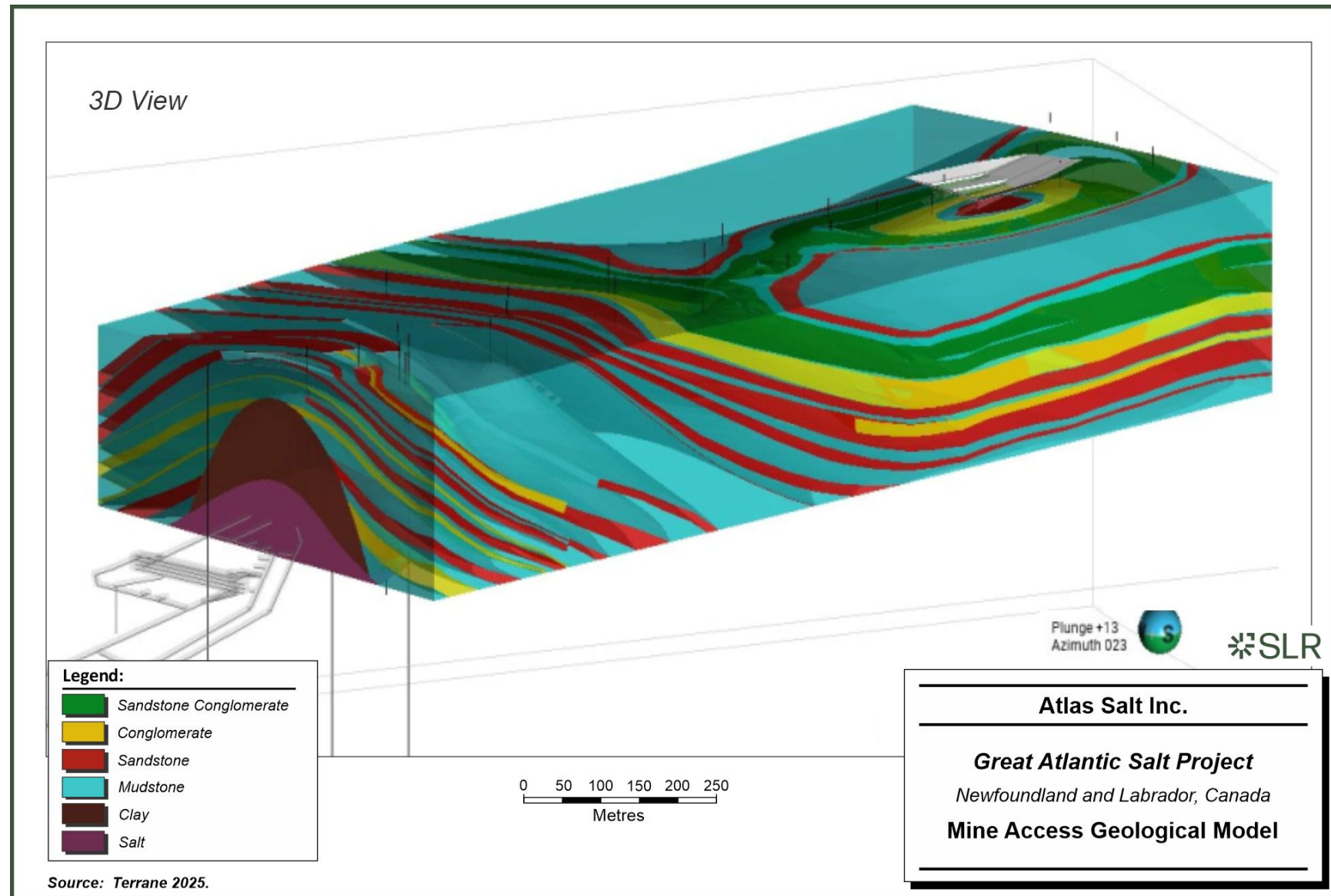


Table 16-4: Modelled Geological Units

Lithology Code	Description
Overburden	Overburden, glacial till, organics.
Mudstone 1	Primarily mudstone with local amounts of siltstone, limestone and sandstone beds incorporated
Sandstone	Primarily sandstone with localized areas of interbedded mudstones or conglomerates
Conglomerate	Primarily conglomerate with localized areas of interbedded sandstones
Sandstone/Conglomerate	Sandstone and conglomerated intervals
Mudstone 2	Weathered mudstone/clay cap encountered overlying salt dome
Salt	Salt dome encountered in GT-18 and GT-19



Figure 16-8: Mine Access Geological Model – View to North-Northeast



Structural Model

The structural model can be broken into two sub-models: Major Structures (i.e., faults and shear zones), and Fabrics (e.g., bedding, joints, veins, etc.).

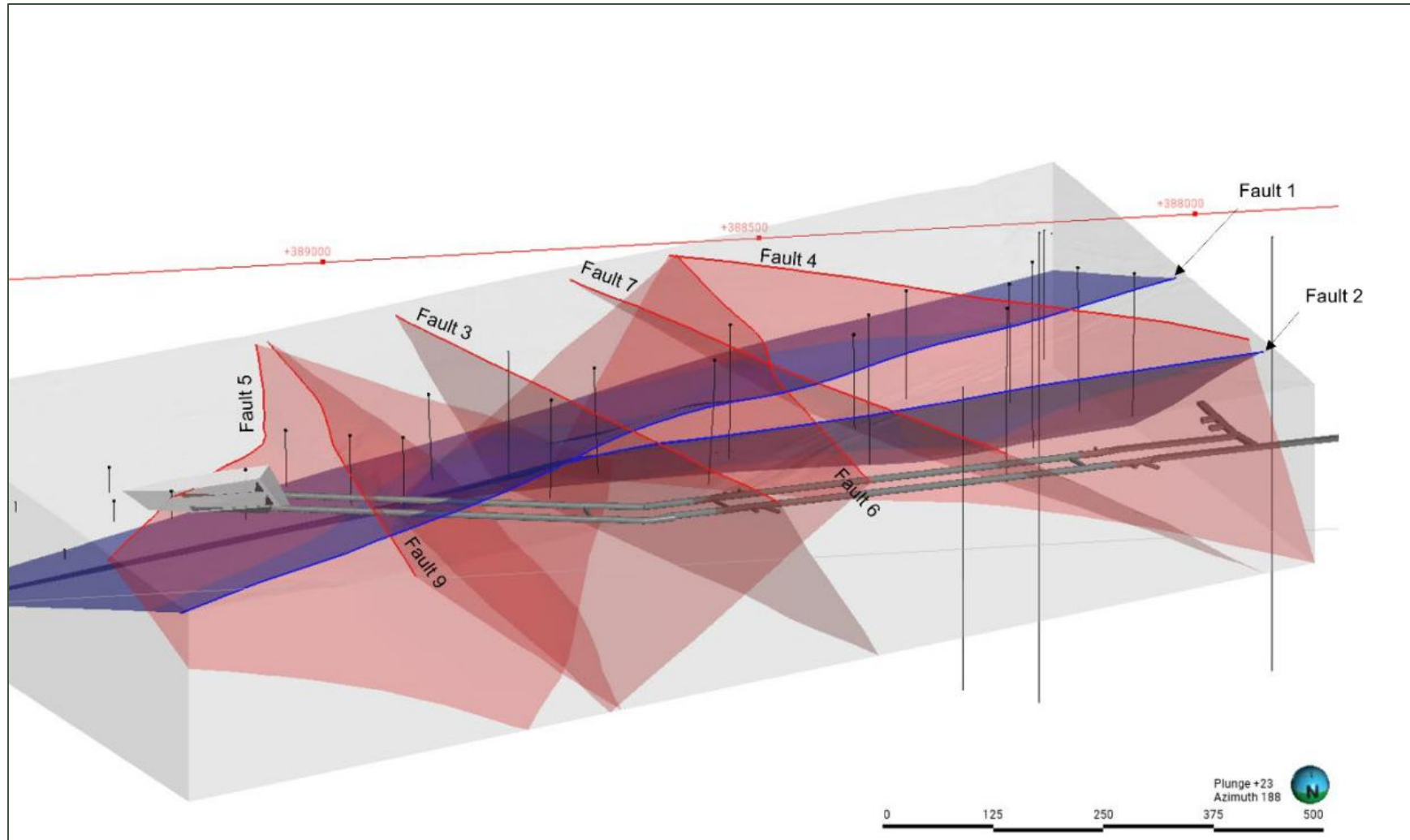
Major geologic structures were modelled by compiling and incorporating the historical and recent (Terrane 2025) geotechnical drill hole data and topographic lineament interpretations to construct a 3D representation of the structural geology of the GAS decline and boxcut area.

A total of nine faults were interpreted and modelled by Terrane for the decline and boxcut area. Table 16-5 summarizes the major structures modelled and the assigned confidence rating. The fault surfaces modelled by Terrane generally align with the structural history of the area and are presented in Figure 16-9.

Rock mass fabrics were interpreted stereographically for each drill hole using Dips (Rocscience 2024). The analysis of the drill hole data indicates that the GAS Project decline and boxcut area is composed of three structural domains (Northeast, Central, and Southwest) based on the orientation of the bedding relative to the east-northeast trending open and upright antiformal structure. Figure 16-10 shows the boundaries of the structural domains within the geological model.



Figure 16-9: Fault Model Confidence Heatmap – View to South



Source: Terrane 2025

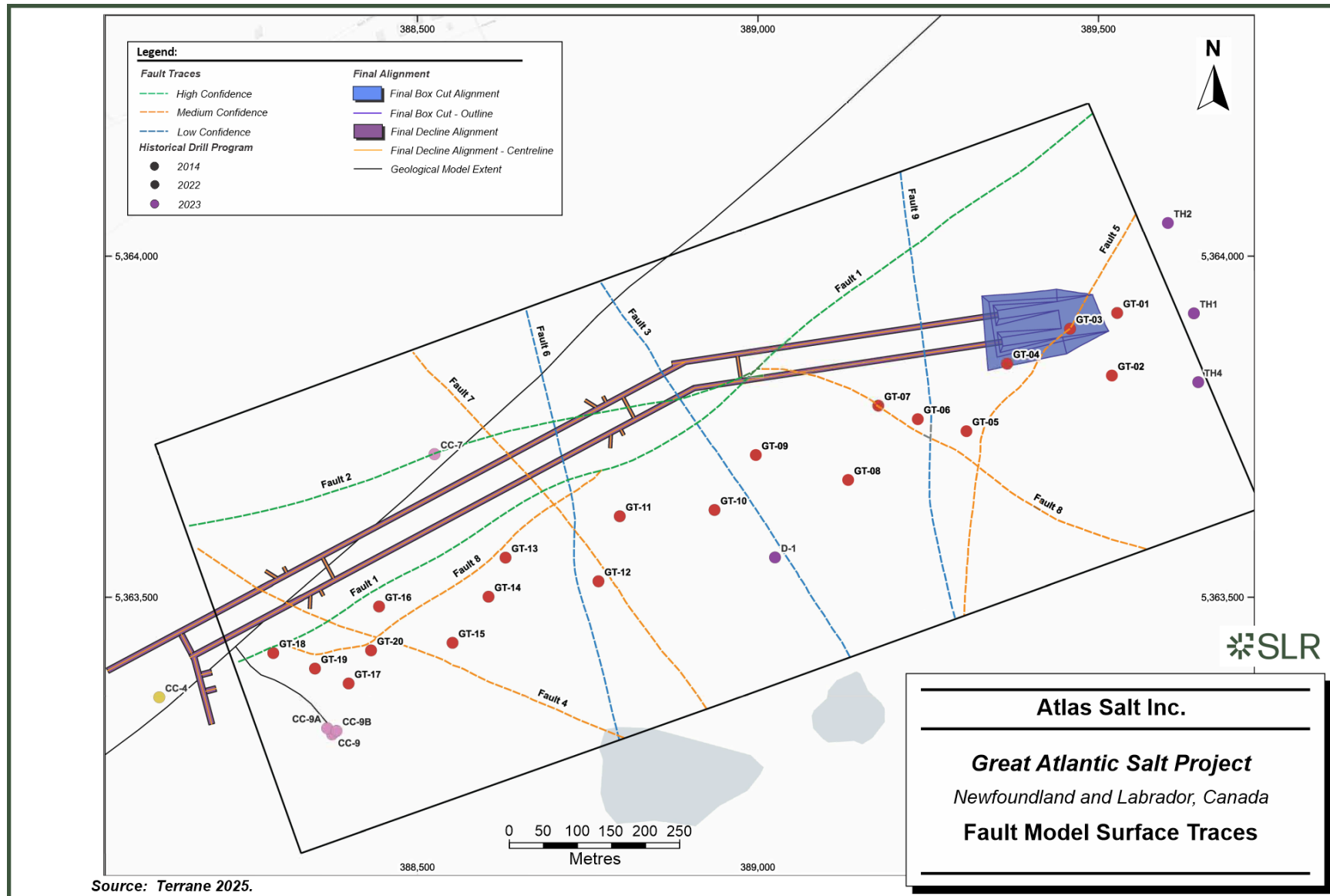


Table 16-5: Major Fault Confidence Scoring Summary

Fault ID	Dip Direction	Dip	Topographic Expression (0-3)	Evidence in Literature	Seismic Support	No. of Faults in Televiewer	No. of Intercept Recoveries <50%	No. of Logged Intervals	Score	Fault Confidence
Fault 1	149	20	0	2	0	5	1	4	12	High
Fault 2	167	31	0	2	1	4	1	2	10	High
Fault 3	237	61	0	1	1	2	0	0	4	Low
Fault 4	021	66	3	1	1	3	0	0	8	Medium
Fault 5	289	28	0	1	0	3	0	1	5	Medium
Fault 6	071	34	0	1	0	2	0	0	3	Low
Fault 7	231	36	0	1	1	2	0	2	6	Medium
Fault 8	181	06	0	0	0	4	3	0	7	Medium
Fault 9	267	41	1	1	0	2	0	0	4	Low
Source: Terrane 2025										



Figure 16-10: Fault Model Surface Traces



Source: Terrane 2025.



The GAS decline and boxcut area is characterized by two primary discontinuity sets: S_0 , and JS_1 . Additional joint sets (JS_2 and JS_3) were observed within the Northeast/Southwest and Central domains respectively. It should be noted that there is a potential bias within the dataset to underrepresent near vertical structures due to the orientation of the drill holes within the database.

- S_0 – Interpreted to be bedding. This discontinuity set is persistent and locally folded.
- JS_1 – Moderately W/SW dipping discontinuity set with orientation sub-parallel to Fault 3, Fault 7, and Fault 9.
- JS_2 – Moderately S/SE dipping discontinuity set with orientation sub-parallel to Fault 2.
 JS_3 – Moderately NE dipping discontinuity set with orientation oblique to Fault 3.

Table 16-6 displays the mean dip and dip direction of each discontinuity set within the structural domains.

Table 16-6: Summary of Discontinuity Sets

Structural Domain	Discontinuity Set	Dip (°)	Dip Direction (°)
Northeast	S_0	26	331
	JS_1	38	250
	JS_2	48	165
Central	S_0	21	182
	JS_1	59	241
	JS_2	60	047
Southwest	S_0	31	048
	JS_1	54	255
	JS_2	44	155

Rock Mass Characterization

The rock mass model summarized below was developed through analysis and interpretation of the geotechnical data collected by Terrane (2025), as well as select historical data. Data analysis and interpretation indicates four geotechnical domains within the GAS Project decline and boxcut area. The four geotechnical domains are interpreted from the modelled geological units (Table 16-7) which were sub-divided based on degree of weathering and intact rock strength.

The Rock Mass Rating System (RMR_{76}) (Bieniawski 1976) and Q-System (Barton 1974) classifications were used to inform the rock mass model development.

The geotechnical parameters for RMR_{76} were logged for each metre of core, thereby creating a profile of the rock mass classification with depth in each geotechnical drill hole. For the Q-System the four primary geotechnical parameters for Q' (RQD, J_n , J_r , and J_a) were logged for each metre of core (Terrane 2025), thereby creating a Q' profile of the rock mass with depth in each geotechnical drill hole. The J_w /SRF factor (active stress) is difficult to determine in the field; therefore, when logging core at the GAS Project, Q' (Q-Prime) was calculated. For the Q'



calculation, it is assumed that J_w/SRF is equal to one (the rock mass is dry and is subjected to “medium” stress conditions).

Additionally, the degree of weathering was logged following International Society for Rock Mechanics and Rock Engineering (ISRM 1981), for each metre of core at the GAS Project site, thereby creating a weathering profile of the rock mass with depth in each geotechnical drill hole.

The mudstones, on average, are of poorer quality and were observed to have a higher weathering grade than the sandstones and conglomerates. The rock mass characterization by lithology is presented in Table 16-7.

Table 16-7: Rock Mass Characterization by Modelled Lithology

Modelled Lithology	Intact Rock Strength (Brown 1981)	Weathering (USRM 1981)	RMR ₇₆ (Mean)	RMR ₇₆ Standard Deviation	Q' (Geometric Mean)
Mudstone 1	R0-R3	W2-W6	23	9	0.11
Mudstone 2	R0-R1	W4-W6	18	1	0.07
Sandstone	R0-R4	W1-W6	35	13	0.65
Conglomerate	R0-R4	W2-W5	37	11	1.06
Conglomerate/Sandstone	R0-R4	W1-W5	34	12	0.72

While the rock mass characteristics vary within each lithology, there is a correlation between the intact rock strength (IRS), degree of weathering, and rock mass classification within the coarse-grained (i.e., sandstone and conglomerate) and the fine-grained units (i.e., mudstone). From this, the rock mass at the GAS decline and boxcut area was sub-divided into four geotechnical domains (areas of similar geology, rock mass classification, intact strength, and hydrogeological properties):

- Extremely Weak Mudstone → Mudstone (R0).
- Weak Mudstone → Mudstone (R1+).
- Extremely Weak to Very Weak Sandstone/Conglomerate → Sandstone/Conglomerate (R0 – R1).
- Weak Sandstone/Conglomerate → Sandstone/Conglomerate (R2+).

A summary of the rock mass classification per domain is presented in Table 16-8.

Table 16-8: Rock Mass Characterization by Domain

Geotechnical Domain	Intact Rock Strength	Weathering	RMR ₇₆		Q'	Q		
			Mean	Standard Deviation	Geomean	J _w	SRF	Geomean
Mudstone (R0)	R0	W5	18	2	0.07	1	10	0.007
Mudstone (R1+)	R1-R3	W3-W4	31	10	0.36	1	10	0.036
Sandstone/Conglomerate (R0-R1)	R0-R1	W3-W4	28	9	0.32	0.66	5	0.042
Sandstone/Conglomerate (R2+)	R2-R4	W2-W3	44	10	2.55	0.66	5	0.337



Geomechanical laboratory testing results (point load (PLT), UCS, TCS, BRZ) were compiled in Rocscience RSData software (Rocscience 2025) and used in conjunction with field logging parameters and literature review values to develop failure envelopes for each of the four geotechnical domains at the GAS Project. Associated strength parameters are presented in Table 16-9.

Table 16-9: Material Properties, Intact Rock Strength and Failure Criterion by Domain

Geotechnical Domain	Poisson's Ratio	Young's Modulus	Unit Weight	GSI	Generalized Hoek-Brown		Mohr-Coulomb	
					Intact UCS (MPa)	mi	Cohesion (kPa)	Friction Angle (°)
Mudstone (R0)	0.33	0.75	23	5-15	N/A		275	18
Mustone (R1+)	0.18	3.37		31	16	4	N/A	
Sandstone/Conglomerate (R0-R1)	0.2	0.7		28	8	6		
Sandstone/Conglomerate (R2+)	0.3	4.35		44	17	22		

Overburden

Within proximity of the proposed boxcut, glacial till was encountered underlying an organics layer with thickness ranging from 6.8 m to 19.4 m varying locally from a very dense silty sand and gravel to a sandy silt with some gravel. There was no observed predominant structure within the till unit; however, the colour was observed to transition from a brown grey to a reddish brown with depth. The average standard penetration test (SPT) N value (number of blows per 0.3 m) within the till was 39 (dense), with values that ranged from a minimum of 7 (loose) to a maximum of 50 (very dense) (Terzaghi and Peck 1967). The average friction angle, ϕ , for the till was interpreted to be 36° based on the correlation between the mean SPT-N value and the equation below (Cao et al. 2015).

$$\phi = 32.5 + 0.09(N) \pm 2$$

Seismic Assessment

The Project site is located within a region that is considered relatively seismically active, although historical records indicate that the area typically experiences low to moderate earthquake activity. Ground motion parameters, including Spectral Acceleration (Sa), Peak Ground Acceleration (PGA), and Peak Ground Velocity (PGV), have been determined using data from the Geological Survey of Canada for the 2020 National Building Code of Canada (NBCC).

For the purposes of this assessment, in the absence of shear-wave velocity, a Site Classification of C/D has been assumed in accordance with NBCC guidance, based on an evaluation of the ground conditions.

The site-specific seismic hazard values for a 2% probability of exceedance in 50 years are presented in Table 16-10.



Table 16-10: Seismic 2%/50 Years Probability

Site Classification	Sa(0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)	Sa(5.0)	Sa(10)	PGA	PGV
C	0.155	0.126	0.0789	0.0408	0.0117	0.000421	0.0664	0.0879
D	0.194	0.229	0.151	0.0781	0.0221	0.00711	0.104	0.157

Insitu Stress and Seismicity

Due to the relatively shallow nature and geographical location (away from any tectonic plates) of the GAS Project, ground stresses are not expected to have significant impacts on stability. Ground stresses have been assumed as isotropic and that vertical stress will increase relative to depth and overburden density. The seismicity in eastern Canada and Newfoundland is considered “low to moderate”. Newfoundland lies far from any active plate boundaries and, as such, no seismic impacts are considered in the design (SLR 2023).

Defect Parameters

Due to lack of direct shear testing on defects (i.e., natural defects or saw-cuts), Mohr-Coulomb parameters were estimated based on the joint conditions logged as part of the interval logging and separated into Bedding or Jointing based on the structural domain the drill hole fell into and the ‘Major Structure’ recorded for that interval. As the majority of the historical drill holes sit beyond the structural domain boundaries, only the Atlas drill holes were considered.

For J_r values ≤ 4 , the friction angle was estimated from literature and based on the median logged J_r/J_a values. Friction angle for $J_a > 4$ and cohesion for all defects were chosen based on literature review and engineering judgement. From the logging distributions it can be seen that bedding and joints in the Northeast domain are predominantly coated with sand and those in the Southwest domain are predominantly infilled with clay. The values selected and the associated strength parameters are presented in Table 16-11.

Table 16-11: Defect Parameters

Structural Domain	Defect Type	Count	Spacing (m)	J_r	J_a	Cohesion (kPa)	Friction Angle (°)
Northeast	Bedding	50	0.05-0.3	1.5	3	0	25
	Joints	6	0.05-0.3	1.5	4	0	20
Southwest	Bedding	246	0.05-0.3	2	8	0	22
	Joints	59	0.05-0.3	2	12	0	22

16.3.1.3 Mine Access Design

Access to the mine will be via two declines, a fresh air decline used for vehicle access and material transport and an exhaust air decline used for a conveyor system to transport salt to surface and a secondary access to the mine.

The geotechnical drilling for the FS decline layout indicates that conditions along the alignment will be poorer than contemplated in the 2023 FS when more limited information was available. In addition to faults identified, including one that was parallel to the decline, salt was intercepted above the elevation of the planned decline in holes GT-18 and GT-20. The proposed decline



alignment was considered to be high risk and the FS planned excavation method was deemed unsuitable considering the expected conditions. The presence of salt at a higher elevation and closer to the portal presented an opportunity for reduced costs as the salt development is expected to be faster and less expensive than the Red Bed development.

The boxcut and portal alignment were revised to avoid the fault along the FS alignment and the excavation method was changed to a sequential excavation method using special excavators with various cutting tools for excavation. The revised alignment included a 20° dog leg at a distance of approximately 450 m from the portal to provide a more favourable fault crossing angles. This design location was selected for the crossing angles while retaining the boxcut close to the FS location and where it did not intrude on the adjacent brook. The revised alignment is shown in Figure 16-12.

Atlas engaged Shaft and Tunnel Consulting Services Ltd. (STCS) to review the development designs and plans and to provide an assessment of the plans and alternatives development options. STCS provided an assessment and a scoping report on the decline and subsequently Atlas engaged STCS to complete the UFS decline design and a cost estimate for the Red Bed section of the declines.

STCS recommended revising the ground support design to a thick structural shotcrete (known as sprayed concrete) shell without rock bolts that is capable of resisting hydrostatic and ground pressures. This is based upon using the Sequential Excavation Method (SEM), a common civil engineering sector methodology when developing through mudstone (clay) based strata or water bearing units at a steep gradient.

16.3.1.4 Boxcut and Portal Design

The boxcut will provide access to the decline portals and will be formed by excavating a ramp into the overburden and mudstone. Ramp sidewalls will be battered to a stable angle requiring no mechanical stabilization beyond a sprayed concrete layer for erosion protection.

The portal face will be cut at approximately 81°, orthogonal to the decline angle of approximately 15.8% (9°). Temporary stability during construction will be achieved using shotcrete, mesh, and soil nails. A steel liner plate tunnel will be installed within the open cut and the boxcut will be backfilled to provide long-term stability.

Design Assumptions

- 1 Temporary cut slopes are designed for a construction period of up to two years before backfilling.
- 2 Slopes remain stable indefinitely in the absence of adverse external influences (e.g., freeze–thaw damage or erosion).
- 3 Adequate space is available to batter the ramp sides without mechanical support, except for erosion protection.
- 4 Dewatering will reduce porewater pressures to zero at or below the invert.
- 5 Portal face support will consist of soil nails and sprayed concrete.
- 6 The headwall will be reinforced concrete.
- 7 Soil nails will be installed progressively in rows, with sprayed concrete facing applied after each excavation stage.
- 8 Mudstone will remain stable during soil nail installation.



9 Pre-excavation groundwater level is assumed at ground surface.

10 The design life of the portal shall be 50 years.

Slope Design and Acceptance Criteria

Geological data from borehole GT-04 indicate:

- Overburden to 9 m depth.
- Mudstone and sandstone to 24 m depth.
- Sandstone and conglomerate to 42 m depth.

The portal, at approximately 24 m depth, will be entirely within the overburden, mudstone, and sandstone units. Parameters used in stability assessment are based on available testing data, borehole logs, and conservative assumptions from Terrane's interpretation. Additional ground investigation should be undertaken during detailed design.

The Mohr–Coulomb constitutive model was adopted for slope stability analysis. Table 16-12 summarizes the material parameters used.

Table 16-12: Parameters used for Tunnel Portal Slope Stability Assessment Using Typical Values

Material	Unit Weight (kN/m ³)	Constitutive Model	Cohesion	Phi (°)
Overburden ¹	23	Mohr-Coulomb	0	16
Mudstone	23	Mohr-Coulomb	275 ¹ 100 ²	18 ¹ 30 ²
Sandstone ³	23	Mohr-Coulomb	80	32
Notes:				
1. Parameters as per Terrane (2025) at 165 m depth				
2. STCS interpreted parameters				
3. Parameters converted from Hoek-Brown values				

A 10 kPa surface load is assumed at the crest, with a 2 m exclusion zone during construction.

The static loading Design Acceptance Criteria (DAC) applied by STCS for the GAS Project are based on the Guidelines for Open Pit Slope Design (Read and Stacey 2009) and presented in Table 16-13. Critical sections were determined based on lithology and structural interactions.

Table 16-13: Design Acceptance Criteria

Description	Criterion
Single batter, <20 m	FoS ≥ 1.10
Interramp and overall slope, no impact to infrastructure	FoS ≥ 1.30
Interramp and overall slope, impact to infrastructure	FoS ≥ 1.50
Note. FoS – Factor of Safety	

Potential failure modes identified are presented in Table 16-14. Kinematic analyses were completed to assess potential failures and inform the final design.



Table 16-14: Potential Failure Modes

Locations	Failure Mode	Description
Portal face in overburden or mudstone	Circular failure	Circular slip based on Mohr-Coulomb strength
Portal face in sandstone	Toppling	Clay bands are spaced 0.05 m to 0.3 m apart and are highly weathered with clay infill. Bedding dipping into the face so planar sliding along bedding not considered a credible risk. Two jointsets present creating blocky ground for potential toppling or wedge failure.
	Wedge	
Boxcut sidewalls in overburden and mudstone	Circular	Circular slip based on Mohr-Coulomb strength
Boxcut sidewalls in overburden and sandstone	Planar sliding	Clay bands are spaced 0.05 m to 0.3 m apart and are highly weathered with clay infill. Bedding dipping into the face so planar sliding along bedding not considered a credible risk. Two jointsets present creating blocky ground for potential toppling or wedge failure.
	Toppling	
	Wedge	

Limit Equilibrium Modelling (LEM) of all critical sections was completed using Slide2 (RocScience 2025) software with the following settings:

- Mohr-Coulomb strengths to be used, with Hoek-Brown strengths for the sandstone converted to best-fit Mohr-Coulomb parameters for the applicable stress ranges.
- Circular search (for rotational failure modes), non-circular (for sliding failures on bedding).
- Factor of Safety (FoS) will be computed for both Bishop Simplified and GLE/Morgenstern-Price.

Boxcut Excavation and Ground Support

The boxcut excavation is 70 m wide at the top, 50 m wide at the bottom, and 120 m long. The approximate spoil volume is 120,000 m³. The side wall batter angles are assumed to be 59°. The excavation will be carried out in two to three metre lifts, working from the tunnel portal wall back to the existing ground level, with crews stabilizing the wall with sprayed concrete liner (SCL) as the excavation progresses. The SCL will be a 50 mm layer for stabilization and a 150 mm layer at the portal areas.

The estimate assumed that the roadway would be concreted requiring 1,500 m³ of crushed stone, 1,600 m³ of concrete, 2,000 t of SCL, and 300 m of 8 m diameter Armtex Bridge plate for the two portals. Ground support will also include soil nails, mesh, and spiles. The ground support for the boxcut and portals is shown in Figure 16-11.

It has been considered that the portal development will be constructed in two phases:

- 1 Boxcut Development:
 - a) Bulk excavation and batter to angle of repose
 - b) Installation of erosion control measures to the soil slopes
 - c) Temporary water management measures



- d) Reinforced sprayed concrete facings
- e) Soil nails / anchors
- 2 Permanent Works:
 - a) Reinforced concrete head walls and wing walls
 - b) Tunnel lining and supports
 - c) Pavements
 - d) Steel Liner (culvert) installation and backfill
 - e) Permanent drainage
 - f) Other mine infrastructure (ventilation, services, etc.)

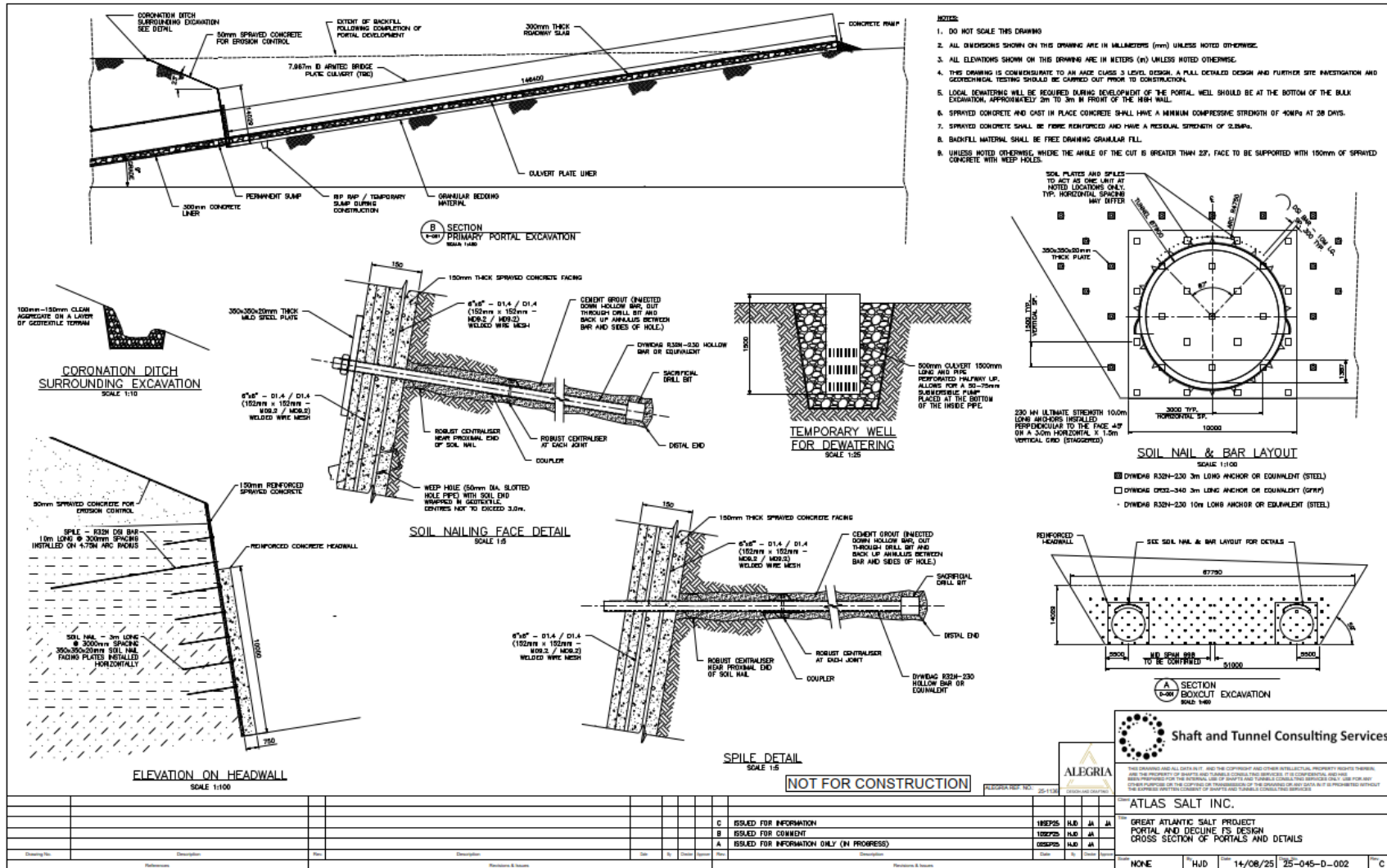
Steel Portal Liner

The portal steel liner, and any required waterproofing of it, is to be designed by a proprietary manufacturer, such as Armttec Inc. The waterproofing may not be required and should be considered at detailed design in conjunction with a review of the water table elevation.

The boxcut excavation and support design is presented in Figure 16-11.



Figure 16-11: Boxcut and Portals Support Design



Source: STCS 2025



16.3.1.5 Decline Geotechnical Design

Geological Assessment

Figure 16-2 presents a plan view of the proposed decline, coloured by anticipated lithology unit intersected. As shown, most of the excavation from surface down to the 20° turn is expected to be through mudstone. The remainder of the decline down to the mining horizon will be approximately equal distribution between mudstone and sandstone. SLR notes that the cross-cuts and stubs shown in the figure have been removed from the design and plan due to a change in construction methodology and to limit geotechnical risk.

Design Considerations and Assumptions

It is the opinion of STCS that a sprayed concrete liner from surface to the 240 Level is the preferred support design due to the many advantages having a continuous liner, including, but not limited to, reduced risk of water ingress to mining horizon, reduced capital costs of establishing water management (sumps, drainage lines, etc), and reduced operational costs of operating/maintaining water management equipment.

The general geometry, shown in Figure 16-13, includes a circular excavation and liner, with an internal diameter of 7.9 m to allow for:

- A roadway that allows for tramming of the continuous miners, the largest piece of equipment that will go underground, with 750 mm of clearance to either side of tunnel (5.69m width).
- Adequate clearance for equipment beneath suspended conveyor.
- A closed ventilation area of 42 m² (excluding personnel walkway area), in accordance with long-term operational requirements.

At approximately 450 m down the decline, where a 20° turn is located, the internal diameter will be increased to 8.50 m to:

- Accommodate the transfer conveyor.
- Function as a passing bay.

The design life of the decline shall be 50 years and the gradient of the decline is approximately -16%.



Figure 16-12: Expected Lithological Intersections Along Decline

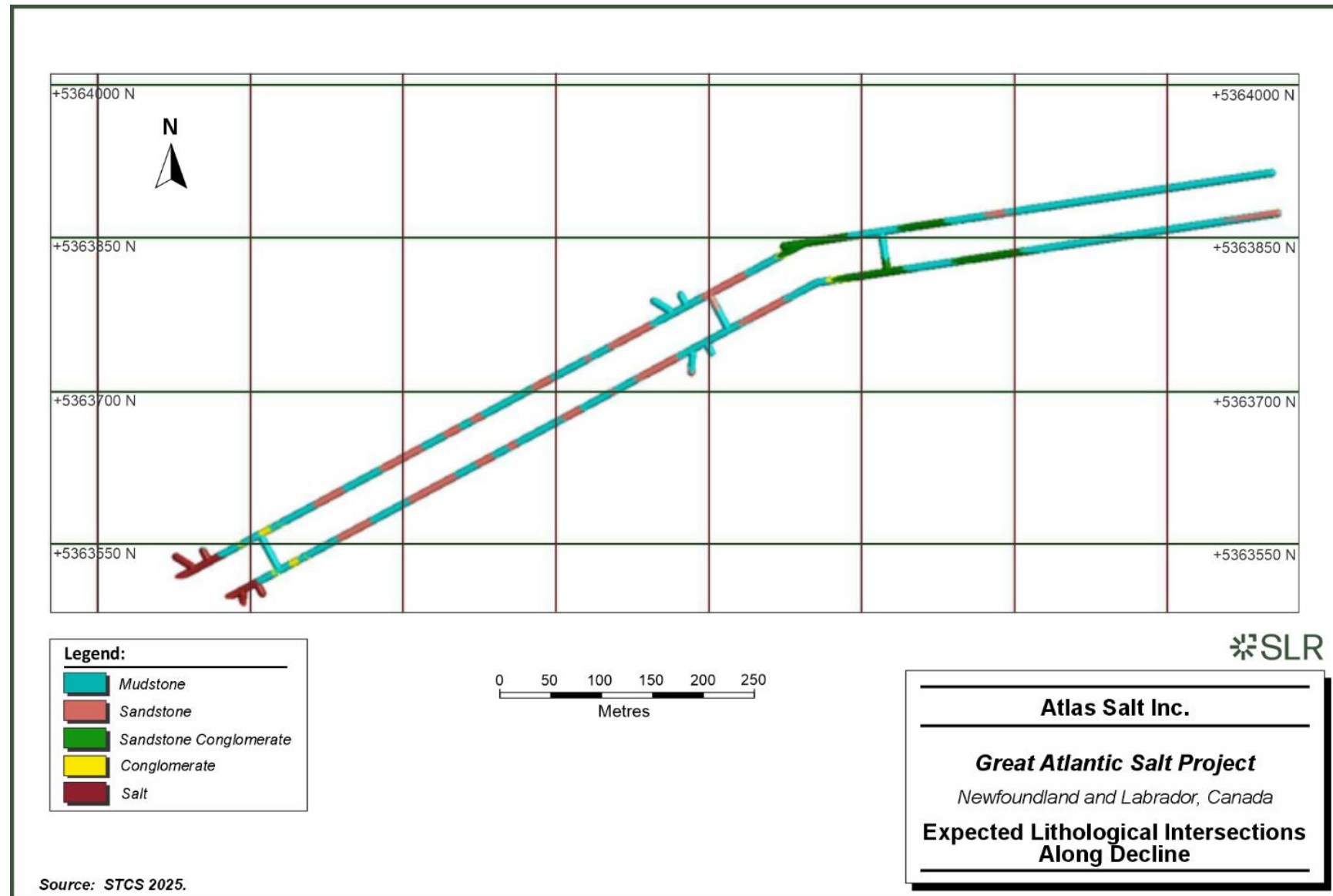
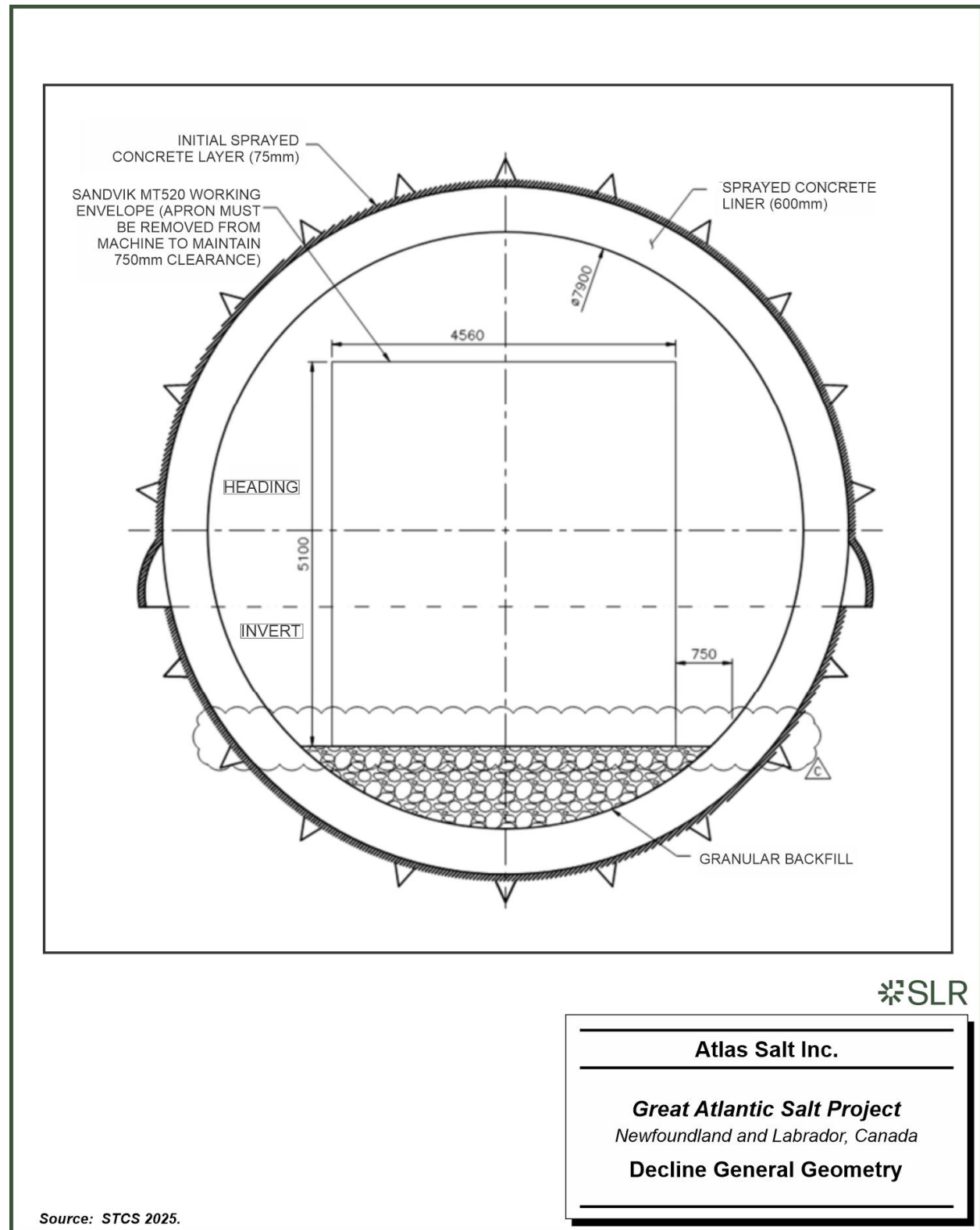


Figure 16-13: Decline General Geometry



Ground Loading

The majority of core has an RMR value of less than 50% and therefore most areas are considered 'highly fractured'. The intact rock UCS varies depending on lithology and therefore the anticipated failure mechanisms also vary between lithology. In the Extremely Weak Mudstone, failure is expected to occur in the form of unravelling and can be assessed in accordance with ground arching theory. In the Very Weak Sandstone, rock mass is anticipated to be competent enough to withstand blocky conditions and therefore the anticipated failure mechanism is gravity driven. The interbedded nature of the mudstone, sandstone, and conglomerate units make it operationally unfeasible to adjust the ground support (i.e., hydrostatic liner design) as the excavation intersects each material.

Kinematic Assessment

For the portion of decline excavated in competent rock mass (i.e., stronger mudstone, sandstone, conglomerate), wedges falling from the roof or sliding out of the sidewalls of the opening is anticipated to be the dominant failure mechanism. These wedges are formed by intersecting structural features, such as bedding planes and joints, which separate the rock mass into discrete but interlocked pieces. When a free face is created by the excavation of the opening, the restraint from the surrounding rock is removed. One or more of these wedges can fall or slide from the surface if the bounding planes are continuous or rock bridges along the discontinuities are broken.

Wedge analysis was completed using UNWEDGEv5.020, for structural domains based on the orientation of interpreted bedding and jointing. A summary of the structures by domain is presented in Table 16-15.

Table 16-15: Structures Presented by Structural Domain

	Southwest		Northeast	
	Dip (°)	Dip Direction (°)	Dip (°)	Dip Direction (°)
Bedding	31	048	26	331
Joint set 1	54	255	38	250
Joint set 2	44	155	48	165
Fault 7	36	231	20	149
Fault 4	66	021	-	-
Fault 1	-	-	20	149
Fault 9	-	-	41	267
Fault 3	-	-	61	237
Fault 6	-	-	34	071
Decline Orientation	Trend (°)	Plunge (°)		
Bottom Leg	240	009		
Top Leg	260	009		



The base case scenario assumed that defects are planar and continuous, and will therefore calculated largest possible wedges which can be formed for the given geometry. Wedges were scaled down to realistic sizes based on persistence and spacing of the discontinuities.

Finite Element Modelling Assessment

2D Finite Element modelling of multiple decline sections was completed in RS2, considering ground arching, wedge formation, ground relaxation, and hydrostatic loading. The UFS design is based upon scenarios representing worst base conditions for the interbedded mudstone and sandstone/conglomerate stratigraphy, with these loadings applied to the lining system.

The liner loading factors used for analysis were taken from the Canadian Standards for Live loading and Permanent Loading and are presented in Table 16-16.

Table 16-16: Base Case FEM Factors of Safety

Load Type	Safety Factor – Ultimate Load State
Permanent	1.4
Live	1.5
Lateral Earth Pressure	1.4
Water Pressure	1.1
Geostatic Pressure	1.1

Decline Layout

The declines have a minimum finished diameter of 7.9 m and are designed at a -16% gradient. The two headings are parallel, at a centreline-to-centreline spacing of 40 m, leaving a nominal 31 m separation pillar. Near the 20° turn in the declines, the profile is enlarged to 8.5 m to allow extra clearance for the installation of conveyor transfer infrastructure, and for mobile equipment during construction.

A plan view of the decline is shown in Figure 16-14 and cross-section with lithology is in Figure 16-15.



Figure 16-14: Mine Access Decline Design

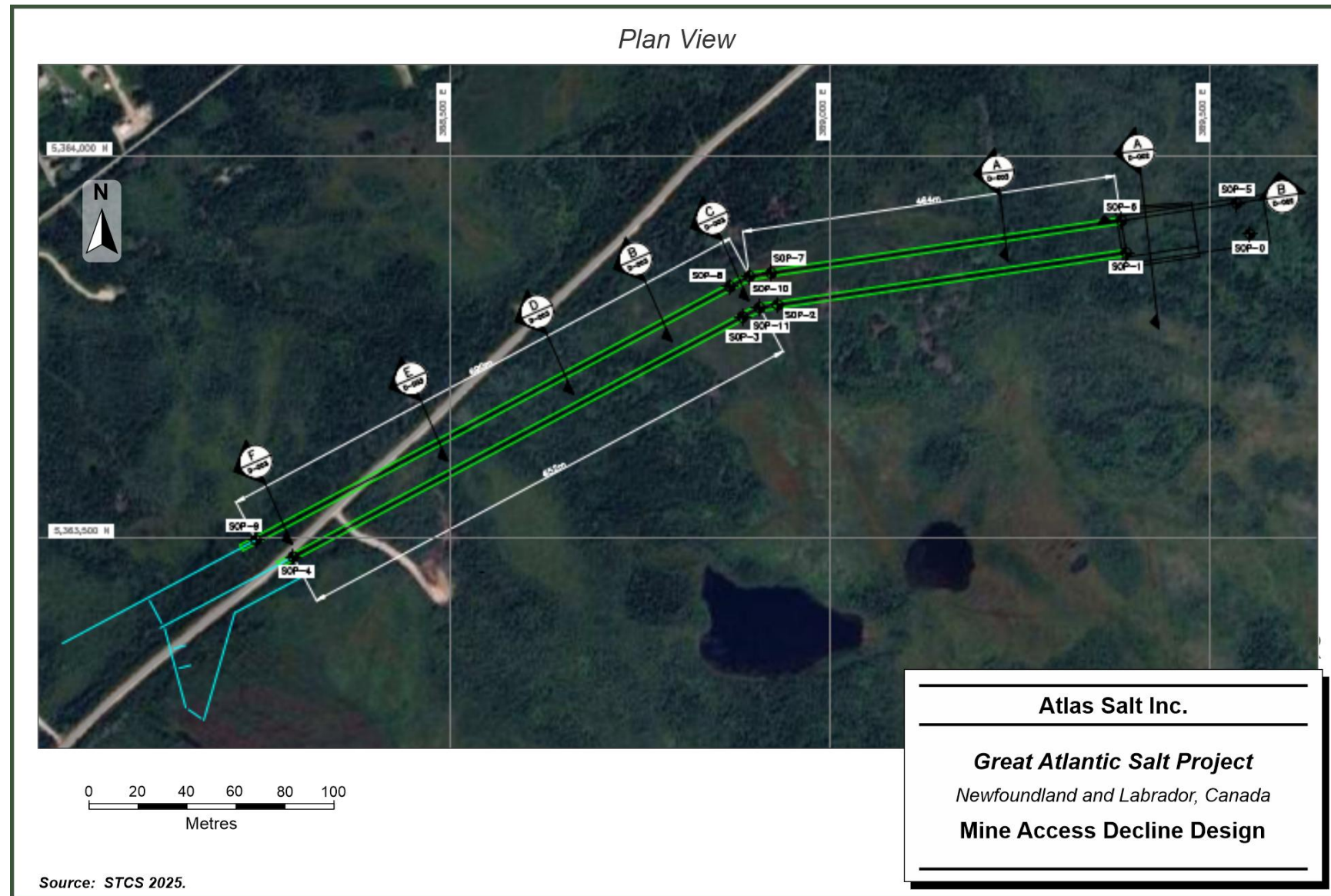
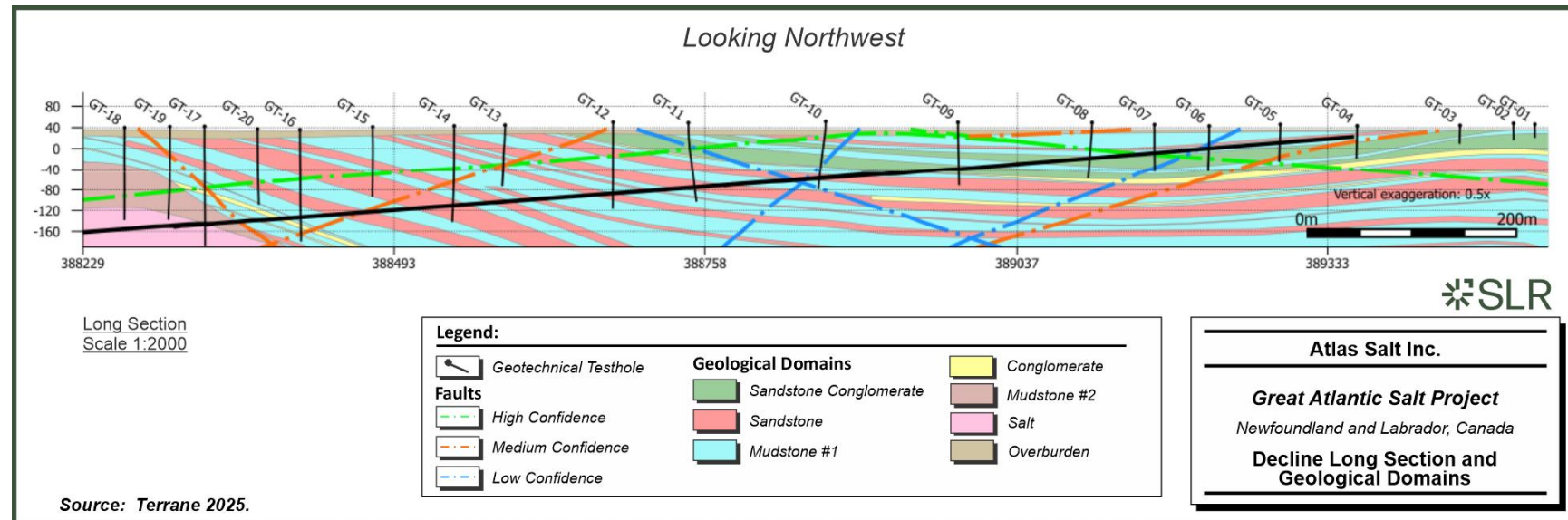


Figure 16-15: Decline Long Section and Geological Domains



Liner Design

There are six liner configurations planned for the decline. In general the liner thickness increases with depth as ground stress and water pressure increases. The decline liner types are summarized in Table 16-17.

Liner Type A through Type E are designed to limit water ingress and are thus designed to manage the hydrostatic groundwater pressures. For practical purposes, the maximum thickness of the structural sprayed concrete liner has been limited to 600 mm, which would be applied in two layers. By constraining the liner to this thickness the final 170 m of the decline, which passes through weak mudstone containing clay lenses and salt, will need to be pressure relieved, as the liner alone will not be capable of resisting full hydrostatic pressure at depth. This corresponds with the change from Liner Type E to Liner Type F where the sprayed concrete is reduced from 600 mm thickness to 300 mm thickness. All chainages are approximate and to be reviewed and revised by the Project Engineer based upon the conditions encountered during construction. The liner details are shown in Figure 16-16.

In the Type F liner a tunnel drain will be installed between the initial and final shotcrete layers to capture any water and divert it to a drainage sump in the tunnel floor. Water will flow down the lower tunnel centreline and into a drainage sump located at the base of the decline.

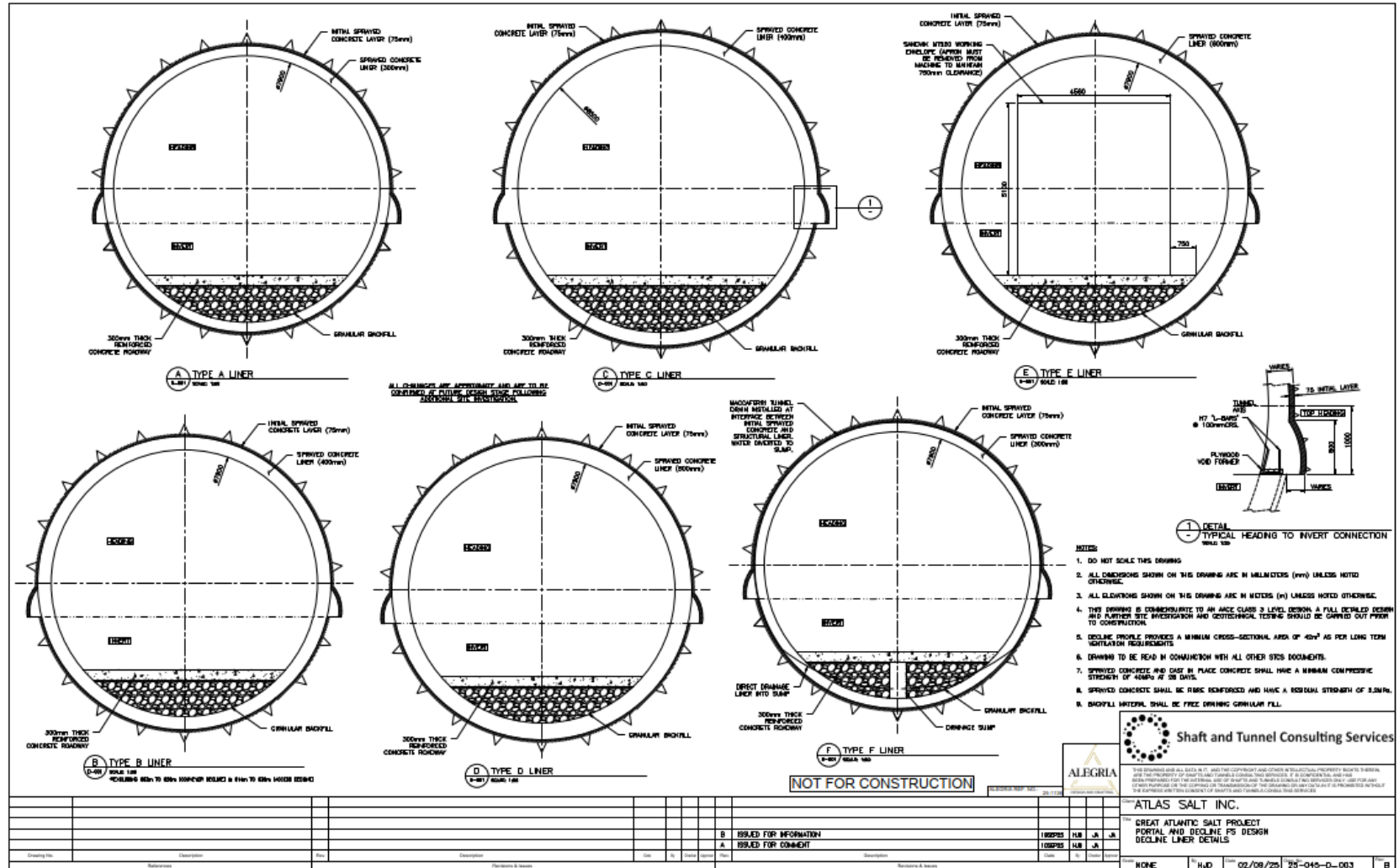
The invert is to be filled with a granular fill and if desired a 300 mm reinforced concrete roadway may be installed.

Table 16-17: Decline Liner Details

Liner	Finished Diameter (m)	Initial SCL Thickness (mm)	Structural SCL Thickness (mm)	Conveyor Decline Chainage	Access Conveyor Chainage
Steel Culvert	-	-	-	0 to 143	0 to 154
Type A Liner	7.9	75	300	143 to 580	154 to 591
Type B Liner	7.9	75	400	580 to 830	591 to 841
Type C Liner	8.5	75	400	603 to 628	614 to 639
Type D Liner	7.9	75	500	830 to 955	841 to 966
Type E Liner	7.9	75	600	955 to 1158	966 to 1169
Type F Liner	7.9	75	300	1158 to 1328	1169 to 1339



Figure 16-16: Decline Liner Details



Source: STCS 2025

Refer to Figure 16-14 for section locations



Decline Excavation

Considering the ground and groundwater conditions as outlined in the 2025 geotechnical investigation, the development method was revised from the road header development proposed in the FS to a sequential excavation method (SEM) with a structural concrete liner to support the ground and to provide a hydrostatic tunnel liner. The proposed development method is a common civil engineering sector method when developing through mudstone based strata water bearing units at a steep gradient. The method has been used at the Irish Salt Kilroot Mine and at the Fruta Del Norte Mine.

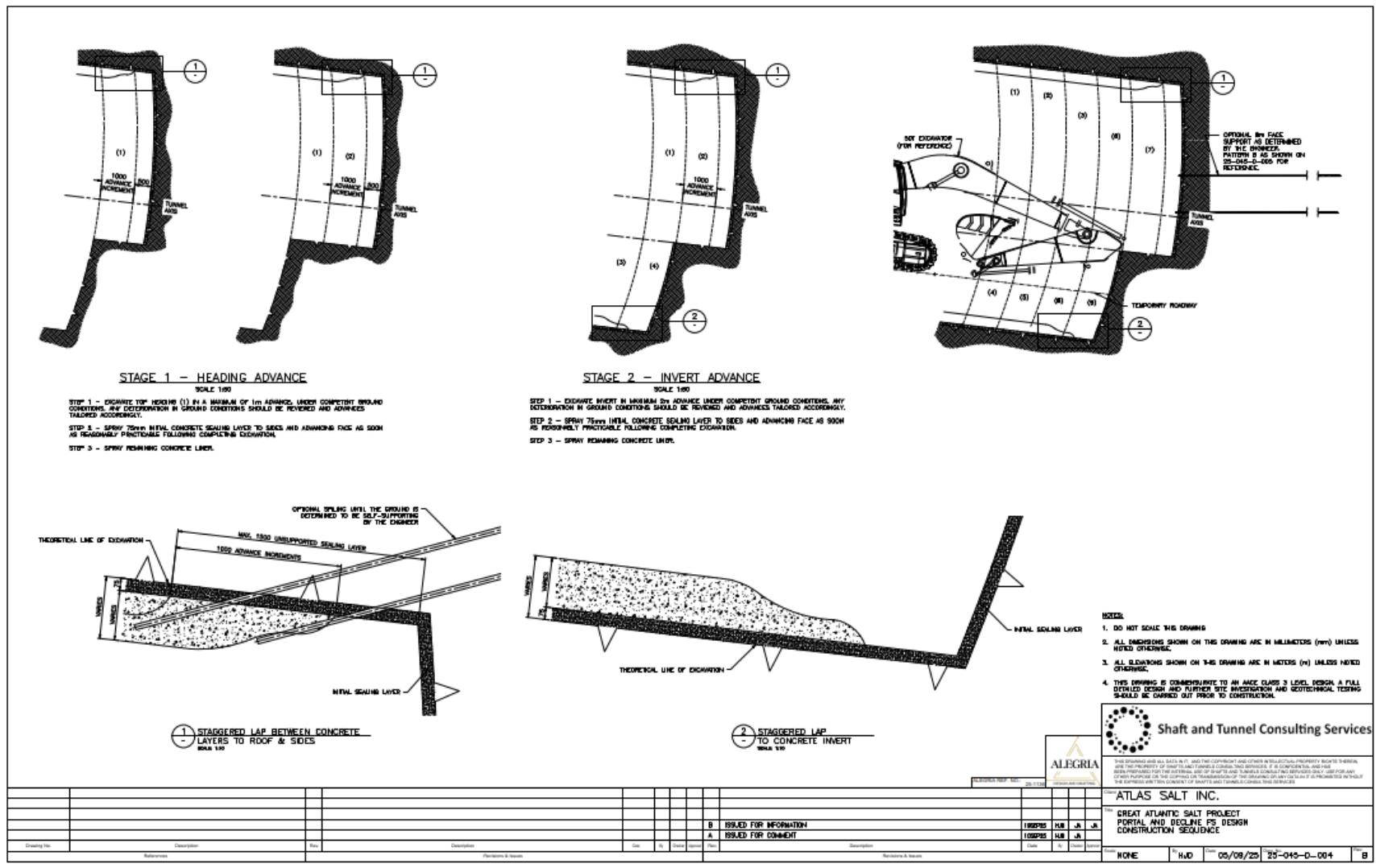
Excavation will be done with two civil engineering type 360 degree excavators working in tandem at the face. One excavator equipped with a bucket, hydraulic breaker and road header drum attachments will be used for excavation of the face. The second small excavator would gather the spoil and load it into small articulated dump trucks.

The decline excavation sequence is shown in Figure 16-17. The upper portion of the face is advanced in one metre steps with the 75 mm SCL applied to the sides and face as soon as reasonably practicable after the excavation. The invert is then advanced by 2 m and supported with the initial liner. Face and back support will be installed as required to suit the ground conditions.

Face dowelling threadbar patterns will alternate between A and B every four metres as determined by the Engineer and as shown in Figure 16-18. The face dowels will be 8 m long DSI R32N hollow steel threadbar (grouted) with butterfly plates. The threadbar will be perforated for 1.5 m at the leading end. The area around the face dowels will be locally reinforced with mesh. In very poor ground the entire face will be reinforced with mesh. Sprayed fibre reinforced concrete with thickness ranging from 50 mm to 150 mm will be applied to face of excavation.



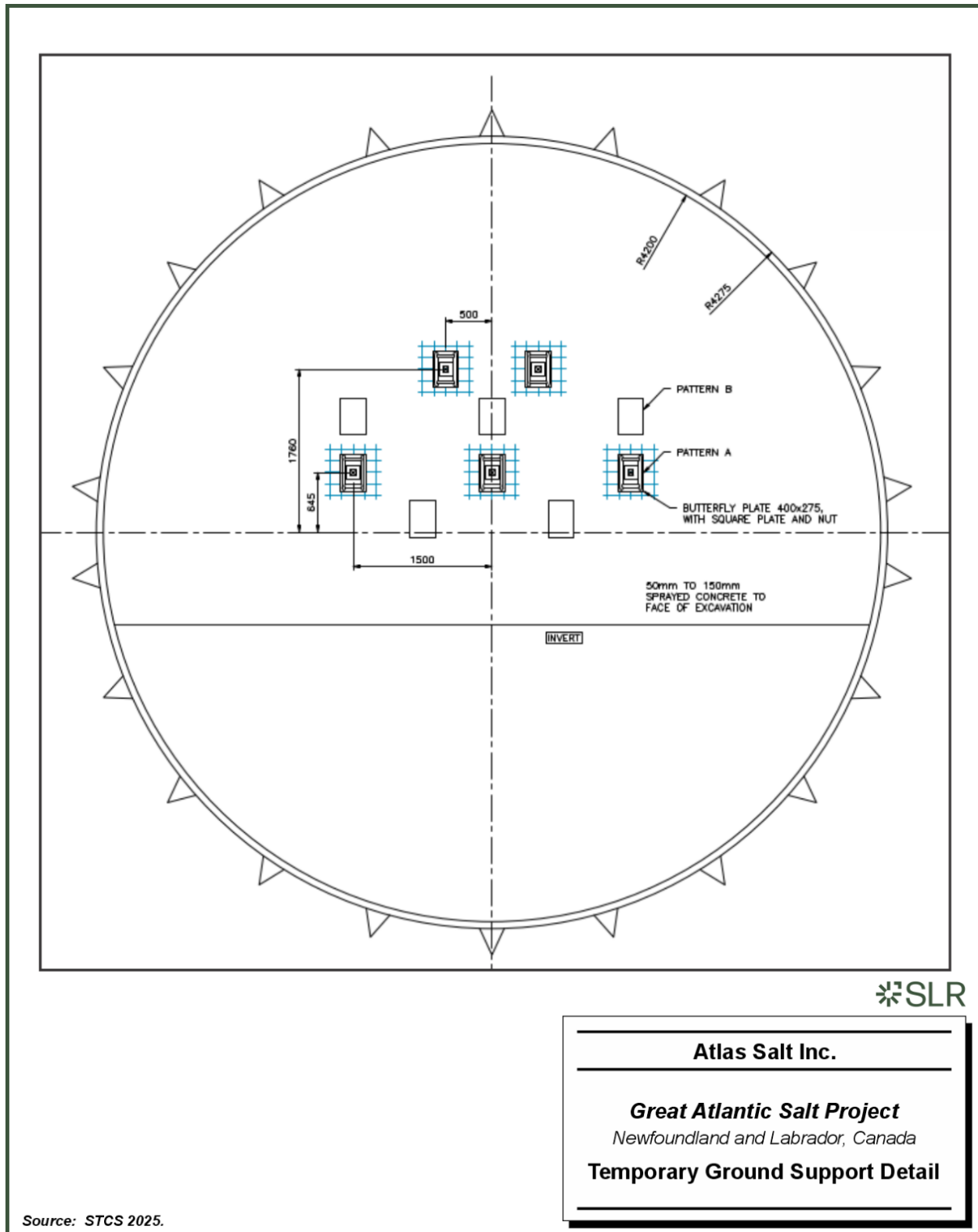
Figure 16-17: Proposed Decline Excavation Sequence



Source: STCS 2025



Figure 16-18: Temporary Ground Support Detail



16.3.1.6 Red Beds Geotechnical Recommendations

Terrane recommends the following:

- 2D seismic surveys should be completed along the revised decline and boxcut alignment by a qualified services provider experienced in complex stratigraphic conditions. The aim of the surveys is to increase confidence in the 3D geological and structural models.
- Additional targeted geotechnical drilling should be completed along the revised decline and boxcut alignment utilizing a sonic drill rig. A sonic drill will allow for collection of in-situ samples (i.e., Shelby tubes) within very weak to extremely weak rocks. The aim of this drilling will be to refine the rock mass, geological, and structural models, and collect representative geomechanical samples along the revised alignment. These samples should be tested for triaxial compressive strength and shear strength to characterize the cohesion and friction angle.

16.3.2 Salt Geomechanics

16.3.2.1 Approach and Basis for Geotechnical Model

This section is a summary of the work undertaken for the geotechnical analysis and inputs into the mine design.

Analogous mines, such as Boulby Mine (United Kingdom), Mines Seleine (Canada), Pugwash Mine (Canada), Cote Blanche Mine (USA), Fairport Mine (USA), Goderich Mine (Canada), and Kilroot Mine (Ireland), were used as initial guidance and for comparative information. They are all salt/potash mines, use similar room and pillar approaches, and are of comparable depths.

Empirical, analytical, and numerical modelling has been completed to derive geotechnical inputs to the mine design.

The geotechnical model follows the geological stratigraphy presented in Figure 16-19, while the geotechnical model domain summary is presented in Table 16-18.

The design basis criteria used are as follows:

- As salt typically behaves in a ductile manner, the pillars between rooms have been designed to be “rigid”, i.e., not yielding pillars. As such the FoS used in the numerical analyses was above 1.0, with values preferred above 1.10, to account for variation in material strengths. It is noted that a FoS below 1.0 would indicate that yielding, rather than brittle failure, could occur.
 - Empirical analyses use a higher FoS threshold, depending on the specific method employed.
 - Ground support also uses a differing threshold, covered in more detail in Section 16.3.2.7.
 - While the pillars are designed to be rigid, an assessment of creep/closure was made.
- The geotechnical mine design is based on the 392 Level, which encompasses 10 years of mine life. While mining is planned to occur in deeper horizons, where higher stresses are present (primary controlling factor for stability), the mine staff will have gathered further data and knowledge of the ground performance to update the room and pillar design accordingly.



- The geometries are to be maintained for each mining level in order for pillars to coincide vertically.
- While subsidence is expected to occur due to creep/closure, it should be minimized due to the rigid design. It is not currently considered as a material constraint to the mine design, i.e., subsidence will not cause adverse surface or aquifer impacts.
- While it has been calculated, closure is not considered a limiting factor.
- While the drilling density limits the chance of intersecting faults, they were not identified in the geological modelling, and as such are not expected and were not considered in the geotechnical analyses. Any faults would be expected to be healed, though nothing of that nature has been identified in the core.
- While mining will be horizontal, the geological inclination is important as inclined partings could affect pillar and roof stability. This has been assessed in the pillar and ground support analyses.
- Three passes by a CM will excavate a 17 m wide room. Rooms will be executed in four 5 m high cuts up to a maximum mining height of 20 m for a single level.
- The requirement for roof support is not considered to be a limiting factor for room width, as this is driven by equipment operating widths.
- While potash seams are described in historical geological reports, recent drilling and logging indicates that there is no significant presence of adverse geotechnical minerals in the mining target horizons, e.g., carnallite.
- No mining is planned in 1-Salt, though the mine decline will access this horizon, and the processing plant (the Plant Area) will be placed in 1-Salt. The Plant Area is planned to be 20 m wide and 20 m high, and approximately 187 m long.

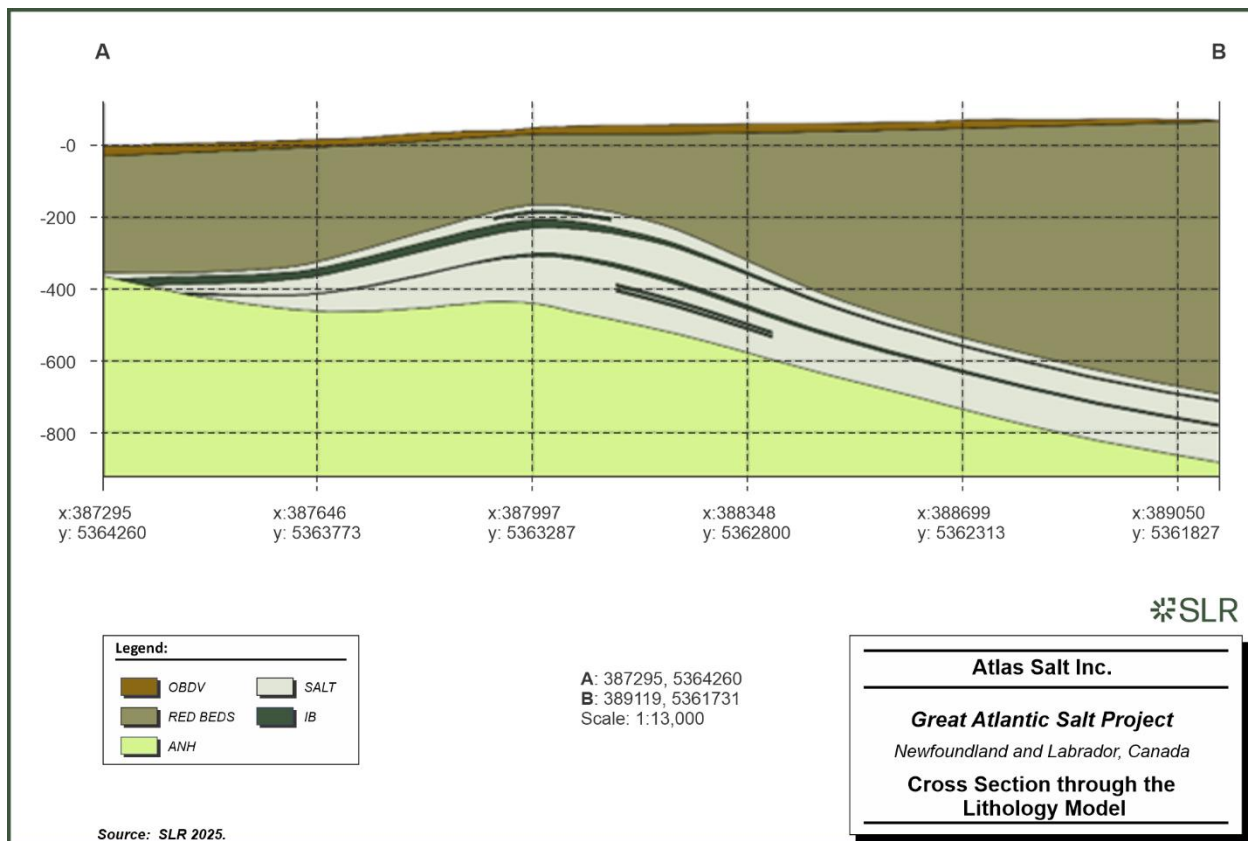
Table 16-18: Geotechnical Model Domain Summary

Code	Lithologies	Comment
OVB	Overburden	As this is only a few metres thick (10 m to 30 m) and 250 m to 300 m from the mining horizons, it was not considered in these analyses.
RED BEDS	Red Beds (interbedded siltstones and mudstones)	190 m to 330 m (vertically) thick interbedded sandstones, mudstones, and conglomerates. While this is a significant thickness of material, no mining will occur in it and it is separated from the mining levels in 2-Salt by 1-Salt.
1-SALT	1-Salt (including Interburden 0.5)	40 m to 50 m (vertically) thick. No salt production will occur in 1-Salt; however, the Plant Area will be placed in this horizon. Interburden 0.5 (IB-0.5) is modelled as a limited-extent lateral mudstone horizon.
IB-1	Interburden 1 (mudstone)	12 m to 25 m (vertically) thick mudstone, separating 1-Salt and 2-Salt. Five metre high by six metre wide development will be driven through the interburden to access 2-Salt from 1-Salt.
2-SALT	2 Salt	60 m to 100 m (vertically) thick. Salt production will occur in 2-Salt.
IB-2	Interburden 2 (mudstone)	Three metres to 10 m (vertically) thick mudstone, separating 1-Salt and 2-Salt.



Code	Lithologies	Comment
		Five metre high by six metre wide development will be driven through the interburden to access 3-Salt from 2-Salt.
3-SALT	3 Salt	85 m to 175 m (vertically) thick. Salt production will occur in 3-Salt. Interburden 3 and 4 (IB-3 and IB-4) are modelled as limited-extent lateral mudstone horizons.
ANH	Anhydrite	3-Salt is underlain by at least 100 m thick anhydrite layer.

Figure 16-19: Cross Section through the Lithology Model



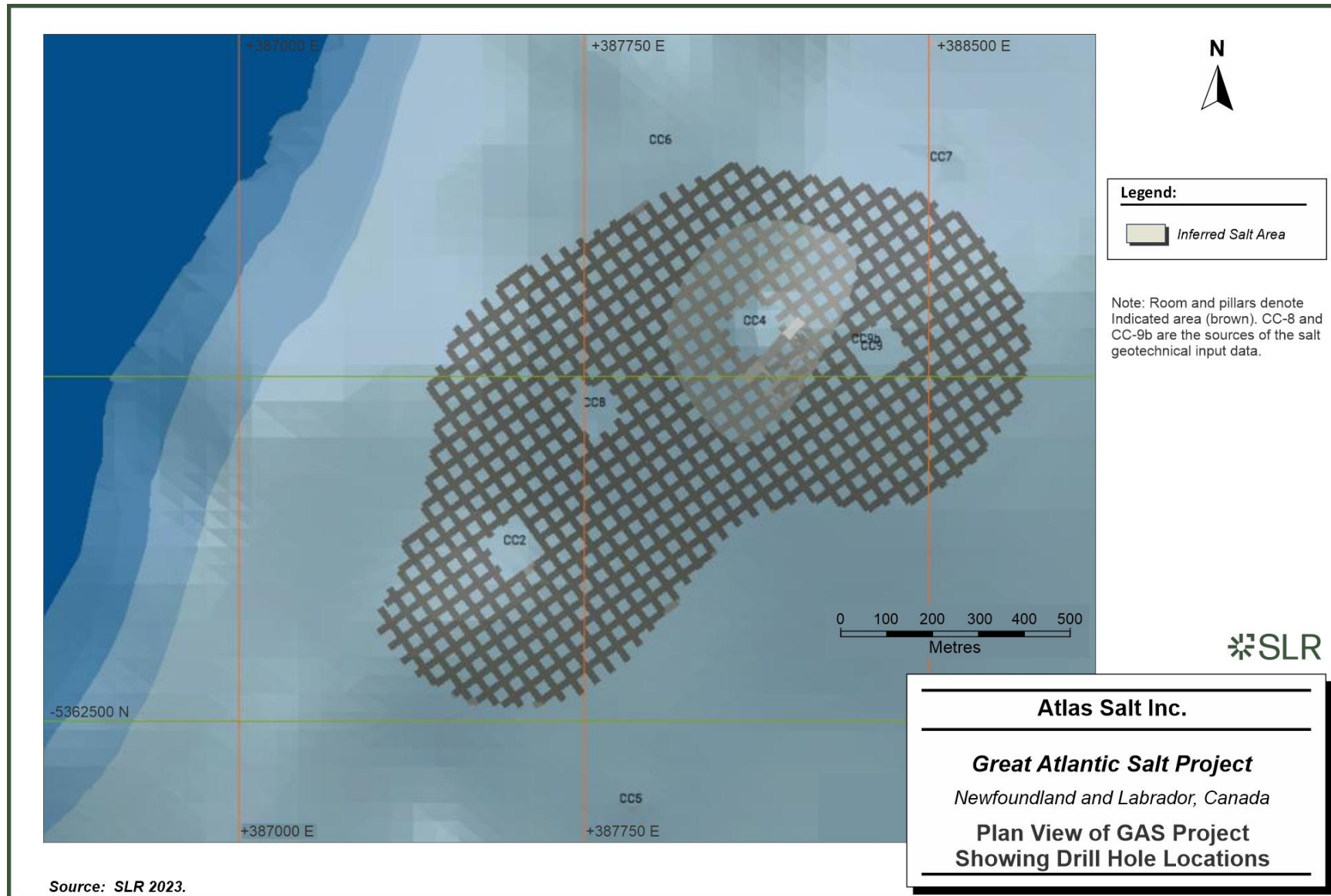
16.3.2.2 Geotechnical Data Collection

Material properties have been compiled following a site investigation campaign targeting salt domains, and interburden. Five drill holes (though only two intersected salt) were used to retrieve core for geotechnical logging and collect samples for laboratory testing. Figure 16-20 presents the plan view of the mining area alongside drill hole locations. CC-8 and CC-9b are the sources of the salt geotechnical input data.

The geotechnical core logging, including sample collection was undertaken by Terrane with initial guidance from the QP in the form of a logging manual. The QP provided occasional minor input into geotechnical data capture requirements from planned Mineral Resource drill holes and performed QA/QC on the final logging database. Material testing was completed by Geomechanica Inc, under instruction from the QP.



Figure 16-20: Plan View of GAS Project Showing Drill Hole Locations



The salt geotechnical data was collected from CC-8 and CC-9b, while Red Beds data was collected from CC-6, CC-7, CC-8, CC-9a, and CC-9b. The remaining drill holes, CC-1 to CC-5, were not logged or sampled for geotechnical data (as these were drilled for the Scoping Study). Visual review of the available photos indicated no significant difference in the salt or interburden between these drill holes and those geotechnically logged. Material testing samples were selected through salt horizons 2-Salt and 3-Salt and are considered to be representative of salt to be mined on all mining levels.

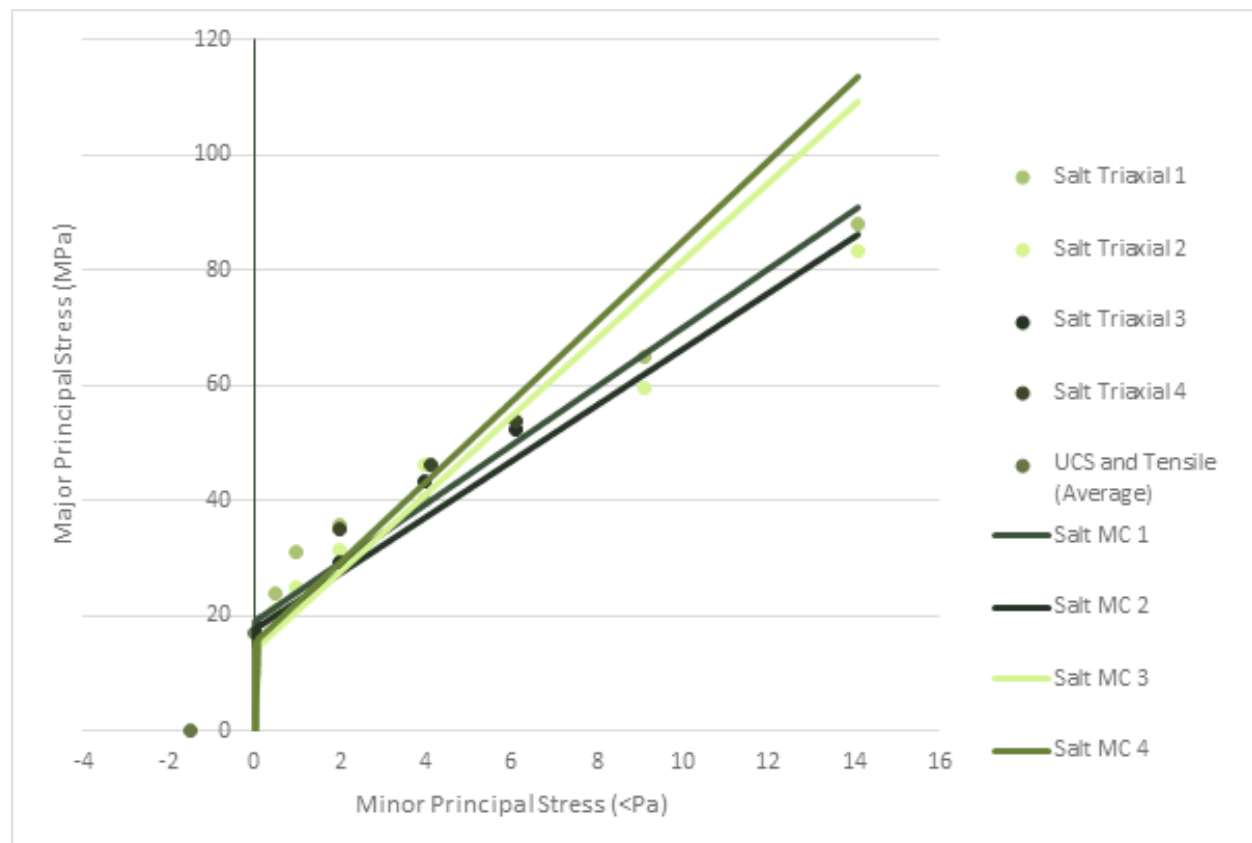
16.3.2.3 Geotechnical Data Analyses

SLR has conducted geotechnical analyses in support of mining the GAS deposit using available site characterization data, producing a geotechnical model considering the following elements: geology, rock mass, structure, hydrogeology, and geotechnical domaining. The geotechnical model is the basis of geotechnical analysis and mine design.

The material analyses culminated in the development of strength envelopes for salt and interburden. A sample principal stress plot for the Project is provided in Figure 16-21.

Dunn (2015) presents a subjective scheme for rating the reliability of the component of a geotechnical model. Table 16-19 provides a summary of the geotechnical model reliability for the Project's mining domains. It is noted that this does not pertain to the requirements for Mineral Resources and mining, only geotechnics.

Figure 16-21: Principal Stress Plot for the GAS Project



Source: SLR 2023



Table 16-19: FS Geotechnical Model Reliability

Component and Description	Reliability and Comment	FS Target
Geology: Lithology, alteration, weathering, mineralized zones and the in-situ stress state.	65% – The geologic model provided is suitable for basic delineation of geotechnical regions. The 3D location and geometry of geotechnically problematic domains is uncertain. Only regional stress data is available	65%–85%
Rock Mass IRS, defect shear strength, rock mass strength and rock mass classification.	60% – The laboratory testing program has provided a reasonable understanding of the IRS. Salt strengths were only sourced from two drill holes; there is a risk that there is variation across the mining regions.	60%–75%
Structure Major structures (large faults, bedding, folds) and rock fabric (e.g., joints and minor faults).	50% – No large-scale faults are expected across the deposit, though small scale (mining-horizon) faults could be present; there is not enough spatial data to warrant a structural model of that scale currently.	45%–70%
Hydrogeology Hydrogeological units, hydraulic conductivities, flow regimes, phreatic surfaces and pore pressure distribution.	40% – There is no water in the salt. There is water expected in the Red Beds, however, information on aquifers is currently limited.	40%–65%
Geotechnical Domaining Domains that exhibit similar rock mass and structural characteristics.	60% – Salt is set as a single geotechnical domain for this study, though there is some evidence to suggest that the salt strength varies slightly between them. Interburden horizons are distinctly weaker than the salt and are avoided wherever possible in the mine design.	50%–75%

Source: modified from Dunn 2015 and Read and Stacey 2009.

16.3.2.4 Geotechnical Mine Design

The following mine design conclusions are drawn from the analysis work in the 2023 FS.

The selected pillar width/height ratio was initially based upon benchmarking with similar mines. The ratio is lower than that of some other analogous mines. An assessment of the empirical pillar stress/strength calculation methods (Uhlenbecker 1971 and Dreyer 1967) indicate that the pillars are sized appropriately for the upper four working levels. While these approaches suggest that the pillars below this level may yield, it is noted that these empirical approaches are considered to provide conservative pillar FoS estimates.

The numerical models were established using a schematic cross-section room and pillar layout so that the geometry variations could be standardized. The numerical analyses using the input data collected indicate that the pillars at the first 10 years of operations, and even at the lowest mining depths, satisfy the FoS thresholds. Notwithstanding this, the 425 Level and deeper are due to be mined later in the mine life, allowing for engineering improvements to the design as the ground characteristics and stresses are better understood.

In the 2023 FS, rooms were 16 m in width, pillars separating rooms were 25 m in width, and sill pillars between levels were 15 m in vertical thickness. Since the 2023 FS, further production planning and equipment selection work resulted in the preferred room width being increased from 16 m to 17 m. The numerical models completed in the 2023 FS were updated with this larger room span to evaluate the impact to on-level pillars and sill pillars.



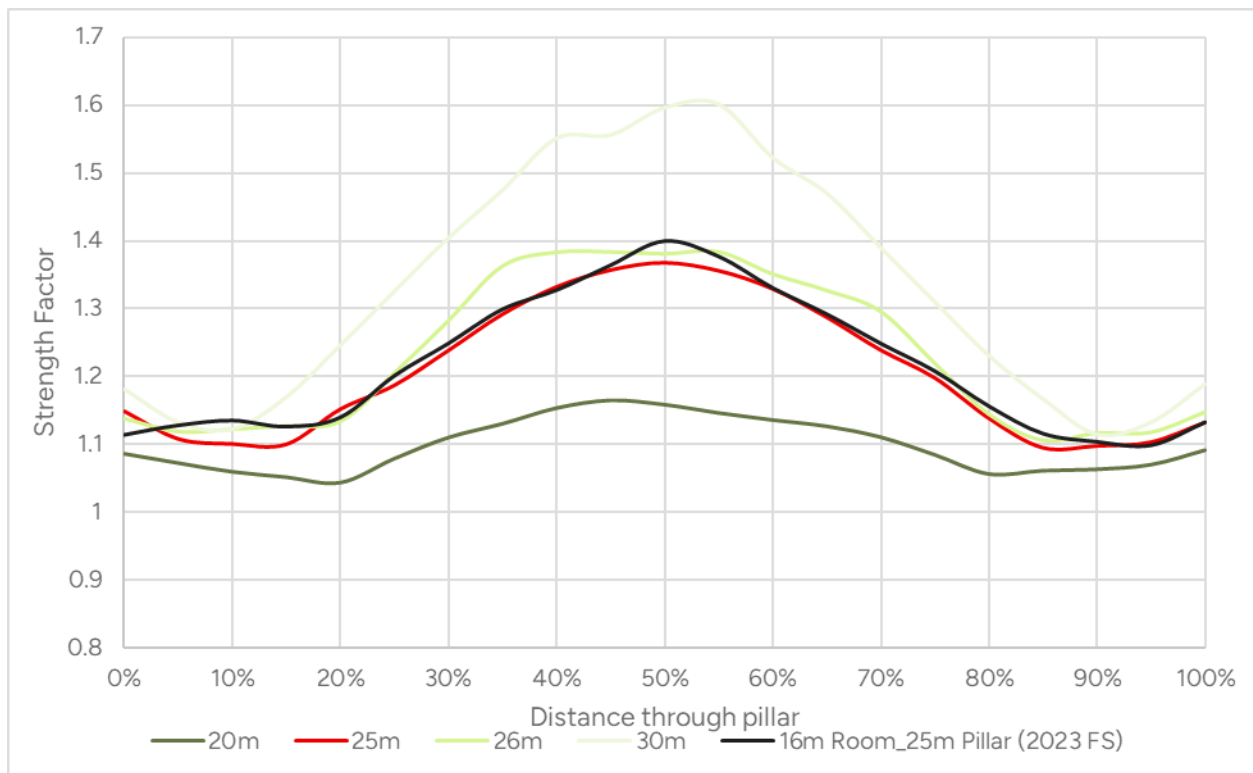
Modelling results showed that there was not a material change to induced stresses within the 25 m wide pillars separating rooms due to the increase in room width. As presented in Figure 16-22, the strength factors are very similar between the UFS 25 m wide pillar (with 17 m wide rooms) shown in red and the 2023 FS 25 m pillar (16 m wide rooms) shown in black.

A similar analysis was completed to test the impact of the increased room width on sill pillars. Figure 16-23 shows the variation of strength factor across the width of the sill pillar, with pillar widths varied between 14 m, 15 m, 16 m, and 18 m and a comparison of the original 2023 FS geometry. A 15 m sill pillar with the increased room width (17 m) had a lower strength factor than a 15 m sill pillar when compared with the smaller 2023 FS room dimension (16 m), as shown by the purple and black lines respectively. The analyses suggested that a 16 m thick sill pillar should be used in the mine design to accommodate the room width increase to 17 m.

While not represented in the models, installation of ground support will improve the strength factor in the sill pillars, though this should only be relied upon for localized stability.

A summary of the updated geotechnical mine design parameters is provided in Table 16-20.

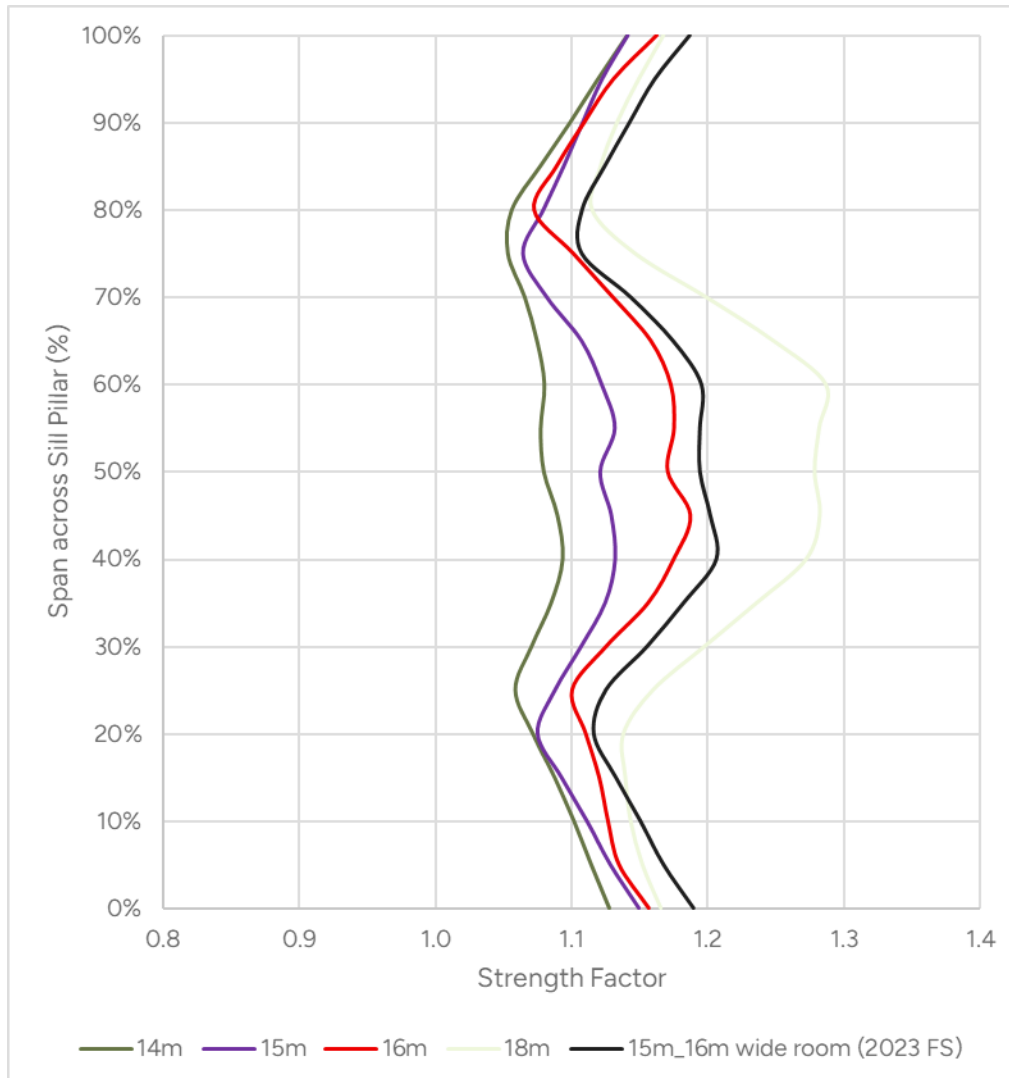
Figure 16-22: Pillar Width Strength Factor Chart (Fourth Mining Level from FEA Models)



Source: SLR 2025



Figure 16-23: Sill Pillar Strength Factor Chart (Between Third and Fourth Mining Level from FEA Models)



Source: SLR 2025

Table 16-20: Summary of Geotechnical Mine Design Parameters

Mining Element	Metres (m)
Room width:	17
Room height:	20
Pillar width:	25
Sill pillar vertical thickness:	16
Roof pillar between Salt and Interburden:	8
Floor pillar between Salt and Interburden:	5
Barrier pillars (drill hole):	50



16.3.2.5 Creep, Closure, and Subsidence

Though closure through salt creep will occur, as working locations are transient and short term, it is considered that only the main roadways and access drives will require rehabilitation associated with closure. The pillars are designed to be rigid, and thus limited subsidence is anticipated. This should not affect the surface, nor any overlying aquifers.

Vertical and horizontal displacement outputs from selected rooms in the centre of the mining area were collated from the cross-section Finite Element Analysis (FEA) model. Analyses of creep, closure and subsidence was not conducted as part of the UFS, as the room and pillar sizes have not changed significantly in relation of the overall deposit size. The magnitude of active subsidence for room and pillar mines is generally small, and the ground surface may experience a variable frequency of subsidence incidents during the life of mine. The pillars and surrounding rock are typically sound; only minor deflections of the roof would be transmitted to surface.

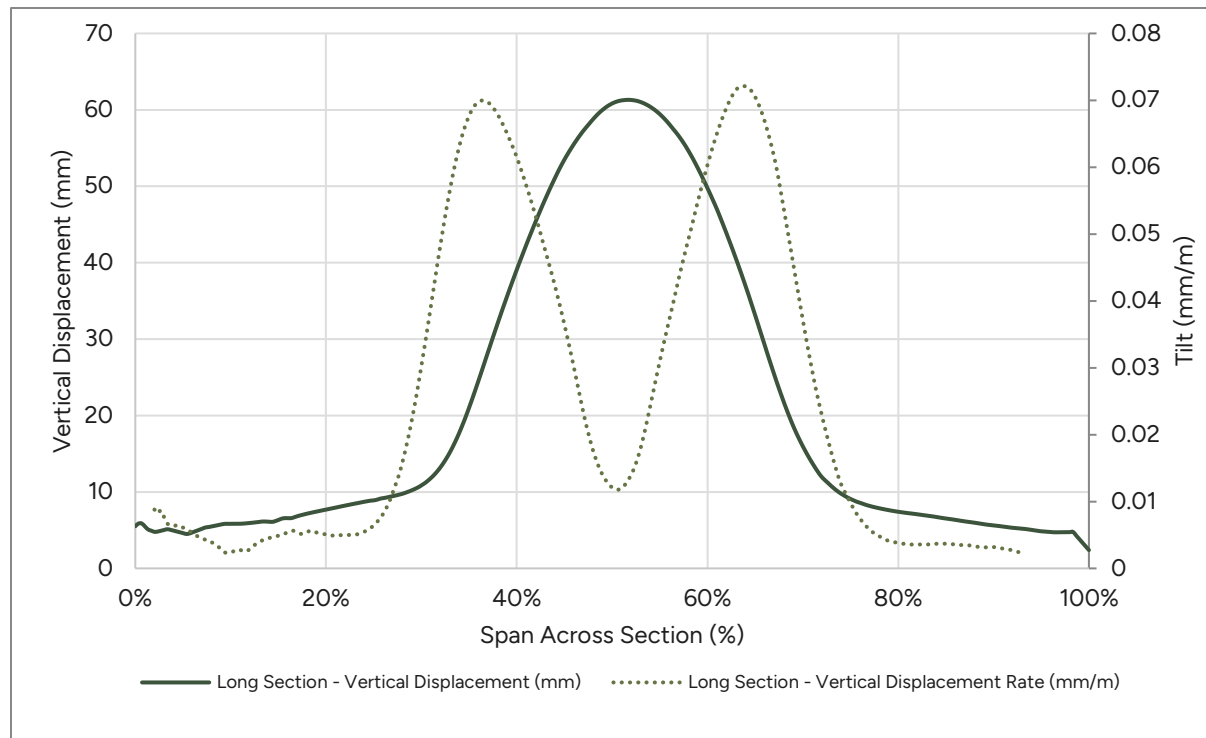
An output of the subsidence results from the 2023 FS is shown in Figure 16-24. The vertical displacements along the surface of the numerical models have been extracted and plotted against the length of the sections. The change in elevation per metre ("tilt", mm/m) was also calculated. The results indicate that the maximum vertical displacement can be expected to be from 52 mm to 62 mm above the centre of the mining region. While this represents a relatively low value when compared to the benchmarked Mines Seleine and Pugwash (200 mm to 250 mm), these mines cover a larger areal extent than the proposed GAS mine. Similarly, the tilt prediction is lower than the benchmarked subsidence (less than 0.1 mm/m).

Creep and closure of mine openings is typical in evaporite mines and is the results of the rock material adjusting to the changes in in-situ stresses. Closure rates of salt typically occur in three stages due to sustained constant load, where near-immediate initial loading has an increased strain rate, followed by a longer-term but lower creep rate, and a tertiary accelerating increase as the rock tends to failure.

The Red Beds, in which there could be aquifers, could experience slightly higher subsidence to that seen at the surface. The tilt is greater, as it is closer to the mining horizons, though still very low at a maximum of 0.2 mm/m. While hydrogeological/mechanical modelling would confirm this hypothesis, the impact is unlikely to cause rupture or dislocation between the 1-Salt and (any) Red Beds aquifers (or any associated faults).



Figure 16-24: Creep and Closure Outputs



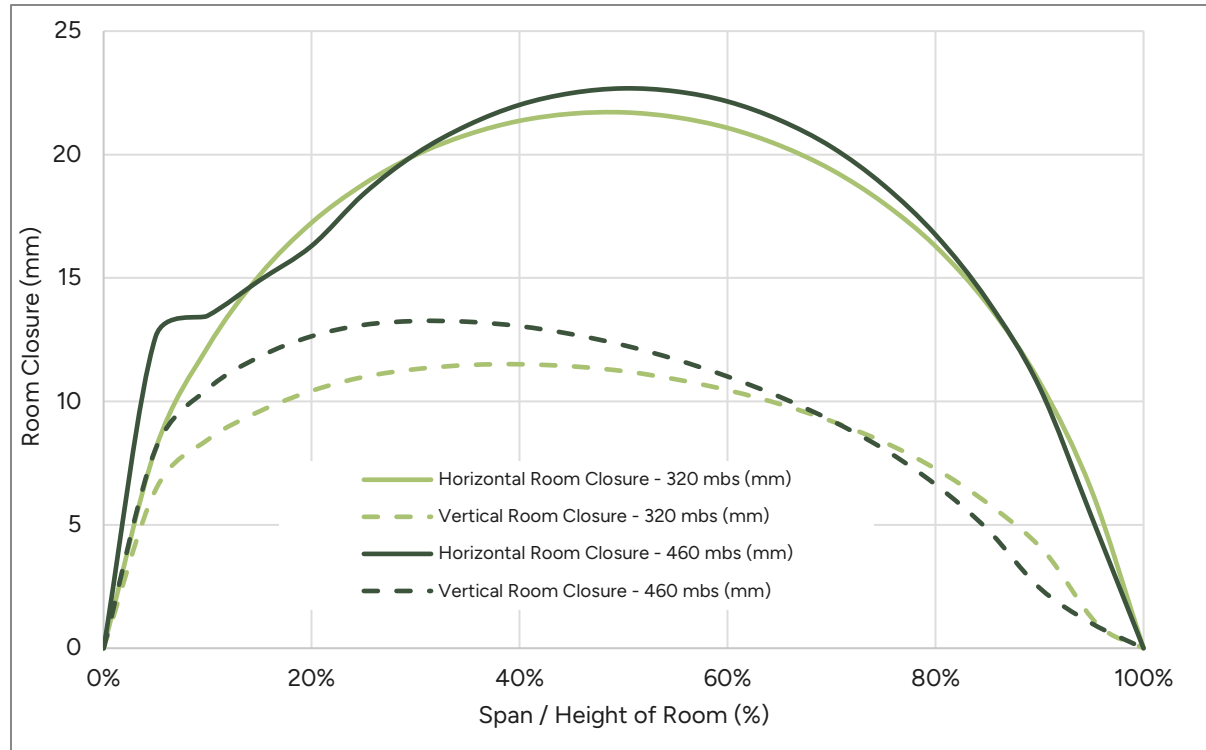
Source: SLR 2025

The creep and closure assessment of mine openings from the 2023 FS is maintained; a summary output chart is provided in Figure 16-25 for the first and third mining levels (320 mbs and 460 mbs respectively). In the centre of the room a vertical closure of up to 12 mm can be expected on the first mining level. Horizontal closures can be expected to reach 23 mm. As this is the maximum closure, it can be assumed that a closure rate of 6 mm/year would occur. This is commensurate with Level 3 rates experienced at Mines Seleine (approximately 300 m below surface). Comparing the results for the first and third mining levels shows that closure values increase only marginally with depth.

While there are no provincial guidelines for subsidence limits, the Subsidence Engineers' Handbook 1975 edition (SEH'75) has been used to judge the potential impact on surface structures. SHE'75 was developed based on actual cases and field observation for the British coal mining industry. According to SEH'75 general guidance, strain (tilt) of 1 mm/m and below would cause "very slight or negligible" damage for a 25 m long structure. It is noted that no structures of that size are present, nor planned, above the mining area.



Figure 16-25: Room Closure Predictions



Source: SLR 2025

16.3.2.6 Mining Geotechnical Risk and Opportunity Evaluation

The primary geotechnical risks associated with the Project are:

- Due to drilling difficulties, there is limited geotechnical data coverage across the GAS deposit. There may be variation in rock mass and structural conditions in areas of the mine outside of those that were available for this study.
- While analyses have suggested that there is little/no material variation between the main salt domains (1-Salt, 2-Salt, and 3-Salt), and they have been combined in this study, any variation in the strength across domains and laterally within the domains themselves could lead to unoptimized room and pillar sizing and ground support recommendations.
- There are no regional ground stress measurements. Atlas should consider options to obtain site-specific stress measurements prior to production, such as drill hole break-out measurements.

The primary geotechnical opportunities are:

- Ground control measures (see Section 16.4 of this Technical Report) can be further optimized once additional data on ground conditions and performance is gained through monitoring during production (e.g., lower bolt density, or elimination).
- Varying bolt types can be trialled during production to test effectiveness (and potential cost saving).
- Mining barrier pillars on-retreat when moving from one mining level to the next is a potential option that can be explored further once additional geotechnical data and



ground performance information is collected during operations. The degree of pillar extraction has not been explored for this study. Subsequent studies can assess this potential and will result in increased surface subsidence, although this does not appear to be an issue in this environment. The risk of high pillar stresses and uncontrolled pillar yield/failure is possible if too high a proportion of the pillars are removed.

- Updating and obtaining mine-specific ground stress measurement will help predict future room and pillar performance, particularly at depth.
- Routine monitoring of the rooms and pillars will provide further data and understanding of performance.

16.3.2.7 Ground Support and Monitoring

Ground support should be commensurate with ground monitoring to be able to judge the effectiveness of the support implementation and to allow for optimization when further understanding of ground performance is available. Ground support is described in this section, where monitoring (as part of a Ground Control Management Plan (GCMP)), is described later.

For ground support design, while the conventional rock mass classification approaches (i.e., Q and RMR₇₆) can be used to define interburden support, they cannot be reliably used for salt. These classification systems have been developed primarily for jointed rock mass conditions. Application of classification-based support design for salt excavations generally result in non-conservative support system estimates. As such, an analytical approach alongside benchmarking has been made for the salt support design.

Salt is typically supported using bolts. Pattern bolting is used at Goderich, Mines Seleine, and Boulby. At the latter, monitoring and measurements demonstrated there was very little ground movement that warranted bolting. Systematic pattern bolting is planned at Woodsmith, although very little, if any, movement is anticipated.

While being mindful of the previous statements, it is considered prudent to plan and cost for systematic bolting at GAS. Though the most effective type of bolt to provide support is debated, with many mines having trialed many variations, the two primary methods are end-anchored or fully grouted bolts. Each bolt provides advantages to mitigate specific salt support issues.

As rooms are designed to be up to 20 m high, it is prudent to install systematic roof support on the first cut, as installing support after the second to fourth cut would be problematic and affect production.

Eight metre wide tunnels and declines are planned to be cut in the salt. While a reduction in width reduces the risk of unstable block formation, the increased exposure means that these excavations should be supported in the same manner as the mining rooms.

The following conclusions are offered for the support design:

- Closure will not have a significant impact on the choice of bolt-type where corrosion is likely to be the limiting factor.
- Three differing bolting approaches for the salt horizons have been provided. Either of the following approaches can be adopted:
 - Fully Grouted
 - Bolt length 2.4 m
 - 90% at 0.34 MN/m bond strength



- Spacing 2.5 m x 2.5 m (in/out of plane) (0.16 bolt/m²)
- End-Anchored (Option 1)
 - Bolt length 3.0 m
 - Plate and end-anchor capacity 0.15 MN
 - Spacing 2.5 m x 2.0 m (in/out of plane) (0.2 bolt/m²)
- End-Anchored (Option 2)
 - Bolt length 2.4 m
 - Plate and end-anchor capacity 0.15 MN
 - Spacing 2.5 m x 2.0 m (in/out of plane) (0.2 bolt/m²)
 - Combined with 3.7 m long “angel bolt” in centre of room at 10 m spacing
- While there is variation in the interburden, a single support strategy is recommended:
 - Systematic rock bolting on roof and sidewalls
 - 2.4 m long resin rebar
 - 20 mm diameter
 - 0.5 bolts/m²
 - Welded wire mesh on roof and sidewalls
 - 50 mm mesh
- If deemed necessary after geotechnical assessment(s), application of 100 mm thick fibre-reinforced shotcrete.
- The Plant Area should have the same support as the interburden, but with 3.0 m long bolts.
- Stand-up time analyses indicate that the worse sections of the interburden could only stand-up unsupported for one hour to ten hours. This highlights the need for slow development and efficient installation of ground support when mining through the interburden and Plant Area.

A GCMP and associated monitoring plan should be implemented. GCMP development is a process for creating a secure geotechnical environment in a mine and it is the responsibility of management, technical support services, and mine operations. It is considered that the policies, protocols, designs, processes, roles, and responsibilities to achieve this goal should be clearly documented in a GCMP.

Frequent monitoring stations in the roof along the roadways are recommended, enabling a rapid response to adverse movement rates and to judge the effectiveness of the ground support.

- Strain gauge bolts (SGB) – suggested to be installed in main roadways and select working rooms.
 - These are instrumented bolts and are usually installed as an array and substitute standard bolts in the support pattern. Apart from shearing across the bolt, the following can be understood; total bolt loading, position of bolt loading, rate of bolt loading, characteristic behaviour of the bolt loading, confirmation that bolt loading



has stabilized, confirmation of any spare capacity remaining within the bolting system; culminating in an improved understanding of the quality of bolt installation.

- Extensometers – suggested to be installed in areas near to the interburden.
 - Multi-height tell-tale/extensometers monitors (e.g., Magnasonic).
 - Anchored at two metres, four metres, and six metres into the roof.
 - Installed at every junction and the centre-point of each room, and (some) sidewalls providing strata displacement/movement.
- InSar surface deformation monitoring should be implemented two years prior to the commencement of mining to provide a good baseline for subsidence calculations.

16.3.3 Hydrology and Hydrogeology

16.3.3.1 Hydrology

The proposed portal and decline area is characterized as coastal plains bounded by upland regions to the north (Lewis Hills, Serpentine Range), east (Long Range Mountains), and south (Anguille Mountains) (GEMTEC 2023b). The surface topography in the area of interest is gradually sloping to the southwest towards the coast. The most significant surface water features are the marine waters of Flat Bay to the northwest of the Project, and Flat Bay Brook approximately 200 m to the south (GEMTEC 2025). There are several small ponds within the Project area, including Burnt Pond Brook which serves as headwater to Dribble Brook.

Annual precipitation in the region is expected to be 1,342 mm/yr, with as much as 120 mm experienced in the autumn months. Appropriate surface grading and drainage must be considered to manage this and prevent any flow down the decline.

16.3.3.2 Hydrogeology

The work undertaken to date on 3D groundwater modelling was conducted by the study team-GEMTEC and sub-contractor Geocentric Environmental Inc (Geocentric) for Terrane.

GEMTEC created a 3D finite difference numerical groundwater flow (GEMTEC 2025) model using MODFLOW-NWT based on SLR's 2023 Conceptual Groundwater Model. The modelling method allows the simulation of the groundwater flow system by representing the discrete representative hydrogeological properties in 3D, as well as surface water boundary features, site recharge and discharge areas. The SLR 2023 model was updated with revised hydraulic conductivities and a new decline and boxcut engineering design. All the other components of the SLR model remained unchanged including the modelling domain, hydrostratigraphy, recharge and discharge areas, groundwater flow paths, hydraulic connections between formations, and boundary conditions.

Hydrostratigraphy

As interpreted by SLR (2023b) and GEMTEC (2023), the overburden is generally continuous and averages 15 m thick. The overburden soils have been described as till consisting of silty sand to clayey silt with local interbeds of sand and gravel (GEMTEC 2023). Below the overburden, sequences of sandstone, conglomerate, and mudstone overlay a continuous halite unit.

Based on geological evaluations, interpolation of geological units was regionally complex. The emphasis of the geological interpretations was focused on the project area proximal to the



proposed decline. A geological model was created by Terrane (2025) which provided the basis for the simplified numerical model layers. The simplified but representative numerical model lithological layers were based on the upper and lower bedding bounds observed in the detailed Terrane Geomodel.

Hydraulic Conductivities

Hydrogeological packer testing was carried out concurrently with the 2025 geotechnical drilling program (November 14, 2024, to April 3, 2025). A total of 18 of the 20 geotechnical drill holes were packer tested as part of the Terrane 2024–2025 SI program. GT-18 and GT-19 were not tested due to salt intersecting target intervals. A total of 93 packer tests were completed during the field investigation. The hydraulic conductivities used in the updated groundwater model were derived from the recent testing as well as packer testing completed in 2022 and other historical testing (Fracflow 2003 and GEMTEC 2023b). The hydraulic conductivities assigned to the various lithologies are summarized in Table 16-21 and compared to the previous values used by SLR in their 2023 model.

Table 16-21: Modelled Hydraulic Conductivities by Lithology

Description	New Model K (m/sec)	2023 Model	Change
Overburden (Till)	4.60E-08	4.60E-08	Unchanged
Conglomerate	9.70E-08	3.50E-08	Increase
Sandstone/Conglomerate	6.89E-08	Not Defined	
Sandstone	2.54E-07	1.00E-07	Increase
Clay	5.61E-07	Not Defined	
Mudstone	3.90E-08	1.40E-08	Increase
Salt	No Flow	No Flow	Unchanged

Modelling and Results

A uniform recharge rate of 10^{-5} m/day (determined during calibration) was applied in the SLR model across the model domain to reflect the continuous overburden layer. Flat Bay Brook was assumed to be shallow and was assigned as constant head boundaries (values based on topography) only occurring in the topmost layers of the model domain. Ephemeral streams and small ponds were assigned drain and constant head boundary conditions, respectively. The highlands in the southeast of the model domain were assigned general head boundaries (values based on topography) to represent groundwater flow from those recharge zones.

Given the lack of a robust water level dataset in the Project area and to be conservative, consistent with the SLR modelling approach, the water table was assumed to be at or within several metres of ground surface for calibration. Calibration was also focused on achieving artesian pressures at depth. Modelled heads were generally within several metres of target values in the boxcut and decline area.

Drainage nodes representing mined-out volumes were placed in the model based on the most recent boxcut and decline designs. The calibrated and updated groundwater flow model was used to simulate groundwater levels and flow under baseline conditions and at steady state after decline construction. Model output included groundwater elevations, interpreted groundwater flow directions, and estimation of seepage rates into the boxcut and decline.



Predicted long-term inflows to the fully built-out boxcut/decline were simulated to be approximately 832 m³/day after applying an FoS of 1.5. The entire flow is contributed by the decline as the boxcut is fully dewatered in the steady-state solution. This represents a minor increase compared to the 820 m³/day estimated in the SLR 2023 model. Which can primarily be attributed to the increased K value in sandstone.

The above results were achieved using fully active drain nodes along the entire decline alignment. However, the updated decline design includes a sprayed concrete liner along the majority of the alignment which is designed to limit water ingress and withstand hydrostatic pressures. An additional modelling scenario was developed to simulate the effect of the tunnel liner on groundwater pressures, and flows.

In this model the drainage nodes were turned off along the section of decline designed with a hydrostatic liner. In the deepest section of decline which does not have a hydrostatic lining, the hydraulic conductivity was developed for a range of likely seepages into this section of tunnel. Depending on the hydraulic conductivity and applied FoS, total seepage into the two declines ranged from 2.5 m³/d to 45 m³/d, a significant reduction compared to the model with fully open drain nodes. Likewise maximum water table drawdown was reduced from approximately 80 m in the fully drained model to 10 m. It is important to note that because the model was run in steady state, the drawdown is more conservative than what would be observed over a shorter mining timeframe.

16.3.3.3 Deposit Hydrogeology

The halite unit underlying the Red Beds is lithologically consistent so that it can be considered one hydrostratigraphic sequence. Since no permeability testing has been completed on the halite in the Project area, literature values for evaporite units have been considered. These permeabilities are sufficiently low that any groundwater movement through this unit would be expected to be associated with secondary porosity along bedding plane fractures. Drilling was completed using a saturated brine solution to prevent salt dissolution into the drill water. Water head was not measured while drilling through the salt unit. No structures were identified that connect the overlying red beds to the halite so permeabilities are expected to be very low. For the groundwater model, the salt contact was assigned as a no flow boundary condition.

16.3.3.4 Hydrology and Hydrogeology Recommendations

The QP recommends the following actions to improve the hydrogeology understanding on site and increase confidence in the groundwater modelling results:

- Collection of static groundwater levels measurements during future drill programs.
- Installation of wells for continuous, long-term monitoring of groundwater levels. Target areas include near the boxcut, along the decline alignment, near major surface water features. In-situ testing of overburden conductivities. To date, all of the conductivity testing on overburden materials has been laboratory based, which can give different results than field testing.
- More packer testing of various lithologies to aid in refining inflow predictions. These should be performed over short intervals of consistent lithology.
- Transient modelling of the Project of the boxcut excavation should be completed to help assess peak inflow values during the construction period. Transient modelling of the broader Project over a longer-term horizon should also be considered.



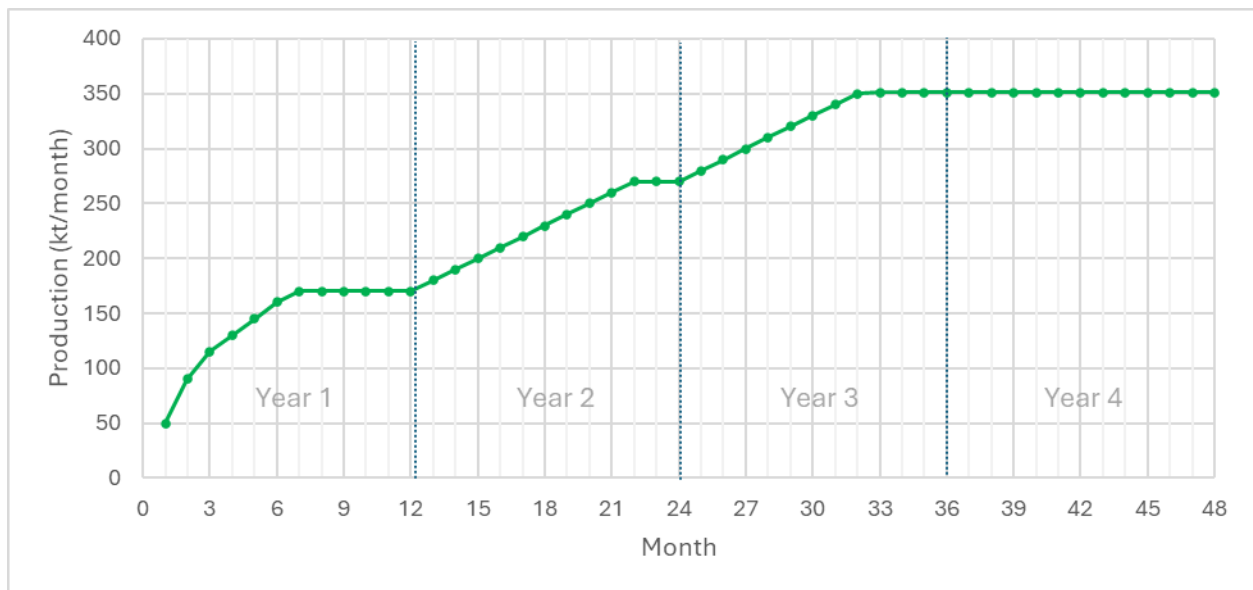
- Additional packer testing should be conducted along the revised decline and boxcut alignment to further characterize the hydraulic conductivity of each geotechnical domain.

16.4 Life of Mine Plan

Mine production will commence after a four year capital period during which surface infrastructure, surface declines, the underground plant, and the underground infrastructure to support the first production level will be completed.

Production will begin on the 320 Level with two CMs and the road header available for production efforts. Target annual production is 4.0 Mtpa of salt product. Fines losses of 5% by weight, between the mining face and process plant output, have been included in the LOM plan meaning the target mining rate per years is 4.2 Mtpa. A three year production ramp-up has been scheduled, increasing from 1.7 Mtpa in Year One, to 2.8 Mtpa in Year Two, 3.9 Mtpa in Year Three, and achieving the full capacity of 4.2 Mtpa in Year Four. A chart presenting the monthly ramp-up over the first four years is provided in Figure 16-26.

Figure 16-26: Production Ramp-up

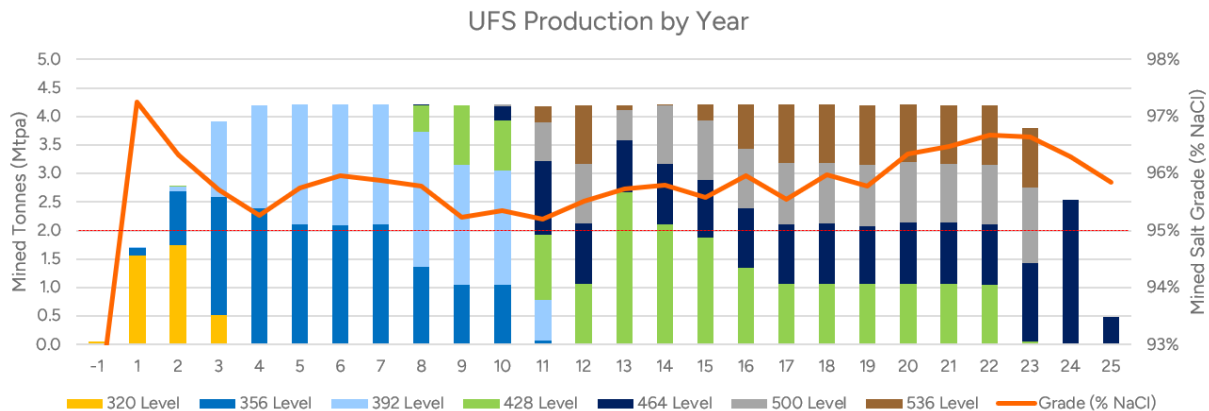


Source: SLR 2025

The full production rate will be maintained from Year Three through to the end of the 24 year mine life. Salt grades are the highest in the first two years of production, exceeding 97.0% NaCl, before dropping to a consistent grade of between 95.2% NaCl and 96.7% NaCl after the first level is mined out. Average yearly grades meet or exceed the minimum product grade target of 95.0% NaCl. The QP is of the opinion that more detailed mine scheduling in the next phase of engineering or as part of the ongoing operational mine planning will resolve the production grade matters. A chart presenting the LOM production plan is provided in Figure 16-27.



Figure 16-27: LOM Production Plan



Source: SLR 2025.

The LOM production plan will need to be continually monitored and revised to ensure that minimum product grades can be maintained. It is expected that more detailed mine planning on a shorter term basis will prevent the occurrence of the low-grade production periods present in the current LOM plan. This will be achieved through grade blending where higher-grade tonnes can be deferred or brought forward in the LOM plan as required to meet short to medium term grade targets. From an operational perspective this is not expected to be problematic given the large size of the mine levels and high number of available faces at any given time.

Over the LOM, up to 21,000 m of development is required, of which approximately 48% is salt by mass. Of this total 34% of the metres are scheduled to be completed during the capital period. Development requirements through the production period are intermittent because the development required to bring a new level online is small enough that it can be completed in a single calendar year. During the production period, development will be completed by the production mining crews with a CM and support mining equipment re-assigned to support these activities. There is sufficient capacity within the specified equipment fleet to support this re-assignment while maintaining full production rates. The development requirements for each level are similar owing to the centrally located declines and material handling infrastructure and repeating design by level.

A summary of LOM development requirements is presented in Table 16-22. The LOM total is presented on the left, alongside the pre-production total, production period total, yearly average, and yearly maximum. The greatest development requirement is in year 11 when 3,127 m of development is scheduled to bring the two lowest production levels, Level 500 and Level 536, online. These levels were brought forward in the mine plan due to their higher average grade thus allowing for greater blending opportunities.

Table 16-22: Summary of Development Requirements

Parameter	Unit	Total	Pre-Production Total	Production Period Total	Production Period (Yearly Average)	Production Period (Max/Year)
Development	m	20,845	7,039	13,831	576	3,127
NaCl Mined	000 t	1,190	81	1,114	46	181
Waste Mined	000 t	1,280	691	589	25	273
Total Mined	000 t	2,471	772	1,703	71	341



Parameter	Unit	Total	Pre-Production Total	Production Period Total	Production Period (Yearly Average)	Production Period (Max/Year)
NaCl Grade	%	92.6%	91.4%	92.7%	92.7%	96.3%

The QP recommends:

- 1 More detailed planning of levels, development, and grade schedules.
- 2 Development of more detailed interburden mining plans, development methods, and ground support.

16.5 Mine Infrastructure

16.5.1 Ventilation

A ventilation plan for the GAS Project has been developed based upon a mine plan that uses primarily BEV equipment. While there are set standards for ventilation air requirements for diesel powered equipment, ventilation requirements for mines that use BEV equipment are still being developed. For this study, SLR used a factor of 50% of the regulatory diesel ventilation requirement for ventilation requirements.

Public reports for the Borden Mine (a Canadian all electric mine) noted that the owner expected to reduce ventilation needs to 50% of that of an equivalent diesel powered mine. Tahmasebi (2018) equated the power consideration for BEV as 0.39 times that of diesel based on thermal efficiency. The study suggested derating the ventilation requirement by that factor considering heat only and ignoring exhaust gases and diesel particulate matter. The same source noted that one Australian regulation related to electric equipment was a minimum air speed in the area of 0.25 m/s. For a full production opening of 17 m by 20 m this equates to airflow of 85 m³/s (180,000 cfm).

Airflow at the face will be achieved with directed flows from ducting to ventilate the area where the CM is working therefore the full face air speed recommendations is not relevant to this case.

As the Project progresses, the QP recommends the following:

- 1 Additional review of BEV ventilation needs at operating mines be conducted.
- 2 Evaluation of the ventilation requirements based upon a waste heat analysis.
- 3 Consideration of “ventilation on demand” to supply fresh air when and where required to suit the mining activities.
- 4 Ventilation monitoring and control systems to demonstrate that the air quality is suitable and to reduce fan operation.

The fresh air requirement is estimated to be 189 m³/s (400,000 cfm) as outlined in Table 16-23. BEV units have been assigned air requirements equal to 50% of equivalent diesel-powered equipment and in all cases a machine utilization factor has been applied. A 25% loss factor was applied to the estimated requirement.



Table 16-23: Airflow Requirements

Units	N	kWe	Max vs Peak	Utilization	% Diesel	BEV Installed kW	BEV kW for Design
Sandvik MB670	4	-	-	-	-	-	-
Sandvik TH550B	9	540	100%	60%	50%	4,860	1,458
Sandvik LH518B	2	540	100%	30%	50%	1,080	162
Sandvik MT521	1	315	80%	30	50%	315	38
MacLean Rock Scaler RB3-S-EV	1	180	80%	20%	50%	180	14
CAT992K Wheel Loader with boom	1	610	50%	5%	100%	610	15
Sandvik DS412iE	1	205	80%	30%	50%	2015	25
RDH-Scharf Muckmaster 300EB	1	100	80%	10%	50%	100	4
F150 Utility	8	432	50%	10%	50%	3,456	86
Rokion R200 Crew Truck	6	86	80%	15%	50%	516	31
MacLean Mine-Mate Series	9	180	80%	40%	50%	1,620	259
Bobcat S7X	1	80	80%	20%	50%	80	6
Equipment Contingency	20%					2,604	420
Power for Ventilation Design						15,626	2,519
Minimum Airflow (diesel)	m ³ /sec/kW	0.06					
Airflow Required	m ³ /sec	151	kcfm	320			
Losses	%	25%					
Design Airflow	m³/sec	189	kcfm	400			

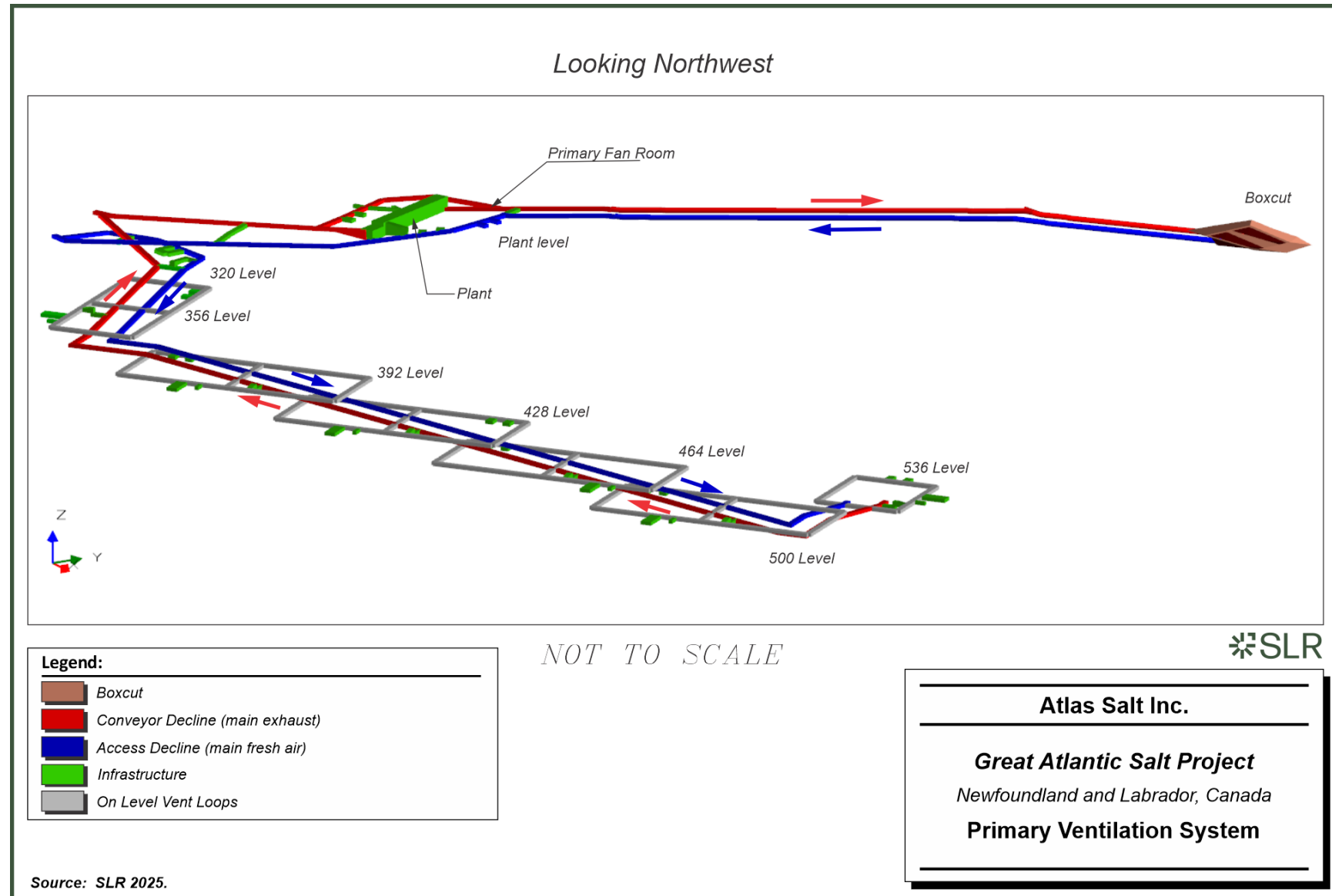
The mine heat load has not been considered, and the ambient surface humidity is not considered an issue for the mine.

16.5.1.1 Primary Ventilation

The mine's primary ventilation routes will be the twin portals at surface as presented in Figure 16-28. The service portal will be the fresh air side, and the conveyor portal will be the exhaust side. The mine will be ventilated using a pull system with two main fans installed in parallel, located near the plant on the 240 Level. The fans will be twin 2.14 m diameter (84"), running at 1,180 rpm and a total pressure of 1,500 Pa. Each fan will deliver approximately 97 m³/s. The fresh and exhaust sides of the primary circuit will be separated by a series of bulkheads and airlock doors as dictated by the operational requirements of a given area.



Figure 16-28: Primary Ventilation Network



Phase 1 – Initial Decline Development

The proposed decline development plan has a maximum air requirement of 81 m³/s (172,000 cfm) per decline. This requirement was calculated based on the development method and selected mining equipment and operating philosophy.

The decline ventilation system is summarized as follows:

- Each decline will be ventilated independently as no cross-connections exist between the headings.
- The ventilation system along with the heating system will be set up in the boxcut area near the entrance to the declines.
- At each decline two fans, each 1.37 m in diameter (54") with 112 kW (150 hp) motors will be set up in series, delivering a maximum of 81.4 m³/s (172,500 cfm) at 8,000 Pa (32.2 in. w.g.).
- Each ventilation system will have its own heating system to account for the heating needs of both decline ramps. Heaters are preliminarily sized at 8 MMBtu per decline to adequately heat the required airflow.
- Twin 1.52 m diameter (60") rigid round ducting will be used to supply air from the fan to the face.

The mine air heating provision within the decline development was included to ensure a sufficiently high air temperature for rapid curing of the planned shotcrete to support the planned advance rates. Mine air heating is not proposed for the operations phase of the mine life.

Phase 2 – Development Below the 240 (plant) Level

As the Plant Area excavation is underway, the primary exhaust fans will be installed in the fan room located off the conveyor drive. A vent stopping will be erected in the conveyor decline along with suitable ventilation controls to establish the fan room as the main airway and to minimize short circuiting through the conveyor drive.

Below the Plant Area ventilation will be provided with fans and ducting using a similar set up to that of the initial decline development. Auxiliary fans can be advanced to a cross connection between the two declines below the plant excavation.

The planned development below the plant level is 40 m² to 50 m² (two pass CM development) which would require at least 15.1 m³/s (32,000 cfm) per heading or (30.2 m³/s total). As development progresses to depth, the equipment in service will increase which will add to the airflow requirements.

The phasing in of the BEV equipment for operations will also impact the airflow requirements if the assumed contracted decline development is undertaken with diesel powered equipment.

Phase 3 – 320 Level Development and Operation

The 320 Level does not have a ventilation loop as planned for the larger levels. When mining commences, the main ventilation circuit will be in place. The stope development face will be 85 m² and the minimum airflow, 24.5 m³/s (52,000 cfm) with a 20% allowance for loss. All mining equipment will be BEV units.

Each face will be fed with a duct to blow fresh air to the operating face and an exhaust duct to take dust from the face and deliver it into the exhaust airway. As connections are developed



between the mining entries, the suction ducting will not be required as dust will be sent ahead in the direction of the CM advance and dust will settle in the large down stream areas or be carried into the exhaust airway.

Phase 4 – Levels Below 320

Development below each level will be supported with ventilation ducting until the ventilation loop is in place. Separate ducts will be used to support the two independent development headings. After the loop is in place, the ventilation will follow the method used on the 320 Level.

Ventilation Power Required

Ventilation simulations using Ventsim software indicated pressure requirements of 2,000 Pa and electrical power demand of 450 kW at the design flow rate of 189 m³/s.

16.5.1.2 Auxiliary Ventilation

Auxiliary ventilation will be provided throughout the mine using ducting and portable fans. Auxiliary fans for active mining headings will have motors ranging in power from 37 kW to 112 kW (50 hp to 150 hp).

16.5.1.3 Ventilation Recommendations

For the next stage of the engineering and design, the QP recommends:

- Advance the engineering designs for the main fans and bulkheads at the 240 Level.
- Advance the designs of the ventilation control in the conveyor decline adjacent to the main fan room.
- Further review of the BEV ventilation requirements.
- Detailed design of the plant ventilation.
- Review of fan controls to minimize power requirements (ventilation on demand).
- Detailed design of the auxiliary ventilation at the miners.

16.5.2 Material Handling

All material in the mine will be handled by load-haul-dump units (LHD) or by haul trucks. Plant feed material will be hauled by LHD or truck to passes to feed a feeder breaker. From the feeder breaker the plant feed will be moved by conveyor to the plant. If the loading pocket at the feeder breaker is full, the material will be dumped into open rooms near the pass and transferred by LHD at a later time. The trucks selected for this study were Sandvik TH550B, BEV trucks with 50 t capacity. These were selected based upon the payload capacity and the haul speed potential. Waste materials will be hauled by truck or LHD and placed in empty rooms.

A schematic view of the truck dump and feeder breaker is presented in Figure 16-29. Plant feed material will be dumped into the pass and drop approximately 5 m to the lower level; the salt falls near but not directly onto the feeder breaker feed chain. The edge of the pile of dumped salt will be picked up by the feed chain and the material will pass through the feeder breaker. From the feeder breaker the material will be conveyed a short distance before being discharged onto the main plant feed conveyor.

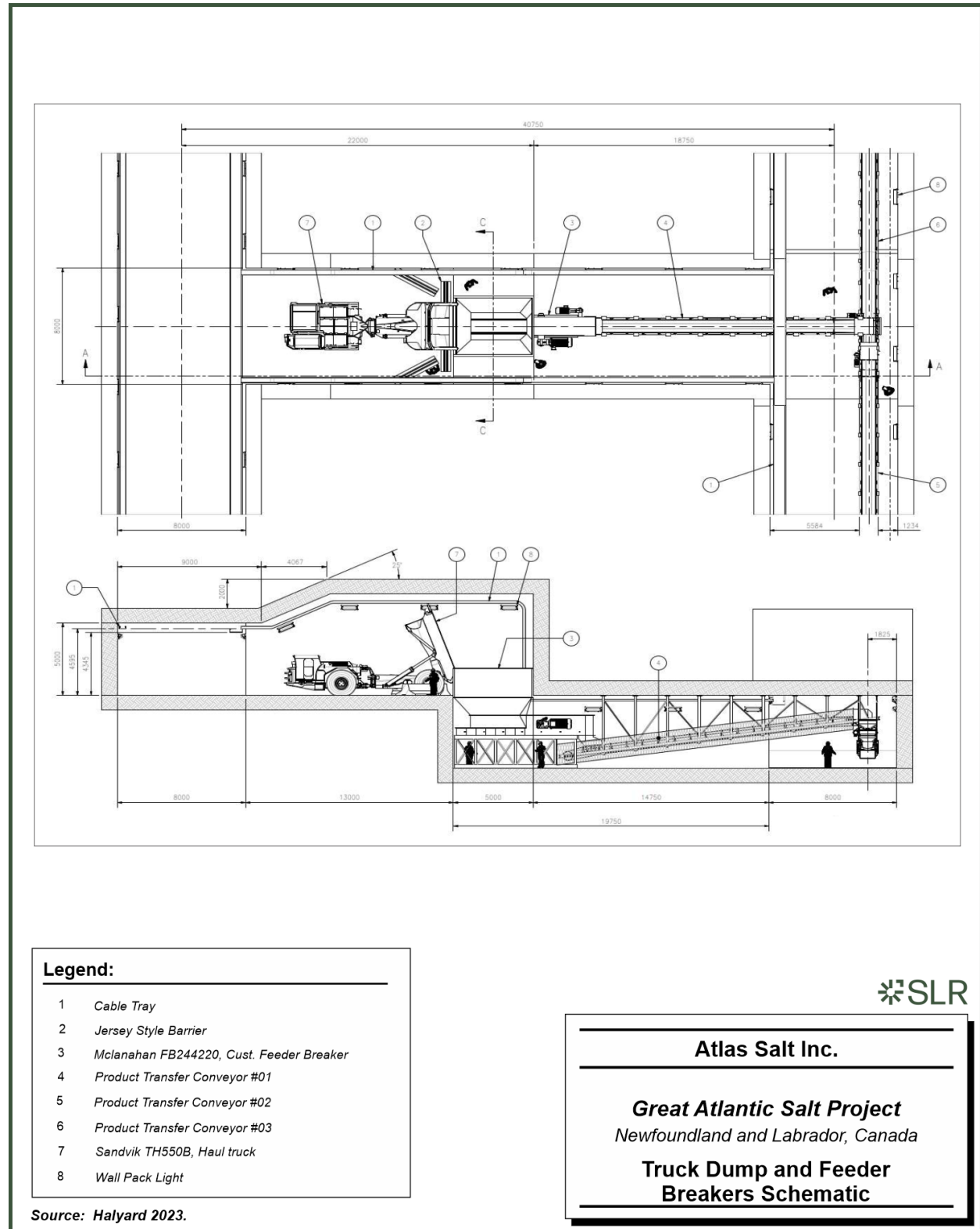


The initial capital includes the construction of a material pass and feeder breaker on the 320 Level, and the conveyors to connect this area to the plant. When mine development of the 356 Level commences, a second feeder breaker will be purchased and installed on the 356 Level. Subsequent levels will be serviced by relocating the uppermost feeder breaker to the level being developed.

The conveyor system in the mine is planned to be a 914 mm (36 in.) wide belt with a capacity of 800 tonnes per hour (tph) to support a 4.0 Mtpa operation.



Figure 16-29: Truck Dump and Feeder Breaker Schematic



16.5.3 Dewatering

It is assumed that the production areas of the mine will be dry, however, dewatering of the declines and boxcut is required.

16.5.3.1 Boxcut Dewatering

For the period that the boxcut is open it will intercept all of the precipitation, and this water will be collected in a sump, from which it will be subsequently pumped to the surface discharge water pond. The inflow from the boxcut will be diminished by the installation of the metal culvert decline covers which will be encased in an engineered compacted fill.

16.5.3.2 Decline Water Inflow

The decline development through the Red Bed horizons is expected to produce groundwater from the development excavations as described in Section 16.3.3 of this Technical Report. At the time the dewatering system was designed, the GEMTEC model that incorporated the hydrostatic liner and seepage controls was not available. Thus, the SLR 2023 and GEMTEC fully drained modelling results, 820 m³/day and 832 m³/day respectively, were used to design and size the dewatering system. Therefore, although the latest modelling predicts that seepage will be between 2.5 m³/day and 45 m³/day (0.5 to 8.0 USgpm), the dewatering system is designed to handle 1,000 m³/day (83 USgpm).

The system designed to handle the earlier modelled seepage rates consisted of two sumps and two pump stations constructed in ancillary stub headings off each of the declines. The excavation of the sumps and pump stations was removed from the decline design and plan once it was determined that the anticipated seepage rates would be significantly reduced. Costs associated with construction of these dedicated excavations have been removed from the capital cost estimate, while the pump, piping, and electrical costs associated with the larger system remain. It is now expected that small pumps kept active near the advancing decline face that pump into portable sump boxes will provide sufficient dewatering capacity for the project and this represents an opportunity for costs savings.

All water will be pumped to a settling pond located on surface. However, there is potential for some of the water to be used within the mine for road dust suppression. The expected volume of water that could be used for dust suppression will rise as workspaces are developed. At a water application rate of 4L/day/m² (from highway watering estimates), the disposal of 32 m³/day/km of ramp may be possible, which greatly exceeds the estimated seepage rates. However, there is currently no provision in the mine equipment fleet for a water truck nor has the design of a water spray system in the declines and workings been included in the plan.

The QP recommends that:

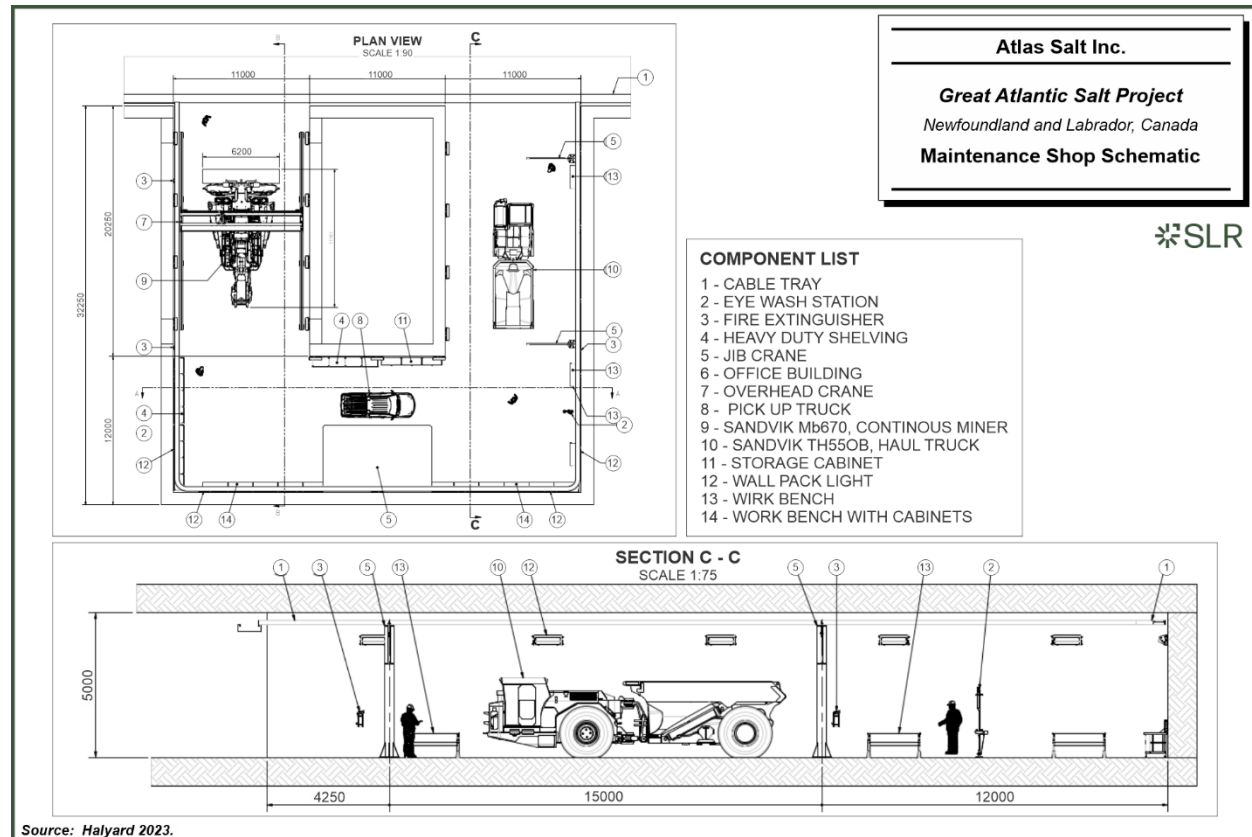
- 1 The dewatering system design be updated to reflect the latest hydrogeology modelling estimates.
- 2 Although groundwater impacts are now significantly reduced compared to earlier designs, potential groundwater flow mitigation measures should still be considered and incorporated into future decline construction plans.
- 3 Consider the alternative water disposal options such as for mine road dust control.



16.5.4 Maintenance

The site equipment fleet will be maintained in a combination of shop spaces located on surface near the portal and at an underground shop located at the 320 Level. The surface shop will be used for light vehicles and minor maintenance. The underground shop will be used for all major equipment maintenance and will include two 11 m by 20 m main bays for equipment maintenance and a small stores and office area. A schematic showing maintenance shop is presented in Figure 16-30.

Figure 16-30: Maintenance Shop Schematic



16.5.5 Power Distribution

Electrical power will be supplied from a new surface substation with feeds to the underground mining, underground plant, mine ventilation, surface offices, shops, and surface surge pile. The overland conveyor, and port will be fed from the existing overhead NL Power transmission lines. Power will be fed to the mine in each decline to provide redundant supply into the mine. Power will be supplied at 13.6 kV from surface to load centres at the plant and on each mining level. At the plant, the power will be transformed to 600 V to supply the plant equipment.

On the mining levels, there will be a requirement for 600 V power for fans, BEV chargers, and light equipment. The CMs run off 1,000 V power and will be supplied by 4,160 V feeds up to 1.2 km from the decline, with further power distribution accomplished through trailing cables. Charging stations for the heavy equipment will be located at the main shops and then relocated at lower levels as the mine is deepened. A summary of the mine connected electrical load is presented in Table 16-24. The loads increase over time with the addition of CMs, additional



chargers for trucks and utility equipment, and with the additional load as the conveyor system is extended deeper into the mine.

Table 16-24: Mine Connected Electrical Load

Area	Connected Electrical Load (kW)		
	Initial	Year 3	Ultimate
Continuous Miners and support	1,092	3,294	3,294
Ground support	205	205	205
Haul truck chargers	2,700	3,375	4,725
LHD chargers	1,350	1,350	1,350
Utility vehicle chargers	617	1,084	1,084
Run-of-mine (ROM) breakers and conveyors	71	272	1,157
Decline dewatering	257	257	257
Mine ventilation	1,022	1,022	1,022
Total	7,314	10,860	13,112

16.5.6 Mine Services

A communications system for telephone, radio, and data will be established in the mine. Potable water will be supplied together with sanitary facilities. Portable refuge stations will be installed at the Plant Area and near the production levels. Compressed air will be supplied as needed through on-board compressors on drills and through the use of portable compressors as needed. A small, compressed air system will be established for the plant.

16.6 Mine Equipment

The initial mine equipment list is presented in Table 16-25. The fleet is based upon the use of BEV equipment to the maximum extent possible. A second and third CM and a fifth haul truck will be added in the first year of operations to support mine production and development. The equipment fleet will continue to grow through the ramp-up period reaching a maximum of six CMs and seven haul trucks in year four.

Table 16-25: Initial Equipment Fleet

Equipment Type	Make & Model	Units
Continuous Miner	Sandvik MB670	1
Roadheader	Sandvik MT521	1
Mine Truck	Sandvik TH550B Mine Truck	3
LHD	Sandvik LH518iB	2
Scaler - Development	MacLean Rock Scaler RB3-S-EV	1
Bolter	Sandvik DS412iE	1
Supervisor & Tech Services SUV	Ford Lightning F150 Crew Truck	4
Maintenance Truck	Rokion R200 Utility Truck	3



Equipment Type	Make & Model	Units
Boom Truck	MacLean Mine-Mate Series BT3-EV	2
Scissor Lift	MacLean SL3	2
Personnel Carrier	MacLean SL3	2
Drill		1
Forklift	Rokion R700 Series Support Vehicle	2
Skid Steer Loader	Bobcat S7X	1
Total		26



17.0 Recovery Methods

17.1 Introduction

Salt from the mine will be processed to produce one product only: de-icing salt conforming to the ASTM D632-12 specification for de-icing salt for road maintenance and construction. The standard provides specifications on delivery for salt content (minimum 95% NaCl $\pm 0.5\%$) and size grading (presented in Table 17-1). Additionally, the standard specifies that de-icing salt is to be delivered in free-flowing form, requiring the addition of an anti-caking agent prior to shipping, typically expected by customers to be at a minimum concentration of 50 ppm in the case of the most commonly used anti-caking agent, yellow prussiate of soda (YPS).

Table 17-1: ASTM D632-12 Size Grading Specification for Road De-icing Salt

Sieve Size	Mass % Passing
12.5 mm (1/2 in.)	100
9.5 mm (3/8 in.)	95 to 100
4.75 mm (No. 4)	20 to 90
2.36 mm (No. 8)	10 to 60
600 μ m (No. 30)	0 to 15
Source: ASTM D632-12, Standard Specification for Sodium Chloride	
Note.	
1. Tolerance: 5 percentage points on the maximum value for the range for each sieve size, except the 12.5 mm (1/2 in.) and 9.5 mm (3/8 in.) sieve sizes.	

Processing will be carried out in the underground mine and will consist of conventional dry screening and crushing using double roll crushers and inclined vibrating screens. An excavation approximately 190 m long, 20 m wide, and 20 m high, located at the bottom of a conveyor incline tunnel (one of the two parallel mine access declines) will accommodate the processing plant. The plant and associated conveyors and infrastructure have been designed to process up to 4.0 Mtpa. Excess processing capacity exists due to the inclusion of a 25% design factor on all key equipment and overland transport conveyors, which will allow the processing plant to increase production during seasonal high-demand periods and allow for routine maintenance to be prioritized during periods of low demand while maintaining the overall 75% annual plant availability. This will also assist in managing stockpiled product quantities at the port to ensure that sufficient material is available for shipping and that the available storage capacity is not exceeded.

A key constraint during processing is the minimization of fines generation, hence the use of roll crushers and multiple crushing and screening stages to minimize the reduction ratio at each stage of crushing, and where product-size material is screened out before each stage of crushing and directed to the product stockpile. Fine screens within the processing plant will remove excess minus 600 μ m material from the crushed salt if necessary.

Sodium chloride content of the finished salt product will be controlled by ensuring that the blended material feeding the processing plant contains 95% or higher NaCl.

Key process design criteria are presented in Table 17-2.



Table 17-2: Key Process Design Criteria

Criteria	Unit	Design Value
Annual Production Rate - Finished Salt (max)	tpa	4,000,000
Operating Days per Year	d/a	365
Process Plant Availability	%	75
Equipment Capacity Design Factor	%	25
Design Throughput	tph	761
Salt Bulk Density	t/m ³	1.28
Abrasivity – Bond Abrasion Index (Ai, max)	g	0.07
UCS, 75th Percentile	MPa	28.6
ROM Moisture (max)	%	2
ROM (Plant Feed) Size F100	mm	200
Fines Production (max percent of feed to plant)	%	10
Product Composition		
Sodium Chloride (min, dry basis)	%	95
Insolubles (max, dry basis)	%	5
Moisture (max)	%	2
Anti-caking Agent (min)	ppm	50
Product Size P ₁₀₀	mm	12.5

17.2 Process Description

Mining will be carried out by CMs that will produce ROM material with a top size of approximately 200 mm. Material larger than 200 mm may occasionally occur due to natural breakage of the salt during mining. The ROM material will be hauled to a pass where a feeder-breaker located at the bottom of the pass will reclaim the material from a stockpile and ensure that any oversize is broken before discharging it onto a transfer conveyor. The salt will be transported to the receiving bin at the processing plant on the 240 Level by a series of transfer conveyors from the initial mining level (320 Level) and later from the second (356 Level) and subsequent mining levels. The receiving bin will have a capacity of approximately 80 t.

Salt will be withdrawn from the receiving bin by a variable speed belt feeder that will meter the salt to the crushing plant in conjunction with a belt scale on the feed conveyor. A belt magnet and metal detector will remove metal from the plant feed conveyor or stop the conveyor before metal can enter the plant.

The first step in processing will consist of a grizzly feeder that will simultaneously feed the primary crusher while removing <64 mm material, which will bypass the primary crusher and report to the primary screens. Undersize (<12 mm) from the double deck primary screens will report to the product conveyor while the oversize from the top deck (>45 mm) will report to the secondary crusher and oversize from the second deck (12 mm to 45 mm) will report either to the secondary or tertiary crusher via a diverter gate. This flexibility has been allowed for so that secondary and tertiary crusher loads can be optimized during operation. The product from the secondary crusher will feed the tertiary screen where the oversize (>10 mm) will report to the tertiary crusher and the undersize (<10 mm) reports to the fines screen. The final crushing stage (tertiary crushing) will be in closed circuit with the two quaternary screens operating in



parallel, from which undersize or product-size material (<12 mm) will be directed to the product conveyor and oversize material (>12 mm) will be returned to the tertiary crusher.

The tertiary crushing circuit has been designed to accommodate two tertiary crushers operating in parallel to achieve the design production rate of 4.0 Mtpa. However, initially only one tertiary crusher will be installed, with the second crusher installed in Year Two of operation as the mine ramps up production. In the single tertiary crusher configuration, the processing plant is estimated to be capable of processing between 3.0 Mtpa and 3.5 Mtpa.

There is no need and no allowance for intermediate storage (i.e., storage between crushing and screening stages). Salt will be screened and crushed as it is produced by the previous stage.

A fines rejection circuit will form part of the tertiary screening circuit where fine material (<800 µm) in the secondary crusher product may be screened out if necessary and stockpiled separately and returned to the mine and used for road surfacing. This will allow for a portion of the fines in the crushed product to be rejected to ensure that the final salt product conforms to the specification for de-icing salt, i.e., is no more than 20% passing 600 µm. Oversize from the fines screen will be directed to the product conveyor. A diverter gate on the fines screen undersize chute allows for fines to be redirected to the product conveyor should the quantity of fines in the product not exceed the allowable limit.

The final salt product will be sampled by an automatic cross-cut sampler for regular testing to ensure that it conforms to the specification. The product conveyor will deposit the final salt product onto the approximately 1,740 m long incline conveyor that will carry the salt to the surface. Transfer conveyors on surface will carry the salt from the incline conveyor to an overland conveyor that will transport the salt to storage buildings at the port. A small storage facility near the mine portals will allow for storage of approximately 11,700 t of salt if downstream equipment requires maintenance, as well as for loading of trucks by front end loaders (FEL) to supply local customers. Anti-caking agent (YPS) in solution form will be added to salt that will be stored in the facility and intended for the local market.

The overland conveyor, approximately 2,019 m in length, will transport the salt along an existing haul road and causeway to the port at Turf Point where it will be stored prior to shipping. The conveyor will pass through the outskirts of the town of Saint George's and will pass under the main road (route 461) west of the town and then over Beach Lane. The conveyor will be covered and fenced off for the part of the route outside of the town, and enclosed and fenced off where it passes nearby residential properties.

The existing storage and ship loading facilities at Turf Point are currently used for shipping gypsum mined at a quarry approximately 8.5 km southwest of the port and hauled to the port by truck along the haul road and through the town. The existing storage building at Turf Point, originally built and used for base metal concentrate storage prior to shipping, and subsequently for gypsum storage, will be modified to include conveyor delivery of salt.

The existing storage building and ship loading facilities at Turf Point, and a new storage building constructed for the Project will accommodate approximately 60,000 t of salt.

Salt will be shipped by bulk carriers, and shipment sizes may range from 25,000 t to 50,000 t. Salt will be reclaimed from the storage buildings by new underground vibrating feeders and existing belt feeders and conveyors for shipping via the existing 1,000 tph ship loader. YPS will be added to the salt in solution form prior to shipping and the salt will be sampled by an automatic cross-cut sampler as it is discharged onto transfer conveyors carrying the salt to the ship loader.



A block flow diagram for mining, processing, storage, and load-out is presented in Figure 17-1, and a simplified flow sheet of the process plant is shown in Figure 17-2.

Consumables will consist mainly of crusher wear parts and screen decks, as well as conveyor parts (idlers and return rollers), and lubricants. Preliminary testing has indicated that the salt is not abrasive or only mildly abrasive, and crusher roll segments are expected to last several years before requiring replacement. Annual allowances have been included in the operating cost estimate to account for these items.

Only one reagent, YPS, will be used in the process, and will be added to the salt prior to shipping to limit caking. A dosage rate of 75 g/t has been allowed for, slightly higher than needed to meet the generally required minimum 50 ppm concentration. YPS will be delivered in the form of a crystalline powder in 500 kg bags and will be mixed with water at a concentration of 2% by weight and applied to the salt as a spray. Two YPS make-up and addition stations will be installed, one at the intermediate storage facility near the mine portals and one at the Turf Point Port. At a dosage of 75 g/t and a salt production rate of 2.5 Mtpa, YPS consumption will be 188 tpa.

17.3 Laboratory

A small laboratory will be located at the surface complex and will be capable of conducting simple chemical analysis for NaCl and insoluble content of salt samples, and size analysis of crushed salt. The laboratory will carry out analysis of shift samples for process plant monitoring and control, shipment samples, and analysis of mine grade control samples.

17.4 Plant Control System

The plant control system (PCS) will comprise a programmable logic controller (PLC) based architecture with a fibre optic backbone and remote input/output (RIO). Independent PCS and control rooms will be provided for the mine and port facilities and networked for monitoring purposes. The control network will comprise interfaces between the PCS controllers, RIO, motor control centres (MCCs), and third-party PLCs. High bandwidth data services, such as voice over internet protocol (VOIP), video, equipment and personnel tracking, and corporate data transfer and storage will be supported by separate networks utilizing the fibre optic backbone. All material handling and processing equipment will be monitored and controlled through the PCS. The PCS workstations will provide a user-friendly interface for operations personnel to monitor and control the facilities. The workstations will include historian, trend, alarm and event log, and report functionalities.

17.5 Electricity Consumption

Electricity will be supplied from the grid and consumption has been estimated from the mechanical equipment list, associated electrical motor sizes, and equipment utilization requirements to achieve 4.0 Mtpa of salt production. Installed power is estimated at approximately 2,607 kW, including processing, conveying to surface, storage, reclaim, and surface conveying, and excluding the overland conveyor and port. Annual consumption is estimated to be approximately 17,500 MWh with an average equipment utilization of 71%.

17.6 Fuel

Fuel will be required for a small fleet of mobile equipment including personnel transport, maintenance vehicles, FEL and compact wheel loader, forklift, and mobile crane. A fuel storage facility will be located adjacent to the surface facilities.



17.7 Personnel

The processing plant and conveyor transport to the port are simple operations and will be largely automated requiring minimal operator intervention. At design capacity, the plant will operate 24 hours per day, 365 days per year. Shift workers will work on a twelve-hour shift basis. The total complement (all shifts) including management and supervision, operators, maintenance personnel, and laboratory personnel has been estimated at 37. Salt storage, reclaim, and ship loading at Turf Point will be carried out by the port owner on a contract basis.

17.8 Commissioning and Ramp-up

Ramp-up to steady state throughput is anticipated to be achieved within weeks of starting up due to the simplicity of the plant and the small number of different types of equipment being used. Some optimization of crusher gap settings and screen deck openings to improve efficiency and ensure that individual pieces of equipment are operating within design parameters is expected to be required and may be completed over the first year of operation. However, the actual annual production rate will be dictated by other factors, including the supply of ROM salt from the mine and market penetration rate. The mine plan allows for ramp-up to an annual production rate of 4.0 Mt by the fourth year of operations.



Figure 17-1: Block Flow Diagram

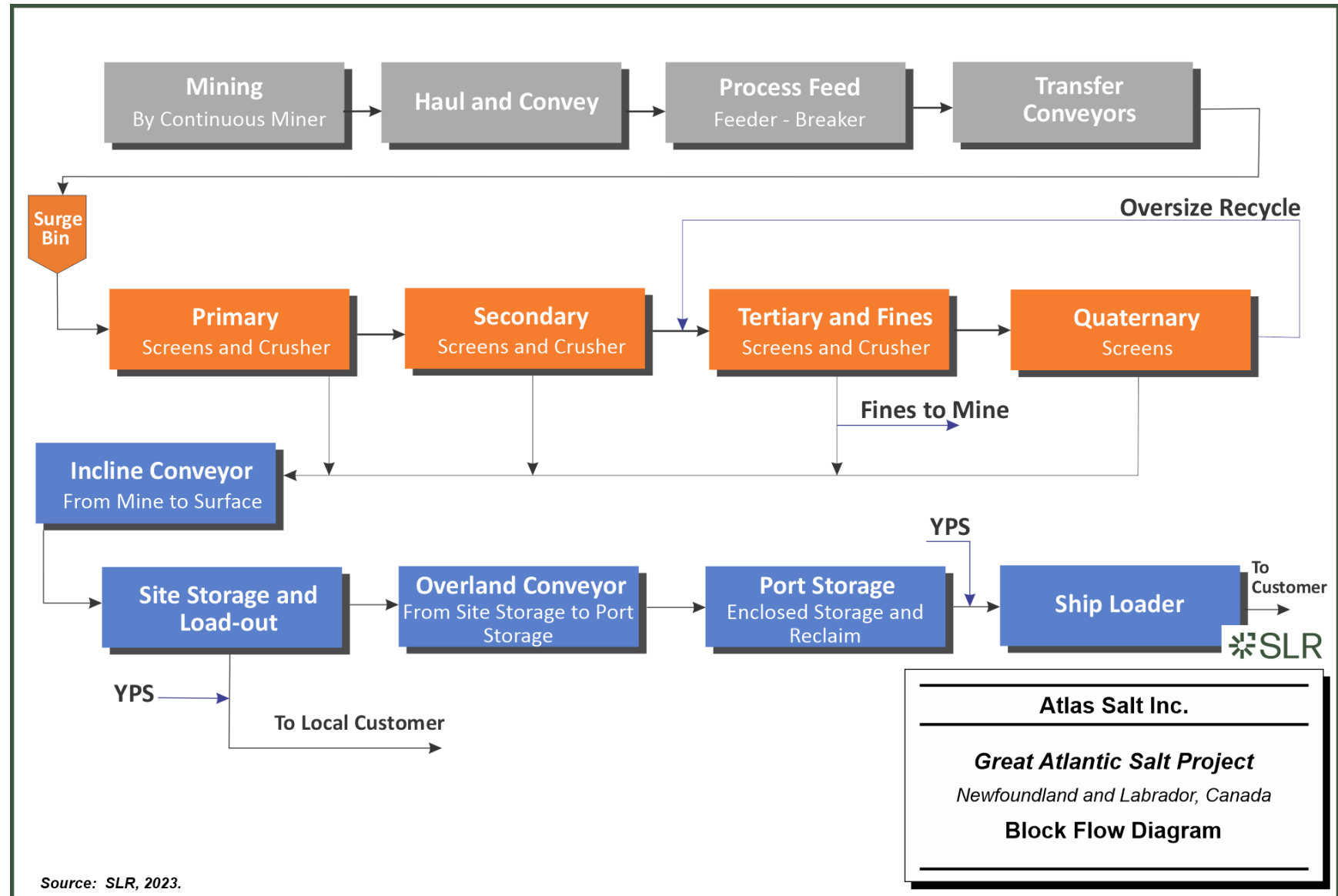
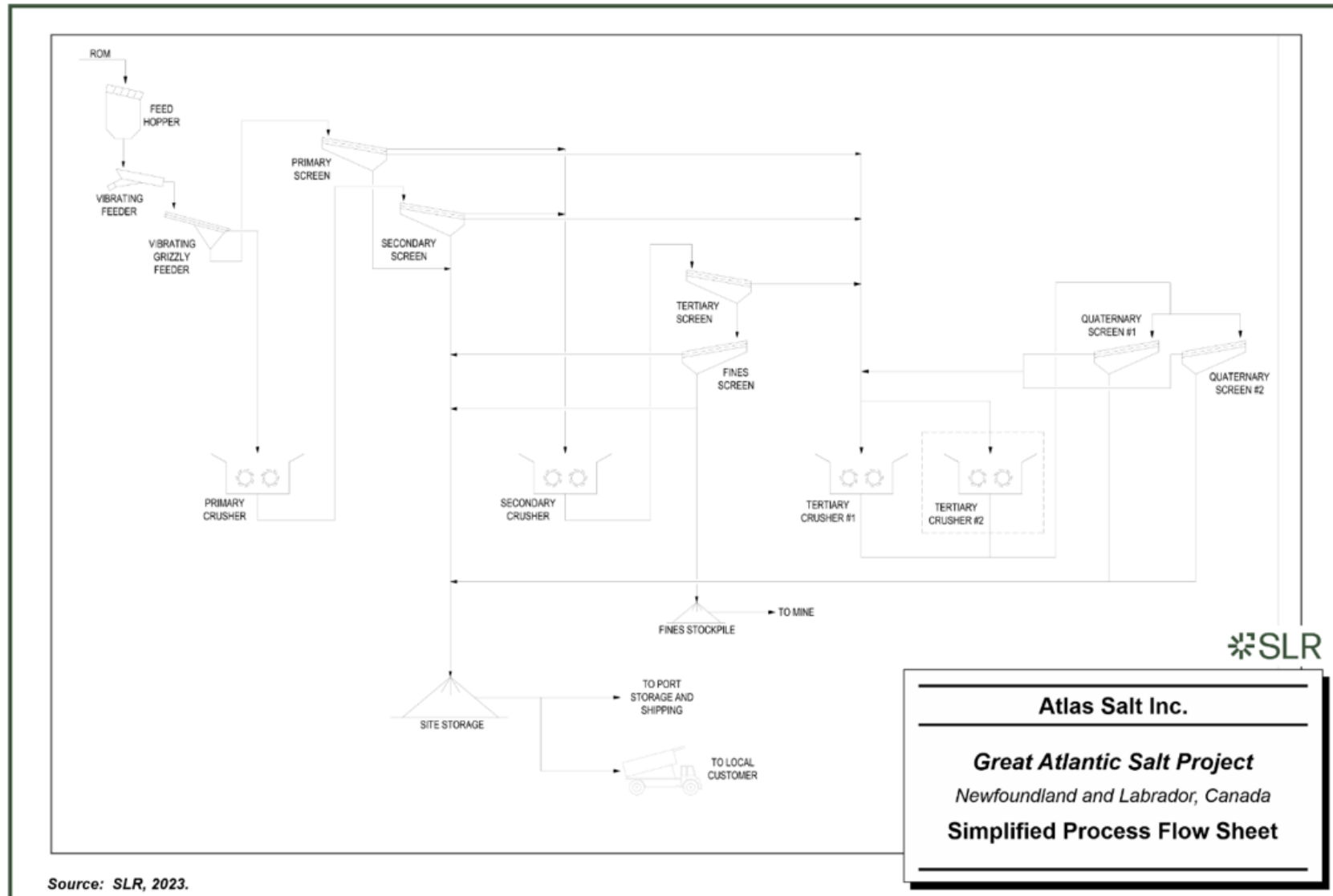


Figure 17-2: Simplified Process Flow Sheet



18.0 Project Infrastructure

The Project is located in the vicinity of St. George's, Newfoundland. To develop the Project, significant infrastructure is required. The following section outlines some of the key infrastructure planned for the Project. The site layout is shown in Figure 18-1 and the overall Project layout including the overland conveyor and port is shown in Figure 18-2. The area around the mine declines and surface buildings demarcated by a fenced perimeter and gatehouse is referred to as "onsite infrastructure" and contained within a "site terrace", while the area outside this perimeter (including the overland conveyor, port, and transmission line) is referred to as "offsite infrastructure".

SLR has not researched property ownership in the area of the site terrace or access road. The QP recommends that a detailed survey of land ownership be undertaken to ascertain right-of-way access for the Project.

18.1 Surface Development

In order to develop the Project, a surface clearing of approximately 40 ha will be completed. Within this area, a "site terrace" will be created. The area of the site terrace is categorized as gently sloping toward the north-northwest, with an elevation of from 40 masl to 50 masl, with bogland identified to the immediate southeast. Three test holes were drilled to depths ranging from 12.2 m to 28.9 m in the area of the proposed portal boxcut to evaluate geotechnical conditions. Additional drilling was carried out as part of a 2024 and 2025 geotechnical program.

Organics consisting of a thin layer of rootmat followed by peat and topsoil were encountered at all drill hole locations, with a total thickness ranging from 0.25 m to 1.0 m. Glacial till was encountered underlying the organic layers extending to depths ranging from 7.5 m to 22.5 m below ground surface. Standard penetration tests completed on the till rated the material as compact to very dense. Bedrock was encountered in all holes below the till. Inferred sandstone bedrock that was disintegrated, highly weathered, and very weak was encountered in one hole and extended to end of hole. This hole was drilled to a depth of 28.9 m. In the other two shorter holes, a thin layer of fair quality mudstone was encountered before the rock transitioned to a good to excellent quality, and moderate to strong sandstone that continued until end of hole at 12.2 m.

The QP recommends that further geotechnical investigations be undertaken to determine the suitability of this area to host the site infrastructure and mine access locations, including site-specific geotechnical investigations for the waste rock pile and surface buildings.



Figure 18-1: Site Layout

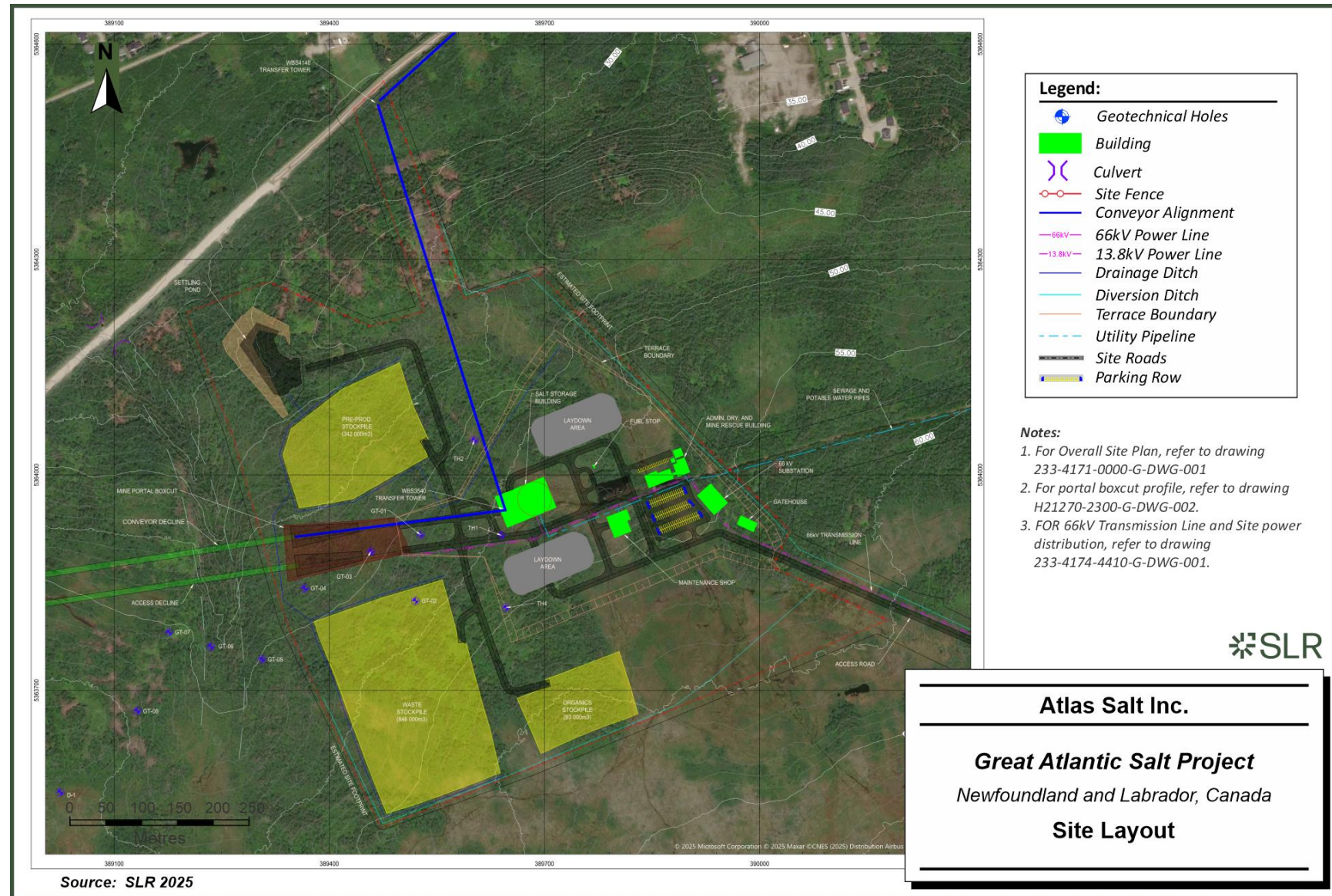
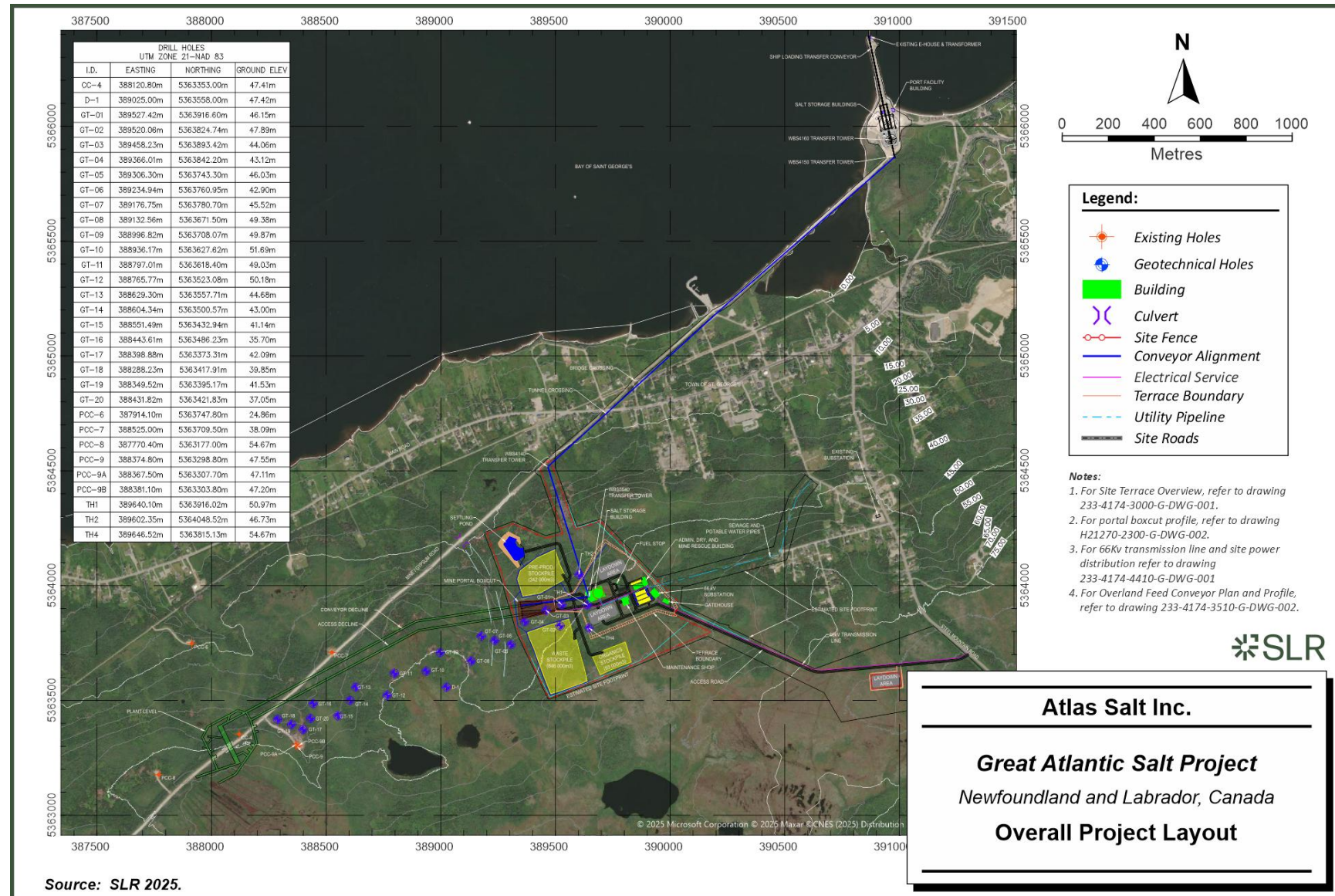


Figure 18-2: Overall Project Layout



Source: SLR 2025.



18.2 Roads

18.2.1 Access Roads

The site will be accessed by a new 1,400 m access road that will connect the site terrace to Steel Mountain Road. Steel Mountain Road connects to the Trans-Canada Highway, thereby limiting the amount of heavy vehicle traffic through the town of St. George's. The access road will be developed at a nominal gradient of 4%, with suitable widths to maneuver heavy machinery. This road will be the main access route to the site during construction as well as after construction for operational personnel, supplies, and trucked salt shipping for the local market.

A second access route, approximately 300 m in length, will be constructed alongside the transfer conveyor carrying salt from the site to the overland conveyor and will be used only for conveyor maintenance. A third access route will be constructed along a utility corridor where potable water and sewage pipelines will connect the site to the town's infrastructure. This road is not expected to be regularly used once the pipelines have been laid, buried, and become operational.

18.2.2 Site Roads

In addition to the access road, approximately 2,000 m of site roads are required for access to various components of surface infrastructure such as buildings, the mine portals, waste piles, water management areas, and substation. The QP recommends that studies be undertaken to identify suitable road construction material in the vicinity of the Project.

18.3 Electrical Power

Electrical power is available from a substation owned by NL Power (a corporation that distributes power to end-users) located at the intersection of Steel Mountain Road and Muisen Lane approximately 1,000 m from the proposed mine site. It is proposed that a 66 kV transmission line approximately 2,400 m long will connect the Project to the NL Power substation, via Steel Mountain Road and the proposed site access road. Discussions between Atlas and NL Power indicate that the substation has the capacity to accommodate the addition of an industrial consumer such as what is being proposed for the Project. A site substation will receive the power from NL Power, and then step down the power to 13.8 kV and distribute it to all the key areas of the Project including the mine, process plant, surface buildings, and onsite surface conveyors. The overland conveyor and port storage facilities (1.0 MW) will be connected to the grid through a port area E-house and local overhead line tie-in (for the overland conveyor tunnel).

The initial operation connected load is estimated at 9.8 MW increasing over time with the addition of additional CMs, haul truck and ancillary equipment chargers, and extensions of the conveyors in the mine to 13.5 MW at full production and ultimately to 15.7 MW. The connected loads are summarized in Table 18-1.



Table 18-1: Site Connected Electrical Load

Connected Electrical Load (kW)			
Area	Initial	Year 3	Ultimate
Continuous Miners and support	1,092	3,294	3,294
Ground support	205	205	205
Haul truck chargers	2,700	3,375	4,725
LHD chargers	1,350	1,350	1,350
Utility vehicle chargers	617	1,084	1,084
ROM breakers and conveyors	71	272	1,175
Decline dewatering	257	257	257
Mine ventilation	1,022	1,022	1,022
Plant	1,290	1,476	1,476
Incline conveyor	821	821	821
Site storage, reclaim and conveying	258	258	258
Reagents	53	53	53
Subtotal Site Substation	9,735	13,467	15,720
Overland conveyor	257	257	257
Storage and ship loader	693	693	693
Subtotal Port E House	950	950	950
Total	10,686	14,417	16,670

The electrical load list will be further developed during basic and detailed engineering. This work will provide the basis for advancing discussions with NL Power regarding the extent of upgrades necessary to the St. George's substation.

18.4 Water

18.4.1 Fresh Water System

The Project is located within the town of St. George's and a connection to the town water supply is envisioned. Discussions with the St. George's town planner indicated that the town freshwater system has the capacity to accommodate a project such as what is being proposed at Great Atlantic, however, further work is required to confirm this. Alternatively, the site could consider developing a well system to source freshwater. Potable water will be available in the administration building, maintenance facility, and mine dry, and will be distributed to other locations within the site and underground using portable systems.

18.4.2 Sewer System

Similar to the freshwater system, the Project will connect domestic sewer waste to the town infrastructure. This will include wastewater from the administration building, maintenance facility, and mine dry. Sewerage from underground facilities will use truck pump-outs to collect



and carry sewage to the town's sewerage disposal system. Alternatively, the site could consider developing a septic system within the site.

18.4.3 Fire Protection Water

A fire protection system will be installed to service the surface onsite infrastructure. A central fire water storage tank fed from the town's potable water supply will store water for use in the event of a fire. A series of fire hydrants will be installed at key areas around the site and connected to the fire water storage tank.

18.4.4 Process Water

There is no requirement for process water at the site, given that the processing system consists only of dry screening and crushing. A nominal amount of water will be used for YPS make-up, which will be applied to salt intended for the local market as it enters the onsite salt storage building. This water will be supplied from the potable water system.

18.4.5 Surface Non-contact Water Management

A series of ditches along the upslope perimeter of the site will divert surface water away from the site. These drainage ditches will utilize the natural topography of the area so that water collected in the ditches is redirected into streams and creeks in the area.

18.4.6 Contact Water Treatment

Water that may have come into contact with salt will be collected in an effluent water treatment system. This water will be made up of the following principal sources:

- Surface water runoff from the waste rock pile and temporary salt storage.
- Water that has been pumped to surface from the underground sump at the base of the decline tunnels.

A site water balance has been completed that shows the Project will have a net surplus of water throughout the year. The contact water handling system includes:

- Catchment ditches located around the property.
- Effluent water pond.
- Overflow spillway into a nearby watercourse.

The effluent water pond allows for solids to settle out of the water using gravity prior to release into a nearby watercourse. No chemical or mechanical treatments of the discharge water are planned at this time. The QP recommends that further analysis be undertaken on the quality and quantity of water that is anticipated to be handled by this system. It is recommended that the site water balance be updated in future studies to aid in the sizing of necessary water management infrastructure.

18.5 Waste Management

Waste management facilities will be located near the mine portals and include the following.

- A waste rock storage facility sized to accommodate approximately 850,000 m³ of waste rock and overburden generated from the decline excavations will be located immediately to the south of the boxcut and portals. Some of the excavated material will be used to



backfill the boxcut over steel tunnel liners that will extend the tunnels to the surface grade.

- An organics stockpile, approximately 93,000 m³, is planned to hold the top 0.5 m of material removed from the site during initial site clearing. The pile will be located east of the waste rock storage facility and the material will be used during eventual site rehabilitation at the end of the mine life.
- A salt stockpile, approximately 342,000 m³, will store salt excavated during the pre-production period. This salt will be primarily Inferred 1-Salt material but also contain some Indicated material from 2-Salt. The salt will remain in the pile until it can be processed. The stockpile will be located immediately to the north of the boxcut and portals. The stockpile will be lined with a high density polyethylene (HDPE) liner over a crushed rock and sand base, and the salt will be covered with tarpaulins so that rain and snowmelt will not be contaminated with salt. Regardless, water from this area will be collected in perimeter ditches and directed to the settling pond and can be monitored for salinity. The salt storage area will be available throughout the LOM to be used seasonally, as required, to manage variable mining and shipping schedules.

All processed material is either sold as product or returned to underground mined-out areas and therefore there is no requirement for a tailings management facility.

18.6 Surface Buildings and Facilities

Onsite buildings and facilities will consist of the following:

- Administration building
- Light vehicle parking
- Mine dry (change house)
- Surface mobile equipment maintenance shop, with the main maintenance shop being in the underground mine
- Substation
- Spares and supplies storage
- Cold storage area
- Perimeter fencing
- Gatehouse
- Truck scale

A camp is not required for the Project as it is assumed that the workforce would commute daily from the local area. The QP recommends that a housing and lodging survey be carried out as part of the next stage of Project development.

18.7 Salt Conveyor System and Overland Conveyor

The salt conveyor system includes the following principal components:

- Onsite salt transfer system
- Salt storage building



- Overland conveyor from site to the port

18.7.1 Onsite Salt Transfer System

Salt product will be conveyed up the decline from the 240 Level process plant to surface via a series of two 36 in. conveyor belts totalling 1.74 km in length. On surface, the salt will be conveyed by covered 36 in. wide belts with 800 tph capacity as follows:

- Site stockpile conveyor
- Overland feed conveyor
- Overland conveyor

18.7.2 Site Salt Storage Building

The site salt storage is planned to have a capacity of nominally 11,700 t. The site salt storage serves a dual purpose:

- Providing a buffer in the event that the overland conveyor requires planned maintenance.
- A location for loading salt into trucks for selling into local markets.

The site salt storage building will include a YPS system and will have the ability for a FEL to reclaim the salt into the conveyor system for delivery to the port. The site salt storage building can also be used to build up and reclaim the outdoor site salt storage, in the event that it is required for seasonal mining and shipping adjustments.

18.7.3 Overland Conveyor

A principal component of the Project is the planned overland conveyor connecting the site with the existing Turf Point Port. The alignment of the overland conveyor will generally follow the historical haul road and causeway that was built in the 1960s to serve the gypsum quarry to the southwest of the Project. The overland conveyor will be a single continuous conveyor approximately 2 km in length. Two portions of the overland conveyor require crossings of municipal infrastructure – one in the area of Main Street, and one at the intersection of Station Road, Beach Lane and the T’Railway Provincial Park. A third area near the municipal marina at Court House Road will have a pedestrian crossing. At the crossing of Main Street, the conveyor will pass through a tunnel under the road, while the crossings at Beach Lane will use a bridge over the road. The route and cross-sections of the different overland conveyor sections are shown in Figure 18-3, while the cross-sections of the different overland conveyor sections are shown in Figure 18-4.

The overland conveyor will be a total of 2,019 m in length from site (discharge of the overland feed conveyor) to the transfer onto the port storage feed conveyor that carries the salt into the existing and new port storage buildings. The conveyor can be divided into approximate lengths characterized as follows:

- 670 m of covered conveyor, fenced, aligned beside the haul road.
- 100 m within a tunnel under Main Street at the intersection with Butt’s Lane.
- 100 m of covered conveyor, fenced, aligned beside the haul road between Butt’s Lane and Beach Lane.
- 75 m of covered conveyor in a bridge over Beach Lane.



- 430 m of covered conveyor, fenced, aligned beside the haul road between Beach Lane and the marina access road.
- 890 m of covered, raised conveyor across the causeway.
- 130 m covered conveyor.

SLR has not researched property ownership along the route of the proposed overland conveyor. The QP recommends that a detailed alignment study of the overland conveyor be carried out to gain a full understanding of land ownership considerations to ascertain right-of-way access for the overland conveyor.



Figure 18-3: Overland Conveyor Plan View and Cross-Section

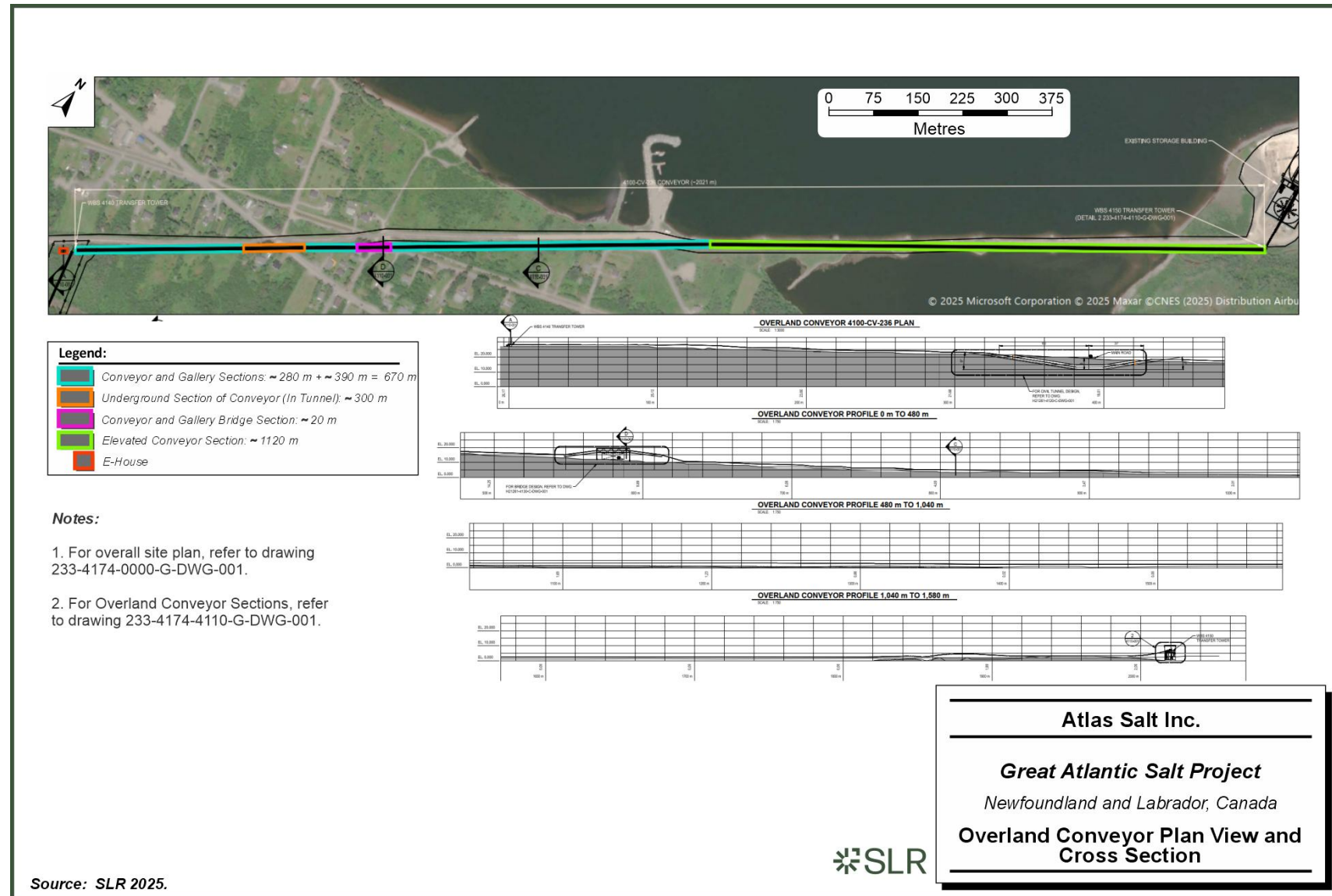
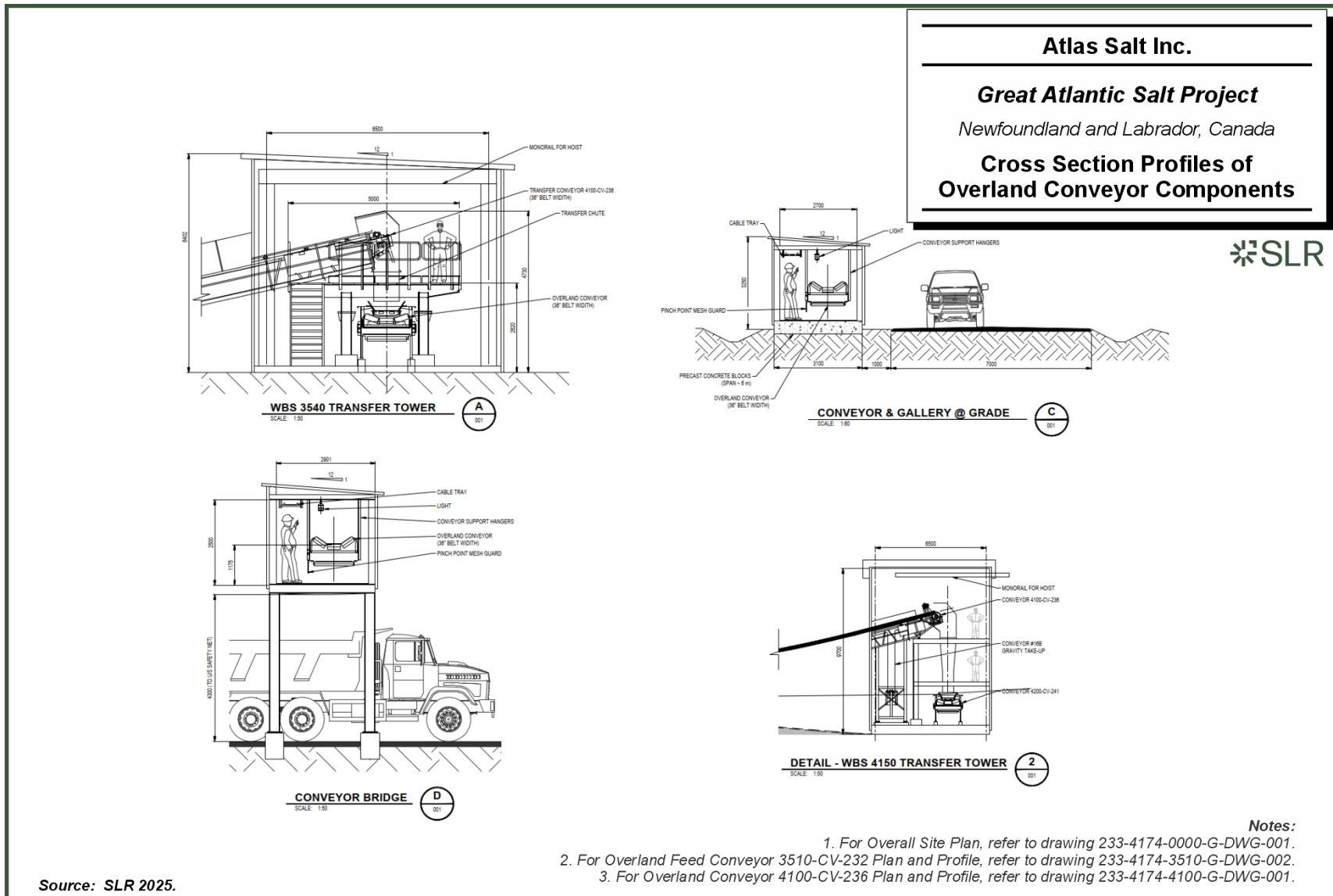


Figure 18-4: Cross-Section Profiles of Overland Conveyor Components



18.8 Turf Point Port Facility

Turf Point Port is an existing aggregate exporting facility currently used by Atlas to ship gypsum from its Ace Gypsum quarry to markets in North America. Turf Point is owned by a third-party and exports between 150,000 dmt and 200,000 dmt per year of gypsum. It is assumed that the GAS Project will use the port for the shipment of salt contingent on establishing a commercial agreement with the third-party port owner.

The principal components of the port as it exists today include:

- Aggregate storage building (with an estimated capacity of approximately 12,700 t if it was to be used for salt).
- Outdoor aggregate storage.
- Seven draw points (one inside the building and six under the outdoor storage) feeding onto a single reclaim conveyor feeding the ship loader.
- Series of five concrete caissons extending into Bay of St. George's connected by a structural steel trestle.
- Ship loader and 36 in. wide conveyor within the structural steel trestle with a loading rate of nominally 1,000 tph.

Vessels up 225 m long, 32.26 m in beam and an alongside depth of 10 m can be accommodated. The existing facilities will be augmented and refurbished to enable the port to be suitable for exporting 4.0 Mtpa of salt. The following key changes are planned:

- Modification of the existing storage building to accommodate the delivery of salt via conveyor.
- Construction of a new storage building with a capacity of 47,300 t in the area of the current outdoor storage immediately adjacent to the existing storage building.
- Construction of reclaim tunnels, feeders, and conveyors underneath the new building to feed salt to the ship loader.
- Installation of YPS make-up, dosing, and addition point equipment, and salt sampling equipment.
- Refurbishment of the existing ship loader including a detailed assessment of the structural steel condition, replacement of corroded steel members, sand blasting and coating, and replacement of the existing load-out conveyors with wider conveyors (42 in. vs. the existing 36 in.) to allow for the conveyors' speed to be reduced and improve equipment reliability and availability.
- Dredging of the dock area and the approaches to Turf Point to better accommodate larger vessels.
- Installation of one additional mooring caisson.

With the addition of the new storage building the total storage at the port will be approximately 60,000 t, or approximately two ship loads. With the modifications to the conveyors and load-out facilities the ship loader capacity will increase to 1,400 tph. The proposed port modifications are shown in Figure 18-5 and Figure 18-6.



Figure 18-5: Port Storage Layout

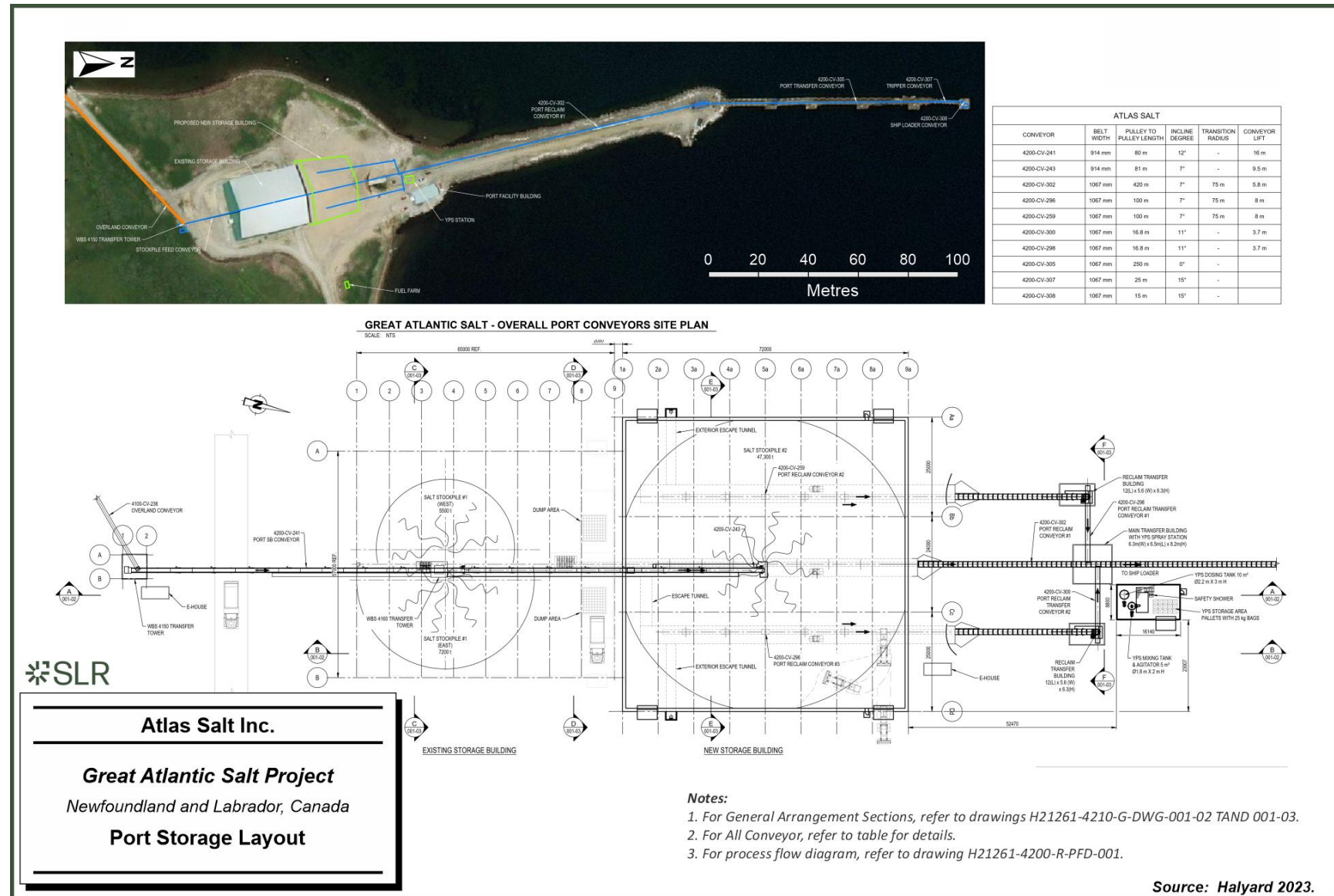
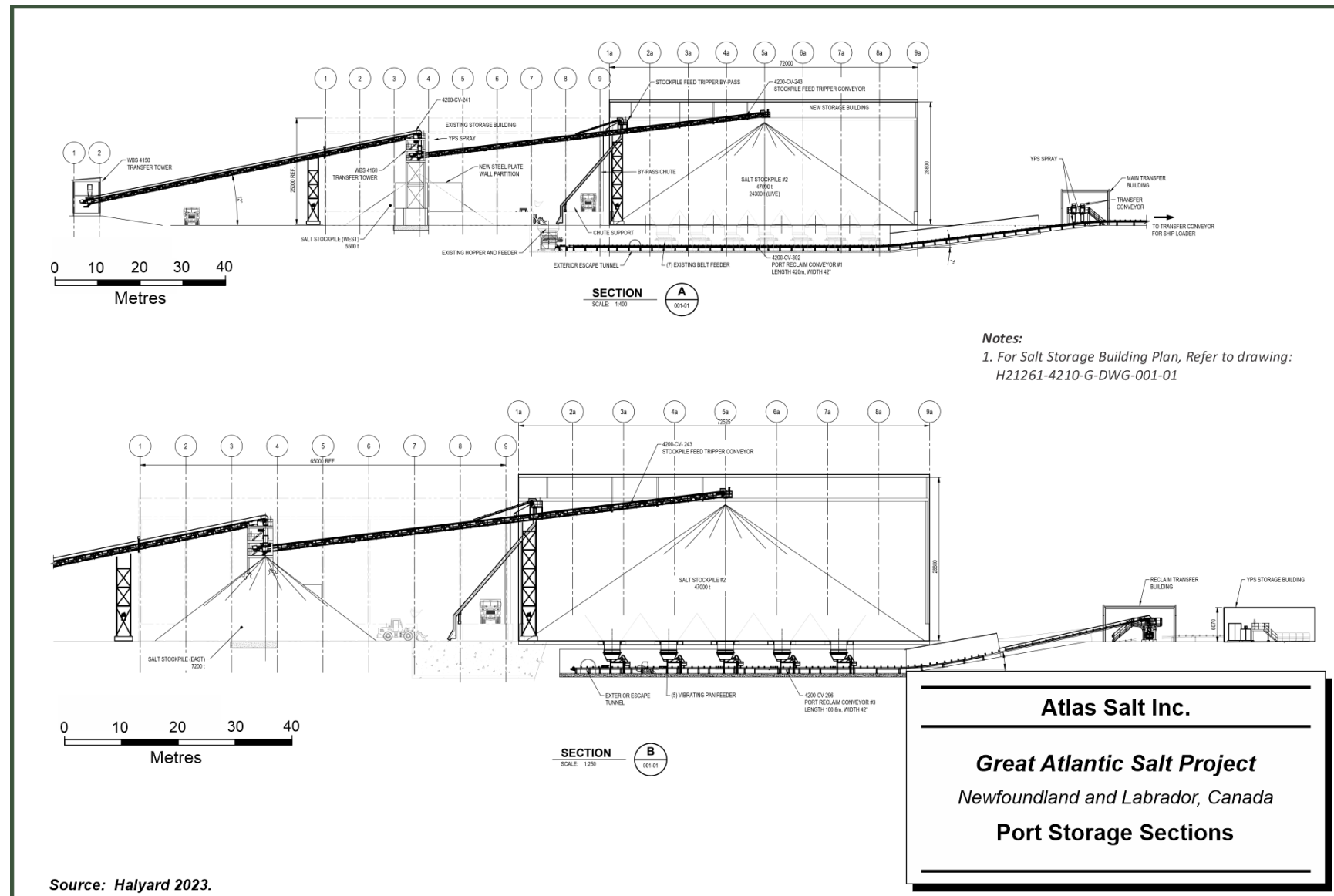


Figure 18-6: Port Storage Sections



19.0 Market Studies and Contracts

19.1 Basis of Marketing Assessment

In order to establish a reasonable marketing plan and pricing data, SLR has reviewed publicly available information and relied on information and documentation commissioned specifically for Atlas and the Project. For this UFS, revenue generating products will be bulk road salt, packaged de-icing salt for the consumer market, and a minor amount of colour based (white) salt for specialty markets. At this time, no other types of salable salt (i.e., chemical salt, food salt, or industrial salt) are planned to be produced from the Project.

Documents the QPs have relied on for this FS include the following:

- North American Road Deicing Salt Price Research; Independent Report, August 2025.
- Transport and Logistics Review for Atlas Salt; Independent Report, August 2025.
- Confidential Salt Market Analysis – 3Q, 2024.
- Compass Minerals Inc. Technical Reports – Cote Blanche and Goderich, 2021 (Compass 2021).
- Compass Minerals Annual Reports, Quarterlies, and public information, 2010 to 2025.
- Compass Minerals Presentation – Jeffries Industrials Conference, September 3, 2025.
- Cargill 2025 Annual Report.
- USGS Salt Data Sheet, Mineral Commodity Summary 2020 to 2025.

19.2 Market Overview

The North American de-icing market is divided into two primary end-users: government entities and commercial operators, accounting for approximately 70% and 30% of volume, respectively.

Government entities include municipalities, Departments of Transportation (DoT), counties, and other provincial or state entities, while commercial operators may vary from distribution companies for retail purchase, or contractors who purchase rock salt for de-icing private property.

The specifications of rock salt are summarized in Table 19-1.

Table 19-1: Rock Salt Product Specifications

Specification	ASTM-D632-12	Typical Government Bid/Tender	Screened Mediums (Commercial Contracts)
Purity (% NaCl)	95% min	95% min	>95% min
Moisture	2% max	1%	0.5% to 1% max
Gradation	0 to > 12.5 mm	0 to > 12.5 mm	2 mm up to 6 mm
Fines	0% to 15% passing 0.5 mm (#30 mesh)	N/A	<5% below 2 mm
Yellow Prussiate of Soda (YPS, anti-caking agent)	N/A	50-150 ppm	50-150 ppm



19.3 Market Size

The total annual North American market for de-icing salt is estimated to be approximately 25 Mt to 35 Mt.

The North American rock salt market is currently supplied by six main companies, as presented in Table 19-2.

Table 19-2: North American Rock Salt Producers

Company	Fully Integrated	Primary Market	Notable Mines Serving NA Market
Compass Minerals	Yes	All CA, all USA except USEC	Goderich ON, Cote Blanche LA
Morton Salt ¹	Yes	All CA, all USA	Windsor ON, Pugwash NS, Mines de Seleine QC, Detroit MI, Weeks Island LA, Tarapaca Chile, Inagua, Bahamas
Cargill Salt ²	Yes	All CA, all USA	Cleveland OH, Lansing NY
Eastern Salt	Yes	All USA	Iquique Chile
American Rock Salt	Yes	USA Northeast	Hampton Corners (Rochester) NY
Nutrien	Rock Salt only	New Brunswick, CA	Sussex NB, former potash mine
Notes:			
1. Kissner Group, owned by Stone Canyon Industries Holdings, acquired K+S Morton Salt in 2021.			
2. Cargill owns the formerly producing Avery Island salt mine, situated in Louisiana, which closed in 2022.			

“Fully integrated” salt producers refer to companies that own and operate both the mines and distribution channels. In addition to the six producers identified in Table 19-2, there are other companies that import rock salt into North America from North Africa, Egypt, Chile, the Caribbean, and Mexico.

According to public and confidential sources and USGS, salt imports into the North American region were approximately 23.0 Mt in 2019. In 2023, imports were approximately 15 Mt to 18 Mt. De-icing salt imports comprised approximately 8.0 Mt to 10.0 Mt annually from 2019 to 2023.

The international salt importers to North America contend with variable shipping rates and rely on low operating costs at the source mines to be profitable with shipping such great distances. It is anticipated that because of its location, GAS product can be competitive with salt imported from international producers.

19.3.1 Target Markets

Table 19-3 presents estimated annual road salt usage by the regions in which Atlas could potentially ship GAS product. Atlas has determined that the initial priority markets will be US East Coast (Maine to North Carolina and inland states), Newfoundland, Québec, and the other Maritime provinces. A particular target will be displacement of imported supply.



Table 19-3: Rock Salt Consumption by Region

Country	Regional Market	Annual Consumption Range (Mtpa)		GAS High Potential
		Low	High	
USA	New England	3.5	5.0	Y
USA	Mid-Atlantic East Coast	4.0	6.0	Y
USA	Great Lakes	7.0	8.5	N
USA	Mississippi River Supply	7.0	8.0	N
Canada	Ontario	3.5	4.0	N
Canada	Québec and Maritimes	3.5	5.0	Y
Total		28.5	36.0	
Total for GAS High Potential Markets		11.0	16.0	

Based on published data, the province of Newfoundland consumes approximately 300,000 t to 350,000 t of rock salt annually. Newfoundland currently does not have any rock salt production from within the province.

As demonstrated in Table 19-3, the annual consumption of markets that GAS has a high potential of penetrating is estimated to be approximately 11 Mtpa to 16 Mtpa. SLR notes that annual consumption varies, with some winters having more weather events necessitating the increased application of rock salt.

Table 19-4 presents the percentage of market share captured at the design capacity when considering only the High Potential Market.

Table 19-4: Comparison of the GAS Project High Potential Market Demand with Target Throughputs

GAS Potential Throughput (Mtpa)	GAS Percentage of Market Share of High Potential North American Market Demand	
	Low (11.0 Mtpa)	High (16.0 Mtpa)
4.0	36%	25%

At 4.0 Mtpa, the rate of market capture would range from 25% to 36%. Atlas would supply approximately from one quarter to one third of total rock salt in the target market, which is similar to the current scenario with two to three companies operating in each sub-region of North America. Gaining this level of market penetration will require a ramp-up period as Atlas establishes itself in the market. To achieve market share, it is envisaged that Atlas would first displace production that originates from overseas markets, given the relative shipping advantage that GAS would have. Further, Atlas could potentially displace some production from the aging rock salt mines located in the region.

19.4 Pricing

19.4.1 Target Markets

Atlas has based the FS sales plan on the following markets.



- US East Coast (USEC) – Maine to Baltimore ports, including states as far west as Pennsylvania and West Virginia.
- Québec – Montreal and St Lawrence downstream, entire province.
- Newfoundland and Labrador – entire province.
- Spot Sales – largely sales to government/municipalities, dependent on winter severity. Also, private companies that buy salt for use in de-icing operations on private property, and which typically pay a premium price due to the relatively low tonnages consumed.
- Commercial – via distributor.

Table 19-5 shows the Project allocation by destination or type of sale.

Table 19-5: Market Breakdown

Destination	Allocation	
	%	Tonnes
USEC	56.0%	2,240,000
Canada Maritime Provinces	8.5%	340,000
Québec	15.5%	620,000
Spot Sales and Commercial	20.0%	800,000
Total	100%	4,000,000

All salt prices and logistics costs are based on Q2 2025 estimates.

19.4.2 Shipping and Logistics

Atlas has assessed the costs of water borne transport and logistics costs to ship product from Turf Point to the locations listed above.

Although there exists a typical salt marketing “season” from April to December of each year, it is assumed that GAS can ship salt year-round since it has access to a generally ice-free port, and the high potential market is accessible year-round.

With the exception of the west coast Newfoundland market, Atlas would sell salt as far as the point of delivering it dockside at each of the destination ports. From that point, a distribution company would manage the unloading of the salt, salt storage, and delivery of salt to the final point of sale. This is generally known as CIF (Cost, Insurance, Freight).

It has been assumed that shipping would occur mainly via using 25,000 t to 30,000 t capacity self-unloaders and up to 50,000 t capacity grab unloaders. Smaller vessels could also be utilized for smaller ports. Shipping to USEC will be mainly by international flagged vessels.

For the west coast Newfoundland market, SLR has assumed that Atlas will use a Delivered at Place (DAP) pricing basis, in which Atlas will arrange for delivery of salt to the final point of sale determined by the customer (typically a municipality). Atlas will accomplish this either by truck for nearby municipalities, or vessels when appropriate.

Some sales could be conducted on a Free on Board (FOB) basis, where salt purchasers would arrange for a vessel to be loaded with salt at Turf Point Port.

Shipping prices are based on current quotes from an independent source.



Regardless of the shipping terms (DAP, FOB, CIF), the pricing assumed by SLR in the financial model is FOB Turf Point Port.

19.4.3 Prices

SLR has developed a weighted average of the price that Atlas could reasonably expect to receive assuming FOB Turf Point of \$81.67/t. The weighted average is based on actual 2025/2026 pricing data for individual ports in the markets listed in Table 19-5.

19.5 Contracts

Atlas has had preliminary discussions with potential salt purchasers as well as salt brokers. Similarly, the Company has had preliminary discussions with logistics companies and port operators that would be involved in the process of delivering salt to destination markets. As of the effective date of the UFS, Atlas has not entered into any binding commercial contracts with respect to salt marketing or logistics.



20.0 Environmental Studies, Permitting, and Social or Community Impact

This chapter describes the environmental baseline setting, potential environmental and social issues and mitigation measures, and environmental approvals and permits required, as well as conceptual closure planning for the Project. This chapter has been informed by the Feasibility Study completed for the Project, the Environmental Assessment (EA) Registration, and environmental baseline studies completed and management plans compiled for the Project to date.

20.1 Environmental Aspects

20.1.1 Environmental Baseline (Setting)

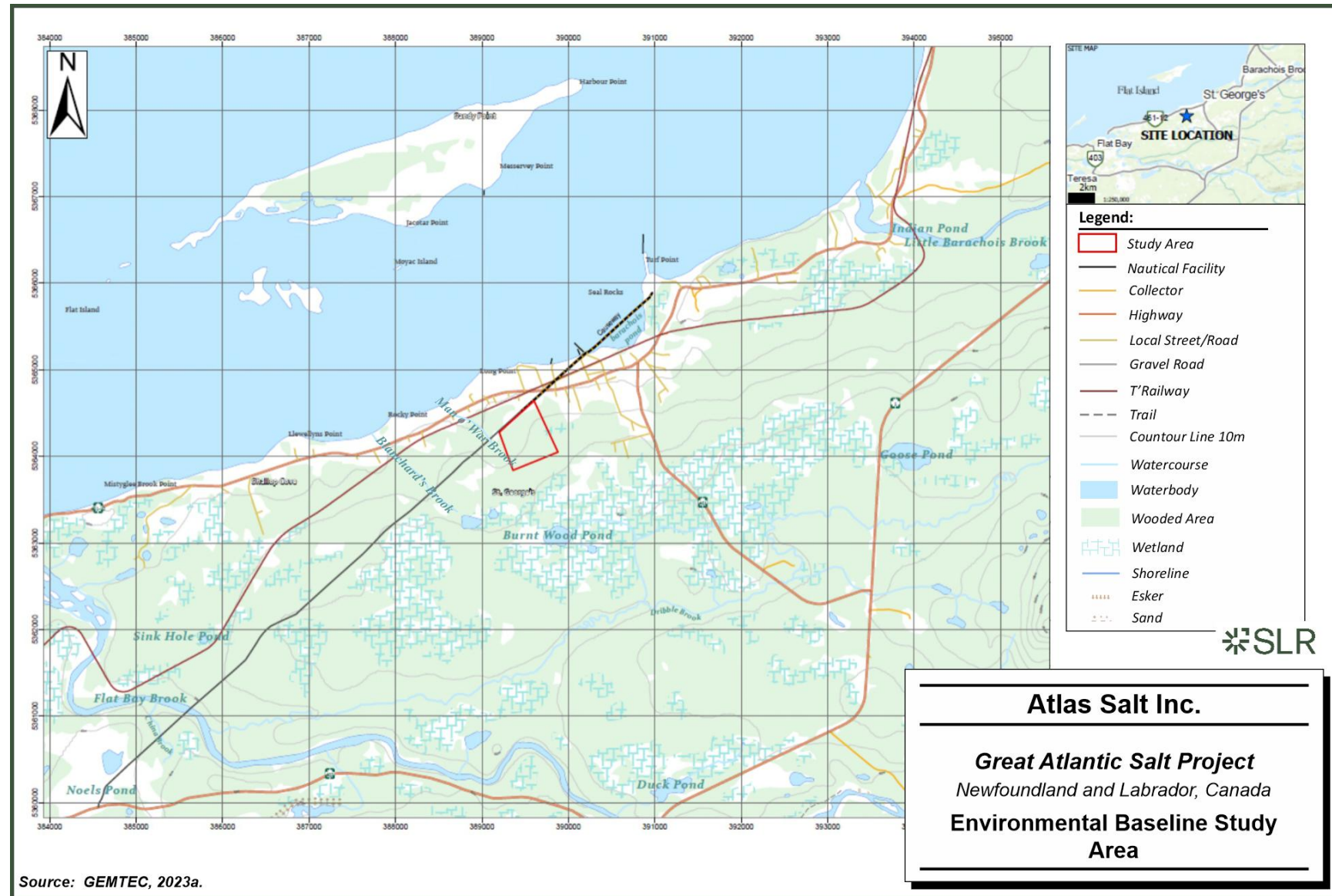
GEMTEC carried out the following environmental baseline studies in 2022:

- Photographic interpretation for terrestrial field studies
- Initial fish and fish habitat assessment, and reporting
- Vegetation community and habitat mapping
- Breeding avifauna and wildlife assessments
- Wetland identification, delineation, and reporting
- Desktop hydrogeological assessments, and reporting
- Desktop and preliminary field hydrological assessments, and reporting

The designated study area for the GEMTEC baseline studies is delineated in Figure 20-1. ICI Innovations (ICI) conducted additional baseline work for the Project in support of environmental permitting to reflect an evolving Project footprint.



Figure 20-1: Environmental Baseline Study Area



Key baseline environment information follows (GEMTEC 2023 a to d; ICI 2024a and b):

20.1.1.1 Ecoregion

The Project lies within the St. George's Bay Subregion of the Western Newfoundland Forest Ecoregion with flat to rolling terrain and contains extensive plateau bogs. The sub-region is characterized by forests of Balsam Fir with an understory dominated by wood ferns. Black spruce occurs in poorly drained areas or in areas with exposed bedrock. In heavily forested areas deep, rich soils formed from glacial deposits and runoff occurs.

20.1.1.2 Surface Water

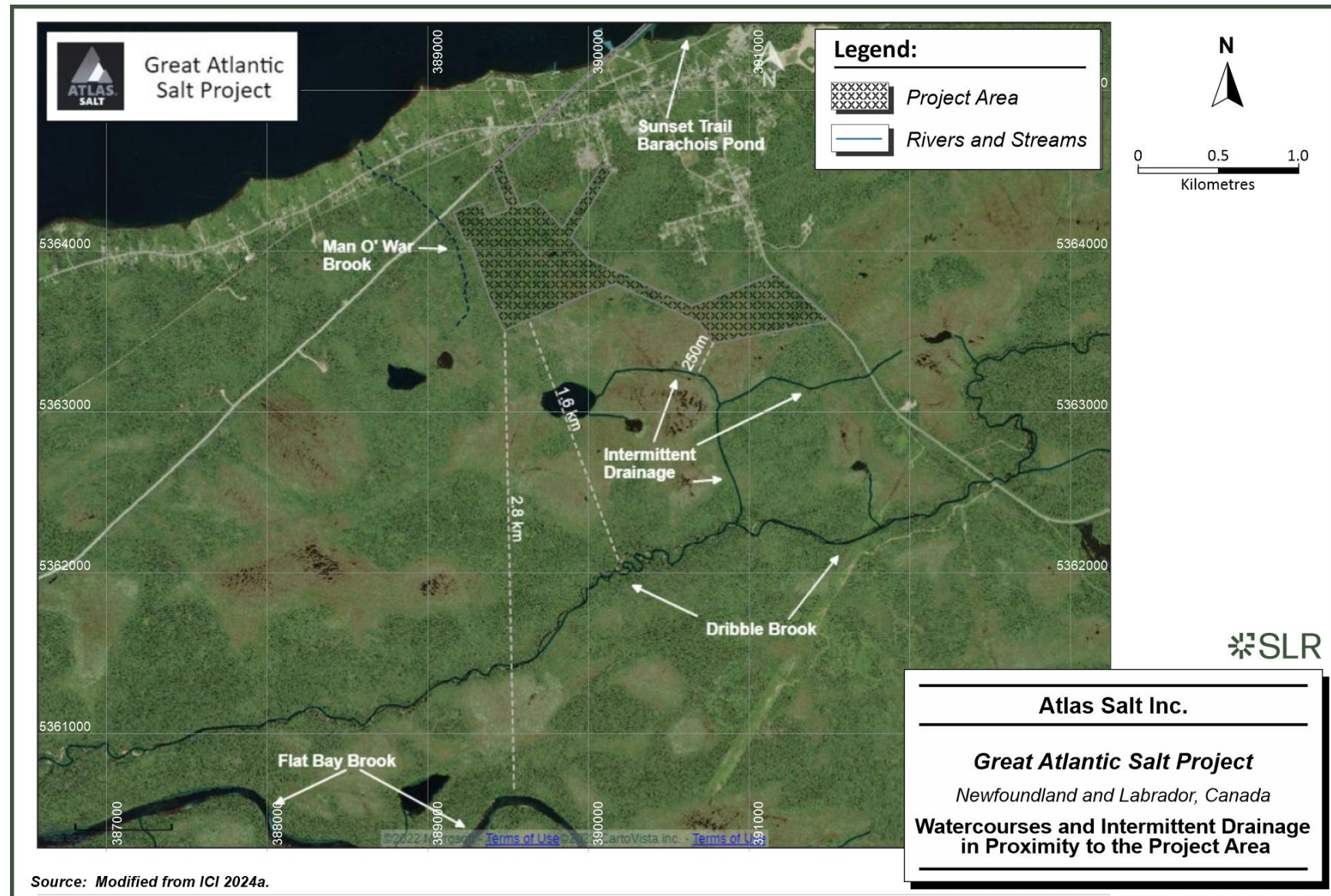
No waterbodies or watercourses were identified within the disturbance footprint of the mine site, shown as the Project area in Figure 20-2. There is one stream approximately 150 m west of the site, a tributary to Flat Bay known locally as "Man o' War Brook". GEMTEC carried out streamflow and water quality monitoring at this stream and in other watercourses in the vicinity.

Surface water sampling showed low pH (as low as 5.63) and exceedances of the Atlantic Risk Based Corrective Action (ARBCA) - Ecological Tier I Environmental Quality Standards (EQS) for Surface Water [Freshwater] (V4 2021) for aluminum, iron, copper, lead and zinc.

The town of St. George's has a Public Protected Water Supply Area (PPWSA) in the upper reaches of Dribble Brook (PPWSA ID WS-S-0689), located approximately 2.5 km east of the proposed mine site.



Figure 20-2: Watercourses and Intermittent Drainage in Proximity to the Project Area



20.1.1.3 Groundwater

In the Project area, groundwater recharge likely occurs in the highlands to the southeast (Long Range Mountains) and discharge likely occurs to the marine environment at Flat Bay, in addition to various lowland regions in the Project area. Groundwater in the Project area is presumed to mimic topography and flow to the northwest towards Flat Bay. Only one water level measurement was obtained where a water level of 4 m below surface was recorded at an exploratory water well.

Shallow groundwater was noted to be of calcium bicarbonate to sodium bicarbonate type, and the concentration of several metals including, aluminum, iron and manganese were noted as exceeding the Canadian Drinking Water Quality Guidelines. A well sampled at Shallop Cove cemetery, located approximately 500 m north of the site also showed concentrations of iron and manganese that exceeded Canadian Drinking Water Guidelines.

The town of St. George's has a wellfield PPWSA located approximately 1.5 km northeast of the Project area. This groundwater supply wellfield comprises four production wells completed to depths ranging from 25.6 m to 50.3 m. In addition, 56 water wells for domestic, municipal, commercial, and industrial uses are located within the town of St. George's, which range in depth from 7 m to 91 m but are not considered to be hydraulically connected to the Project area. There are no registered water rights holders near the Project.

The Project geology of the salt deposit suggests that Project development is unlikely to result in the generation of acid rock drainage / metals leaching (ARD/ML), primarily due to the lack of sulphide mineralization. To confirm this, the QP recommends that the Company carry out limited sampling and static geochemical characterization of the overburden/till, sedimentary rocks, and conglomerates in the Red Beds, as well as in the interburden material in the halite deposit during the construction phase.

20.1.1.4 Wetlands

Wetlands comprising approximately 24 ha and wet conifer scrub comprising 20 ha were delineated within the surface disturbance area of the mine site and ancillary infrastructure (shown as the Project area in the figure), representing 35% and 29% of the area, respectively. Wetlands occupy a large portion of the area to the south of, and partially overlap, the surface disturbance area of the mine site (Figure 20-3). The wetlands are characteristic of plateau bogs and have a high abundance of graminoid species.

20.1.1.5 Protected and Sensitive Areas

The town of St. George's includes several protected/sensitive areas such as Sandy Point, Flat Bay Brook, and the Turf Point marine or barachois pond (shown in Figure 20-4). Sandy Point is an island in St. George's Bay directly across from the town of St. George's which is reported to be culturally and environmentally significant as it supports vulnerable species and historical infrastructure. The Flat Bay peninsula and Sandy Point are considered critical habitat for the piping plover. Flat Bay brook is located to the west of the town of St. George's and includes tidal marshes which are habitat for vulnerable species. The low area on the shore below the railway between Station Road and Turf Point is a sensitive natural environment which supports vulnerable species and is vulnerable to sea level rise. This eastern bank and surrounding terrestrial habitat of the pond is a designated Environmental Protection area by the town of St. George's to protect its natural environment, including rare plant and animal species including the banded killifish and piping plover.



Figure 20-3: Wetlands in Proximity to the Project Area

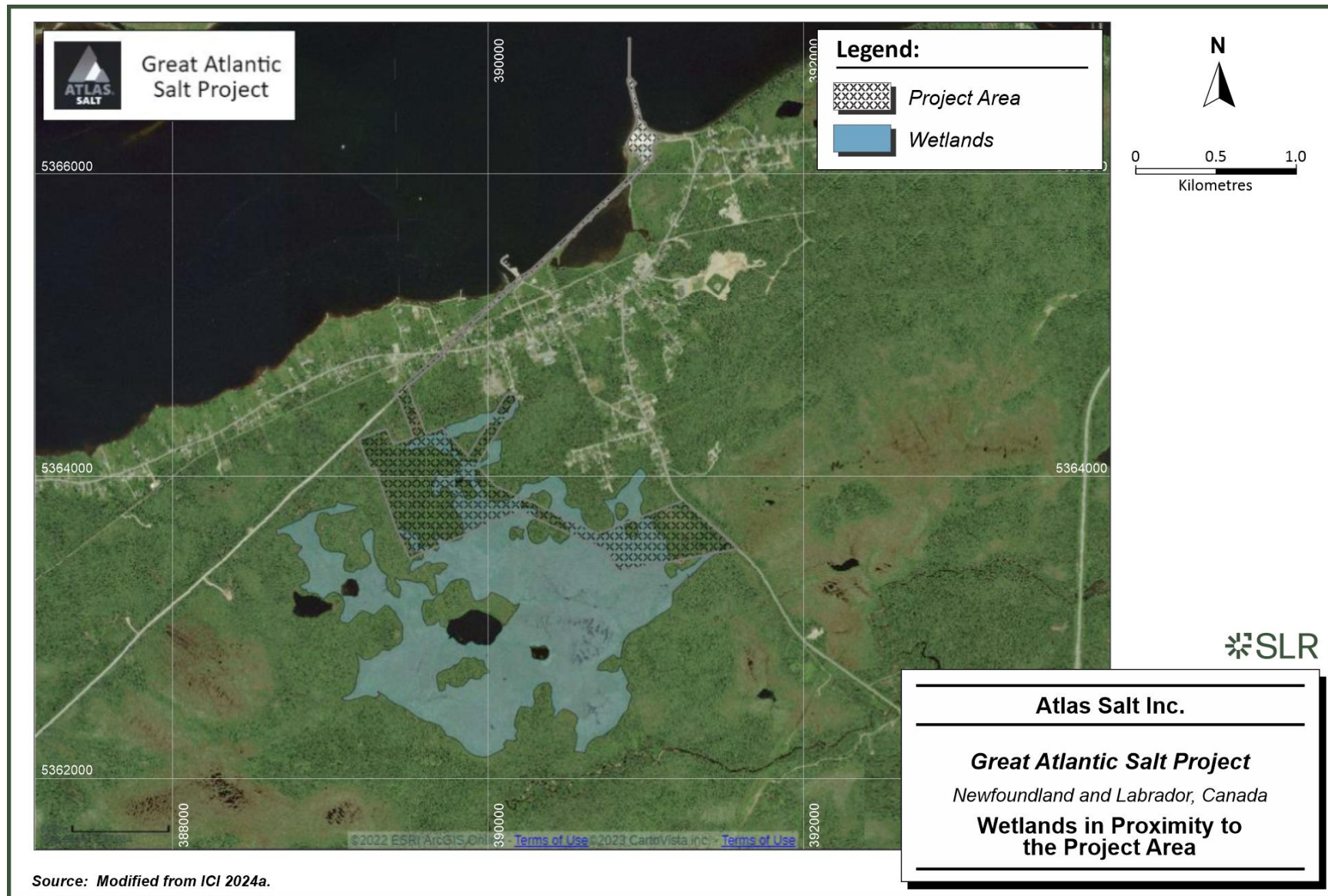
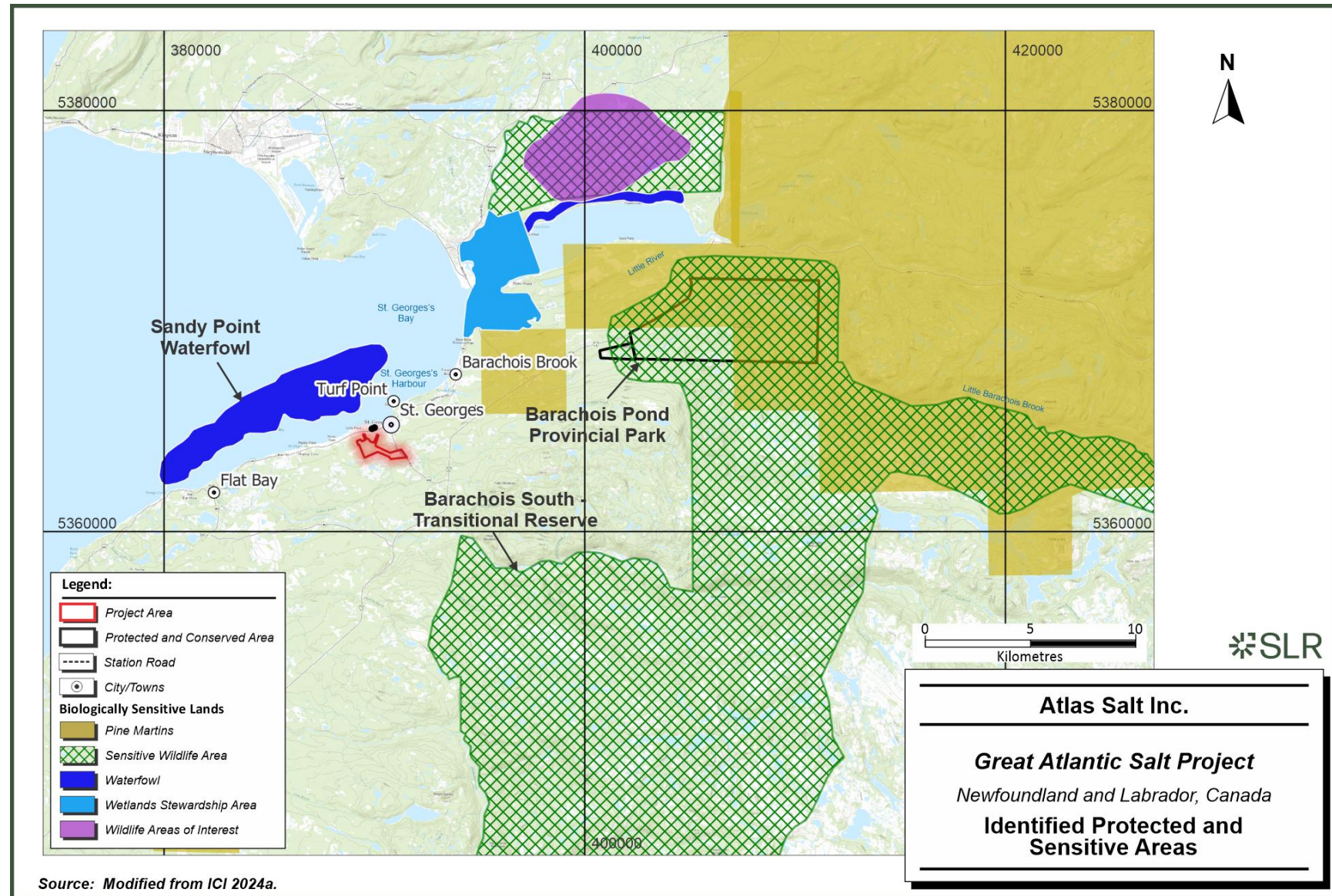


Figure 20-4: Identified Protected and Sensitive Areas



Source: Modified from ICI 2024a.



20.1.1.6 Flora and Fauna

A total of 150 flora species were documented in the study area, all are common species and widespread in the region. No species at risk (SAR) were identified.

A total of 52 bird species were identified in the study area, most of which are common in the region, although one SAR was identified, the Barn Swallow. Three species of conservation concern (SOCC) were identified within the study area, namely the willet (Critically Imperiled), great blue heron (Special Concern), and yellow-bellied sapsucker (Imperiled). Habitat for these species appears to be present within or proximal to the study area.

Common animals that occur in the area include moose, mink, snowshoe hare, lynx, black bear, beaver, muskrat, and otter. Wildlife encountered during field surveys includes some of these species as well as frogs (non-endemic) and birds mentioned above. There are two endangered species of bats that are found within Newfoundland and Labrador, Northern Myotis and Little Brown Myotis, and both were detected through acoustic monitoring during field surveys.

20.1.1.7 Fish and Fish Habitat

There are no identifiable waterbodies or watercourses containing fish habitat in the disturbance footprint of the Project site.

In the town of St. George's Municipal Planning Area, there is one scheduled salmon river: Flat Bay Brook, which is inclusive of its main tributary, Dribble Brook. Flat Bay Brook is located approximately 6 km south of the Project area and Dribble Brook lies approximately 1.6 km south of the Project area. Flat Bay Brook flows west to the ocean at Flat Bay. Scheduled salmon rivers are regulated for fishing and have limitations for when fishing is allowed and permissible fishing equipment. The river is characterized by a series of natural obstructions that limit salmon access. Fish species in the watershed include Atlantic Salmon, Brook Trout, American Eel, Rainbow Smelt, and Stickleback.

GEMTEC (2023a) conducted a fisheries survey on Man o' War Brook which included eDNA collection in Barachois Pond. Findings include:

- The watercourse known as "Man o' War Brook" does not appear on 1:50,000 topographic mapping and lies approximately 150 m west of the Project site. Brook Trout were identified in this watercourse.
- Barachois Pond is located on the shore below the railway line between Station Road and Turf Point. The eastern bank and surrounding terrestrial habitat of the pond has been designated as an Environmental Protection area by the town of St. George's. Barachois Pond is tidally influenced and outlets via a large (2 m diameter) culvert into Flat Bay at the northeastern limit of the causeway, adjacent to Turf Point. SAR identified through eDNA collection include Banded Killifish, Mummichog, and American Eel.

Bay St. George, Sandy Point, and Port au Port are in the Laurentian Channel ecoregion of Parks Canada's National Marine Conservation Areas System. Bay St. George and Port au Port Bay are Fisheries Conservation Closed Areas, aimed at conservation of Atlantic salmon, Atlantic herring spring spawning, and lobster.

20.1.1.8 Historical Resources

Based on information available from the Provincial Archaeology Office database, there are no known historical resources located within or near the Project area.



20.1.2 Key Environmental and Social Issues

Environmental permitting documentation was compiled in 2024 and key environmental and social aspects of Project development were identified and assessed (ICI 2024a). Table 20-1 summarizes residual potential environmental and social impacts, based on the environmental permitting documentation and accounting for planned mitigation measures. No significant impacts or cumulative effects were identified for the Project.

The Project definition has since evolved and key changes are discussed in Section 20.3.4. The QP recommends that potential Project effects and mitigation measures be reviewed considering these Project changes. In the QP's opinion, the changes to the mine site surface infrastructure are not considered to be material and are not expected to result in material changes to the potential Project effects and mitigation measures. Potential effects and mitigation for changes planned at the existing Turf Point Port will need to be considered and relevant regulators consulted during permitting.



Table 20-1: Summary of Residual Project Effects and Mitigation Measures

Valued Ecosystem Component (VEC)	Potential Project Effects	Planned Key Mitigation Measures to be Implemented by Atlas	Characterization of Project Effect
Atmospheric Environment	• Gaseous emissions from equipment and vehicles. • Dust generation. • Light pollution. • Noise and vibration generation.	• Maintain vehicles and equipment in good working order. • Use electric vehicles underground. • Minimize blasting. • Implement a dust management system. • Enclose the conveyor where the route traverses residential areas and design transfer stations to minimize dust and noise. • Limit external artificial lighting.	• Planned Project activities and infrastructure may result in some small, localized, and short-term emissions and disturbances. • Expected to be negligible and within applicable regulations and standards.
Surface Water	• Sedimentation of surface water resources. • Surface water contamination due to accidental leaks and spills and discharge of excess mine water to Man O' War Brook. • Changes in surface water flow regime. • Loss of two ephemeral drainage features and wetlands (non-fish bearing). • Discharge to Man 'O War Brook.	• Implement erosion and sediment controls. • Contain contact water. • Manage discharge using a settling pond and treatment, if needed. • Fuel and chemical use will adhere to industry standard operating procedures. • Implement a water quality monitoring program. • Implement management plans approved by the provincial Water Resources Management Division, including: Water Resources Management Plan, Waste Management Plan, Environmental Protection Plan. • Rehabilitate after mining operations cease and conduct post-closure monitoring.	• Planned Project activities and infrastructure will have some potential to interact with and affect surface and groundwater resources through surface disturbance. • Discharge to Man 'O War Brook is not expected to significantly change the water flows. • Further study, including modelling and monitoring work, is planned and will be factored into ongoing Project design.



Valued Ecosystem Component (VEC)	Potential Project Effects	Planned Key Mitigation Measures to be Implemented by Atlas	Characterization of Project Effect
Groundwater	- Lowering of groundwater levels. - Potential saltwater intrusion due to dewatering, which could impact potable groundwater resources. - Post-mining flooding could lead to some salt dissolution of the mine void walls and pillars.	- Baseline survey will be conducted of all water wells in the vicinity prior to dewatering. - Transient groundwater modelling will be conducted during detailed engineering to understand potential dewatering impacts on nearby potable water supplies, including the St. George's wellfield and surface water resources. - Should potential saltwater intrusion effects on potable water resources be identified in modelling, appropriate measures will be incorporated into the design of the Project. - Implement a water quality monitoring program. - Implement approved management plans including: Water Resources Management Plan, Wetland Mitigation Plan, Waste Management Plan, Environmental Protection Plan. - Address potential stability issues related to post-closure flooding as part of mine design and closure planning. - Rehabilitate after mining operations cease and conduct post-closure monitoring.	- Planned Project activities and infrastructure will have some potential to interact with and affect surface and groundwater resources through surface disturbance. - Further study, including modelling and monitoring work, is planned and will be factored into ongoing Project design.
Fish and fish habitat (freshwater)	- Change in fish presence or abundance, including SAR. - Change in fish health. - Change in fish activities and requirements.	- Implement a buffer zone of 30 m around freshwater habitats where possible. - Implement erosion control measures. - No blasting will be conducted close to a water body. - Implement a water quality monitoring program. - Implement approved management plans including Water Resources Management Plan, Waste Management Plan, Environmental Protection Plan.	Planned Project activities and infrastructure have minimal potential to interact with and affect freshwater waterbodies and watercourses in the area.



Valued Ecosystem Component (VEC)	Potential Project Effects	Planned Key Mitigation Measures to be Implemented by Atlas	Characterization of Project Effect
Wildlife and wildlife habitat	• Change in wildlife presence or abundance, including SAR. • Change in habitat availability or quality. • Disturbance caused by noise, light, dust generation, waste management, traffic, human presence.	• Monitor for bird nests during breeding season (1 May to 15 August) ahead of clearing activities and avoid trees with nests when cutting down trees. • Follow federal and provincial requirements and guidance should nests be found. • Implement approved management plans including: Waste Management Plan, Environmental Protection Plan, Bat Preventative Measures Plan. • Hunting and harassment of wildlife will not be permitted. • Pets will not be permitted. • Equipment and vehicles will yield to wildlife. • Limit artificial lighting. • Suppress dust effectively. • Rehabilitate after mining operations cease and conduct post-closure monitoring.	• Planned Project activities and infrastructure have the potential to interact with and affect wildlife and habitat. Such interactions will be localized and mostly limited to the construction phase.
People and communities	• Changes in human health. • Changes in social health and well-being. • Changes in community services and infrastructure availability, quality, and cost.	• Manage access to the mine site. • Inform local residents of construction activities, e.g., when mobilizing heavy equipment along public roadways. • The mine access will be routed around the community. • Implement design and mitigation measures, as well as approved management plans, to minimize potential emissions that may impact human health. • Define construction workforce accommodation requirements and understand local capacity and community preferences.	• Planned Project activities and infrastructure are not expected to have significant adverse effects.



Valued Ecosystem Component (VEC)	Potential Project Effects	Planned Key Mitigation Measures to be Implemented by Atlas	Characterization of Project Effect
Land and resource use	• Change in land uses • Change in historical resources	• Implement design and mitigation measures, as well as approved management plans, to minimize potential emissions that may impact land use and human health. • Implement accidental or “chance find” historical resources procedures. • Continue regular communication with communities, Indigenous communities, other groups, and the general public to address emerging or ongoing concerns. • Rehabilitate after mining operations cease and conduct post-closure monitoring.	• Planned Project activities and infrastructure are not expected to have material adverse effects.
Economy, employment, and business.	• Change in economy, employment, business (positive impacts). • Interference with other economic activities.	• Implement local hiring where possible. • Share labour force estimate with appropriate agencies and organizations to help identify employment needs and opportunities. • Implement procurement and contracting policies that provide full and fair opportunity for participation by qualified and competitive companies within the province.	• Positive socio-economic effects in Western Newfoundland and the broader province. • No significant adverse effects expected.
Note: Effects and mitigation measures of the Project on the marine environment were excluded from this table because the Project definition in the environmental permitting documents did not consider in-water works for the refurbishment of the port. The effects assessment and management plans are being updated accordingly, and Atlas will address any associated permitting issues with provincial and/or federal authorities (Section 20.3.4).			



20.2 Water and Mine Waste Management

20.2.1 Environmental Geochemistry

ARD/ML is a common environmental issue that develops in underground and open pit mining operations where rock containing sulphide minerals, like pyrite (FeS_2), is excavated and exposed to atmospheric oxygen in the presence of water. Based on geological information available, ARD/ML is not expected to arise as a material issue during Project development, operation, and closure. Angler Solution (2024) considered the ARD/ML risk associated with the Early Works activities to be remote, although noted that a program of sample collection and testing should be initiated during construction to confirm this.

For confirmation purposes, the QP recommends that geochemical characterization be performed of the overburden/till, sedimentary rocks, and conglomerates in the Red Beds, as well as interburden material in the halite deposit. The testing program is recommended to include collecting a sufficient number of samples of each material type to characterize the spatial (lateral and vertical) variability of geochemical properties throughout the area of mine development and be initiated during construction.

The QP further recommends that the results of the geochemical characterization testing be used to establish monitoring plans for leachate and surface and groundwater, and to determine the need for and types of controls necessary to protect the environment.

20.2.2 Water Management

The Project has incorporated mitigation measures into the design and has considered best practice as per the Transportation Association of Canada's Synthesis of Best Practices for Road Salt Management (TAC 2013).

The Early Works Water Resources Management Plan includes the following key measures (ICI 2025b):

- Surface runoff from the undisturbed catchment area upstream of the Project area will be diverted with ditches to reduce the volume of water from precipitation to be collected in the settling pond. Diverted water will remain within the same natural watershed from pre-development conditions.
- Surface runoff from areas being cleared for construction will be contained using ditches and directed to two settling ponds to promote settling of solid particles, before being discharged to the natural environment through existing vegetation before entering Man o' War Brook.
- Culverts will be constructed for the access road and onsite roads.

Mitigation measures for operations included in the design are as follows (refer to Section 18.4):

- One point of discharge for contact water to the receiving environment is proposed in the water management plan. Surface runoff from the Project facilities (waste rock stockpile, pre-production [temporary] salt stockpile and site terrace) will be collected via perimeter ditches then directed to a sediment settling pond. Underground mine dewatering will be pumped to the same settling pond. The pond will be the only facility releasing water to the receiving environment.



- The water management plan includes the construction of a settling pond to promote settling of solid particles from surface runoff and mine water. The discharge location will be designed with suitable outflow rates and adequate protection against erosion.
- If necessary, the flow conveyance capacity of the existing culvert crossing on Man o' War Brook under the historical haul road will be expanded to maintain unrestricted flow along the brook.
- Surface runoff from the undisturbed catchment area upstream of the Project area will be diverted with ditches to reduce the volume of water from precipitation to be collected in the settling pond. Diverted water will remain within the same natural watershed from pre-development conditions.
- The temporary pre-development salt stockpile will have an impermeable foundation and will be covered with a tarp to manage seepage and runoff.

20.3 Environmental Permitting and Schedule

This section addresses federal and provincial environmental approval and permit requirements.

20.3.1 Current Status

The Project holds Mineral Claims Licence 0227183M. Atlas Salt obtains the permits to conduct exploration activities on an as-needed basis. The Project holds environmental approval-in-principle at the provincial level as described below.

20.3.2 Federal Approval

The *Impact Assessment Act* (IAA), implemented by the Impact Assessment Agency of Canada (IAAC), requires the formal assessment of proposed projects that are on federal lands, involve federal funds, or are defined projects pursuant to the Physical Activities Regulations (2019). These regulations do not specifically mention salt mines, however, quarries and sand and gravel pits are included for a production capacity of 3.5 Mtpa or more.

Under subsection 9(1) of the IAA, the federal Minister of Environment and Climate Change may designate any project not described in regulations if, in its opinion, either the carrying out of that physical activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects, or public concerns related to those effects warrant the designation.

Designation requests may come from the public, Indigenous communities, non-governmental organizations, a federal authority, the IAAC, another jurisdiction, or the Project proponent.

The IAAC confirmed in writing that the Project was not subject to a federal EA on December 6, 2023. The Project definition has since evolved which may have federal permitting implications (Section 20.3.4).

The Project must comply with other federal legislation, including:

- *Canadian Environmental Protection Act (CEPA)*: CEPA provides for environmental management of hazardous substances and pollutants to protect human health and the environment.
- *Species At Risk Act (SARA)*: Both the NL and federal governments manage and protect species at risk including critical habitats of species at risk. As part of an impact assessment process the Proponent will be required to document any proposed project and species at



risk interactions and develop mitigative measures to reduce and/or eliminate any impacts to species at risk within the project zone of influence.

- *Migratory Birds Conventions Act (MBCA)*: The MBCA protects avifauna in Canada and prohibits the destruction of birds, eggs, and nests of migratory birds. As part of an impact assessment process the proponent will be required to document any adverse effects to migratory birds and bird habitat including any proposed mitigations designed to reduce and/or eliminate the effects.
- *Fisheries Act*: The federal *Fisheries Act* regulates the protection of fish habitat and the deposition of deleterious substances that may impact fish and fish habitat. Section 36 of the *Fisheries Act* prohibits the deposition of all deleterious substances into water frequented by fish.
- *Canadian Navigable Waters Act (CNWA)*: The CNWA regulates activities that may impede vessel movement and travel of Canada's navigable waterways. For this Project, of concern would be any modification of the existing marine terminal or the size and nature of the vessels using the existing terminal.

20.3.3 Provincial Approval

Environmental reviews at the provincial level are carried out under the NL *Environmental Protection Act*, 2002 (NL EPA). The Environmental Assessment Regulations (2003) (EAR) provide a list of designated undertakings requiring environmental review.

A project proponent initiates the environmental review process by submitting an EA Registration document describing the proposed project and how it will affect the bio-physical and socio-economic environment. The regulator reviews the EA Registration document and—depending on factors including the nature of the project, its anticipated environmental and social impacts, and public interest—may respond in one of the following ways:

- The project may be released from the assessment process and may proceed as indicated in the Registration, subject to any conditions that the Minister may establish, and other applicable legal requirements.
- An Environmental Preview Report (EPR) may be required if additional information is needed to complete the environmental review.
- An Environmental Impact Statement (EIS) may be required in instances where significant potential negative effects are indicated or where there is significant public concern about a proposed project.

Once released from the environmental review process, the project proponent will normally need to obtain other permits and authorizations related to project development.

Atlas Salt submitted an EA Registration document on February 28, 2024. The Project was released from the EA process on April 19, 2024 (Reg.#2290). This release remains valid for three years, although Atlas has the option to apply for an extension of a maximum of three additional years, should the Project not have commenced in this timeframe. The release is subject to the following conditions (NL ECC 2024):

- Atlas must adhere to all commitments made in the EA Registration document.
- The Pollution Prevention Division (PPD) of NL ECC requires a Certificate of Approval prior to construction. A Waste Management Plan for construction and operations must be approved by the PPD prior to construction.



- The Water Resources Management Division (WRMD) requires a set of management plans to be approved by WRMD prior to construction, including a Water Resources Management Plan, Emergency Response Plan, Wetlands Conservation Plan, and Environmental Protection Plan. In addition, a full groundwater assessment is required and a real-time water quality and quantity network may be required.
- The Department of Fisheries, Forestry, and Agriculture requires bat acoustic monitoring, a Preventative Measures Plan to discourage bat occupation of infrastructure, and specified requirements for tree removal with regard to bats.
- The Wildlife Division requires surveys for Black Ash and digital plant location data. A Mitigation Plan to manage potential impacts of runoff into the tributary of Flat Bay Brook and measures protect American eel, mummichog, and banded killifish must be approved by the Wildlife Division prior to construction.
- The Department of Industry, Energy, and Technology (IET) requires the development of a Benefits Plan that must be approved by the Minister of IET prior to commencement of site activities.
- Atlas must comply with vegetation clearing limitations.

Atlas is working to comply with these requirements and has compiled management plans for early works, which includes the following activities (ICI 2024):

- Site clearing or organic and overburden material.
- Construction of the mine access road off the Provincial route 461 (Steel Mountain Road).
- Construction of the 1,400 m long primary access road, including required culverts, ditches, site access controls, and signage.
- Construction of the 300 m long secondary access road from Flintkote Road, including required culverts, ditches, site access controls, and signage.
- Construction totalling approximately 2,000 m of gravel site roads.
- Construction of laydown areas.
- Construction of temporary construction facilities such as buildings, an office, and a wash trailer.
- Implementation of temporary sediment and erosion controls, and a settling basin or sump.
- Construction of berms and ditching required to divert water around the mine site.
- Construction of terraces for planned infrastructure areas.

Approved early works management plans include:

- Early Works Development and Rehabilitation and Closure Plan
- Waste Management Plan
- Water Resources Management Plan
- Wetland Conservation Plan
- Bat Preventative Measures Plan
- Environmental Protection Plan



An Early Works Socio-economic Benefits Plan is currently being developed.

Atlas defined a footprint area in the Early Works Development and Rehabilitation and Closure Plan and this is referred to as the “permitted” area.

Atlas has submitted a report on the Black Ash and raptor surveys completed, which indicate that none were found in the Project area. Bat acoustic monitoring was completed in July 2024 and 66 bat passes were detected. The majority of bat calls were identified as Myotis species, either little brown bats or northern long-eared bats. Further acoustic monitoring was conducted from April to June 2025, however, the results are not yet available.

Atlas plans to submit management plans for Capital Development in due course.

The Project definition has evolved since the EA release was issued, which may have provincial permitting implications (Section 20.3.3).

20.3.4 Changes to the Project

There are changes to the Project as described in the Project Registration submitted to NL ECC in 2024. The main changes include:

- Increase in production rate from 2.5 Mtpa to 4.0 Mtpa. The Project Registration did state that there was potential to increase production up to 4.0 Mtpa.
- Geotechnical work has shown an intersect with the salt resource at a shallower level and therefore the declines will be adjusted to minimize development in the Red Beds. In addition, geological faults recently identified have required adjustments to the positioning of the declines.
- The boxcut will shifted slightly to lie approximately 10 m outside of the permitted area.
- Changes to estimated stockpile volumes and areas (Table 20-2) according to current Project design.
- The overall footprint (permitted area) will increase by approximately 5 ha outside of the current permitted area.
- Refurbishment of Turf Point will include adding a new concrete caisson or a pile structure and extension of the steel trestle.
- Dredging of the dock area and the approaches to Turf Point will be required.

Table 20-2: Project Design Changes to Stockpile Facilities

Stockpile	Parameter	EA Registration (according to 2023 Project design)	Current Project Design
Soil and organic material	Volume (m ³)	162,000	92,500
	Height (m)	14.5	11
	Area (m ²)	28,000	13,500
Salt stockpile (product)	Volume (m ³)	291,000	341,758
	Height (m)	14	27
	Area (m ²)	30,000	24,400



Stockpile	Parameter	EA Registration (according to 2023 Project design)	Current Project Design
Waste rock overburden	Volume (m ³)	570,000	846,466
	Height (m)	25.7	33
	Area (m ²)	40,000	51,000

These changes have the following environmental approval and permitting implications:

- **Federal:** Section 53 of the Physical Activities Regulations addresses the expansion of existing marine terminals. The activity is defined as “*The expansion of an existing marine terminal, if the expansion requires the construction of a new berth designed to handle ships larger than 25 000 DWT (dead weight ton) and, if the berth is not a permanent structure in the water, the construction of a new permanent structure in the water.*” In SLR’s opinion, the addition of a caisson or pile structure is unlikely to trigger an environmental review under the IAA. These changes will require in-water works, which may trigger permitting requirements under the *Fisheries Act*. This process could take 18 months or more. Under the Project execution schedule there is sufficient time to obtain approval prior to commencing work on the port terminal. The QP recommends that GAS consult with the IAAC and the Department of Fisheries and Oceans (DFO) to confirm what, if any, federal permitting action will be required.

SLR further recommends that Atlas confirm with IAAC that the Project will not require review under the IAA due to the increase in production rate.

- **Provincial:** Atlas will need to inform the NL ECC of these changes, and the regulator will determine whether a revised EA Registration is required or if an EPR is required to provide further information. Based on discussions with Project permitting consultant ICI, the QP is of the opinion that the changes at the mine site are not material and will not trigger additional environmental review via an EPR or EIS.
- A permit for dredging will need to be obtained by the port operator or their contractor.

20.3.5 Permit and Approval Register

Table 20-3 lists the federal and provincial approvals and permits identified for the Project based on current information, including the estimated timeframes for approval.

A detailed execution schedule has been developed for the Project which includes environmental application processes in a phased approach considering Early Works, Capital Development, and Commercial Production. This schedule allows for the following key tasks:

- Preparation and submission of an information package to regulators which will clearly shows the Project changes (estimated at two months). This includes engagement with stakeholders, the public, and Indigenous communities.
- Regulator review and decision on Project changes (estimated at two months).
- Permitting of Early Works activities and infrastructure (estimated at nine months).
- Preparation of Capital Development Environmental Protection Plan (EPP) and management plans (estimated at four months). This includes engagement with stakeholders, the public, and Indigenous communities.
- Permitting of Capital Works activities and infrastructure (estimated at five months).



- Preparation of Commercial Production EPP and management plans (estimated at four months). This includes engagement with stakeholders, the public, and Indigenous communities.
- Permitting of operations activities and infrastructure (estimated at five months).

Early Works may proceed while the approvals are obtained for Capital Development activities.

As discussed in Section 20.3.4, a permit for dredging will need to be obtained by the port operator or their contractor, therefore this is not included in the list of approvals which Atlas Salt must obtain.



Table 20-3: Permit and Approval Register

Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	Project Activities/Trigger	Permit Information Requirements	Regulator Review Time/ Process Time	Comment
Provincial (NL)					
Release from EA Process	NL Department of Environment and Climate Change (ECC)	Mining of a mineral	Comprehensive EA registration or EPR.	4 to 6 months	EA release obtained for the Project. It will be necessary to confirm this release will remain in place with the changes made to the Project infrastructure. Regulator may require a revised EA Registration (unlikely to require an EPR). Required before any permits or construction can occur
Approval of Environmental Protection Plan (EPP)		Mining activity	EPP and select management plans.		
Monitoring plan for Certificate of Approval (CoA)	NL ECC – Pollution Prevention Division	Water discharge	Draft during EPR review.	3 months	Required prior to water discharge activities.
Approval of Environmental Contingency Plan / Emergency Spill Response		Use of fuels and chemicals.	Part of EPP.	2 months	EPP and select management plans were submitted to regulator for approval for Early Works. Separate EPP required for Capital Development and Commercial Production.



Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	Project Activities/Trigger	Permit Information Requirements	Regulator Review Time/ Process Time	Comment
Certificate Of Environmental Approval to Alter a Body of Water-		Water abstraction and discharge	Water Management Plan (WMP) including engineering design drawings	3 to 6 months	Water management plan submitted to regulator for approval for Early Works. Separate management plan required for Capital Works and Operations. These plans will be informed by groundwater transient modelling.
Culvert Installation		Road access	Stream flow and engineering design drawings	3 months	Required prior to specific road construction.
Fording / Bridge		Stream crossing	Stream flow and engineering design drawings	3 months	Prior to activity.
Water Intake		Water extraction	Engineering information and design drawings	3 months	Required prior to construction.
Other Works close to a body of water		Activities close to a body of water.	WMP including engineering design drawings.	1 to 6 months	Required prior to construction.
Water Use License		Process Water	Water Management Plan including engineering design drawings.	1 to 6 months	Water management plan submitted to regulator for approval for Early Works. Separate management plan required for Capital Development and Commercial Production. These plans will be informed by groundwater transient modelling. Required prior to construction.
Permit to occupy Crown Land	NL Department of Fisheries, Forestry and Agriculture – Crown Lands Division	Use of Crown Lands	Survey data and Initial Development Plan.	3 to 6 months	Required prior to construction.
Operating Permit to Carry out an Industrial Operation During Forest Fire Season on Crown Land	NL Department of Fisheries, Forestry and Agriculture –	Site Preparation/Clearing	Initial Development Plan data.	1 month	Required prior to construction.



Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	Project Activities/Trigger	Permit Information Requirements	Regulator Review Time/ Process Time	Comment
Permit to Cut Crown Timber and Burn	Forestry and Agrifoods Agency	Site Clearing	Initial Development Plan data.	1 month	Required prior to construction.
Development Plan	NL Department of Industry, Energy and Technology Mineral Development and Mineral Lands Division	Mining	Development Plan.		Early Works Development and Rehabilitation and Closure Plan has been approved. Development plans required for Capital Development and Commercial Production (operations).
Rehabilitation and Closure Plan (RCP) including Financial Assurance		Mining	RCP		Early Works Development and Rehabilitation and Closure Plan has been approved. Closure plans required for Capital Development and Commercial Production (operations).
Mill Licence		Mining	Development Plan.		Required prior to operation.
Blasters Safety Certificate	Department Of Digital Government and Service NL Government Service Centre	Blasting	Initial Development Plan data.	3 months	Required prior to activity during construction.
Approval for Storage and Handling of Gasoline and Associated substances		Fuel storage	Engineering design drawings and EPP	2 months	Required prior to activity.
Fuel Storage Tank Registration		Fuel storage	Engineering design drawings and EPP	2 months	Required prior to activity.
Approval for Used Oil Storage Tank System (Oil / Water Separator)		If oil/water separation is needed for equipment maintenance area	Engineering design drawings and EPP	3 months	Required prior to activity.
CoA for a Waste Management System		Waste disposal	Engineering design drawings	3 months	Required prior to activity.
CoA for a Sewage / Septic System		Septic system	Engineering design drawings and soil drainage tests	3 months	Required prior to activity.



Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	Project Activities/Trigger	Permit Information Requirements	Regulator Review Time/ Process Time	Comment
Highway Access		Access from provincial road	Preliminary application to develop land	1 month	Required prior to activity.
Protected Road Regulations		Development within Protected Road Regulation	Preliminary application to develop land	1 month	Required prior to activity.
Federal					
Fisheries Act Authorization permitting serious harm to fish	Fisheries and Oceans Canada	Not likely required for effluent discharge but dependant on discharge quality and effects.	NA	Potentially obtain a letter of advice	Required prior to construction.
		Addition of caisson or pile structure at Turf Point may require a permit.	Permit application providing detail of construction method and potential impacts to fish.	Permit may take 18 months.	Required prior to construction.
Licence to Store, Manufacture, or Handle Explosives (Magazine Licence)	Natural Resources Canada	Use of blasting.	Initial Development Plan data.	3 months	Required prior to activity.



20.4 Social and Community Aspects

20.4.1 Social Baseline (Setting)

The Project is located in the town of St George's, which offers a balance of industrial, commercial, and recreational development, including the jetty which was developed for gypsum shipment from a nearby mine, now inactive. Stephenville, 17 km north of the Project site (Figure 4-1), is a regional base of commerce, government, recreational, and healthcare services. In 2021, the populations of Stephenville and St. George's were 7,344 and 1,139, respectively; in the previous five years, the population of St. George's had declined 5%.

The nearest Indigenous community is the Qalipu Mi'kmaq First Nation, established in 2011, with a central administrative office in Corner Brook, approximately 70 km to the north of the Project area, however, there are Indigenous people living in the general area. Indigenous ancestry for the population in private households in the region was measured in Statistics Canada's Census 2021. In St. George's, from the 25% sample of the 1,140 population in private households, 375 reported Indigenous ancestry. In Stephenville, based on a sample of 7,045 people, 1,720 reported single Indigenous ancestry (1,625 were First Nations, 50 Metis, and 40 Inuit). There were a few people who reported multiple Indigenous ancestry (Statistics Canada 2021).

The St. George's Community Plan states that the Mi'kmaq Nation of Newfoundland (called Ktaqmkuk in the Community Plan) is not entitled to any treaty rights, however, the Nation is working with the government to obtain hunting and fishing rights.

20.4.2 Community Engagement

The Company's engagement and community relations efforts have been based on building relationships and understanding the region. Butland Communications, a company that Atlas has hired to assist with stakeholder engagement, reports that for close to 20 years, the Company has connected with residents of the area, regularly engaged with the St. George's Town Council, provided some support for youth recreation, and has actively provided industry and public updates of the Project's advancement through exploration and economic evaluation phases.

Atlas has communicated to SLR to be fully committed to a comprehensive program of planned and organized community and stakeholder engagement as Project development advances.

20.4.3 Stakeholders and Indigenous Communities

Atlas maintains a list of stakeholders and Indigenous communities that will be updated as the Project develops. The list includes area residents, community groups, government agencies, hunters, fishers, berry pickers, outfitters, recreational groups, cabin owners, and others.

Questions and issues previously raised during the engagement process and addressed by Atlas were focused on:

- Protection of groundwater and surface water drinking supply
- Water management and the planned discharge of excess mine water
- Project electricity demand and supply
- Salt storage
- Concerns around blasting



- Concerns around conveyor routing
- Capacity of the town of St. George's housing and infrastructure to accommodate Project requirements
- Planned activities at the port and increase in vessel traffic
- Potential effects on wildlife and any protected/special areas in the region
- Dust and noise emissions
- Potential Project effects on recreational users in the Project vicinity
- Community and business opportunities and benefits

It is noted that the town of St. George's, Bay St. George's Chamber of Commerce, and the First Nations Bands of St. George's, Flat Bay, and Three Rivers have all communicated their support. The Qalipu First Nation is still considering their support for the Project but to date has not expressed any specific concerns.

20.4.3.1 Engagement Plans

Butland Communications has provided information on planned engagement as the Project moves forward. Key tools that will be used include a website and newsletters to provide information, community open-houses, meetings, site tours, job fairs, working groups or committees, and direct liaison with community leaders. Detailed information is provided in Table 20-4.

Atlas will need to present the proposed Project changes to communities and stakeholders and address any new questions and issues that are raised.

Community engagement efforts will continue to evolve as the Project advances. The Company will continue to respond to the community needs and Project-related concerns.

Atlas Salt has indicated commitment to Indigenous engagement. Key provisions are expected to include preferential hiring of qualified personnel; engaging with Indigenous enterprises for economic development and supplier development; and capacity building for improved social, cultural, educational, and community well-being.



Table 20-4 Engagement Plans

Stakeholder Group or Indigenous Community	Engagement Plan	Interests and Concerns
<u>Towns of St. Georges and Local Service Districts in Bay St. George area.</u> Municipal committees and advisory boards Local Band Councils / First Nations Groups	Project office in St. George's Regular project update meetings Communications through newsletters, social media, website Open houses Site tours Community events Liaison officers Working committees and advisory groups	Municipal and regional plans – services, land use, recreation, business areas, taxation, waste management, emergency services, housing, roads and highway use, grants and other interests and social concerns. Municipal support and services, e.g., accessibility to land Community supports for employees and contractors Local employment, training and business opportunities
<u>Land user groups</u> Trail societies and committees Hunters, fishermen, berry pickers, hikers, all-terrain vehicle (ATV) users Cabin owners – individuals and associations Agriculture associations	Meetings Community events Communications through newsletters, social media, website Working committees and advisory groups	Land use, mapping and infrastructure planning Mitigating impacts Cooperation and assistance
<u>Community groups</u> Youth and elder groups Social and health committees Heritage societies	Meetings Community events Open houses	Community supports
General Public	Job fairs Open houses Presentations News media – releases, interviews, site tours Communications through newsletters, website and social media	Employment Training and education requirements, plans and opportunities Community impact and supports Environmental impacts and mitigations Socio-economic impact, opportunities and supports



Stakeholder Group or Indigenous Community	Engagement Plan	Interests and Concerns
<u>Business Community</u> Companies Contractors Industry associations Chambers of Commerce	Conferences and Trade shows – regional, provincial Association activities, events and membership Procurement officers / coordinators Information sessions Site tours	Supplier opportunities and gaps Information and introduction of supply chain and contractors Procurement systems Project updates, budgets and schedules Partnership and joint venture opportunities Economic impact
<u>Provincial Members of House of Assembly</u> Members of Parliament Government committees	Meetings Site tours Briefing papers Inclusion in public events	Opportunities and impact on constituents Awareness of regulatory approvals
<u>Economic Development organizations</u> Regional committees and boards	Meetings Site tours Conferences Corporate Communications	Economic impact and opportunities Strategic and development planning Regional surveys and impact monitoring
<u>Marine sector</u> Fishers and fish harvesters Harbour and port authorities Marine Traffic Control and Harbour Pilotage	Meetings Corporate and community communications Working committees and advisory groups	Infrastructure Service requirements Traffic impact Impact mitigation Monitoring
<u>Employment organizations</u> Unions Trades organizations Groups for diversity, inclusion, equity and underrepresented employment	Meetings Corporate and community consultation Conferences and events Working committees and advisory groups	Opportunities for employment Training Diversity, Inclusion and Equity planning Workforce and standards planning
<u>Educators</u> High schools Colleges – public and private University	Meetings Corporate and community communications Conferences and events Job fairs	Planning to address gaps and opportunities for skills and expertise Employment and on-the-job training opportunities Research and development Innovation



20.5 Mine Closure Requirements

A Reclamation and Closure Plan (RCP) is required prior to commencement of a mining operation under the *Mining Act* (1999). This plan must include progressive rehabilitation work plans for each year of the mining lease term. Financial assurance for rehabilitation and closure must also be provided to the satisfaction of the Minister of Natural Resources.

GEMTEC reviewed the rehabilitation and closure activities and prepared the cost estimate for rehabilitation for early works. A financial assurance proposal will be submitted to the regulator following approval of the Early Works Mine Development and Rehabilitation and Closure Plan. GEMTEC developed the Early Works rehabilitation cost estimate using RS Means unit rates and allowances based on previous experience. The cost is provided in the Early Works Mine Development and Rehabilitation and Closure Plan (ICI 2024b). It is made up of a calculated cost of \$2,168,547.82 for surface mine closure, \$90,000 closure studies, post closure monitoring at \$153,900, Engineering and Project Management (10%) at \$216,854.78, and a contingency (15%) of \$325,282.17. The total cost is estimated at \$2,710,684.

Atlas will develop an RCP for Capital Development and Commercial Production in due course. To support the UFS, the Project Team developed a conceptual mine closure plan and a high-level estimate of rehabilitation and closure costs. Table 20-5 provides the conceptual closure planning for Project infrastructure. The high-level rehabilitation and closure cost has been estimated to be \$14 million.

The Turf Point Port is owned by a third party and has not been included in closure planning.



Table 20-5: Conceptual Closure Plan for Infrastructure

Project Area	Component	Conceptual Closure Plan
Mining and processing	Access to underground - portal area	The area will be covered. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Twin portals	Portals will be hydraulically sealed to prevent the possibility of groundwater daylighting, and to prevent access by people or animals.
	Underground void Includes maintenance shop Crushing and screening plant	Some mining and processing equipment may be salvaged. The remainder will be left underground in an environmentally benign condition. Any hazardous waste will be disposed of at a permitted facility. Dewatering will cease and the void will flood.
Surface infrastructure	Waste rock stockpile	The stockpile will be contoured to reduce topographic relief and the sides will be contoured to an angle not steeper than 1:3 to allow re-vegetation. Topsoil will be placed on the top and slide slopes, and these will be re-vegetated. Once the waste rock stockpile is adequately re-vegetated to the point where runoff no longer needs to be contained, the runoff containment infrastructure will be removed, and natural runoff will occur to the catchment.
	Water and sediment settling ponds	The ponds will be required for a period after closure to manage runoff during active rehabilitation and until the waste stockpile is adequately re-vegetated. The water will be tested to ensure compliance with relevant quality limits before being released into the environment. Sludge will be removed and disposed of offsite or onto the waste stockpile. Any hazardous waste will be disposed of at a permitted facility. The retaining walls will be removed. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Surface water diversion infrastructure	Diversion ditches will be filled. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.



Project Area	Component	Conceptual Closure Plan
	Conveyor	The conveyor and supporting infrastructure will be removed. The tunnel section will be filled in. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Access road and site roads	The roads will be removed. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Transmission lines	Transmission lines and supporting infrastructure will be removed. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Fire protection water tank	The water will be tested and if it complies with relevant quality limits it will be released into the environment. The tank will be removed. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix.
	Administration building Laydown areas Light vehicle parking Mine dry (change house) Minor maintenance shop Warehouse Salt storage building Cold storage area Perimeter fencing Gatehouse	All structures and foundations will be removed. Any hazardous waste will be disposed of at a permitted facility. Inert waste may be disposed of onto the waste rock stockpile. The surface area will be sloped to prevent ponding, maintain natural drainage pathways, and to re-establish pre-mining topography as is practical. The surface will be scarified as necessary, topsoil will be replaced, and the disturbed areas will be re-vegetated with an appropriate endemic seed mix. All utility connections will be sealed.



21.0 Capital and Operating Costs

21.1 Capital Costs

21.1.1 Pre-production Capital

The pre-production capital costs for the Project are based on Q3 2025 estimates. The capital cost estimate corresponds with an AACE Class 3 level of detail. The estimate was developed by SLR with input from other consultants under the supervision of the QP. Capital costs have been escalated at a rate of 2% annually. The project estimate is based upon a four year construction period. The unescalated and escalated capital costs are shown in Table 21-1.

Table 21-1: Capital Cost Estimate

Cost Area	Amount (C\$ million)	
	Q3 2025 Basis	With Escalation
Mining	192.9	203.5
Processing	39.2	42.1
Onsite Infrastructure	46.9	50.0
Offsite Infrastructure	77.0	81.9
Total Direct Cost	356.0	377.5
EPCM / Indirect Cost	79.0	83.7
Owner's Costs	47.4	50.4
Subtotal Costs	482.3	511.6
Contingency	72.9	77.5
Initial Capital Cost	555.2	589.1
Sustaining	456.2	609.1
Reclamation and closure	15.0	27.1
Total Capital Cost	1,026.3	1,225.3

The mine costs cover the two declines from surface to the 320 Level as well as the pre-production development to establish the first production level, the mobile equipment fleet, mine services, and mine infrastructure. The decline capital cost was developed from first principles. Mine mobile equipment (including CMs) is assumed to be acquired on a lease to purchase basis. Batteries for the major BEV units are leased or included as a service in operating costs.

Processing capital costs cover the crushing and screening plant on the 240 Level, mobile equipment servicing the plant and surface onsite operations, product conveying, and process infrastructure.

Onsite infrastructure includes the site development and site access roads, site buildings, site services, power supply and distribution, and salt material handling system. Offsite infrastructure includes the overland conveyor and the port upgrades.

Indirect costs are approximately 35% of direct costs and cover freight, engineering, procurement, and construction management (EPCM), owner's costs, first fills, and capital



spares. Contingency was applied to each area and equals 15% of the direct and indirect totals. Costs shown to a Work Breakdown Structure (WBS) Level Two are shown in Table 21-2.

Table 21-2: Summary of Unescalated Capital Costs by WBS

WBS Description	Amount (C\$000)
1000 Mining	
1100 Mine Access	110,145
1200 Mine Excavations	24,771
1300 Mine Mobile Equipment	31,483
1400 Material Handling Systems	7,526
1500 Mine Services	16,947
1600 Mining Infrastructure	1,984
1000 Mining Total	192,856
2000 Process Plant	
2100 ROM and Crushing Plant Feed	968
2200 Crushing and Screening	15,515
2300 Product Conveying and Storage	17,016
2600 Process Plant Infrastructure	4,886
2700 Process Plant Offices & Refuge Station	848
2000 Process Plant Total	39,232
3000 Site Infrastructure	
3000 Site Infrastructure	2,462
3100 Site Development	7,245
3200 Site Buildings	4,351
3300 Site Services	787
3400 Power Supply and Distribution	5,520
3500 Material Handling Systems	22,949
3600 Site Mobile Equipment	3,593
3000 Site Infrastructure Total	46,907
4000 Offsite Infrastructure	
4100 Product Haulage and Conveying	15,255
4200 Port	58,498
4400 Electrical Systems	2,891
4500 Utilities	312
4000 Offsite Infrastructure Total	76,956
5000 Indirects	



WBS Description	Amount (C\$000)
5000 Indirects	432
5200 Contractor Indirects	16,153
5300 Temporary Facilities	14,468
5400 Start Up and Commissioning	2,245
5500 Logistics and Freight	11,222
5600 Engineering and Procurement	21,221
5800 Temporary Power	1,150
5900 Temporary Utilities	1,320
5700 Construction Management	10,748
5000 Indirects Total	78,959
6000 Owner's Costs	
6000 Owner's Costs	19,335
6100 Permitting	265
6200 Vendor Representatives	816
6300 Spares	1,735
6400 First Fills	15
6500 Operational Readiness	1,879
6600 Owner's Project Management	9,573
6700 Corporate Costs	4,797
6800 Insurance	4,775
6900 Land Acquisition	4,201
6000 Owner's Costs Total	47,392
7000 Contingency	
7000 Contingency	72,862
7000 Contingency Total	72,862
Grand Total	555,164

With escalation applied, the pre-production capital totals \$589.1 million and is spent over four years as shown in Table 21-3.

Table 21-3: Escalated Pre-Production Capital Cost Estimate

Cost Area	Units	Total	YR-4	YR-3	YR-2	YR-1
Mining	C\$000	203,496	39,343	40,129	61,398	62,626
Processing	C\$000	42,133	-	-	16,653	25,480
Onsite Infrastructure	C\$000	49,985	4,784	4,880	14,933	25,387
Offsite Infrastructure	C\$000	81,922	3,925	16,013	24,500	37,485



Cost Area	Units	Total	YR-4	YR-3	YR-2	YR-1
Total Direct Cost	C\$000	377,536	48,052	61,023	117,485	150,977
Indirect Costs	C\$000	83,724	8,054	16,430	29,327	29,914
Owner's Costs	C\$000	50,352	4,834	7,396	17,602	20,519
Subtotal Costs	C\$000	511,612	60,940	84,848	164,414	201,410
Contingency	C\$000	77,487	3,716	15,161	27,063	31,547
Initial Capital Cost	C\$000	589,100	64,656	100,009	191,477	232,958

21.1.2 Sustaining Capital

The sustaining capital for the Project is \$627.5 million from Year 1 of operations onwards. The sustaining capital consists of:

- Mine fleet expansion (continuous miners and haul trucks)
- Surface and underground equipment overhaul and replacement
- Underground development to establish new mining production levels
- Electrical, services, and material handling systems installations for each new mining level
- Plant sustaining capital
- Offsite infrastructure refurbishment

The sustaining capital items listed are required to sustain the 4.0 Mtpa production over the 24.25 year mine life. The cost basis is Q3 2025 with 2% annual inflation applied.

21.1.3 Contingency

Contingency was assessed on a line by line basis considering the work element and the level of engineering. Certain elements related to mine development and major surface earthworks such as the boxcut were assigned a 25% contingency. The average contingency is 15.1%.

21.1.4 Exclusions

Exclusions from the capital cost estimate include, but are not limited to, the following:

- Project financing and interest charges
- Working capital
- Environmental and permitting costs ongoing and future field programs related to data collection that will be used as inputs to subsequent studies
- Lease rights of way and water rights
- Any additional civil, concrete testing work due to adverse soil conditions or location
- Sunk costs
- Pilot Plant and other test work
- Exploration drilling



- Costs of fluctuations in currency exchanges
- Project application and approval expenses
- Future expansion
- Relocation of any facilities, if required
- Purchase of existing facilities and buildings

21.2 Operating Costs

Operating cost estimates were built up from first principles. Personnel requirements were estimated for each of the areas and wage rates and benefits were based on a comparison to hard rock and salt mines in the Maritime region. Personnel levels were estimated for each area of the operation. Mine operations personnel levels considered the mining productivity and equipment requirements.

Materials costs were from vendor quotes and escalated vendor quotations. Hourly equipment operating costs were generated based on public and manufacturers' references and the costs of supplies for maintenance. Equipment operating hours for the mining fleet were estimated from the mining productivity calculations.

The operating cost basis is Q3 2025 and operating costs are escalated at a rate of 2% per year from 2026. The LOM escalated operating costs are summarized in Table 21-4.

The port is independently owned and an operating cost estimate for the storage and ship loading was generated from first principles on the assumption that the port would be operated by an independent third party. The port costs are included within the processing line item and include port operations, overhead, profit, and an allowance for ongoing repairs.

Table 21-4: LOM Operating Costs

Area	LOM (C\$000)	Steady State Annual Average (C\$000)	Unit Costs with Q3 2025 Basis (C\$/t shipped)	LOM Unit Costs (C\$/t shipped)
Mining	1,354,042	58,791	10.67	15.00
Processing and Material Handling	854,416	35,988	6.86	9.46
General and Administration	334,572	13,550	2.63	3.71
Total	2,543,031	108,329	20.17	28.17
Notes:				
1. The columns LOM, Steady State Annual Average, and LOM Unit Costs include escalation.				

21.2.1 Personnel

The mine will operate 24 hours per day on a full 365 day year basis. The Project will be operated by company employees with mine equipment maintenance personnel provided by a third party contractor. The total initial personnel is estimated to be 162 persons as summarized by department in Table 21-5. The personnel increases to a maximum of 194 persons with the addition of miners and haul truck operators. This total excludes personnel working at the port, who would be employed by a third party.



Table 21-5: Project Personnel

Department	Number of Personnel (initial)	Peak
Mine	52	80
Underground Maintenance	10	10
Technical Services	10	10
Contracted Mine Maintenance	27	31
Plant & Surface	37	37
Management & Administration	26	26
Total	162	194

21.2.2 Basis of Operating Costs

Operating costs have been estimated as follows:

- Labour: requirements for management, supervision, operating, and laboratory personnel for a 24-hour, 365-day-per-year operation, based on twelve-hour shifts for production crews, and including overtime allowance and burden. Management and administration labour is assumed to be a Monday to Friday arrangement. Labour rates were sourced from comparable projects. A project-specific labour study has not been undertaken to date.
- Mine equipment maintenance will be provided by a third party based on a monthly maintenance cost.
- Electricity: equipment list, motor power, utilization requirements for a 4.0 Mtpa production rate, as well as consumption allowances for smaller infrastructure such as offices and warehousing, and an electricity cost of \$0.062 kWh, based on assuming that the Project would qualify for an industrial rate for power consumption.
- Continuous miner and road header operating costs are based upon quoted cost per cutting hour rates from Sandvik.
- Reagents and Consumables: consumption based on production rate and vendor pricing.
- Mobile Equipment: list of mobile equipment and estimates of power consumption and utilization, as well as maintenance factors. Battery and battery charger costs are included as a service in operating costs.
- Maintenance: factored from direct capital costs.



22.0 Economic Analysis

The economic analysis contained in this Technical Report is based on information available to SLR as of Q3 2025. For the purposes of the cash flow model and applying escalation, SLR has assumed that the Project would commence construction in the year following the base date, and have a four year construction period. There is no certainty that these dates are achievable.

An after-tax cash flow projection has been generated from the LOM production schedule and capital and operating cost estimates. A summary of the key criteria is provided below.

22.1 Economic Criteria

22.1.1 Revenue

- Three-year ramp-up to achieve steady state production, with Year 1 production of 1.6 Mtpa, Year 2 production of 2.6 Mtpa, Year 3 production of 3.7 Mtpa, followed by 4.0 Mtpa from Year 4 onward to Year 22, and ramp down for the last 2.25 years of operations.
- Product grade maintained greater than 95% NaCl for the entirety of operations, with no premium applied for higher grade material.
- Average price per tonne FOB Turf Point - C\$81.67 (Q3 2025 basis).
- Price escalated at 4% from the base date for a period of five years and 2% per year thereafter, which is a consistent approach to other publicly available technical reports and publicly available pricing information on major North American rock salt mines.
- 3% net production royalty (gross revenue less certain operating costs and other deductions) payable to Vulcan Minerals.
- Revenue is recognized at the time of production.

22.1.2 Costs

- Pre-production period: 48 months based on the commencement of engineering, procurement of long-lead items, and early-works construction.
- Mine life: 24.25 years.
- LOM production plan as summarized in Section 16.
- Capital and operating costs that have a Q3 2025 basis.
- Capital and operating costs escalated at 2% per year from the base date.
- Pre-production capital cost of C\$589.1 million (including escalation).
- LOM sustaining capital of C\$609.1 million (including escalation).
- Reclamation and closure cost of C\$27.1 million (including escalation).
- Average operating cost over the mine life is C\$28.17 per tonne shipped FOB Turf Point (including escalation).



22.1.3 Taxation and Royalties

The cash flow includes a 3% net production royalty to Vulcan Minerals calculated as 3% of the gross revenue less port charges, processing costs, and the NL Mining Tax. Taxes include the NL Mining Tax plus federal and provincial income taxes. The QP has relied on Atlas and its advisors for the calculation of taxes.

22.2 Cash Flow Analysis

Considering the Project on a stand-alone basis, the undiscounted pre-tax cash flow totals \$6,663 million over the initial 24.25-year mine life. A summary of economic results such as net present value (NPV) and internal rate of return (IRR), both pre-tax and after-tax, is presented in Table 22-1. The annual cash flow is shown in Table 22-2. The annual pre-tax cash flow is shown in Figure 22-1.

Table 22-1: Summary of Economic Results

Metric	Units	Value
Pre-Tax Payback Period	yrs	3.6
Pre-Tax IRR	%	27.1%
Pre-tax NPV at 5% discounting	C\$000	2,758,831
Pre-tax NPV at 8% discounting	C\$000	1,682,806
Pre-tax NPV at 10% discounting	C\$000	1,219,722
After-Tax Payback Period	yrs	4.2
After-tax IRR	%	21.3%
After-tax NPV at 5% discounting	C\$000	1,574,169
After-tax NPV at 8% discounting	C\$000	920,433
After-tax NPV at 10% discounting	C\$000	609,418

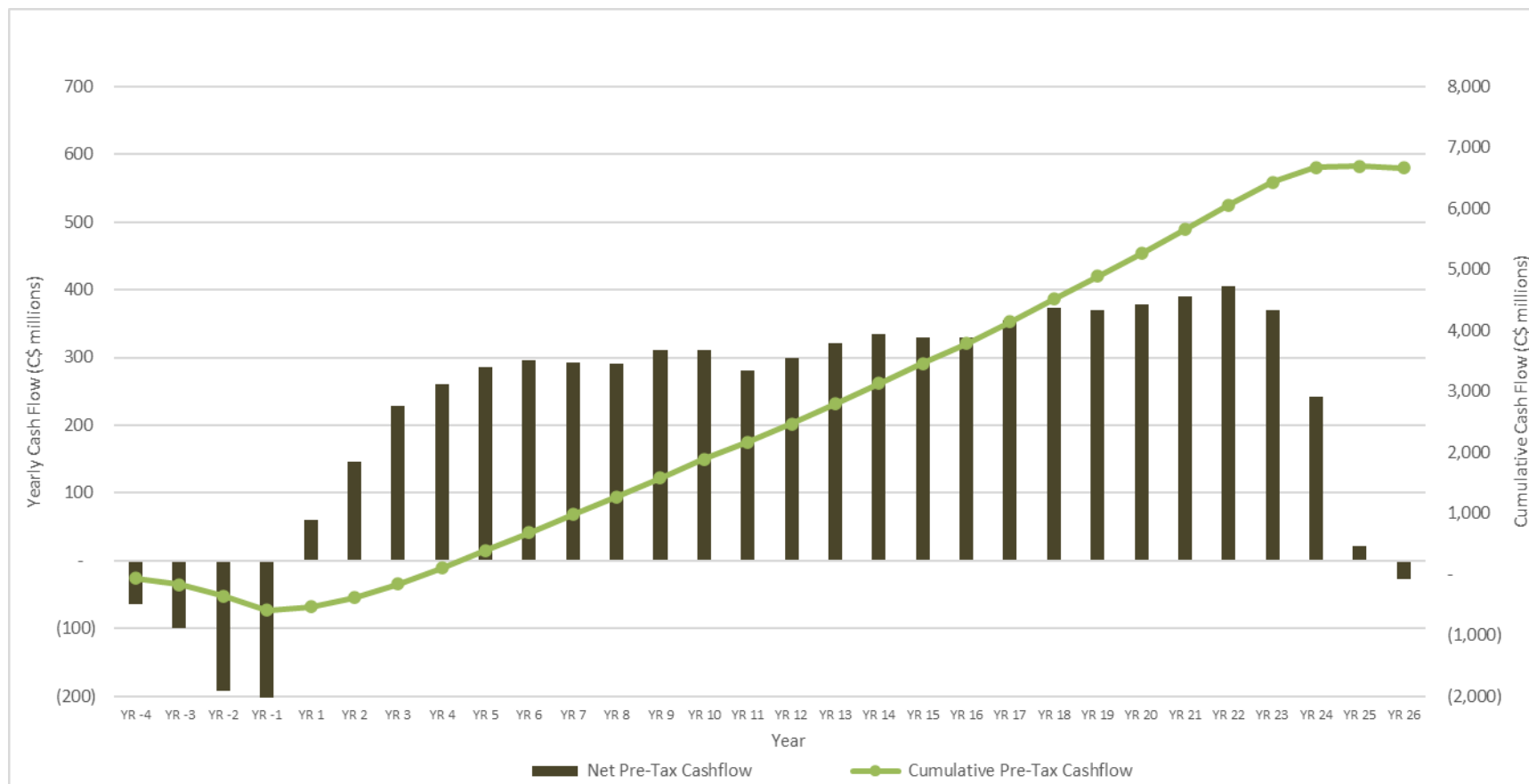


Table 22-2: After-Tax Cash Flow Summary

SLR - Cash Flow Summary																				
Atlas Salt - Great Atlantic Salt																				
Date: Aug 2025	UNITS	TOTAL	YR -4	YR -3	YR -2	YR -1	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	Total/Avg YR 11-15	Total/Avg YR 16-20	Total/Avg YR 21-25	
MINING																				
Years of Production	Yrs	24.3					1	1	1	1	1	1	1	1	1	1	5	5	4.25	
Underground Production	Mtpa	95.03					1.70	2.78	3.91	4.19	4.20	4.20	4.20	4.20	4.20	4.21	20.99	21.02	15.21	
Minimum Grade	% NaCl	95.9%					97.3%	96.4%	95.7%	95.3%	95.7%	96.0%	95.9%	95.8%	95.2%	95.3%	95.6%	95.9%	96.5%	
Waste	Mtpa	0.72					0.03	0.09	0.01	0.01	0.00	0.00	0.00	0.02	0.01	0.05	0.36	0.09	0.06	
Total Mined	Mtpa	95.75					1.73	2.87	3.92	4.20	4.21	4.20	4.21	4.22	4.21	4.26	21.35	21.11	15.27	
Cumulative Salt	MI						1.70	4.48	8.40	12.58	16.79	20.99	25.20	29.40	33.60	37.81	58.80	79.82	95.03	
PROCESSING																				
Material Processed	Mtpa	95.0					1.70	2.78	3.91	4.19	4.20	4.20	4.20	4.20	4.20	4.21	20.99	21.02	15.21	
Head Grade	% NaCl	95.9%					97.3%	96.4%	95.7%	95.3%	95.7%	96.0%	95.9%	95.8%	95.2%	95.3%	95.6%	95.9%	96.5%	
Contained NaCl	Mtpa	91.1					1.68	2.68	3.75	3.90	4.03	4.04	4.03	4.03	4.00	4.01	20.06	20.16	14.68	
Losses from Mine Face to Ship	%	5%					5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
Payable Rock Salt	Mtpa	90.3					1.62	2.64	3.72	3.95	3.99	3.99	3.99	3.99	3.99	4.00	19.94	19.97	14.45	
REVENUE																				
Market Price	CS / t shipped	118.49					99.37	97.49	96.75	98.51	100.48	102.49	104.54	106.63	108.76	110.94	117.78	130.03	103.80	
Weighted Average Market Price (FOB Turf Point)	CS / t shipped	118.49					99.37	97.49	96.75	98.51	100.48	102.49	104.54	106.63	108.76	110.94	117.78	130.03	103.80	
Total Gross Revenue	CS '000	10,897,920					160,765	257,362	359,740	391,901	401,389	409,413	417,522	425,728	434,079	443,294	2,346,878	2,596,799	2,650,151	
Total Charges + Royalties	CS '000	822,528					13,255	19,314	26,562	29,706	30,365	30,973	31,590	32,216	32,853	33,532	177,824	196,470	168,266	
Net Revenue	CS '000	9,974,993					147,510	238,048	333,178	362,195	371,022	378,440	385,932	393,512	401,226	409,762	2,171,054	2,400,329	1,881,885	
Unit NR	CS / t milled	103.90					96.62	95.66	95.13	96.49	98.24	99.00	99.80	99.63	99.51	99.42	103.42	114.19	123.71	
OPERATING COST																				
Total Operating Cost (with escalation)	CS '000	1,985,704					48,008	57,392	67,746	69,236	70,569	71,669	74,204	74,688	76,047	77,714	419,566	467,841	413,044	
Total Onsite Costs	CS/t shipped	22.00					28.44	21.74	18.22	17.40	17.67	17.94	18.58	18.71	19.05	19.45	21.04	23.43	28.58	
Operating Cashflow	CS '000	7,888,328					101,502	180,656	265,432	292,959	300,433	308,771	311,728	318,823	325,179	332,048	1,751,468	1,932,488	1,468,841	
CAPITAL COST																				
Direct Cost																				
Mining	CS '000	203,496	39,343	40,129	61,398	82,626	-	-	-	-	-	-	-	-	-	-	-	-	-	
Processing	CS '000	42,133	-	-	10,653	25,490	-	-	-	-	-	-	-	-	-	-	-	-	-	
On-Site Infrastructure	CS '000	49,985	4,784	4,880	14,933	25,387	-	-	-	-	-	-	-	-	-	-	-	-	-	
Off-Site Infrastructure	CS '000	81,922	3,925	16,013	24,500	37,485	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Direct Cost	CS '000	377,536	48,052	61,023	112,485	150,977	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Costs																				
Indirect Costs	CS '000	83,724	8,054	16,430	29,327	29,914	-	-	-	-	-	-	-	-	-	-	-	-	-	
Owner's Costs	CS '000	50,852	4,834	7,396	17,602	20,519	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal Costs	CS '000	512,112	60,940	84,848	154,414	291,419	-	-	-	-	-	-	-	-	-	-	-	-	-	
Contingency	CS '000	77,487	3,716	15,161	27,063	31,547	-	-	-	-	-	-	-	-	-	-	-	-	-	
Initial Capital Cost	CS '000	589,600	64,656	100,009	191,477	232,958	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sustaining (with escalation)	CS '000	609,094	-	-	-	-	41,796	34,444	37,538	32,314	15,082	10,778	19,707	27,420	14,922	20,542	187,039	126,736	40,776	
Reclamation and Closure	CS '000	27,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Capital Cost	CS '000	1,225,774	64,656	100,009	191,477	232,958	41,796	34,444	37,538	32,314	15,082	10,778	19,707	27,420	14,922	20,542	187,039	126,736	67,856	
CASH FLOW																				
Net Pre-Tax Cashflow	CS '000	6,862,554	(64,656)	(100,009)	(191,477)	(232,958)	59,707	146,212	227,894	280,648	285,351	295,993	297,020	291,403	310,257	311,508	1,564,429	1,805,751	1,400,985	
Cumulative Pre-Tax Cashflow	CS '000		(65,196)	(165,105)	(356,642)	(589,600)	(529,893)	(383,681)	(155,786)	104,869	390,210	686,203	978,223	1,269,626	1,579,883	1,891,389	3,455,818	5,261,569	6,689,635	
Taxes																				
NI Mining Tax	CS '000	999,871	-	-	-	-	-	8,932	29,329	33,853	35,657	37,554	38,906	40,117	43,276	44,604	230,305	259,566	197,723	
Income Tax (Federal, Provincial)	CS '000	1,718,595	-	-	-	-	-	2,325	61,694	65,925	69,728	72,523	74,920	76,512	78,692	80,695	408,695	457,783	349,698	
Total Taxes	CS '000	2,718,466	-	-	-	-	-	8,932	91,653	95,547	101,482	107,282	111,429	115,037	119,787	123,496	638,999	717,349	547,421	
After-Tax Cash Flow	CS '000	3,944,088	(64,656)	(100,009)	(191,477)	(232,958)	59,707	137,280	196,241	165,099	153,869	188,711	188,591	176,366	190,470	188,910	925,378	1,088,402	880,645	
Cumulative	CS '000		(65,196)	(165,105)	(356,642)	(589,600)	(529,893)	(382,613)	(196,372)	(31,273)	152,586	341,307	521,898	698,264	886,734	1,076,744	2,002,122	3,090,524	3,971,169	
PROJECT ECONOMICS																				
Pre-Tax																				
Payback Period	Yrs	3.6																		
Pre-Tax IRR	%	27.1%																		
Pre-tax NPV at 5% discounting	CS '000	2,738,831																		
Pre-tax NPV at 8% discounting	CS '000	1,682,606																		
Pre-tax NPV at 10% discounting	CS '000	1,210,722																		
After-Tax																				
Payback Period	Yrs	4.2																		
After-tax IRR	%	21.3%																		
After-tax NPV at 5% discounting	CS '000	1,574,169																		
After-tax NPV at 8% discounting	CS '000	800,433																		
After-tax NPV at 10% discounting	CS '000	606,418																		



Figure 22-1: Annual Pre-Tax Cash Flow



22.3 Sensitivity Analysis

Project risks can be identified in both economic and non-economic terms. Key economic risks were examined by running cash flow sensitivities:

- Salt price
- Production losses
- Operating costs
- Pre-production capital costs

Pre-tax and after-tax 8% NPV and IRR sensitivities over the base case have been calculated for -20% to +35% variations. The pre-tax sensitivities are shown in Figure 22-2, Figure 22-3, while after-tax sensitivities are shown in Figure 22-4 and Figure 22-5. Table 22-3 shows the pre- and after-tax results side-by-side.

Figure 22-2: Pre-Tax 8% NPV Sensitivity Analysis

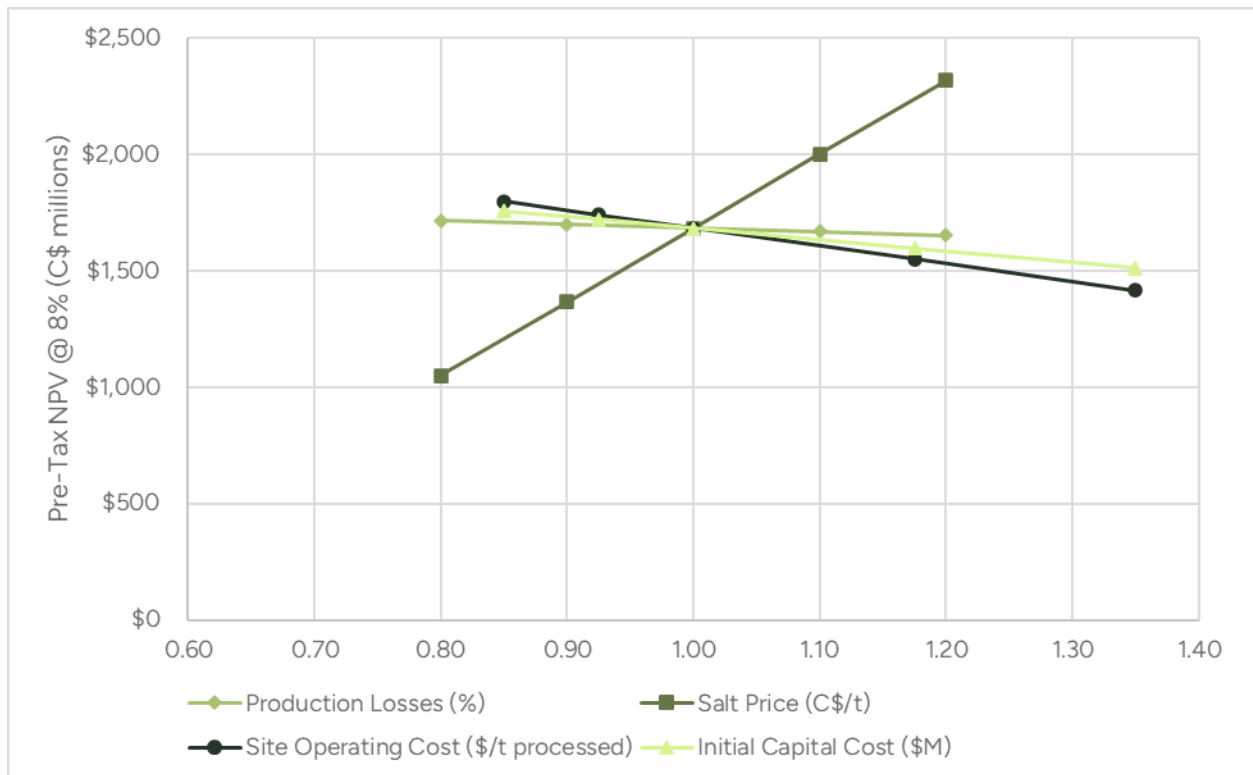


Figure 22-3: Pre-Tax IRR Sensitivity Analysis

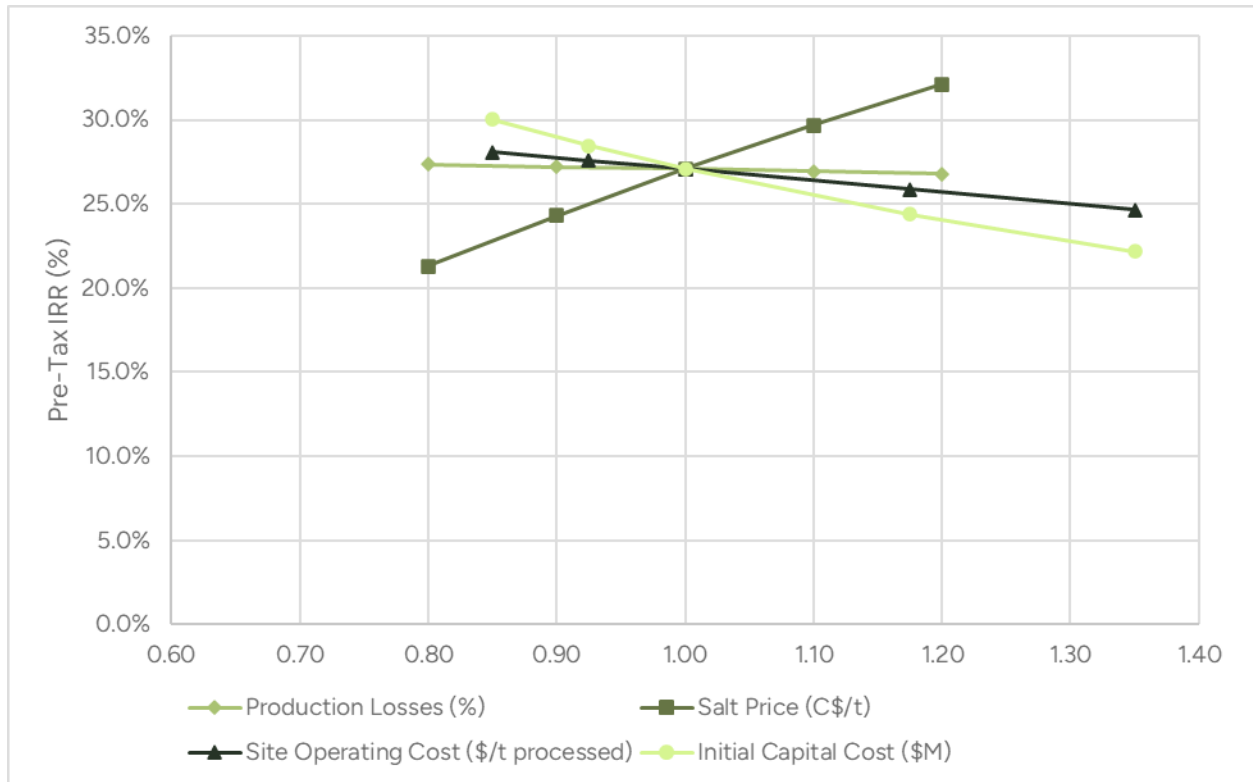


Figure 22-4: After-Tax 8% NPV Sensitivity Analysis

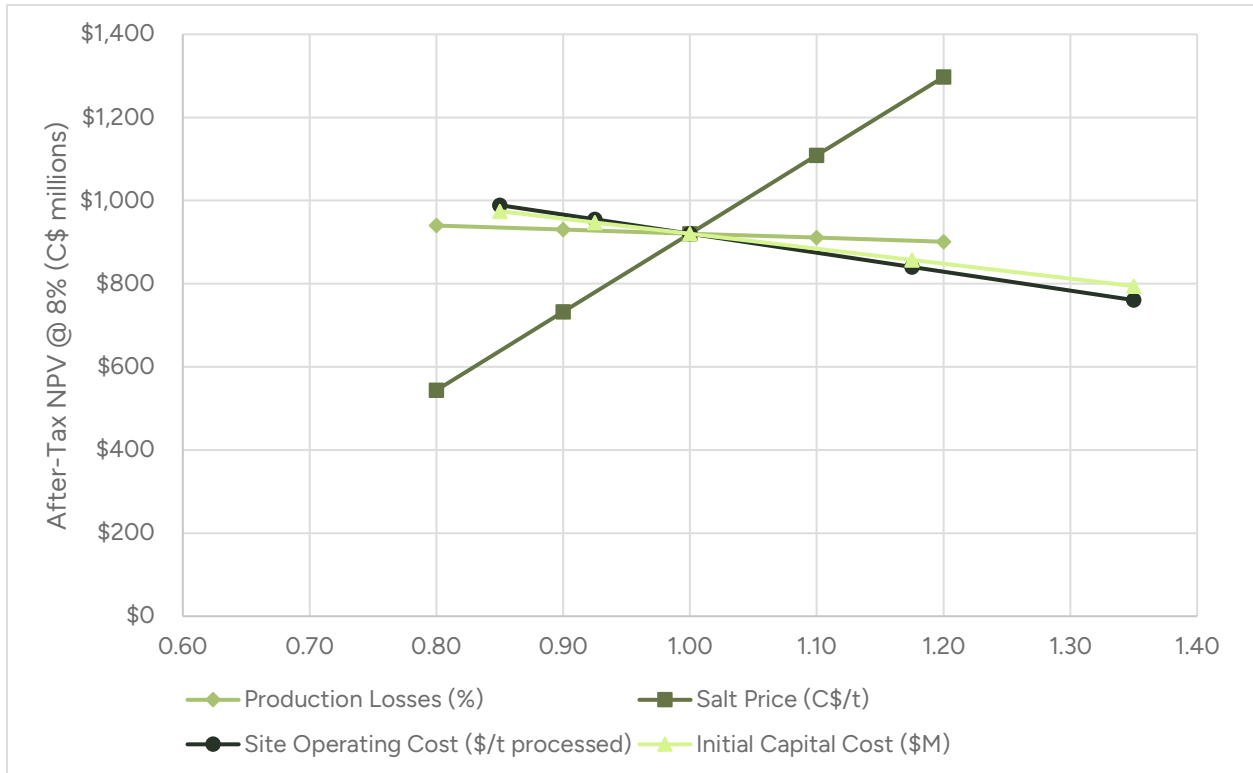


Figure 22-5: After-Tax IRR Sensitivity Analysis

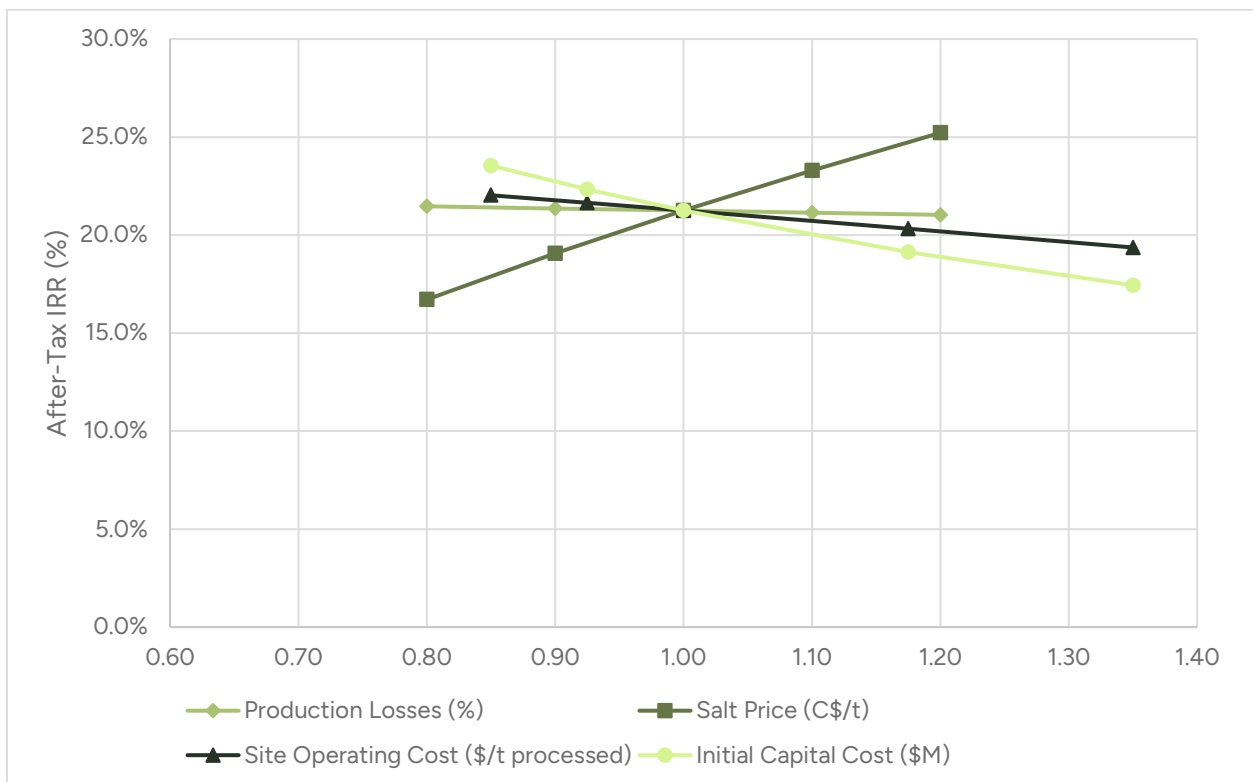


Table 22-3: Pre-Tax Sensitivity Analyses

	Pre-Tax		After-Tax	
Production Losses (%)	NPV at 8% (\$ million)	IRR	NPV at 8% (\$ million)	IRR
4.00%	\$1,716	27.4%	\$ 940	21.5%
4.50%	\$1,699	27.2%	\$ 930	21.4%
5.00%	\$1,683	27.1%	\$ 920	21.3%
5.50%	\$1,666	26.9%	\$911	21.1%
6.00%	\$1,650	26.8%	\$ 901	21.0%
LOM Salt Price (C\$/t)	NPV at 8% (\$ million)	IRR	NPV at 8% (\$ million)	IRR
94.79	\$1,050	21.3%	\$544	16.7%
106.64	\$1,366	24.3%	\$732	19.1%
118.49	\$1,683	27.1%	\$920	21.3%
130.33	\$1,999	29.7%	\$1,109	23.3%
142.18	\$2,316	32.1%	\$1,297	25.2%
Operating Cost (\$/t processed)	NPV at 8% (\$ million)	IRR	NPV at 8% (\$ million)	IRR
\$23.94	\$1,798	28.1%	\$989	22.0%
\$26.06	\$1,740	27.6%	\$955	21.6%
\$28.17	\$1,683	27.1%	\$920	21.3%
\$33.10	\$1,548	25.9%	841	20.3%
\$38.03	\$1,414	24.6%	\$761	19.4%
Initial Capital Cost (\$M)	NPV at 8% (\$M)	IRR	NPV at 8% (\$ million)	IRR
\$500.7	\$1,756	30.0%	\$975	23.5%
\$544.9	\$1,719	28.5%	\$947	22.3%
\$589.1	\$1,683	27.1%	\$920	21.3%
\$692.2	\$1,598	24.4%	\$857	19.1%
\$795.3	\$1,512	22.2%	\$794	17.4%



23.0 Adjacent Properties

Table 23-1 provides a summary of key property owners conducting exploration across the Bay St. George region, the majority of which are focused on gold exploration. The most advanced of these properties is considered to be the Cape Ray Gold Project (Matador Mining Limited) with a Scoping Study completed in 2020. With regard to industrial minerals, Atlantic Minerals Limited is currently operating a limestone and dolomite quarry at the Lower Cove Quarry on the Port au Port Peninsula, approximately 40 km northwest of the GAS Project. Atlas also operates the Flat Bay Gypsum Quarry (Ace Gypsum) located approximately 3 km southwest of the GAS Project.

In 2022, Atlas spun-off other regional licence holdings as Triple Point Resources. The Stephenville, Fischell's Brook, and St. Fintan's licence areas are all prospective for massive halite deposits along with having salt cavern potential as a renewable energy storage solution.

Figure 23-1 presents the location of the aforementioned adjacent properties in relation to the GAS Project.

Table 23-1: Summary of Adjacent Properties

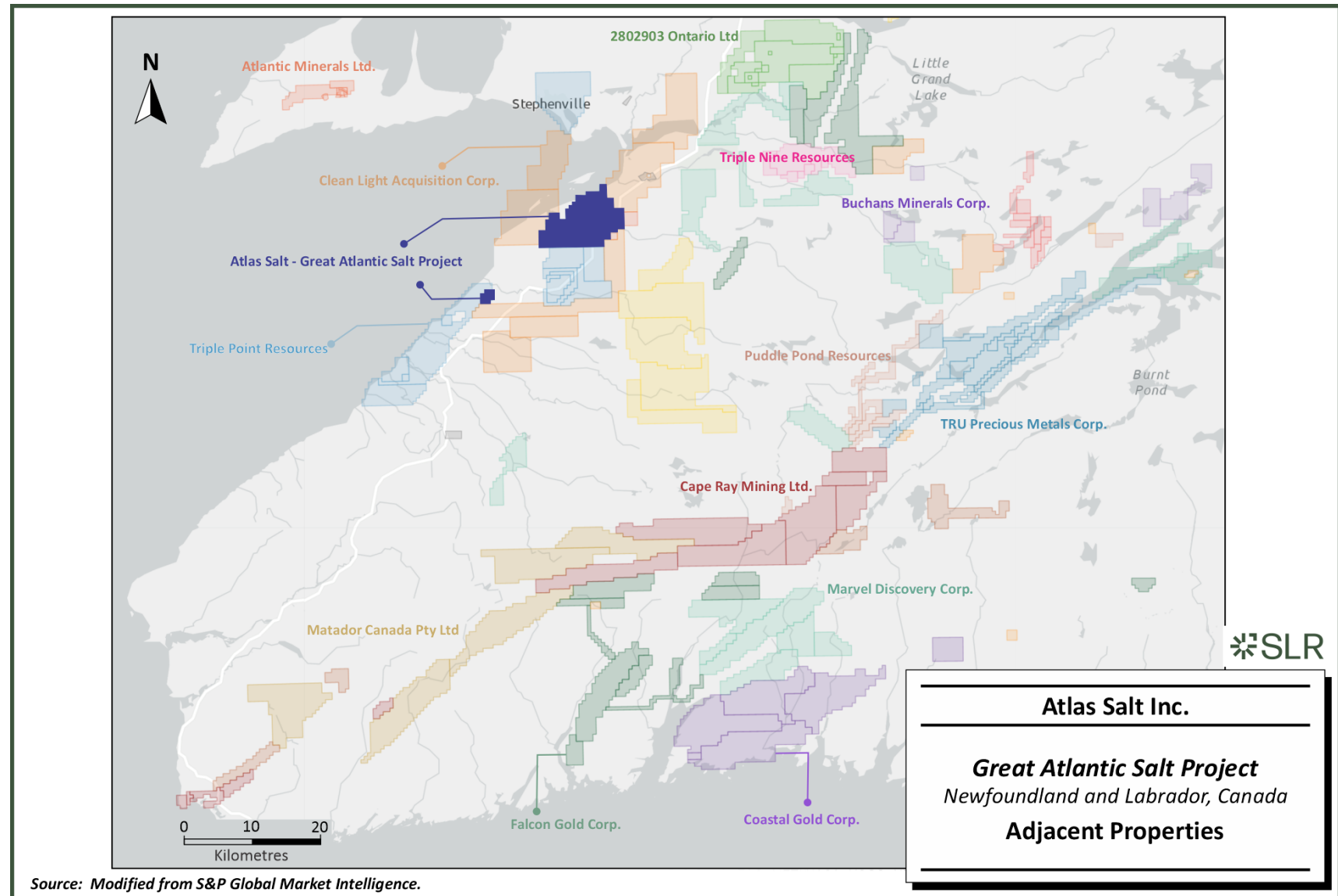
Owner	Property	Commodity	Status
Atlantic Minerals Ltd.	Lower Cove Quarry	Limestone	Operating
Triple Point Resources	Stephenville, Fischell's Brook, St. Fintan's	Halite	Exploration
Matador Canada Pty Ltd. (Matador Mining Ltd.)	Cape Ray	Gold	Exploration to Feasibility
Falcon Gold Corp.	Golden Brook JV, Valentine Gold South, Victoria West	Gold	Exploration
Coastal Gold Corp.	Hope Brook	Gold	Feasibility
Marvel Discovery Corp.	Golden Brook JV	Gold	Exploration
Cape Ray Mining Ltd. (Matador Mining Ltd.)	Cape Ray	Gold	Exploration to Feasibility
Puddle Pond Resources	Princess Lake, Lloyd's Lake	Gold	Exploration
Rocky Island Gold Corp.	-	Gold	Exploration
Buchans Minerals Corp.	Long Range	Gold	Exploration
Triple Nine Resources	Four Corners	Iron Ore, Titanium, Vanadium	Exploration
2802903 Ontario Ltd.	-	Rare Earth Elements	Exploration
Fair Haven Resources	Fair Haven	Gold, Copper	Exploration
TRU Precious Metals Corp.	Golden Rose	Gold	Exploration

Source: S&P Capital IQ Pro, 2023.

The QP has not independently verified this information and this information is not necessarily indicative of the mineralization at the GAS Project.



Figure 23-1: Adjacent Properties



24.0 Other Relevant Data and Information

24.1 Project Risks and Opportunities

There are inherent risks in any greenfield mining project such as the GAS Project. As part of the FS, SLR and its sub-consultants undertook a risk and opportunities assessment for the Project. The risks were assessed at the asset level and categorized under the following categories/areas:

- 1 Mineral Resources and Mineral Reserves
- 2 Mine Design and LOM Plan
- 3 Engineering and Construction
- 4 Project Execution
- 5 Capital Cost Estimate
- 6 Environment and Social
- 7 Operations and Costs
- 8 Health and Safety
- 9 Finance
- 10 Marketing and Prices

24.1.1 Project Risks

SLR used a semi-quantitative approach to analyze the risks for the GAS Project. The SLR FS team generated a register of the anticipated Project risks and then used a risk matrix to generate risk ratings.

In the Risk Register, the likelihoods (probability of occurrence) and consequences (impact of occurrence) of each individual risk were assigned numbered levels that were multiplied to generate a numerical description of the risk rating.

Given the complex nature of the Project, it was decided that the risk assessment would be conducted for each of the following consequence areas:

- Health and Safety
- Mineral Resources and Mineral Reserves
- Capital Costs
- Operating Costs
- Revenue Loss
- Total Cashflow
- Execution Schedule
- Production Schedule
- Environmental
- Social



- Business Impact

The values assigned to the likelihoods and consequences were not related to their actual magnitude, but to the numerical value derived for the risk.

The risk ratings were categorized as Low, Medium, High, and Very High (Figure 24-1).

Figure 24-1: Risk Matrix

Likelihood	Consequence						
			Negligible	Minor	Moderate	Major	Severe
		Score	1	2	3	4	5
Rare	0% to 10%	1					
Unlikely	10% to 30%	2					
Possible	30% to 60%	3					
Likely	60% to 90%	4					
Almost Certain	>90%	5					

	Low	manage by routine procedures
	Medium	monitoring or response procedures, management responsibility specified
	High	senior attention, action plan and management responsibility specified
	Very High	senior attention, action plan and management responsibility specified

SLR's risk analysis identified 57 notable Project risks along with their associated potential mitigation strategies. The distribution before considering mitigation measures is presented in Figure 24-2.

Figure 24-2: Risk Matrix – Pre-mitigation

Inherent Risk - Prior to Mitigation							
Likelihood	Consequence						
			Negligible	Minor	Moderate	Major	Severe
		Score	1	2	3	4	5
Rare	0% to 10%	1	0	0	3	2	1
Unlikely	10% to 30%	2	2	10	7	6	0
Possible	30% to 60%	3	1	6	12	5	2
Likely	60% to 90%	4	0	0	0	0	0
Almost Certain	>90%	5	0	0	0	0	0

count of risks Prior to Mitigation	Low	16
	Medium	34
	High	5
	Very High	2

Prior to any mitigation, most of the risks identified for the Project fall into the Low to Medium severity rating categories, however, seven risks were given a Very High or High rating as follows:

- 1 Very High – The expected decline advance rates are not achieved due to either the encountered geotechnical and hydrogeological conditions being much worse than anticipated, requiring altered construction methodology, advance cover grouting and additional support measures, or the decline contractor simply not achieving the predicted advance rates resulting in a material delay to mine construction – mitigated by undertaking further geotechnical and hydrogeological investigation on the line of the



declines, developing more detailed development cycles and productivity assumptions for use in the development schedule, and engaging the contractor on robust contractual terms including risk sharing.

- 2 Very High – Groundwater inflows into the declines during construction exceed predictions and result in additional grouting and dewatering mitigation measures, reduced contractor advances rates, increased construction costs and delayed completion of the declines. Mitigation includes acquisition of more hydrogeological information and modelling to more accurately predict likely inflow volumes, provision of contingency measures to control higher than anticipated water strikes and inflows.
- 3 High - Capital cost increases due to underestimated costs, inflation, and design changes during detailed engineering and execution - mitigated by appointing an experienced and strong Owner's team, completing detailed engineering before start of construction, and competitive tendering and placing of packages with fixed prices wherever possible.
- 4 High – insufficient cost contingency included in capital estimate to cover project delays, scope design changes and construction contractor claims.
- 5 High - Ship loader is not capable of assumed loading rate resulting in ship loading bottleneck at the port – mitigated by upgrading the ship loader, conducting routine preventative maintenance and a condition monitoring program.
- 6 High – A third decline to ensure emergency egress is required by the provincial mining authorities – mitigated through continued dialogue with authorities and full compliance with provincial regulations.
- 7 High - Penetration into selected markets takes longer than anticipated – mitigated by reducing product price, building alliances with existing distributors and developing products in addition to bulk road salt.

Following the recommended mitigation measures, the severity of the above risks would be reduced with two risks remaining in the High category, these being Risk 1 and 3 above.

The distribution after considering mitigation measures is presented in Figure 24-3.

Figure 24-3: Residual Risk Matrix – Post-mitigation

Residual Risk - After Mitigation							
Likelihood	Consequence						
			Negligible	Minor	Moderate	Major	Severe
		Score	1	2	3	4	5
Rare	0% to 10%	1	0	4	11	3	1
Unlikely	10% to 30%	2	4	17	6	1	0
Possible	30% to 60%	3	0	8	0	2	0
Likely	60% to 90%	4	0	0	0	0	0
Almost Certain	>90%	5	0	0	0	0	0

count of risks Post Mitigation	Low	36
	Medium	19
	High	2
	Very High	0



24.1.2 Opportunities

During the course of the FS, the Project engineering was optimized to introduce efficiencies and reduce costs and risks wherever possible. As such, most technical opportunities that have the potential to bring long-term benefit were identified, considered, and implemented throughout the development of the FS.

A number of further opportunities were, however, identified during the FS and are as follows:

- 1 The GAS deposit is laterally continuous and open at depth – undertake further exploration to expand the currently defined Mineral Resources, increase Mineral Reserves, and extend the mine life.
- 2 Extract barrier pillars on retreat from a level to increase the extraction ratio – consider pillar mining once underground geomechanical conditions are well understood.
- 3 The conversion of Inferred Mineral Resources offers the opportunity to increase the production rate and fully utilize the installed capacity of the Project infrastructure – undertake exploration drilling and development from underground to allow conversion of additional Mineral Resources to Mineral Reserves and advance the case for potential future expansion. This includes the potential conversion of the 1-Salt horizon which is currently classified entirely as Inferred Resource and will be excavated and exposed during the capital period. With further work this has the potential to become a saleable product.
- 4 Optimize and reduce pillar sizes to increase the mining extraction ratio on all levels – undertake in-situ and pillar stress measurements in the salt horizon and optimise pillar sizes based on actual geotechnical and in-situ conditions.
- 5 Optimize ground support in the salt mining levels – monitor ground conditions and support performance during development and production. Trial different types of ground support types.

24.2 Project Execution Plan

24.2.1 Summary

It is assumed that Atlas will establish an Owner's Project Team responsible for managing all of the Project's business, management, and operations activities.

The Project execution strategy is based on an Integrated Project Delivery (IPD) model, outlined in Atlas's Integrated Project Delivery Framework, appointing multiple specialized project delivery partners to collaboratively support the project delivery. The IPD provides that key stakeholders, including Atlas, Lead Engineer, Construction Contractors, and Equipment Suppliers, are integrated into a single contractual agreement or a set of closely interlinked contracts with shared incentives, reducing contractual barriers that may impede collaboration and hinder efficient Project execution.

The primary IPD partners will include but not be limited to the areas of Lead Engineer, Environmental and Permitting, Mining Equipment, Materials Handling, Construction Contractors, Project Delivery Support and Specialist Consultants, to complete the engineering, procurement, and construction management associated with the onsite and offsite infrastructure and all process and material handling facilities. In addition, the Project Execution Plan (PEP) assumes the appointment of a mining contractor for the design and construction of the boxcut and decline development.



To ensure a timely and cohesive implementation of the Project, the Atlas' Operational and Project staff will be required to be mobilized as soon as approval is given to proceed with the Project. The up-front work by the dedicated Owner's Project Team will potentially be supported by Project staff from internal and external sources to assist with the calling of tenders for the Execution Phase Services Contracts, specifically the IPD and Mining Contract.

It is proposed that the Owner's Project Team, will be supported by a Project Steering Committee, which will report to the Vice President of Engineering and Construction, Project Director, and General Manager.

The Owner led IPD will carry overall responsibility for the execution of activities under the project mandate, including detailed engineering, procurement, logistics, construction, commissioning, and Project Controls.

A portion of Atlas' Operations Team will be required to be mobilized during the development phase of the Project to provide common services that will be required over the LOM (i.e., not limited to construction support). Atlas' Operations Team will provide staffing and be responsible for mining operations, including maintenance, health and safety, environmental management and monitoring, permitting, security (assumed to be contracted service), project accounting, warehouse management (IPD in execution and handover to Owner in operations) and community relations.

It is recommended that the core GAS Project team be resourced and established as soon as possible to advance the Project execution planning following the completion of the FS. The key activities of the Project team will be the following:

- 1 Appoint remaining members of the Integrated Project Delivery (IPD) group.
- 2 Establish a detailed short-term 100 day and 300 day plan.
- 3 Conduct updated geotechnical and hydrogeological programs along the revised centreline of the declines.
- 4 Develop a work package and award the early works construction package.
- 5 Establish site utilities, temporary services, and power in advance of construction.
- 6 Continue developing the environmental permitting documents for the capital phase, and in parallel, develop permits for commercial production phase.
- 7 Review existing safety plan and associated systems to ensure safe and successful project execution.
- 8 Further define the Procurement, Logistics, and Warehousing Plan in advance of construction commencement.
- 9 Advance and develop more detail to the UFS schedule and cost estimates, including updating work packages.
- 10 Execute applicable recommendations from the UFS in advance of the next phase of engineering.
- 11 Assign work packages to appropriate IPD partners, contractors, or vendors.
- 12 Identify early work package engineering and execution in advance of the boxcut construction and electrical substation installations.
- 13 Complete value-engineering studies on:
 - a) Mining development rates and methodologies.



- b) Conveyor advancement with decline drives.
- 14 Update the Quality Management Plan, including QA/QC strategy, and document controls, based on the outcome of the FS.
- 15 Further develop and refine the Operational Readiness plan based on updates to the FS.
- 16 Update the long-lead equipment register and consider placing deposits on key long-lead items based on advanced engineering designs.

24.2.2 Development and Construction Schedule Critical Path

The Project is scheduled to take 51 months to permit, engineer, procure, construct, and commission, commencing upon Project Funding and reaching practical completion in month 51, with ramp-up and performance testing following.

The Critical Path (CP) for the Project primarily involves navigating through the permitting procedures necessary for obtaining environmental approval and early works construction commencement.

The working assumption is that the Project will not require an EPR, since the Project has already been approved. This will then be followed by the permitting phase. Once the Project receives the Certificate of Approval for Construction, bids for the bulk earthworks, including the access road and terracing, will be evaluated and awarded. Construction activities will commence after the thaw of the spring season.

Subsequently, the construction CP will encompass site access road and earthworks to advance various mining activities required to establish the boxcut and develop the conveyor access declines, which will be completed by the appointed mining contractor. This phase will be followed by the excavation of the process plant chamber on the 240 Level and the completion of the declines down to the 320 Level.

The CP will then transition to underground construction works, involving the installation of conveyors (including foundations, structural steel, and mechanical components). In parallel to this, the Project will proceed with the construction of the Plant Area, specifically focusing on the installation of mechanical equipment, platework, electrical systems, and instrumentation.

Once the plant is fully constructed and feed from mining is established, the commissioning phase will begin, leading into a six month production ramp-up and performance testing period.

Figure 24-4 presents the Project summary schedule.



Great Atlantic Salt Project - Execution Level II Schedule DRAFT for Review		Overall Project Schedule - Summary		Year		Data Date :01-Mar-25	
Activity ID	Activity Name						
Great Atlantic Salt Project - Execution Level II Schedule DRAFT for Review							
PROJECT EXECUTION							
MANAGEMENT							
MS-1020	FS/UFS Complete						
MT-1400	Permitting - Early Works						
MT-2610	Mob to Site - Civil/Structural U/G						
MS-2280	Civil / Structural Contractor - UG on site						
MS-2090	Plant Commissioning Complete						
CONSTRUCTION							
CN-2080	Access road						
CN-1850	Terraces						
CN-1160	Boxcut Civil Contractor Mobilization						
CN-1220	Boxcut Excavation and Ground Support Installation Round						
CN-1870	Portal Headwall Construction						
CN-2360	Portal Cover Construction, Installation & Backfill						
CN-2370	Conveyor Declines - Redbeds						
CN-2390	Access Declines - Redbeds						
CN-2400	Access Declines - Salt						
CN-2330	Process Plant Excavation						
CN-1750	Foundations						
CN-1760	Erection of steel						
CN-1770	Mechanical equipment rough install						
CN-1780	Mechanical equipment final install						
CN-1790	Platwork install						
CN-1800	Piping install						
CN-1810	Electrical (Trays, cable and terminations)						
CN-1820	Instrumentation (Instruments, trays and cables)						
CN-1830	E-Room (Installation and Terminations)						
CN-1840	Construction punch list						
COMMISSIONING							
CM-1010	2000-Process Plant - Power Off Checks						
CM-1050	2000-Process Plant - Pre-Commissioning						
CM-1090	2000-Process Plant - Cold Commissioning						
CM-1140	1000-Mining - Production Ramp-Up of Year One Throughput						
CM-1150	2000-Process Plant - Production Ramp-Up						
OPERATIONS							
RAMP-UP & PERFORMANCE TESTING							

24-7



25.0 Interpretation and Conclusions

The Qualified Persons (QP) have the following conclusions by area.

25.1 Geology and Mineral Resources

- The geological setting of the deposit is well understood, with the GAS halite being constrained by a combination of exploration drilling and downhole and ground geophysical surveying. The Project is hosted within Devonian and Carboniferous strata of the Bay St George Sub-Basin of the regional Maritimes Basin of southwest Newfoundland; an extensive geological basin underlying the Gulf of St Lawrence and surrounding areas.
- The GAS halite deposit is a basin-wide, bedded evaporite salt deposit with wide lateral extent. The deposit is part of a stratigraphy including sedimentary strata from a range of depositional environments including marine, shallow marine and salina, to fluvial and deltaic. Salt formation within sedimentary environments occurs through the evaporation of seawater within shallow enclosed or isolated basins. The Codroy Formation of the Codroy Group represents the dominant stratigraphic unit within the Project area.
- Salt horizons correlated with the GAS deposit have been intersected in 13 drill holes, of which nine have been assayed. The four unassayed holes include two located outside the resource area and two geotechnical holes that were terminated shortly after entering the Salt-1 horizon. Within the resource area, the deposit extends from approximately 180 m to 395 m depth and varies in thickness from about 68 m in the southwest to 340 m in the northeast. Geophysical information suggests that the deposit extends further laterally than what is currently classified as Mineral Resources.
- The halite is overlain by a thick succession of sandstones, siltstones, mudstones, and conglomerates, referred to as Red Beds, and is immediately underlain by a basal anhydrite, both of which form relatively sharp boundaries with the major halite horizons. There are two interburden layers in the deposit and the salt horizons have been named as follows:
 - 1-Salt is below the Red Beds and overlies the first interburden layer.
 - 2-Salt is between the two interburden layers.
 - 3-Salt is below the second interburden layer and overlies the basal anhydrite.
- Mineral Resources at the Project conform to CIM (2014) definitions.
- As at September 30, 2025, Indicated Mineral Resources are estimated to total 383 Mt averaging 96.0% NaCl containing 368 Mt of NaCl. Inferred Mineral Resources are estimated to total 868 Mt averaging 95.2% NaCl containing 827 Mt of NaCl. This estimate is unchanged from the previous estimate for the Project, with an effective date of May 11, 2023.
- The sample preparation, analysis, and security procedures at the Project are adequate, and the QA/QC results are adequate to support Mineral Resource estimation.
- The drill hole database is of sufficient quality and is suitable for use in a Mineral Resource estimate.



- The QP is not aware of any material limitations on data verification and is of the opinion that database verification procedures for the GAS Project are adequate for the purposes of Mineral Resource estimation. Verification by SLR has included a review of spatial, geological, and geochemical data in relation to the deposit, and updated geological interpretations informed by new drill hole data and reprocessed seismic survey data.
- The QP is of the opinion that the block modelling methodologies and the selected block sizes are suitable for the style of mineralization and proposed mining method.
- The deposit remains open to additional exploration and further technical study, which are warranted.

25.2 Mining and Mineral Reserves

- As at September 30, 2025, the Probable Mineral Reserves are estimated to be 95.0 Mt grading 95.9% NaCl. There are 39.3 Mt grading 95.9% NaCl of Probable Mineral Reserves in the 2-Salt horizon and 55.8 Mt grading 95.9% NaCl of Probable Mineral Reserves in the 3-Salt horizon.
- The Probable Mineral Reserves are based on Indicated Mineral Resources only, after the application of mining plans and designs. No Inferred Mineral Resources were included in the estimate of Mineral Reserves. Inferred Mineral Resources included within the mine plan were treated as waste.
- A mining plan has been developed based upon the Probable Mineral Reserves for an initial mine life of 24.25 years at a steady state operating rate of 4.0 Mtpa of road salt product. There are additional Indicated Mineral Resources at depth that have not been converted to Mineral Reserves.
- The deposit is planned to be accessed by two declines from surface to the plant elevation at the 240 Level (nominally 240 m below surface) and to the first production level at the 320 Level.
- Over the 24.25 life of the Project, the declines will be extended to a further six production levels down to the 536 Level.
- Salt will be mined using CMs and truck haulage in a room and pillar mining operation. Rooms will be 17 m wide; pillars will be 25 m square.
- Mining levels will be up to 20 m high consisting of four vertical cuts each five metres high. Mining levels will be separated by 16 m sill pillars.
- Mining is planned for the 2-Salt and 3-Salt horizons.
- At a block model mining cut-off grade of 90% NaCl, the total production for the initial 24.25 year mine plan is estimated to be 95.0 Mt grading 95.9% NaCl. Mining faces will be blended to maintain the production grade higher than the minimum 95% NaCl road salt specification.
- The mine equipment will primarily comprise electric and battery electric units.
- Mine design and planning are supported by geotechnical studies and geomechanical testing.



25.3 Mineral Processing

- Processing to produce de-icing salt will take place in a processing plant that will be located underground within the mine.
- A multi-stage crushing and screening plant using roll crushers and inclined vibrating screens has been designed to minimize the generation of fines. The flow sheet comprises three crushing and four screening stages, including screening-out of product-size material before each crushing stage to further reduce the potential for fines generation. Regardless, a fine screening circuit has been included to allow for the removal of excessive fines if necessary.
- The process design has been based on UCS tests on thirty samples from drill holes CC-8 and CC-9b completed in 2022 and 2023. The results range from 14.7 MPa to 38.8 MPa with a 75th percentile value of 28.6 MPa.
- Abrasiveness of six samples from drill holes CC-7 completed in 2022 has been assessed by CM manufacturers as “not abrasive” to “slightly abrasive”, while Bond abrasion index results from six samples from CC-7, CC-8, and CC-9b indicate that the salt’s abrasivity is very mild to mild. Additionally, Cerchar Abrasivity Index (CAI) testing on six samples from CC-8 characterized the samples’ abrasivity as very low.
- These results indicate that the salt may be successfully processed to produce de-icing salt conforming to ASTM D632-12 by conventional dry crushing and screening methods.

25.4 Infrastructure

- The Project is located within the town limits of St. George’s. To develop the Project, surface infrastructure is required to augment the infrastructure that exists already in the area.
- A surface clearing will be developed at the site where the majority of new infrastructure will be located. New infrastructure will include access roads, utility connections to town, site roads, buildings, stockpiles, conveyors, an electrical substation, and product conveyors.
- Water that has come in contact with the site will be collected in an effluent water pond, and then discharged into a local creek nearby. It is anticipated that water will require treatment only for total suspended solids.
- A series of conveyors is required to transfer the salt from the mine to the port, including an intermediate salt storage building, and a two-kilometre overland conveyor.
- Turf Point Port is an existing aggregates exporting facility owned by a third party that is currently used to ship gypsum to markets in North America. SLR has assumed that the GAS Project will use the port for the shipment of salt on a contract basis with a third party owner.
- The principal components of the port as it exists today include an aggregate storage building, outdoor aggregate storage, reclaim system feeding onto a conveyor, and a ship loader mounted on the structural steel trestle with a loading rate of nominally 1,000 tph. Vessels up to 225 m long, 32.26 m in beam and an alongside depth of 10 m can be accommodated.



- It is proposed that the existing port facilities will be augmented as part of the Project to enable the port to be suitable for exporting 4.0 Mtpa of rock salt. The following key changes proposed include modifying the existing storage building, constructing a new storage building, completing a series of reclaim feeders, and refurbishment of the existing trestles and ship loader. With the addition of the new storage building, the total storage at the port will be 60,000 t. The ship loader would be upgraded and refurbished to increase its capacity to 1,400 tph.

25.5 Marketing

- The sole product produced from the GAS Project will be rock salt used for de-icing purposes, with a minor amount of colour (white) based product.
- The target market with the highest potential for GAS to penetrate is Québec and the Maritimes, New England, and the USEC (collectively, the High Potential Market). The combined annual consumption of road salt in these markets ranges from 11.0 Mtpa to 16.0 Mtpa.
- The deposit will be developed for a production rate of 4.0 Mtpa of saleable product as a base case, achieved in Year 4 of operations after a three-year ramp-up period. At 4.0 Mtpa, this would position the Project to supply 25% to 36% of the current High Potential Market by the time it achieves full production. It is intended that this market penetration would be achieved by first supplanting rock salt that is imported from overseas markets, followed by displacement of production from aging rock salt mines in the St. Lawrence Basin.
- Based on a review of both publicly available information and commissioned studies, the economic analysis for the UFS is based on a price of C\$81.67/t for road salt FOB Turf Point (with a Q3 2025 basis).

25.6 Environment

- From an environmental and social perspective, SLR characterizes the Project as low risk. Negative environmental and social impacts and risks are expected to be limited and readily mitigable.
- The Company initiated baseline studies in 2022 which focused on water and ecology components. Additional baseline work has been conducted which focused on avifauna, bats, and certain tree species as required by provincial regulators.
- The IAAC confirmed in writing that the Project was not subject to a federal review under the IAA on December 6, 2023.
- The Project required registration under the NL EPA. Atlas submitted an EA Registration document on February 28, 2024 to the NL Ministry of ECC and received a conditional release from conducting an EA on April 19, 2024.
- The Project has evolved since the EA Registration submitted to the NL ECC and described to IAA in 2024. The main changes include an increase in production rate from 2.5 Mtpa to 4.0 Mtpa, re-alignment of surface infrastructure at the mine site, and changes to offsite infrastructure, namely adding a caisson or pile structure to the Turf Point marine terminal. While these changes are not expected to trigger additional environmental review, in-water work at the port may necessitate permitting under the



federal *Fisheries Act*. In addition, a permit for dredging will need to be obtained by the port operator or their contractor.

- Several environmental permits are required and will be applied for in a phased approach. A permit register and high-level schedule have been developed for the Project.
- The Project is located within the town of St George's. The nearest Indigenous community is the Qalipu Mi'kmaq First Nation, with a central administrative office in Corner Brook, approximately 70 km to the north of the Project area. Some residents of St. George's report Indigenous ancestry.
- The Project represents a significant long-term economic opportunity for the community of St. George's and the surrounding area.
- Atlas Salt maintains a list of stakeholders and Indigenous communities and has engaged with local communities. Atlas, in association with independent consultants, has developed engagement plans to be implemented as the Project progresses and to support the environmental approval and permitting processes.
- Conceptual closure planning and a high-level closure costing has been developed for early works, and for the overall Project as part of this UFS. Closure plans and costs will need to be approved by the regulator and financial assurance provided prior to initiating Early Works, Capital Development and Commercial Production.

25.7 Risks and Opportunities

- Through the risk review process undertaken as part of the UFS, no major unique risks were identified that expose the Project Base Case to unreasonable risk. The risks identified are typical of large capital projects in the mining industry.
- The two principal technical risk are a material increase in capital costs and construction schedule delays due to inability to achieve the assumed advance rates during construction of the two declines and the related risk of encountering and controlling unanticipated volumes of ground water inflows during decline construction.
- Some of the risks associated with the Project, such as the penetration into the market, price of salt, and lead times on critical equipment, are open ended or beyond the control of the Project at this stage.
- A number of opportunities were identified that can only be realized during the FEED, Implementation and Operational phases of the Project.
- SLR considers the most significant opportunity to be the extension of the mine life based upon the conversion of Inferred Mineral Resources at depth and beyond the current resource extents, as well as identifying potential value-added salt products that could be eventually produced from the GAS Project.



26.0 Recommendations

The outcome of this UFS shows that the Project has significant economic potential. The QPs recommend that the Project be advanced to the Basic Engineering level of study, and that the environmental permitting process be further advanced. The QPs offer the following recommendations by work area. In certain areas, the recommendations have been split between those that are recommended as part of the next level of study, and those that are intended for longer-term Project development.

26.1 Geology and Mineral Resources

The QP recommends the following be considered as part of the next level of study, or future drilling programs and Mineral Resource updates:

- 1 Where possible, future drill holes should be completed at a larger drill core diameter to provide greater material for sampling and to reduce issues with core splitting and sampling.
- 2 Continue to maintain the more regular analytical sampling spacing applied in holes CC-8 and CC-9b.
- 3 Reconcile the geological model developed for mine access design work with the geological model developed for salt modelling and Mineral Resource estimation.
- 4 The QP recommends that Atlas consider obtaining a sub-set of bulk density measurements using the Archimedes immersion method on intact core samples to cross-check the gas pycnometer results.
- 5 The QP offers the following recommendations with respect to future QA/QC:
 - a) Increase the frequency of laboratory repeats to account for the difficulty in the collection of reliable field duplicates due to issues with core splitting.
 - b) Obtain appropriate blank material, for example equivalent material used internally by Actlabs, for blind insertion into the sample stream by Atlas. This could be a commercially available blank or inert material obtained locally and crushed by Atlas.
 - c) Obtain additional infill and/or check samples in drill hole CC-5. Current Mineral Resource classifications consider that grade continuity between CC-5 and CC-2, spaced at approximately 600 m, is more variable than observed between other closely spaced drill holes.
- 6 Standardize geological records by re-photographing and re-logging older drill holes, particularly CC-1 and CC-5, to align them with the quality of data collected from recent drilling campaigns. While this work is not considered material to the current Mineral Resource estimate, the QP recommends it be undertaken by Atlas as part of routine data improvement to ensure consistency across the deposit.

26.2 Mining and Mineral Reserves

For the next level of study, the QP recommends the following:

- 1 Advance the Project planning towards construction and production through further engineering and definition of the capital and operating costs.



- 2 Advance pre-production mine development planning and scheduling through further engineering and definition.
- 3 Review sill and barrier pillar dimensions to maximize the extraction ratio.
- 4 Complete detailed design of the auxiliary ventilation systems to support production level development and production activities at the continuous mining units.
- 5 Undertake further geomechanical and hydrogeological investigations including:
 - a) Additional packer testing in Red Beds in the areas of the planned declines.
 - b) Installation of wells for continuous, long-term monitoring of groundwater levels.
 - c) Transient groundwater modelling.
 - d) Incorporate updated hydrogeological conditions into decline geotechnical design.
 - e) Near surface geotechnical investigation around the mine terrace and boxcut area.
- 6 Ongoing definition of the location and character of the interburden layers and larger mudstone inclusions.
- 7 Update the estimate of inflows and subsequent development plans for the handling of groundwater inflows in the decline.

As part of ongoing project development, the QP recommends the following:

- 1 Review the production mining cycle and short-term production sequence to maximize the productivity of the mining operation while maintaining grade blending capability.
- 2 As part of mine optimization work, consider automation systems including:
 - a) Truck dispatch systems to optimize production.
 - b) Automated control of the CM alignment (horizontal and vertical).
- 3 Develop plans and procedures for:
 - a) Determination of the salt grades for production planning.
 - b) Grade control to meet product specifications.
- 4 Implement InSar surface deformation monitoring two years prior to the commencement of mining.
- 5 Develop a ground control manual for development and operations.
- 6 Evaluate of the ventilation requirements based upon a waste heat analysis.
- 7 Consider “ventilation on demand” to supply fresh air when and where required to suit the mining activities.
- 8 Establish ventilation monitoring and control systems to demonstrate that the air quality is suitable and to reduce fan operation.
- 9 Complete detailed design of the process plant ventilation system.
- 10 Consider developing processing and marketing plans for the sale of 1-Salt horizon that will be exposed through pre-production mine development.



26.3 Mineral Processing

While the engineering completed during the feasibility study is sufficient to support the capital cost estimate at AACE Class 3 level, the QP recommends that the following be considered as part of the next level of engineering:

- 1 Refine the process plant layout while considering the configuration of all transfer points. Vertical drops through chutes into crushers and onto screens and conveyors should be avoided to minimize fines generation and airborne dust. Chutes should be designed to provide sloped transfers at a high enough angle that will prevent the chutes from blocking up, while at a low enough angle to minimize impacts by ensuring that transfers are by sliding rather than falling streams. Consideration should be given to the inclusion of low-friction linings in all transfer chutes.

26.4 Infrastructure

As part of the next level of study, the QP recommends the following:

- 1 Conduct further geotechnical investigations around the area of the proposed site terrace, to facilitate further engineering works related to foundations of buildings and stockpiles.
- 2 Conduct geochemical testing of the overburden and red beds, to determine whether there are any deleterious elements that could impact the water effluent treatment system.
- 3 Continually update the site-wide water balance.
- 4 Complete hydrogeological testing of the red beds and overburden in the area of the surface facilities.
- 5 Review overland conveyor alignment routes and site access routes, and determine whether any easements, right of ways, or land purchases are required to achieve the selected alignment.
- 6 Review crossing requirements for the overland conveyor with the town of St. George's and other stakeholders to determine optimum crossing locations and methods.

As part of ongoing project development, the QP recommends the following:

- 1 Conduct studies to identify suitable road construction material in the vicinity of the Project.
- 2 Conduct a logistics and traffic study to determine the impact of construction on the town.
- 3 Conduct further discussions with NL Power to confirm and undertake any modifications required at the St. George's substation.
- 4 Conduct further review with the town of St. George's, to confirm suitability for the Project to connect services to the municipal sewer and water systems.
- 5 Install a weather station at the Project to gain site-specific meteorological conditions, which will assist in infrastructure planning.
- 6 Develop a commercial agreement with the port owners that summarizes the terms on which Turf Point Port can be used by Atlas to export salt.



26.5 Marketing

In order to further develop the marketing and logistics plan in the next level of study, the QP recommends the following:

- 1 Meet with potential customers and distributors and arrange letters of intent or other documentation that will lead to formal supply contracts.
- 2 Meet with Canadian and international shipping companies to develop letters of intent or contracts for shipping and logistics.
- 3 Further investigate transportation and distribution options to customers inland of the destination ports, particularly in USEC markets.

26.6 Environment

As part of ongoing project development, the QP recommends the following:

- 1 Obtain confirmation from provincial and federal authorities that the changes to the Project definition do not trigger additional environmental review obligations.
- 2 Confirm what, if any, permitting requirements may be associated with in-water work at the Turf Point marine terminal, and incorporate these activities into the Project execution schedule as appropriate.
- 3 The geology of the salt deposit suggests that Project development is unlikely to result in the generation of ARD/ML, owing mainly to the lack of sulphide mineralization. Carry out limited sampling and static geochemical characterization of the overburden/till, sedimentary rocks and conglomerates in the “Red Beds” as well as in the interburden material in the halite during the construction phase.
- 4 Implement the Indigenous community engagement plan, as well as the general community and stakeholder (including relevant regulators) engagement plan. Ensure that sufficient information is provided to the Qalipu Mi’kmaq First Nation, relevant communities, and other stakeholders regarding potential effects from the proposed Project changes during the engagement process.
- 5 Develop frameworks for community support and agreements, investments, and initiatives with local councils and organizations aimed at responding to the community needs and concerns related to the Project.
- 6 Compile closure plans for Capital Development and Commercial Production in advance of these phases and ensure that the financial assurance is in place per applicable legal requirements.

26.7 Budget

To move the Project forward, the following budget is proposed, as shown in Table 26-1.



Table 26-1: Proposed Work Budget

Item	Program	Cost (C\$000)
1	Advance Engineering, Procurement, and Pre-Construction Work Packages	2,500
2	Geotechnical and Hydrogeological Program	3,000
3	Establish Site Utilities and Power	1,500
4	Owner's Team Project Management and Permitting	325
	Total	7,325

It is noted that the capital costs described in the UFS are inclusive of items #1, #3 and #4, and exclusive of items #2.

26.8 Project Execution Plan

It is recommended that the core GAS Project team be resourced and established as soon as possible to advance the Project execution planning following the completion of the UFS. The key activities of the Project team will be the following:

- 1 Appoint remaining members of the IPD group.
- 2 Establish a detailed short-term 100 day and 300 day plan.
- 3 Conduct updated geotechnical and hydrogeological programs along the revised centreline of the declines.
- 4 Develop a work package and award the early works construction package.
- 5 Establish site utilities, temporary services, and power in advance of construction.
- 6 Continue developing the environmental permitting documents for the capital phase, and in parallel, develop permits for commercial production phase.
- 7 Review existing safety plan and associated systems to ensure safe and successful project execution .
- 8 Further define the Procurement, Logistics, and Warehousing Plan in advance of construction commencement.
- 9 Advance and develop more detail to the UFS schedule and cost estimates, including updating work packages.
- 10 Execute applicable recommendations from the UFS in advance of the next phase of engineering.
- 11 Assign work packages to appropriate IPD partners, contractors, or vendors.
- 12 Identify early work package engineering and execution in advance of the boxcut construction and electrical substation installations.
- 13 Complete value-engineering studies on:
 - a) Mining development rates and methodologies.
 - b) Conveyor advancement with decline drives.



- 14 Update the Quality Management Plan, including QA/QC strategy, and document controls, based on the outcome of the FS.
- 15 Further develop and refine the Operational Readiness plan based on updates to the FS.
- 16 Update the long-lead equipment register and consider placing deposits on key long-lead items based on advanced engineering designs.

The purpose of the recommended tasks is to reduce the risk to safety, schedule, cost and quality during the project execution period.

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28.0 Date and Signature Page

This report titled “NI 43-101 Technical Report Great Atlantic Salt Project, Newfoundland and Labrador, Canada” with an effective date of September 30, 2025 was prepared and signed by the following authors:

(Signed & Sealed) *Pierre Landry*

Dated at Victoria, BC
November 5, 2025

Pierre Landry, P.Geo.

(Signed & Sealed) *David M. Robson*

Dated at Toronto, ON
November 5, 2025

David M. Robson, P.Eng., MBA

(Signed & Sealed) *Lance Engelbrecht*

Dated at Toronto, ON
November 5, 2025

Lance Engelbrecht, P.Eng.

(Signed & Sealed) *Derek J. Riehm*

Dated at Toronto, ON
November 5, 2025

Derek J. Riehm, M.A.Sc., P.Eng.

(Signed & Sealed) *Graham G. Clow*

Dated at Toronto, ON
November 5, 2025

Graham G. Clow, P.Eng.



29.0 Certificate of Qualified Person

29.1 Pierre Landry

I, Pierre Landry, P.Geo., as an author of this report entitled "NI 43-101 Technical Report, Great Atlantic Salt Project, Newfoundland and Labrador, Canada" with an effective date of September 30, 2025, prepared for Atlas Salt Inc., do hereby certify that:

1. I am Principal Geologist and Valuations Lead of SLR Consulting (Canada) Ltd, of 3960 Quadra Street, Unit 303, Victoria, BC V8X 4A3.
2. I am a graduate of Queen's University, Kingston, Ontario, in 2006 with a Bachelor of Science (Honours) degree in Geological Science (Major) and Economics (Minor).
3. I am registered as a Professional Geologist in the Province of British Columbia (Reg.# 47339), and in the Province of Newfoundland and Labrador (Reg. # 10431). I have been working as a professional geologist for a total of 11 years. My relevant experience for the purpose of the Technical Report is:
 - Extensive experience in reviewing, auditing, and reporting as a Resource Geologist on mining operations and mineral projects for due diligence, regulatory compliance, and disclosure under NI 43-101.
 - Mineral resource estimation and preparation of NI 43-101 Technical Reports, including audits, reviews, and due-diligence assessments for stratiform and stratabound deposits across multiple commodities and jurisdictions.
 - Exploration and grade-control experience at Canadian and international mine sites, supporting geological modelling, estimation, and resource classification.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I have not visited the Project.
6. I am responsible for Sections 1.1.1.1, 1.1.2.1, 1.3.1 to 1.3.7, 4 to 12.1, 14, 23, 25.1, 26.1, and related disclosure in Section 27.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of November, 2025

(Signed & Sealed) *Pierre Landry*

Pierre Landry, P.Geo.



29.2 David M. Robson

I, David M. Robson, P.Eng., MBA, as an author of this report entitled "NI 43-101 Technical Report, Great Atlantic Salt Project, Newfoundland and Labrador, Canada" with an effective date of September 30, 2025, prepared for Atlas Salt Inc., do hereby certify that:

1. I am a Principal Mining Engineer with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
2. I am a graduate of Queen's University in 2005 with a B.Sc. (Honours) in Mining Engineering and Schulich School of Business, York University, in 2014 with an MBA degree.
3. I am registered as a Professional Engineer in the Province of Saskatchewan (Reg. #13601) and Province of Newfoundland & Labrador (Reg. #11085). I have worked as a mining engineer for 20 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Design, planning, and scheduling of underground mines located globally, both in a consulting capacity and working at site operations, in a number of commodities, including industrial minerals.
 - Financial analysis, capital cost estimation, operating cost estimation of mining projects located around the world in a variety of commodities, including industrial minerals.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I have visited the Project on three occasions – October 4 to 7, 2021, October 17 to 20, 2022, and April 17 to 20, 2023.
6. I am responsible for overall preparation of the Technical Report, in particular for Sections 1.1.1.2, 1.1.1.4, 1.1.1.7, 1.1.2.2, 1.1.2.4, 1.1.2.7, 1.1.2.8, 1.2, 1.3.8, 1.3.9, 1.3.11, 1.3.14, 1.3.15, 2, 3, 12.2, 15, 16, 18, 21, 22, 24, 25.2, 25.4, 25.7, 25.8, 26.2, 26.4, 26.7, 26.8, and related disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. My prior involvement in the Project includes being a named qualified person of previous Technical Reports completed on the Project with effective dates of January 30, 2023 and July 31, 2023.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. 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.

Dated this 5th day of November, 2025

(Signed & Sealed) *David M. Robson*

David M. Robson, P.Eng., MBA



29.3 Lance Engelbrecht

I, Lance Engelbrecht, P.Eng., as an author of this report entitled "NI 43-101 Technical Report, Great Atlantic Salt Project, Newfoundland and Labrador, Canada" with an effective date of September 30, 2025, prepared for Atlas Salt Inc., do hereby certify that:

1. I am Technical Manager – Metallurgy and Principal Metallurgist with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
2. I am a graduate of the University of the Witwatersrand, Johannesburg, South Africa in 1992 with a B.Sc. degree in Engineering, Metallurgy and Materials (Mineral Processing Option).
3. I am registered as a Professional Engineer in the Province of Ontario (Reg. # 100540095), and Province of Newfoundland and Labrador (Reg. #10730). I have worked as a metallurgist for a total of 28 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Reviews and reports as a metallurgical consultant on numerous mining operations and projects for due diligence and regulatory requirements.
 - Preparation of Conceptual, Prefeasibility, and Feasibility Studies for projects around the world including industrial minerals, as well as test work interpretation, recommendations, and supervision.
 - Management and operational experience at Canadian and international milling, smelting, and refining operations.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I visited the Project on October 4 to 7, 2021.
6. I am responsible for Sections 1.1.13, 1.1.2.3, 1.3.10, 12.3, 13, 17, 25.3, 26.3, and related disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. My prior involvement in the Project includes being a named qualified person of previous Technical Reports completed on the Project with effective dates of January 30, 2023 and July 31, 2023.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of November, 2025

(Signed & Sealed) *Lance Engelbrecht*

Lance Engelbrecht, P.Eng.



29.4 Derek J. Riehm

I, Derek J. Riehm, M.A.Sc., P.Eng., as an author of this report entitled “NI 43-101 Technical Report, Great Atlantic Salt Project, Newfoundland and Labrador, Canada” with an effective date of September 30, 2025, prepared for Atlas Salt Inc., do hereby certify that:

1. I am Technical Director, Mining Advisory, with SLR Consulting Limited at 3rd Floor, Summit House, 12 Red Lion Square, London WC1R 4QH, UK.
2. I am a graduate of Queen’s University in Kingston, Ontario, in 1983 with a B.Sc. (Honour’s, First Class) degree in Metallurgical Engineering and of the University of British Columbia in Vancouver, B.C., in 1990 with a M.A.Sc. degree in Metals and Materials Engineering.
3. I am registered as a Professional Engineer in the Province of British Columbia (Reg #21391), and Province of Newfoundland and Labrador (Reg. #11349). I have worked as an engineer and mining executive for 35 years since my graduation from UBC. My relevant experience for the purposes of the Technical Report is:
 - Environmental and social impact assessments, due diligence evaluations, audits and reviews of numerous mineral exploration and mining projects around the world including preparation of relevant sections of NI 43-101 Technical Reports.
 - A senior position with an international consulting firm focusing on environmental reviews and permitting.
 - Performing as an environmental and social manager and executive for several Canadian mining companies.
4. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
5. I visited the Project on October 17 to 20, 2022.
6. I am responsible for Sections 1.1.1.6, 1.1.2.6, 1.3.13, 12.5, 20, 25.6, 26.6, and related disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. My prior involvement in the Project includes being a named qualified person of a previous Technical Report completed on the Project with an effective date of January 30, 2023.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, sections 12.5, 20, 25.6, and 26.6 of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of November, 2025

(Signed & Sealed) *Derek J. Riehm*

Derek J. Riehm, M.A.Sc., P.Eng.



29.5 Graham G. Clow

I, Graham G. Clow, P.Eng., as an author of this report entitled “NI 43-101 Technical Report, Great Atlantic Salt Project, Newfoundland and Labrador, Canada” with an effective date of September 30, 2025, prepared for Atlas Salt Inc., do hereby certify that:

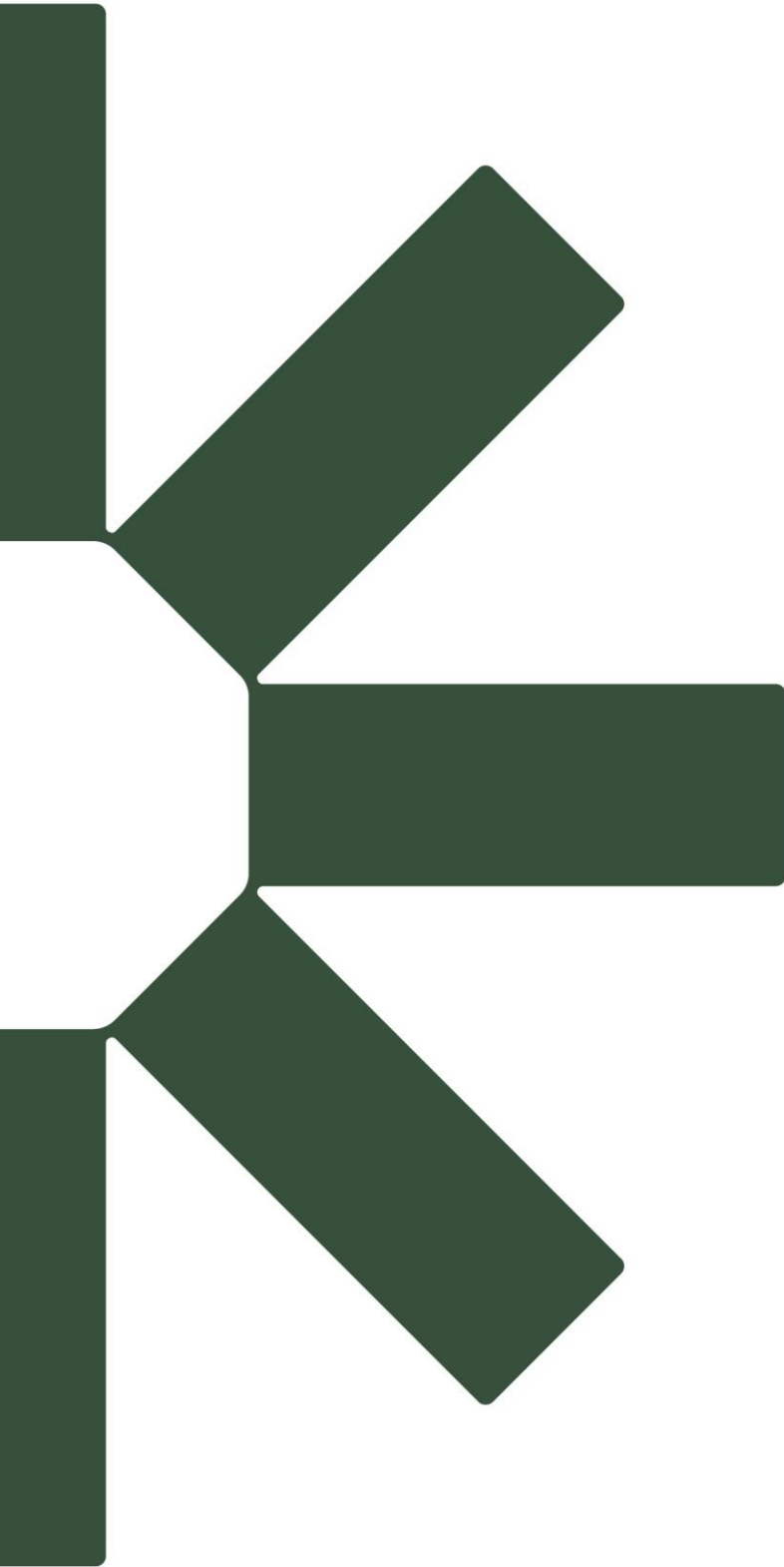
1. I am Strategy Director – Global Mining Advisory with SLR Consulting (Canada) Ltd, of Suite 501, 55 University Ave., Toronto, ON M5J 2H7.
2. I am a graduate of Queen’s University, Kingston, Ontario, Canada in 1972 with a Bachelor of Science degree in Geological Engineering and in 1974 with a Bachelor of Science degree in Mining Engineering.
3. I am registered as a Professional Engineer in the Province of Ontario (Reg. #8750507), and Province of Newfoundland and Labrador (Reg. #11186). I have worked as a mining engineer for a total of 49 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Experience in the marketing, pricing, and logistics for industrial minerals including talc, gypsum, wollastonite, and polyhalite.
 - Experience in costs and logistics for sea-borne bulk commodities.
 - Experience in mining evaporite deposits including gypsum and potash.
 - Review and report as a consultant on numerous mining operations and projects around the world for due diligence and regulatory requirements.
 - Senior Engineer to Mine Manager at seven Canadian mines and projects, senior person in charge of the construction of two mines in Canada, senior VP Operations in charge of five mining operations, and president of multiple mining companies.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I have not visited the property.
6. I am responsible for Sections 1.1.1.5, 1.1.2.5, 1.3.12, 12.4, 19, 25.5, 26.5, and related disclosure in Section 27 of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. My prior involvement in the Project includes being a named qualified person of a previous Technical Report completed on the Project with an effective date of January 30, 2023.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of November, 2025

(Signed & Sealed) *Graham G. Clow*

Graham G. Clow, P.Eng.





Making Sustainability Happen