HOWSE PROPERTY ANNUAL REPORT

April 2024 – March 2025 Activities

Tata Steel Minerals Canada Limited

June 2025

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EXECUTIVE SUMMARY – ENGLISH

Tata Steel Minerals Canada (TSMC) operates the Direct Shipping Ore (DSO) Timmins Facility in the province of Newfoundland and Labrador approximately 25km northwest of Schefferville, Quebec. The facility consists of several open pit mining properties, a processing plant and supporting infrastructures. The facility mines and processes raw iron ore product which is railed from the site to port facilities in Sept-Iles, Quebec, and shipped onward to customers for production of steel and other related products.

The Howse Project, also referred to as the Designated Project or the Project, is a large open pit iron ore mining property in the vicinity of DSO Timmins. The Project includes construction, operation, rehabilitation and closure of an open pit mine. The proposed Howse Project is expected to extract up to about 46 million tonnes of iron ore at a rate of up to 25,000 tonnes per day, over an approximate mine life of 15 years. The Project underwent the Federal environmental assessment, and final approval was received via the Decision Statement issued on June 29, 2018, by the Impact Assessment Agency of Canada (IAAC). This annual report is submitted in compliance with condition 2.8 of the IAAC Decision Statement. The report covers the activities undertaken by TSMC to comply with each of the IAAC Decision Statement conditions during the reporting period of April 2024 to March 2025.

TSMC commenced the construction of the Howse Project on February 23, 2025. The main components of preparatory and construction activities taken up during the reporting period included:

- Planning and review of all compliance documentation, monitoring equipment, infrastructure, and follow-up programs
- Review and update of Follow-up Program documents with newer standard formatting, presentation and completeness of all existing conditions and measures
- Issuance of the Howse Accidents and Malfunctions Response Plan as per Decision Statement
- Submission of updated plans for consultation and review to the five concerned Indigenous groups on January 14, 2025, and to the Agency on February 2, 2025
- Continued engagement through meetings with Indigenous groups throughout the year
- Ground preparation of the first-year operations footprint of the Howse Project haul road and pit, comprising temporary ditching and sumps to collect runoff from the first-year pit excavation footprint and the haul road to be conveyed to the existing Sedimentation Pond 3
- Snow removal, shrub clearing and ground preparation works started in February with plans to complete by April, prior to the bird migration period to ensure there are no impacts to migratory birds
- Vegetation and topsoil deposited in designated piles as per the stockpile management plan
- Construction of the permanent haul road section, temporary haul roads within the pit limit, and excavation of overburden from the first-year pit limit
- Installation of adjacent ditching, water management sumps and dewatering pumps to convey all water from the operations towards Sedimentation Pond 3
- Overburden removed from the pit was deposited into the mined-out Timmins 4 Pit for backfilling that could be extended to other adjacent end-of-life mining pits. This measure will significantly reduce the environmental footprint and the impact to viewscapes from the planned overburden and waste stockpiles while also supporting the rehabilitation and closure measures to be implemented in the other pits.

No reportable accidents or malfunctions were noted during the reporting period. Pit construction works will continue into the next reporting period of April 2025 to March 2026 with anticipated operations to start in parallel once the first-year pit excavation reaches the depth of the iron ore mineral body. Further expansions to the project footprint will be planned and undertaken in a phase-by-phase manner to ensure that all environmental impacts are mitigated without any additional disturbance. The environmental monitoring measures and various studies will be initiated in accordance with the timing, duration, and schedules specified in the Howse Project Follow-Up Programs.

RÉSUMÉ EXÉCUTIF – FRANÇAIS

Tata Steel Minerals Canada (TSMC) exploite l'installation Direct Shipping Ore (DSO) Timmins dans la province de Terre-Neuve-et-Labrador, à environ 25 km au nord-ouest de Schefferville, au Québec. L'installation comprend plusieurs propriétés minières à ciel ouvert, une usine de traitement et des infrastructures de soutien. L'installation extrait et traite le minerai de fer brut qui est transporté par rail du site vers les installations portuaires de Sept-Îles, au Québec, puis expédié aux clients pour la production d'acier et d'autres produits connexes.

Le projet Howse, également appelé le projet désigné ou le Projet, est une grande propriété minière de minerai de fer située à proximité de DSO Timmins. Le Projet comprend la construction, l'exploitation, la réhabilitation et la fermeture d'une mine à ciel ouvert. Le projet Howse proposé devrait extraire jusqu'à environ 46 millions de tonnes de minerai de fer à un taux allant jusqu'à 25 000 tonnes par jour, sur une durée de vie approximative de la mine de 15 ans. Le Projet a fait l'objet d'une évaluation environnementale fédérale, et l'approbation finale a été reçue par l'entremise de la Déclaration de décision émise le 29 juin 2018 par l'Agence d'évaluation d'impact du Canada (AEIC). Ce rapport annuel est soumis en conformité avec la condition 2.8 de la Déclaration de décision de l'AEIC. Le rapport couvre les activités entreprises par TSMC pour se conformer à chacune des conditions de la Déclaration de décision de l'AEIC pendant la période de rapport d'avril 2024 à mars 2025.

TSMC a commencé la construction du projet Howse le 23 février 2025. Les principales composantes des activités préparatoires et de construction entreprises pendant la période de rapport comprenaient :

- Planification et révision de toute la documentation de conformité, l'équipement de surveillance, l'infrastructure et les programmes de suivi
- Révision et mise à jour des documents de Programmes de suivi avec un formatage standard plus récent, une présentation et l'exhaustivité de toutes les conditions et mesures existantes
- Émission du Plan de réponse aux accidents et défaillances de Howse selon la Déclaration de décision
- Soumission des plans mis à jour pour consultation et révision aux cinq groupes autochtones concernés le 14 janvier 2025, et à l'Agence le 2 février 2025
- Engagement continu par le biais de réunions avec les groupes autochtones tout au long de l'année
- Préparation du terrain de l'empreinte des opérations de première année de la route de transport et de la fosse du projet Howse, comprenant le fossé temporaire et les puisards pour collecter le ruissellement de l'empreinte d'excavation de la fosse de première année et de la route de transport à acheminer vers le bassin de sédimentation 3 déjà existant
- Enlèvement de neige, défrichage d'arbustes et travaux de préparation du terrain commencés en février avec des plans de complétion en avril, avant la période de migration des oiseaux pour s'assurer qu'il n'y ait aucun impact sur les oiseaux migrateurs
- Végétation et terre végétale déposées dans des piles désignées selon le plan de gestion des stocks
- Construction de la section de route de transport permanente, routes de transport temporaires dans la limite de la fosse, et excavation du mort-terrain de la limite de fosse de première année
- Installation de fossés adjacents, puisards de gestion de l'eau et pompes de déshydratation pour acheminer toute l'eau des opérations vers le bassin de sédimentation 3
- Le mort-terrain retiré de la fosse a été déposé dans la fosse Timmins 4 entièrement exploitée pour le remblayage qui pourrait être étendu à d'autres fosses minières adjacentes en fin de vie. Cette mesure réduira considérablement l'empreinte environnementale et l'impact sur les paysages des stocks de mort-terrain et de déchets planifiés tout en soutenant les mesures de réhabilitation et de fermeture à implémenter dans les autres fosses.

Aucun accident ou défaillance déclarable n'a été noté pendant la période de rapport. Les travaux de construction de la fosse se poursuivront dans la prochaine période de rapport d'avril 2025 à mars 2026 avec des opérations anticipées à commencer en parallèle une fois que l'excavation de la fosse de première année

atteint la profondeur du corps minéral de minerai de fer. D'autres expansions de l'empreinte du projet seront planifiées et entreprises de manière progressive pour s'assurer que tous les impacts environnementaux sont atténués sans perturbation additionnelle. Les mesures de surveillance environnementale et diverses études seront initiées en conformité avec les délais, la durée et les échéanciers spécifiés dans les Programmes de suivi du projet Howse.

1. HOWSE PROPERTY PROJECT UPDATE

Tata Steel Minerals Canada (TSMC) commenced construction on the Howse Project on February 23, 2025. The activities conducted during the reporting period covered in this annual report were primarily geared towards the preparatory works for the commencement of the project construction. These activities included planning, preparation and scheduling to ensure all compliance related documentation, equipment for monitoring activities, infrastructure, and follow-up programs are in place for commencement of the various project execution phases. These obligations include the conditions of the Newfoundland and Labrador (NL) provincial-level environmental release and the federal-level Impact Assessment Agency of Canada (IAAC, also referred to as the Agency) release decision statement for the Howse Project.

In preparation for the construction activities for the Howse Project, the Follow-up Program documents were reviewed and updated. The updates mostly pertained to newer standard formatting, presentation and completeness of all existing conditions and measures. The Howse Accidents and Malfunctions Response Plan, in meeting with conditions of the Decision Statement was also issued. The updated plans were submitted for consultation and review to the five concerned Indigenous groups on January 14, 2025. The versions submitted for consultation were also submitted to the Agency on February 2, 2025.

As per the Annual Report requirement of the Howse Property Iron Mine Project Decision Statement issued in June 2018, the present report covers the activities conducted in preparation of the construction phase, the activities conducted since the commencement of construction, community updates, and the continued baseline monitoring activities for the reporting period of April 1, 2024, to March 31, 2025.

A Table of Concordance for Conditions is provided at the end of the text.

2. GENERAL CONDITIONS

Section 2 covers the General Conditions 2.1 to 2.13 of the IAAC Decision Statement for the Howse Project.

The activities conducted to meet and comply with the requirements of Conditions 2.1 to 2.13 are outlined in the Table of Concordance at the end of the text.

All Annual Reports and Follow-up Programs required by Condition 2.10 are available for public access on TSMC's website: https://www.tatasteelcanada.com/.

3. FISH AND FISH HABITAT

3.1 Erosion and Sediment Control

Erosion and sediment control measures and mitigations are an integral part of the various project infrastructure. Planning to ensure that sediment and erosion control objectives are achieved has been incorporated into the various permanent and temporary water management infrastructures that will be utilized during the project construction and operations.

3.2 Follow-up Program

There were no updates made to the content of the fish and fish habitat follow-up plan. The document was updated to a new standard format used for all follow-up programs. The newly formatted version was presented to all five Indigenous groups and to the Agency on January 14th, 2025, and on February 2, 2025, respectively.

3.2.1 Surface Water Quality Monitoring

Surface water quality samples were taken between June 16 and October 14, 2024, for four quarters (taken at least 1 month apart). These samples are collected as a part of the baseline monitoring of surface water quality for the Water Chemistry Analysis Program in the creeks and lakes potentially affected once the Howse project will go into the construction and subsequently into the mining phase. The locations sampled are Triangle Lake (TL), Burnetta Creek (BC), Burnetta Lake (BL), Morley Lake (ML), Pinette Lake (SW5) and 4 points along Goodream Creek and its tributaries (SW1, 2, 3 and 4) which are located into the watersheds that might be affected by Howse operations.

Sampling results for the baseline surface water quality monitoring are presented in Appendix I.

3.2.2 Lake Water Levels Monitoring

Lake water levels were measured in summer and fall 2024 even though no activities that could cause impact on the lakes were performed. The information collected will be used for baseline reference when analyzing results collected during the construction and operation phases.

The water depth probes and barometers were installed on June 16, 2024, and programmed to start logging simultaneously on June 17, 2024, at midnight. They were removed for the winter period between October 14 and 16, 2024. They will be reinstalled as soon as conditions allow access to the lakes for data collection throughout the ice-free period in 2025.

The measurements collected during this period are presented in the report included in Appendix II.

3.3 Groundwater Quality and Wells

Groundwater levels in the wells on the Howse Property were not measured and no samples for water quality analyses were collected in 2024 since construction was not started and no activities impacting the deep aquifer occurred.

Groundwater levels will be measured, and samples will be collected four times in 2025, as per the monitoring program, starting in early summer when access to all the wells become possible.

4. MIGRATORY BIRDS

4.1 Bank Swallow

No Bank Swallows were observed in the designated Howse project area or in any of the surrounding areas between April 1, 2024, to March 31, 2025.

4.2 Howse Wetland Monitoring (Avifauna Habitat)

Wetland water levels were measured three times in 2024, on July 20, August 16 and from October 6 to October 7. The results collected during these visits were compared with results from previous years to determine seasonal and annual variations for further use as baseline comparison. Summer period was exceptionally dry in 2024, therefore, the results collected in this period are particularly useful for determining natural levels of wetlands unaffected by the Project in dry conditions and with low water levels.

The results collected in 2024, and the analysis performed with previous year's results are presented in the report included in Appendix III.

5. HEALTH AND SOCIO-ECONOMIC CONDITIONS OF INDIGENOUS PEOPLES

5.1 Air Quality

TSMC's Follow-Up Program for air quality is set to be implemented from the start of construction to the end of decommissioning of the Designated Project.

The air quality follow-up program was updated in order to be made fully compliant with Condition 5.9 of the decision statement and to present the equipment that will be used to monitor the required air quality parameters. Mitigation measures to be put in place in case of impacts to air quality were also presented in this update.

The updated plan was submitted for consultation to the five concerned Indigenous groups on January 14, 2025. The version submitted for consultation was also submitted to the Agency on February 2, 2025.

5.2 Country Foods

TSMC is committed to duplicating the Country Foods sampling program 2 years after the commencement of the Howse Operations phase and, subsequently, every five years for the duration of the operations phase.

There were no updates made to the content of the country foods follow-up plan. The document was updated to a new standard format used for all follow-up programs. The newly formatted version was presented to all five Indigenous groups and to the Agency on January 14, 2025, and on February 2, 2025, respectively.

6. CURRENT USE OF LANDS AND RESOURCES FOR TRADITIONAL PURPOSES

6.1 Bypass Roads

Maintenance and upgrade works were carried out to the existing DSO Timmins Project bypass roads which are a part of the Howse bypass roads. The following maintenance and upgrade activities were undertaken:

- Grading and levelling of road from S-turn bypass road entrance to Km.4.
- Grading and levelling of road from Km.4 to Km.13.
- Bypass road intersections along the Kivivic 3 property were maintained.
- Berms were installed and strengthened where required.
- Additional signage installed for safe movement of traffic.

The construction of the proposed additional bypass, referred to as the Howse bypass, was planned during the construction phase. This bypass road section will run along an existing exploration road which runs from Km.13 of the DSO Timmins Project bypass roads, where it intersects with TSMC's Goodwood Haul Road, towards the community traditional and recreational areas near the Howse project.

The Howse bypass was discussed with the Indigenous groups to ensure access is in place during the construction phase. Feedback was provided to TSMC by the Indigenous groups opposing of the proposed Howse bypass due to the lengthier travel time, added fuel cost and vehicle wear and tear when accessing these areas. TSMC has historically provided the Indigenous groups access to their traditional and recreational areas near the Howse Project through the main DSO Timmins Project site gate. Local recreational and traditional users utilize the wide and well-maintained road from the town of Schefferville to reach the DSO Timmins Project site gate, at which point they are escorted by TSMC Security staff to the entrance of the access roads near the Howse Project to ensure their safety around onsite heavy-vehicle traffic movement. TSMC will consult

with the local Indigenous groups during the construction phase in the upcoming reporting year to validate their preferred access route prior to initiating the development of the Howse bypass. If access via the main gate is preferred by the Indigenous groups, TSMC will ensure that these measures are in place for the life of the project.

6.2 Caribou

No caribou sightings were recorded during the reporting period.

TSMC no longer has a formal arrangement to receive caribou data from the Caribou Ungava program due to the sensitivity of the data. To ensure that the Caribou Follow-up Program protocols are implemented in accordance with the conditions of the Decision Statement, TSMC will maintain its collaborative approach with the Indigenous groups to monitor any caribou reports in the vicinity of the project. To ensure that conservation authorities are aware and involved, TSMC developed engagement with the Government of Newfoundland and Labrador to communicate any caribou sightings or reports for further guidance and measures.

The updated plan was submitted for consultation to the five concerned Indigenous groups on January 14, 2025. The version submitted for consultation was also submitted to the Agency on February 2, 2025.

6.3 Communication

TSMC communicated progress and high-level results of its current monitoring programs to Indigenous groups during its Joint Community Health, Safety and Environment Committee meetings, held in this reporting period on May 30, 2024, and February 28, 2024. Site visits were also conducted during the reporting period by Environmental liaisons and leadership from the Indigenous groups.

7. PHYSICAL AND CULTURAL HERITAGE AND STRUCTURES, SITES OR THINGS OF HISTORICAL, ARCHAEOLOGICAL, PALEONTOLOGICAL OR ARCHITECTURAL SIGNIFICANCE

7.1 Follow-up Program

The follow-up plan concerning the use of cultural and other sites from resulting noise levels was updated to be made fully compliant with Condition 7.5 of the decision statement and to present the equipment that will be used to monitor noise levels. Mitigation measures to be put in place in case of noise exceedances were also presented in this update.

The updated plan was submitted for consultation to the five concerned Indigenous groups on January 14, 2025. The version submitted for consultation was also submitted to the Agency on February 2, 2025.

7.2 Noise Complaint Protocol and Cultural Heritage Control Plan

There were no significant updates made to the content of the noise complaint protocol, which is included in the communication plan, and the Cultural Heritage Control plan. The documents were updated to a new standard format used for all follow-up programs and contacts were updated to reflect changes in TSMC personnel.

The updated version was presented to all five Indigenous groups and to the Agency on January 14, 2025, and on February 2, 2025, respectively.

8. CUMULATIVE EFFECTS

There were no requests made by a relevant authority or the Town of Schefferville to participate in regional initiatives relating to the monitoring, assessment and management of cumulative environmental effects during the period of the reporting year following the start of construction.

9. ACCIDENTS AND MALFUNCTIONS

There were no incidents on the Howse Property during the reporting year.

9.1 Accidents and Malfunctions Response Plan

A complete accident and response plan was developed in compliance with Condition 9.2 of the decision statement. Responses to be implemented in case of accidents and malfunctions that may cause adverse environmental effects, such as slope failures, sedimentation pond failures, ditch failures, destabilization of waste rock piles and overburden stockpiles, or rockslides are presented in this plan.

The accident and malfunction plan was submitted for consultation to the five concerned Indigenous groups on January 14, 2025. The version submitted for consultation was also submitted to the Agency on February 2, 2025.

10. SCHEDULES AND RECORD KEEPING

Conditions 10.1-10.4 of the Howse Property Decision Statement indicate how the Proponent will submit to the Agency schedules associated with the Howse Property Project after the start of construction.

TSMC has maintained all records required to demonstrate compliance with the conditions of the release of the Howse Property Project.

The Annual Report requirements under conditions 2.8 and 2.9 of the Howse Property Iron Mine Project Decision Statement issued in June 2018 are presented below for the reporting period of April 1, 2024, to March 31, 2025.

TABLE OF CONCORDANCE FOR CONDITIONS

IAAC Release Condition		2024-2025 Activities
2. General Conditions		
2.1	The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including community and Indigenous traditional knowledge, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, and have applied the best available economically and technically feasible technologies.	TSMC is committed to follow best practices for all its activities.
2.2	The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:	TSMC has continued to consult with stakeholders and Indigenous groups on IAAC conditions and related topics. TSMC is committed to follow this requirement for all consultation activities.
	2.2.1 provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject of the consultation;	
	2.2.2 provide sufficient information on the scope and the subject matter of the consultation and a reasonable period of time to permit the party or parties being consulted to prepare their views and information;	
	2.2.3 undertake an impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation; and	
	2.2.4 advise in a timely manner the party or parties being consulted on how the views and information received have been considered by the Proponent.	
2.3	The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this Decision Statement, communicate with each Indigenous group with respect to the manner by which to satisfy the consultation requirements referred to in condition 2.2, including methods of notification, the type of information, the period of time to be provided when seeking input, the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation, the period of time to advise Indigenous groups of how their views and information were considered by the Proponent and the means by which Indigenous groups will be advised.	TSMC has continued to consult with stakeholders and Indigenous groups on IAAC conditions and related topics. TSMC is committed to follow this requirement for all consultation activities.
2.4	The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement, determine the following information, for each follow-up program:	The current Follow-up Programs for TSMC's Howse project include this information.
	2.4.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;	
	2.4.2 the scope, content and frequency of reporting of the results of the follow-up program;	
	2.4.3 the levels of environmental change relative to baseline conditions that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities to be stopped; and	
	2.4.4 the technically and economically feasible mitigation measures to be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.4.3 have been reached or exceeded.	
2.5	The Proponent shall submit the information referred to in condition 2.4 to the Agency prior to the implementation of each follow-up program. The Proponent shall update that information in consultation with Indigenous groups and relevant authorities during the implementation of each follow-up program, and shall provide the updated information to the Agency, Indigenous groups and relevant authorities within 30 days of the information being updated.	Updated plans were submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025
2.6	The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:	TSMC is committed to follow these requirements for all follow-up programs.
	2.6.1 conduct the follow-up program according to the information determined pursuant to condition 2.4;	
	2.6.2 undertake monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);	

	IAAC Release Condition	2024-2025 Activities
	2.6.3 determine whether modified or additional mitigation measures are required based on the monitoring and analysis undertaken pursuant to condition 2.6.2; and	The programs have been updated for completeness to comply with all applicable conditions.
	2.6.4 if modified or additional mitigation measures are required pursuant to condition 2.6.3, implement these mitigation measures in a timely manner and monitor them pursuant to condition 2.6.2.	
2.7	Where consultation with Indigenous groups is a requirement of a follow-up program, the Proponent shall discuss with each Indigenous group opportunities for the participation of that Indigenous group in the implementation of the follow-up program, including the analysis of the follow-up results and whether modified or additional mitigation measures are required, as set out in condition 2.6.	TSMC is committed to follow this requirement for all consultation activities.
2.8	The Proponent shall, commencing in the reporting year during which the Proponent begins the implementation of the conditions set out in this Decision Statement, prepare an annual report that sets out:	TSMC has produced an annual report for its 2018-2019, 2019- 2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024 activities; and the current report covers 2024-2025 activities.
	2.8.1 the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;	
	2.8.2 how the Proponent complied with condition 2.1;	
	2.8.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation;	
	2.8.4 the information referred to in conditions 2.4 and 2.5 for each follow-up program;	
	2.8.5 the results of the follow-up program requirements identified in conditions 3.6, 4.7, 4.8, 5.9, 5.10, 6.6, 6.7, and 7.5; and	
	2.8.6 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.6.	
2.9	The Proponent shall submit to the Agency the annual report referred to in condition 2.8, including an executive summary in both official languages, no later than June 30 following the reporting year to which the annual report applies.	TSMC is committed to comply with this condition.
2.10	The Proponent shall publish on the Internet, or any medium which is publicly available, the annual reports and the executive summaries referred to in conditions 2.8 and 2.9, the dust management strategy referred to in condition 5.7, the communication plan referred to in condition 6.8, the cultural heritage control plan referred to in condition 7.6, the communication plan referred to in condition 9.5, the schedules referred to in conditions 10.1, and 10.2, and any update(s) or revision(s) to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for 25 years following the end of operation, or until the end of decommissioning of the Designated Project, whichever comes first. The Proponent shall notify the Agency and Indigenous groups of the availability of these documents within 48 hours of their publication.	Annual reports, schedules. and the Follow-up Program Documents have been published on TSMC's website for public access: https://www.tatasteelcanada.com/
2.11	The Proponent shall notify the Agency and Indigenous groups in writing no later than 60 days after the day on which there is a transfer of ownership, care, control or management of the Designated Project in whole or in part.	No transfer has occurred to date.
2.12	The Proponent shall consult with Indigenous groups prior to initiating any material change(s) to the Designated Project that may result in adverse environmental effects and shall notify the Agency in writing no later than 60 days prior to initiating the change(s).	No changes to the Designated Project that may result in adverse environmental effects have been proposed/initiated to date.
2.13	In notifying the Agency pursuant to condition 2.12, the Proponent shall provide the Agency with a description of the potential adverse environmental effects of the change(s) to the Designated Project, the proposed mitigation measures and follow-up requirements to be implemented by the Proponent and the results of the consultation with Indigenous groups.	No changes to the Designated Project that may result in adverse environmental effects have been proposed/initiated to date.
3. Fish and Fish Habitat		
3.1	The Proponent shall implement erosion and sedimentation control measures within the Designated Project area during all phases of the Designated Project to avoid the deposit of deleterious substances in waters frequented by fish.	There was no deposition of deleterious substances in waters frequented by fish in relation to the Howse Property Project during the reporting period. The entirety of construction activities carried out during the reporting period were conducted in winter conditions prior to the spring thaw.

IAAC Release Condition		2024-2025 Activities
		Erosion and sedimentation control measures will be implemented as required during construction and operations.
3.2	The Proponent shall collect site runoff and pit dewatering water into HowseA and Timmins4 sedimentations ponds. The Proponent shall treat water at the sedimentation ponds prior to its discharge into the environment, if necessary, to meet the requirements of subsection 36(3) of the Fisheries Act.	No site runoff was generated, and pit dewatering was not required during the reporting period.
3.3	The Proponent shall use a time delay blasting technique when blasting.	TSMC is committed to comply with this condition for all blasting events at the Designated Project.
3.4	The Proponent shall not set the blast charge per delay to above 1092 kilograms.	TSMC is committed to comply with this condition for all blasting events at the Designated Project.
3.5	The Proponent shall manage waste rock acid generation taking into account the Mine Environment Neutral Drainage program's Prediction Manual for Drainage Chemistry from Sulphidic Geological Materials.	TSMC is committed to comply with this condition once the production phase of the Project starts.
3.6	The Proponent shall develop, prior to construction, a follow-up program to verify the accuracy of the environmental assessment as it pertains to fish and fish habitat and to determine the effectiveness of mitigation measures referred to in conditions 3.1 to 3.5. The Proponent shall provide the follow-up program to the Agency prior to construction. The Proponent shall implement the follow-up program from the start of construction to the end of decommissioning. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and relevant authorities and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall:	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2, 2025. The plan will be implemented as soon as seasonal conditions allow.
	3.6.1 monitor water quality and quantity parameters as per the Water Management Plan (October 2015) in the environmental impact statement and at locations outlined in figure 1 of the Proponent's final response to Information Request 106 (July 24, 2017), including:	TSMC is committed to comply with this condition, see below.
	3.6.1.1 water levels in Triangle Lake, Morley Lake, Burnetta Lake and Pinette Lake;	Water gauges were first installed at these locations in fall 2017 and replaced by a new probe system in 2023. Data collection was done in 2023 and 2024.
	3.6.1.2 groundwater levels at monitoring well locations outlined in figure 1 or equivalent locations where groundwater may be impacted by the Designated Project;	Additional monitoring well will be installed during the construction phase near Triangle Lake. Monitoring will start as soon as seasonal conditions allow.
	3.6.1.3 iron concentration at the final discharge points of the HowseA and Timmins 4 sedimentation ponds;	There was no effluent discharge during the reporting period. Monitoring will be conducted whenever discharge occurs.
	3.6.1.4 effluent quality at the final discharge points of the HowseA and Timmins 4 sedimentation ponds, in accordance with the Metal Mining Effluent Regulations and taking into account the Canadian Council of Ministers of the Environment's Water Quality Guidelines for the Protection of Aquatic Life; and	There was no effluent discharge during the reporting period. Monitoring will be conducted whenever discharge occurs.
	3.6.1.5 water quality between the HowseA sedimentation pond final discharge point and Triangle Lake, and in Triangle Lake, Burnetta Lake and Pinette Lake.	Water quality baseline monitoring has been conducted since 2016. Monitoring will continue throughout the life of the Project.
	3.6.2 update the hydrogeological groundwater model from the Proponent's final response to Information Request 106 (July 24, 2017) at the end of mining phases I, II and III based on the results from 3.6.1; and	Updates will be done following the mining phases as indicated in the schedule
	3.6.3 monitor fish and fish habitat in Triangle Lake, Burnetta Lake, Pinette Lake and Goodream Creek.	Monitoring will start as required when seasonal conditions allow.
4. Migratory Birds		
4.1	The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's Avoidance Guidelines. The Proponent's actions when taking into	TSMC is committed to comply with this condition. Construction stripping activities were started in winter conditions during Feb and March 2025 and are planned for completion prior to the bird migration season.

IAAC Release Condition		2024-2025 Activities
	account the Avoidance Guidelines shall be in compliance with the Migratory Birds Convention Act, 1994 and with the Species at Risk Act.	
4.2	The Proponent shall have a qualified individual survey, during operation, the mine pit walls annually during the nesting period to determine if bank swallows (Riparia riparia) are using the open pit as a nesting site. The Proponent shall conduct an additional survey one to two days prior to undertaking any new activity associated with the Designated Project during the nesting period areas where bank swallows (Riparia riparia) may occur. The Proponent shall identify, in consultation with Environment and Climate Change Canada and other relevant authorities, and implement a setback distance in which no Designated Project activity shall take place around any bank swallow (Riparia riparia) nest(s) found and shall maintain the setback distance until the young have permanently left the area of the nest. The Proponent shall implement additional measures to deter bank swallows (Riparia riparia) from nesting in the area prior to the next breeding period.	The operations phase for the project has not begun.
4.3	The Proponent shall notify Environment and Climate Change Canada if it finds bank swallow (Riparia riparia) nests within the Designated Project area.	Bank Swallow were not observed in the project area during the reporting year.
4.4	The Proponent shall control lighting required for the construction, operation and decommissioning of the Designated Project, including direction, timing and intensity, to avoid adverse effects on migratory birds, while meeting health and safety requirements.	TSMC is committed to comply with this condition.
4.5	The Proponent shall prohibit vehicles and heavy equipment associated with the Designated Project from entering wetlands except those affected by components of the Designated Project as identified in figure 7-33 of the environmental impact statement.	No vehicles and/or heavy equipment entered wetlands not affected by components of the Designated Project during the reporting year.
4.6	The Proponent shall not undertake vehicle, machinery and equipment cleaning, fueling and maintenance and shall not store substance with the potential to cause harmful effects to the receiving environment, within 20 metres of any wetland.	TSMC is committed to comply with this condition.
4.7	The Proponent shall develop, prior to construction and in consultation with relevant authorities, a follow-up program to determine the effectiveness of all mitigation measures to avoid harm to migratory birds, their eggs and nests. The Proponent shall provide the follow-up program to the Agency prior to construction. The Proponent shall implement the follow-up program during all phases of the Designated Project. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and relevant authorities and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall:	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.
	4.7.1 conduct migratory bird surveys in the Triangle Lake, Burnetta Lake and Pinette Lake watersheds every year for the first three years following completion of construction. After three years, the Proponent shall determine, in consultation with Indigenous groups and relevant authorities, the frequency of additional surveys based on the results of the follow-up program.	Not applicable at this time. Pre-construction baseline surveys were conducted. Surveys will continue following construction.
4.8	The Proponent shall develop, prior to construction, and implement a follow-up program to verify the predictions of the environmental assessment as it pertains to the adverse environmental effects of the Designated Project on wetland functions that support migratory birds, and to determine the effectiveness of the mitigation measures referred to in conditions 4.5 and 4.6 during all phases of the Designated Project. The Proponent shall provide the follow-up program to the Agency prior to construction. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and Environment and Climate Change Canada and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall:	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required
	4.8.1 have a qualified individual conduct a wetland disturbance survey every five years, with the first survey conducted at the start of construction, to assess wetland functions that support migratory birds; and	Pre-construction Survey done in 2022 and planned for 2025 summer.
	4.8.2 monitor groundwater levels associated with the wetlands located north of the open pit to verify the effects of pit dewatering on wetlands. Monitoring wells shall be spaced no more than 50 metres apart and measurements shall be taken every two weeks during operation.	Baseline wetland water level monitoring was conducted throughout summer 2024.
5. Health and socio-economic conditions of Indigenous peoples		

IAAC Release Condition		2024-2025 Activities
5.1	The Proponent shall, in consultation with Indigenous groups, undertake progressive reclamation of the areas disturbed by the Designated Project, including by stabilizing, compacting and revegetating with native plant species overburden stockpiles and waste rock piles.	Progressive reclamation will be carried out as components of the project become available for initiation of reclamation measures. No reclamation activities were conducted during the reporting period.
5.2	Using a qualified individual, the Proponent shall design overburden stockpiles and waste rock piles, in consultation with Indigenous groups and relevant authorities, and in consideration of reducing effects to viewscapes. The Proponent shall implement the design throughout all phases of the Designated Project.	The design of the overburden stockpiles and waste rock piles was completed during the Howse EIS. To further improve viewscapes and reduce the environmental footprint of the stockpiles, TSMC will utilize existing mined out pits under its operation to backfill waste and overburden.
5.3	The Proponent shall apply dust suppressant on the Howse haul road during all phases of the Designated Project to control the release of dust. The Proponent shall select, in consultation with relevant authorities, dust suppressants with the least potential effects on human health and the environment.	Not applicable during the reporting year. Dust suppressants will be used as required.
5.4	The Proponent shall control dust, if observed visually, during the unloading of ore from trucks, except if not feasible for safety reasons.	TSMC is committed to comply with this condition whenever required.
5.5	The Proponent shall implement measures to mitigate dust emissions at the conveyor transfer and drop points when the conveyor is active, in the drum scrubber when ore is mixed and at the crude ore recovery tunnel, the secondary crusher and the dryer during ore processing activities	TSMC is committed to comply with this condition whenever required.
5.6	The Proponent shall fill borehole necks with clean crushed rock to reduce dust and gas emissions from blasting during construction and operation.	TSMC is committed to comply with this condition for all blasting events.
5.7	The Proponent shall develop, prior to construction, a dust management strategy to control dust generated by vehicles associated with the Designated Project using the road to Schefferville and for vehicles entering Schefferville. The Proponent shall implement the strategy during all phases of the Designated Project. The Proponent shall provide the dust management strategy to the Agency prior to the start of construction. The Proponent shall review and update the dust management strategy in consultation with Indigenous groups, relevant authorities and the Town of Schefferville prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first.	An updated version of the Strategy was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The strategy will be implemented as required.
5.8	Throughout all phases of the Designated Project, the Proponent shall implement incentive measures to reduce the number of vehicles from the Designated Project, including by providing shuttle buses to transport workers to and from the Designated Project area.	TSMC is complying with this condition. Shuttle buses are in operation for worker transport.
5.9	The Proponent shall develop, prior to construction, a follow-up program to verify the accuracy of the environmental assessment as it pertains to air quality and the effects of dust on the health of Indigenous peoples and to determine the effectiveness of the mitigation measures referred to in conditions 5.3 to 5.8. The Proponent shall provide the follow-up program to the Agency prior to the start of construction. The Proponent shall implement the follow-up program from the start of construction to the end of decommissioning of the Designated Project. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and relevant authorities and shall provide the update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall:	An updated version of the follow-up plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as soon as seasonal conditions allow.
	5.9.1 monitor air quality at receptors R3, R9, R10, R16, R18, R24, R36, R38 and R40 identified by the Proponent in Table 7-13 of the environmental impact statement, including for total particulate matter, particulate matter less than 10 microns, particulate matter less than 2.5 microns, dustfall, nitrogen oxides, sulfur oxides, carbon monoxide, and periodic monitoring of nitrogen dioxides after blasting activities;	
	5.9.2 monitor dust generation and deposition from the Designated Project at locations potentially affected by the Designated Project, using a dust tracking system and mobile monitoring equipment;	
	5.9.3 analyse concentrations of contaminants of concern in dust, including a minimum of one sampling of heavy metal content between the months of June and August of every year that analyses are conducted; and	

	IAAC Release Condition	2024-2025 Activities
	5.9.4 if the results of the follow-up program demonstrate that modified or additional mitigation measures are required, as determined in condition 2.6, at the Howse mini-plant, Designated Project roads, waste rock piles or overburden stockpiles, the Proponent shall implement modified or additional mitigation measures.	
5.10	The Proponent shall develop, prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first, and in consultation with Indigenous groups and relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to country foods. Country foods may include game birds, mammals, fish, and plant species. The Proponent shall implement the follow-up program. As part of the follow-up program, the Proponent shall:	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.
	5.10.1 sample country food species commonly consumed by Indigenous groups and identified in consultation with Indigenous groups including brook trout (Salvelinus fontinalis) and lake trout (Salvelinus namaycush);	
	5.10.2 sample species identified in condition 5.10.1 for heavy metals, and other contaminants of concern identified in consultation with Indigenous groups and relevant authorities;	
	5.10.3 sample in areas where Indigenous groups harvest country foods and that may be adversely affected by the Designated Project and in a control site that is not affected by activities of the Designated Project. Fish sampling shall include sampling in Goodream Creek, Triangle Lake, and Pinette Lake; and	
	5.10.4 start sampling two years after the start of operation and continue sampling at a frequency and for a duration determined in consultation with Indigenous groups and relevant authorities.	
6. Current use of lands and resources for traditional purposes		
6.1	The Proponent shall upgrade, from the start of construction, a bypass road around the Designated Project in order to provide access for Indigenous groups to Pinette Lake, Kauteitnat and the Howells River Valley. The Proponent shall maintain the bypass road at least twice per calendar year until the end of decommissioning to ensure its usability.	The construction of the proposed additional bypass, referred to as the Howse bypass, was planned during the construction phase. This bypass road section will run along an existing exploration road which runs from Km.13 of the DSO Timmins Project bypass roads, where it intersects with TSMC's Goodwood Haul Road, towards the community traditional and recreational areas near the Howse project. The Howse bypass was discussed with the Indigenous groups to ensure access is in place during the construction phase. Feedback was provided to TSMC by the Indigenous groups opposing of the proposed Howse bypass due to the lengthier travel time, added fuel cost and vehicle wear and tear when accessing these areas. TSMC has historically provided the Indigenous groups access to their traditional and recreational areas near the Howse Project through the main DSO Timmins Project site gate. Local recreational and traditional users utilize the wide and well-maintained road from the town of Schefferville to reach the DSO Timmins Project site gate, at which point they are escorted by TSMC Security staff to the entrance of the access roads near the Howse Project to ensure their safety around onsite heavy-vehicle traffic movement. TSMC will consult with the local Indigenous groups during the construction phase in the upcoming reporting year to validate their preferred access route prior to initiating the development of the Howse bypass. If access via the main gate is preferred by the Indigenous groups, TSMC will ensure that these measures are in place for the life of the project.

IAAC Release Condition		2024-2025 Activities
6.2	The Proponent shall upgrade, from the start of construction, a bypass road around the Direct Shipping Ore 4 area in order to provide access for Indigenous groups to hunting grounds to the northwest of the Designated Project near the Kivivic and Goodwood deposits. The Proponent shall maintain the bypass road at least twice per calendar year until the end of decommissioning to ensure its usability.	Maintenance and upgrade works were carried out to the existing DSO Timmins Project bypass roads which are a part of the Howse bypass roads. The following maintenance and upgrade activities were undertaken: • Grading and levelling of road from S bypass entrance to Km.4. • Grading and levelling of road from Km.4 to Km.13. • Bypass road intersections along the Kivivic 3 property were maintained. • Berms were installed and strengthened where required. • Additional signage installed for safe movement of traffic.
6.3	The Proponent shall not use the bypass roads, referred to in conditions 6.1 and 6.2, for Designated Project activities, except when undertaking the maintenance of those bypass roads as required by conditions 6.1 and 6.2, or if required for safety or emergency reasons.	TSMC has not used the bypass road for any Project activities during the reporting year (this road is accessed only for the purposes of environmental monitoring, and only when no other access exists).
6.4	The Proponent shall prohibit employees and contractors associated with the Designated Project from fishing and hunting within the designated project area, unless an employee or a contractor is provided access by the Proponent for traditional purposes or for exercising Aboriginal rights, to the extent that such access is safe.	As per TSMC policy, employees and contractors (other than local Indigenous land users) are prohibited from fishing, hunting or interfering with wildlife in any manner in all areas. This is communicated to all site personnel during the employee induction process and through periodic reminders. This policy will be enforced for the life of the Project.
6.5	If the Proponent is made aware of or observes caribou within a 20-kilometre radius of the active pit or of the Howse mini-plant, the Proponent shall consult the Newfoundland and Labrador Department of Fisheries and Land Resources to determine the appropriate course of action.	No caribou were reported within a 20km radius of the active pit during the reporting period.
6.6	The Proponent shall develop, prior to construction, and implement during all phases of the Designated Project, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the adverse effects of the Designated Project on the current use of lands and resources for traditional purposes and to determine the effectiveness of the mitigation measures referred to in conditions 6.1 to 6.4, including maintenance of the bypass roads. The Proponent shall provide the follow-up program to the Agency prior to the start of construction. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first.	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.
6.7	The Proponent shall develop, prior to construction, and implement during all phases of the Designated Project, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the adverse effects of the Designated Project on the George River herd of Eastern migratory caribou (Rangifer tarandus caribou). The Proponent shall provide the follow-up program to the Agency prior to the start of construction. The Proponent the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall monitor movement of the George River herd of Eastern migratory caribou (Rangifer tarandus caribou) and develop and implement modified or additional mitigation measures if the range of the George River herd of Eastern migratory caribou (Rangifer tarandus caribou) expands to occupy areas within a 20-kilometre radius of the Designated Project.	Reformatted plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.
6.8	The Proponent shall develop, prior to construction and in consultation with Indigenous groups, a communication plan to share information related to the Designated Project with Indigenous groups. The Proponent shall implement and maintain the communication plan up to date during all phases of the Designated Project. The communication plan shall include procedures, including timing, for sharing information on the following:	An updated version of the communication plan with up-to-date key contacts was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as per the determined schedules and as required for conditional activities.
	6.8.1 the Designated Project activities requiring notification to Indigenous groups and the timing of these notifications. For blasting, the Proponent shall advertise blasting schedules via local radio stations and directly to Indigenous groups at a minimum 48 hours prior to each blasting event;	

IAAC Release Condition		2024-2025 Activities
	6.8.2 follow-up activities and monitoring results referred to in conditions 3.6, 4.7, 4.8, 5.9, 5.10, 6.6, 6.7, and 7.5; and	
	6.8.3 temporary and permanent restrictions on access to traditional territories, including the location and timing of these restrictions, the availability of alternate routes, and the timing of maintenance activities for the bypass roads as per 6.1 and 6.2.	
6.9	The Proponent shall develop, as part of the communication plan referred to in condition in 6.8, procedures for Indigenous groups to provide feedback to the Proponent about adverse environmental effects caused by the Designated Project related to access to and use of traditional territories, traffic, air quality, including dust and dust deposition, and country foods and procedures for the Proponent to document and respond in a timely manner to the feedback received and demonstrate how issues have been addressed. The Proponent shall implement these procedures during all phases of the Designated Project.	These procedures were in place during the reporting year.
6.10	The Proponent shall provide Indigenous groups with the schedules referred to in conditions 10.1 and 10.2 and updates or revisions to the initial schedules pursuant to condition 10.3 and 10.4 at the same time these documents are provided to the Agency.	The updated schedules were submitted to the 5 indigenous groups and to the Agency on March 18th, 2025. No changes were made to the initial schedules submitted during the reporting year.
7. Physical and cultural heritage and structures, sites or things of historical, archaeological, paleontological or architectural significance		
7.1	If requested by Indigenous groups 48 hours prior to their planned use of Kauteitnat, the Proponent shall refrain from blasting for a period of 24 hours during that time of planned use of Kauteitnat, or less if Indigenous groups are no longer using Kauteitnat.	TSMC is committed to comply with this condition.
7.2	The Proponent shall not conduct any Designated Project activity to the south of proposed water diversion ditch, identified in figure 2 in the environmental assessment report, except for activities required for the construction and maintenance of the diversion ditch. The Proponent shall clearly identify the exclusion zone with signage on the ground, within its lease area, posted at the edge of the exclusion zone.	TSMC is committed to comply with this condition. Signs to identify exclusion zones will be posted at the limits of the exclusion zone.
7.3	During the months of June, July, August and September, the Proponent shall not blast more than twice in a week and more than five times per month.	TSMC is committed to plan and conduct all blasting events in compliance with this condition.
7.4	The Proponent shall develop, prior to construction, and implement during all phases of the Designated Project, a protocol for receiving complaints related to the exposure to noise from the Designated Project. The Proponent shall provide the protocol to the Agency and Indigenous groups prior to the start of construction. The Proponent shall review and update the protocol in consultation with Indigenous groups and shall provide this update to the whichever comes first. The Proponent shall respond to any noise complaints within 48 hours of the complaint being received and shall implement corrective actions to reduce exposure to noise in a timely manner.	An updated version of the communication plan which includes a protocol for receiving noise complaints was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The protocol is in place
7.5	The Proponent shall develop prior to construction, and implement during all phases of the Designated Project, a follow-up program to verify the accuracy of the environmental assessment as it pertains to the effects of the Designated Project on the use of cultural and other sites as a result of noise levels. The Proponent shall provide the follow-up program to the Agency prior to the start of construction. The Proponent shall review and update the follow-up program in consultation with Indigenous groups and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. As part of the follow-up program, the Proponent shall:	An updated version of the follow-up plan was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as soon as seasonal conditions allow.
	7.5.1 monitor noise levels at receptor sites R9, R10, R11, R13 and R24 identified by the Proponent in figure 7.10 of the environmental impact statement. The Proponent shall implement modified or additional mitigation measures if noise levels at these sites exceed 5 decibels above the baseline noise levels as a result of the Designated Project, except during blasting.	
7.6	The Proponent shall develop, prior to construction, and implement during all phases of the Designated Project a cultural heritage control plan. The Proponent shall provide the cultural heritage control plan to the Agency prior to the start of construction. The Proponent shall review and update the plan in consultation with Indigenous groups and the Government of Newfoundland and Labrador and shall provide this update to the Agency prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first. If any previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance are discovered within the Designated Project area by the Proponent or brought to the attention of the Proponent by an Indigenous group or another party during construction, the Proponent shall:	An updated version of the cultural heritage control plan with up-to-date key contacts was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.

	IAAC Release Condition	2024-2025 Activities
	7.6.2 delineate an area of at least 30 metres around the discovery as a no-work zone. The no-work requirement shall not apply to action(s) required to be undertaken to protect the integrity of the discovery;	
	7.6.3 have a qualified individual conduct an assessment at the location of the discovery;	
	7.6.4 inform Indigenous groups within 24 hours of the discovery, and allow for monitoring by Indigenous groups during work related to the discovery; and	
	7.6.5 comply, in consultation with Indigenous groups and relevant authorities, with all applicable legislative or legal requirements and associated regulations and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance.	
8. Cumulative Effects		
8.1	The Proponent shall participate in regional initiative(s), if requested by a relevant authority or the Town of Schefferville, relating to the monitoring, assessment and management of cumulative environmental effects, including cumulative health effects related to dust likely to result from the Designated Project in combination with other mining activities that have or will be carried out in the region, should there be any such initiative(s) during the construction and operation phases of the Designated Project.	TSMC will continue to participate in regional initiatives if requested by regional Indigenous groups and/or authorities.
9. Accidents and malfunctions		
9.1	The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects. The measures taken by the Proponent shall include measures to prevent slope failures, sedimentation pond failures, ditch failures, destabilization of waste rock piles and overburden stockpiles, and rockslides.	An accident and malfunction response plan specific for the Howse project was developed and submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025. The plan will be implemented as required.
9.2	The Proponent shall develop, prior to construction, and implement during all phases of the Designated Project, an accident and malfunction response plan. The accident and malfunction plan shall include the types of accidents and malfunctions that may cause adverse environmental effects, and response plans for slope failures, sedimentation pond failures, ditch failures, destabilization of waste rock piles and overburden stockpiles, or rock slides in addition to all emergency response plans identified in the environmental impact statement. The Proponent shall provide the accident and malfunction response plan to the Agency prior to the start of construction.	See 9.1 above.
9.3	The Proponent shall review and update the measures to be implemented to prevent accidents and malfunctions and the accidents and malfunctions response plan in consultation with Indigenous groups and relevant authorities prior to operation or within 120 days of the issuance of this Decision Statement, whichever comes first.	See 9.1 above.
9.4	In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall implement the accidents and malfunctions response plan referred to in condition 9.2 or any subsequent update(s) referred to in condition 9.3 and shall:	There were no accidents or malfunctions during the reporting period. The plan will be implemented as required in the event of any accidents or malfunctions.
	9.4.1 notify, as soon as possible, Indigenous groups and relevant authorities of the accident or malfunction, and notify the Agency in writing no later than 24 hours following the accident or malfunction. When notifying Indigenous groups and in the notification to the Agency, the Proponent shall specify;	
	9.4.1.1 the date the accident or malfunction occurred;	
	9.4.1.2 a description of the accident or malfunction;	
	9.4.1.3 a list of all substances potentially released in the environment as a result of the accident or malfunction.	
	9.4.3 submit a written report to the Agency no later than 30 days after the day on which the accident or malfunction took place. The written report shall include:	
	9.4.3.1 a description of the accident or malfunction and of its adverse environmental effects;	
	9.4.3.2 the measures that were taken by the Proponent to mitigate the adverse environmental effects caused by the accident or malfunction;	

IAAC Release Condition		2024-2025 Activities
	9.4.3.3 any view(s) from Indigenous groups and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects and the measures taken by the Proponent to mitigate these adverse environmental effects;	
	9.4.3.4 a description of any residual adverse environmental effects and any modified or additional measures required by the Proponent to mitigate residual adverse environmental effects; and	
	9.4.3.5 details concerning the implementation of the accident or malfunction response plan referred to in condition	
	9.4.4 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction took place, on the changes made to avoid a subsequent occurrence of the accident or malfunction and on the implementation of any modified or additional measure(s) to mitigate and monitor residual adverse environmental effects and to carry out any required progressive reclamation, taking into account the information submitted in the written report pursuant to condition 9.4.3. The report shall include all additional views from Indigenous groups and advice from relevant authorities since the views and advice referred to in condition 9.4.3.3 have been received by the Proponent.	
9.5	The Proponent shall develop a communication plan in consultation with Indigenous groups. The Proponent shall develop the communication plan prior to construction and shall implement and keep it up to date during all phases of the Designated Project. The plan shall include:	An updated version of the communication plan which includes a protocol for communicating details about accidents or malfunctions was submitted for consultation to the five concerned Indigenous groups on January 14th, 2025, and to the Agency on February 2nd, 2025.
	9.5.1 the types of accidents and malfunctions requiring the Proponent to notify the respective Indigenous groups;	
	9.5.2 the manner by which Indigenous group shall be notified by the Proponent of an accident or malfunction and of any opportunities for the Indigenous groups to assist in the response to the accident or malfunction; and	
	9.5.3 the contact information of the representatives of the Proponent that the Indigenous groups may contact and of the representatives of the respective Indigenous groups to which the Proponent provides notification.	
10. Schedules		
10.1	The Proponent shall submit to the Agency a schedule for all conditions set out in this Decision Statement no later than 30 days after the start of construction. The schedule shall detail all activities planned to fulfill each condition set out in this Decision Statement and the commencement and estimated completion month(s) and year(s) for each of these activities.	The schedule was submitted to the Agency on March 18th, 2025.
10.2	The Proponent shall submit to the Agency a schedule outlining all activities required to carry out all phases of the Designated Project no later than 30 days after the start of construction. The schedule shall indicate the commencement and estimated completion month(s) and year(s) and duration of each of these activities.	
10.3	The Proponent shall submit to the Agency in writing an update to schedules referred to in conditions 10.1 and 10.2 every year no later than June 30, until completion of all activities referred to in each schedule.	There have been no updates to the schedules after they were submitted to the Agency on March 18th, 2025.
10.4	The Proponent shall provide to the Agency revised schedules if any change(s) are made to the initial schedules referred to in condition 10.1 and 10.2 or to any subsequent update(s) referred to in condition 10.3, upon revision of the schedules.	Updated schedules will be submitted as required.
11. Record Keeping		
11.1	The Proponent shall maintain all records required to demonstrate compliance with the conditions set out in this Decision Statement. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.	TSMC is committed to comply with this condition.
11.2	The Proponent shall retain all records referred to in condition 11.1 at a facility in Canada. The records shall be retained and made available throughout construction and operation and for 25 years following the end of operation or until the end of decommissioning of the Designated Project, whichever comes first. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location.	TSMC is committed to comply with this condition.

APPENDIX I – SURFACE WATER QUALITY CERTIFICATES

Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 135796

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/07/05
Report #: R2957639
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C431586
Received: 2024/06/18, 09:00

Sample Matrix: Surface Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	8	N/A	2024/06/18	STL SOP-00038	SM 24 2320-B m
Total Alkalinity (end point 4.5)-waters	1	N/A	2024/06/19	STL SOP-00038	SM 24 2320-B m
Anions in water	9	N/A	2024/06/19	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	5	N/A	2024/06/18	STL SOP-00046	MA103 - Col. 2.0
Real Color	4	N/A	2024/06/19	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	6	N/A	2024/06/18	STL SOP-00038	SM 24 2510-B m
Conductivity in waters	3	N/A	2024/06/21	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	9	2024/06/20	2024/06/22	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	9	2024/07/02	2024/07/05	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	9	2024/06/22	2024/06/22	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	8	2024/06/23	2024/06/26	STL SOP-00062	MA.200–Mét. 1.2 R7 m
Total Extractable Metals	1	2024/06/23	2024/06/27	STL SOP-00062	MA.200–Mét. 1.2 R7 m
Ammonia Nitrogen in water	9	N/A	2024/06/26	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	9	N/A	2024/06/19	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	9	N/A	2024/06/18	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	9	N/A	2024/06/18	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	9	N/A	2024/06/18	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	8	2024/06/25	2024/06/25	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	9	N/A	2024/06/18		Test Kit
Ortho Phosphate-water	5	N/A	2024/06/18	STL SOP-00003	MA.303–P 1.1 R2 m
Ortho Phosphate-water	4	N/A	2024/06/19	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	9	2024/06/21	2024/06/21	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	9	2024/06/22	2024/06/22	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	9	N/A	2024/06/18		Thermometer
Turbidity-water	9	N/A	2024/06/18	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	5	2024/06/21	2024/06/24	ATL SOP 00113	Atl. RBCA v3.1 m
TEH in Water (PIRI) (1)	4	2024/06/24	2024/06/24	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	9	2024/06/21	2024/06/21	ATL SOP 00022	EPA 366.0 m
VPH in Water (PIRI) (1)	9	2024/06/19	2024/06/20	ATL SOP 00130	Atl. RBCA v3.1 m

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 135796

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/07/05
Report #: R2957639
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C431586
Received: 2024/06/18, 09:00
Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 135796

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/07/05
Report #: R2957639
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C431586
Received: 2024/06/18, 09:00

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
05 Jul 2024 16:25:33

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Aglaia Yannakis, General Manager responsible for Quebec Environmental laboratory operations.

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

Bureau Veritas Job #: C431586
Report Date: 2024/07/05

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NC9851	NC9852	NC9853		
Sampling Date		2024/06/17 08:09	2024/06/17 09:45	2024/06/17 09:58		
COC Number		135796	135796	135796		
	Units	HOW-SW1-Q1-2024	HOW-SW2-Q1-2024	HOW-SW3-Q1-2024	RDL	QC Batch
INORGANICS						
Reactive silica (SiO2) †	mg/L	4.4	5.0	2.4	0.50	2537031
PETROLEUM HYDROCARBONS						
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	0.050	2536720
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	0.050	2536720
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	<0.090	0.090	2536720
Return to baseline at C32 †	mg/L	NA	NA	NA	N/A	2536720
Hydrocarbon Resemblance †	mg/L	NA	NA	NA	N/A	2536720
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	102	98	100	N/A	2536720
n-Dotriacontane - Extractable	%	110	106	111	N/A	2536720

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

Bureau Veritas ID		NC9854			NC9855		
Sampling Date		2024/06/17 08:41			2024/06/16 15:21		
COC Number		135796			135796		
	Units	HOW-SW4-Q1-2024	RDL	QC Batch	HOW-SW5-Q1-2024	RDL	QC Batch
INORGANICS							
Reactive silica (SiO2) †	mg/L	4.3	0.50	2537031	1.0	0.50	2537031
PETROLEUM HYDROCARBONS							
>C10-C16 Hydrocarbons †	mg/L	<0.053	0.053	2536719	<0.050	0.050	2536720
>C16-C21 Hydrocarbons †	mg/L	<0.053	0.053	2536719	<0.050	0.050	2536720
>C21-<C32 Hydrocarbons †	mg/L	<0.095	0.095	2536719	<0.090	0.090	2536720
Return to baseline at C32 †	mg/L	NA	N/A	2536719	NA	N/A	2536720
Hydrocarbon Resemblance †	mg/L	NA	N/A	2536719	NA	N/A	2536720
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	110	N/A	2536719	106	N/A	2536720
n-Dotriacontane - Extractable	%	120 (1)	N/A	2536719	113	N/A	2536720

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable
(1) Elevated TEH RDL(s) due to limited sample.

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Bureau Veritas Job #: C431586
Report Date: 2024/07/05

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NC9856	NC9857			NC9858		
Sampling Date		2024/06/16 13:44	2024/06/16 12:51			2024/06/16 14:11		
COC Number		135796	135796			135796		
	Units	HOW-BC-Q1-2024	HOW-BL-Q1-2024	RDL	QC Batch	HOW-TL-Q1-2024	RDL	QC Batch
INORGANICS								
Reactive silica (SiO2) †	mg/L	4.2	5.2	0.50	2537031	4.3	0.50	2537031
PETROLEUM HYDROCARBONS								
>C10-C16 Hydrocarbons †	mg/L	<0.053	<0.053	0.053	2536719	<0.050	0.050	2536720
>C16-C21 Hydrocarbons †	mg/L	<0.053	<0.053	0.053	2536719	<0.050	0.050	2536720
>C21-<C32 Hydrocarbons †	mg/L	<0.095	<0.095	0.095	2536719	<0.090	0.090	2536720
Return to baseline at C32 †	mg/L	NA	NA	N/A	2536719	NA	N/A	2536720
Hydrocarbon Resemblance †	mg/L	NA	NA	N/A	2536719	NA	N/A	2536720
Surrogate Recovery (%)								
Isobutylbenzene - Extractable	%	113	110	N/A	2536719	103	N/A	2536720
n-Dotriacontane - Extractable	%	114 (1)	116 (1)	N/A	2536719	111	N/A	2536720

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable
(1) Elevated TEH RDL(s) due to limited sample.

Bureau Veritas ID		NC9859		
Sampling Date		2024/06/16 16:51		
COC Number		135796		
	Units	HOW-ML-Q1-2024	RDL	QC Batch
INORGANICS				
Reactive silica (SiO2) †	mg/L	0.95	0.50	2537031
PETROLEUM HYDROCARBONS				
>C10-C16 Hydrocarbons †	mg/L	<0.050	0.050	2536719
>C16-C21 Hydrocarbons †	mg/L	<0.050	0.050	2536719
>C21-<C32 Hydrocarbons †	mg/L	<0.090	0.090	2536719
Return to baseline at C32 †	mg/L	NA	N/A	2536719
Hydrocarbon Resemblance †	mg/L	NA	N/A	2536719
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	107	N/A	2536719
n-Dotriacontane - Extractable	%	114	N/A	2536719

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9851	NC9852	NC9853		
Sampling Date		2024/06/17 08:09	2024/06/17 09:45	2024/06/17 09:58		
COC Number		135796	135796	135796		
	Units	HOW-SW1-Q1-2024	HOW-SW2-Q1-2024	HOW-SW3-Q1-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2539264
Total Extractable Aluminum (Al)	ug/L	<10	59	96	10	2536343
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Arsenic (As)	ug/L	<1.0	1.2	<1.0	1.0	2536343
Total Extractable Barium (Ba)	ug/L	<2.0	2.7	2.2	2.0	2536343
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2536343
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2536343
Total Extractable Calcium (Ca) †	ug/L	3000	720	<500	500	2536343
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2536343
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Total Hardness (CaCO3) ††	ug/L	17000	3500	1600	1000	2536343
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Iron (Fe)	ug/L	<60	2100	820	60	2536343
Total Extractable Magnesium (Mg) †	ug/L	2400	410	190	100	2536343
Total Extractable Manganese (Mn)	ug/L	2.9	150	76	1.0	2536343
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable P2O5 ††	ug/L	<25	33	<25	25	2536343
Total Extractable Total phosphorous	ug/L	<10	14	<10	10	2536343
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2536343
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2536343
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2536343
Total Extractable Sodium (Na)	ug/L	690	680	<500	500	2536343
Total Extractable Strontium (Sr) †	ug/L	5.9	5.0	2.4	2.0	2536343
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Titanium (Ti) ††	ug/L	<10	<10	<10	10	2536343
Total Extractable Uranium (U) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Vanadium (V)	ug/L	2.7	3.0	2.9	2.0	2536343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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Bureau Veritas Job #: C431586
Report Date: 2024/07/05

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9851	NC9852	NC9853		
Sampling Date		2024/06/17 08:09	2024/06/17 09:45	2024/06/17 09:58		
COC Number		135796	135796	135796		
	Units	HOW-SW1-Q1-2024	HOW-SW2-Q1-2024	HOW-SW3-Q1-2024	RDL	QC Batch
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2536343

RDL = Reportable Detection Limit
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TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9854	NC9855	NC9856		
Sampling Date		2024/06/17 08:41	2024/06/16 15:21	2024/06/16 13:44		
COC Number		135796	135796	135796		
	Units	HOW-SW4-Q1-2024	HOW-SW5-Q1-2024	HOW-BC-Q1-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2539264
Total Extractable Aluminum (Al)	ug/L	<10	13	100	10	2536343
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Barium (Ba)	ug/L	<2.0	<2.0	2.4	2.0	2536343
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2536343
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2536343
Total Extractable Calcium (Ca) †	ug/L	2400	<500	<500	500	2536343
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2536343
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Total Hardness (CaCO3) ††	ug/L	14000	1800	3100	1000	2536343
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Iron (Fe)	ug/L	<60	<60	150	60	2536343
Total Extractable Magnesium (Mg) †	ug/L	1900	220	490	100	2536343
Total Extractable Manganese (Mn)	ug/L	1.2	5.9	16	1.0	2536343
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable P2O5 ††	ug/L	<25	<25	<25	25	2536343
Total Extractable Total phosphorous	ug/L	<10	<10	<10	10	2536343
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2536343
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2536343
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2536343
Total Extractable Sodium (Na)	ug/L	600	<500	<500	500	2536343
Total Extractable Strontium (Sr) †	ug/L	6.1	2.3	2.7	2.0	2536343
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Titanium (Ti) ††	ug/L	<10	<10	<10	10	2536343
Total Extractable Uranium (U) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Vanadium (V)	ug/L	2.9	2.8	2.6	2.0	2536343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9854	NC9855	NC9856		
Sampling Date		2024/06/17 08:41	2024/06/16 15:21	2024/06/16 13:44		
COC Number		135796	135796	135796		
	Units	HOW-SW4-Q1-2024	HOW-SW5-Q1-2024	HOW-BC-Q1-2024	RDL	QC Batch
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2536343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9857	NC9858	NC9859		
Sampling Date		2024/06/16 12:51	2024/06/16 14:11	2024/06/16 16:51		
COC Number		135796	135796	135796		
	Units	HOW-BL-Q1-2024	HOW-TL-Q1-2024	HOW-ML-Q1-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2539264
Total Extractable Aluminum (Al)	ug/L	<10	11	28	10	2536343
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Arsenic (As)	ug/L	<1.0	1.0	<1.0	1.0	2536343
Total Extractable Barium (Ba)	ug/L	<2.0	2.9	<2.0	2.0	2536343
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2536343
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2536343
Total Extractable Calcium (Ca) †	ug/L	4400	3100	2100	500	2536343
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2536343
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Copper (Cu)	ug/L	3.0	<1.0	<1.0	1.0	2536343
Total Extractable Total Hardness (CaCO3) ††	ug/L	24000	17000	11000	1000	2536343
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Iron (Fe)	ug/L	<60	85	73	60	2536343
Total Extractable Magnesium (Mg) †	ug/L	3200	2300	1400	100	2536343
Total Extractable Manganese (Mn)	ug/L	1.3	12	4.2	1.0	2536343
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable P2O5 ††	ug/L	<25	<25	25	25	2536343
Total Extractable Total phosphorous	ug/L	<10	<10	11	10	2536343
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2536343
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2536343
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2536343
Total Extractable Sodium (Na)	ug/L	740	610	<500	500	2536343
Total Extractable Strontium (Sr) †	ug/L	6.5	7.3	6.1	2.0	2536343
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2536343
Total Extractable Titanium (Ti) ††	ug/L	<10	<10	<10	10	2536343
Total Extractable Uranium (U) ††	ug/L	<1.0	<1.0	<1.0	1.0	2536343
Total Extractable Vanadium (V)	ug/L	2.7	2.9	2.8	2.0	2536343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NC9857	NC9858	NC9859		
Sampling Date		2024/06/16 12:51	2024/06/16 14:11	2024/06/16 16:51		
COC Number		135796	135796	135796		
	Units	**HOW-BL-Q1-2024**	**HOW-TL-Q1-2024**	**HOW-ML-Q1-2024**	**RDL**	**QC Batch**
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2536343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NC9851	NC9852	NC9852		
Sampling Date		2024/06/17 08:09	2024/06/17 09:45	2024/06/17 09:45		
COC Number		135796	135796	135796		
	Units	HOW-SW1-Q1-2024	HOW-SW2-Q1-2024	HOW-SW2-Q1-2024 Lab-Dup	RDL	QC Batch
CONVENTIONALS						
Conductivity	mS/cm	0.039	0.0096	0.0089	0.0010	2534223
Dissolved organic carbon †	mg/L	0.45	2.5	N/A	0.20	2535289
Dissolved oxygen †	mg/L	9.4	9.6	N/A	1.0	2534368
Nitrate (N) and Nitrite(N)	mg/L	0.19	<0.020	N/A	0.020	2534239
Nitrates (N-NO3-)	mg/L	0.19	<0.020	N/A	0.020	2534239
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	N/A	0.020	2534239
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	N/A	0.020	2536561
Orthophosphate (P)	mg/L	<0.050	<0.050	N/A	0.050	2534546
pH	pH	7.18	6.42	6.33	N/A	2534216
pH (15° C) †	pH	6.86	6.28	N/A	N/A	2534345
pH (on-site) †	pH	6.93	6.83	N/A	N/A	ONSITE
Phenols-4AAP	mg/L	N/A	<0.0020	N/A	0.0020	2536788
Real Color	UCV	2.6	66	N/A	2.0	2534561
Sulfides (S2-)	mg/L	<0.020	<0.020	N/A	0.020	2535747
Turbidity	NTU	0.20	2.0	N/A	0.10	2534169
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	14	4.1	N/A	1.0	2534224
Bicarbonates (HCO3 as CaCO3) †	mg/L	14	4.1	N/A	1.0	2534224
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	N/A	1.0	2534224
Chloride (Cl)	mg/L	0.33	0.053	N/A	0.050	2534241
Sulfates (SO4)	mg/L	2.3	<0.50	N/A	0.50	2534241
Total Dissolved Solids	mg/L	37	26	N/A	10	2536167
Total suspended solids (TSS)	mg/L	<2.0	3.0	N/A	2.0	2536175
On-site Measurements						
Temperature (°C) †	Celsius	6.600	11.50	N/A	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NC9853	NC9853		NC9854		
Sampling Date		2024/06/17 09:58	2024/06/17 09:58		2024/06/17 08:41		
COC Number		135796	135796		135796		
	Units	HOW-SW3-Q1-2024	HOW-SW3-Q1-2024 Lab-Dup	QC Batch	HOW-SW4-Q1-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.0020	N/A	2534223	0.037	0.0010	2534246
Dissolved organic carbon †	mg/L	4.4	N/A	2535289	0.60	0.20	2535289
Dissolved oxygen †	mg/L	8.5	N/A	2534368	9.7	1.0	2534368
Nitrate (N) and Nitrite(N)	mg/L	<0.020	N/A	2534239	0.27	0.020	2534239
Nitrates (N-NO3-)	mg/L	<0.020	N/A	2534239	0.27	0.020	2534239
Nitrites (N-NO2-)	mg/L	<0.020	N/A	2534239	<0.020	0.020	2534239
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	2536561	<0.020	0.020	2536561
Orthophosphate (P)	mg/L	<0.050	N/A	2534546	<0.050	0.050	2534546
pH	pH	5.71	N/A	2534216	7.12	N/A	2534237
pH (15° C) †	pH	5.25	N/A	2534345	6.90	N/A	2534345
pH (on-site) †	pH	5.48	N/A	ONSITE	6.43	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	2536788	<0.0020	0.0020	2536788
Real Color	UCV	64	N/A	2534561	2.9	2.0	2534561
Sulfides (S2-)	mg/L	<0.020	N/A	2535747	<0.020	0.020	2535747
Turbidity	NTU	1.0	N/A	2534169	0.18	0.10	2534169
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	1.4	N/A	2534224	13	1.0	2534247
Bicarbonates (HCO3 as CaCO3) †	mg/L	1.4	N/A	2534224	13	1.0	2534247
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	2534224	<1.0	1.0	2534247
Chloride (Cl)	mg/L	<0.050	N/A	2534241	0.39	0.050	2534241
Sulfates (SO4)	mg/L	<0.50	N/A	2534241	2.4	0.50	2534241
Total Dissolved Solids	mg/L	27	N/A	2536167	40	10	2536167
Total suspended solids (TSS)	mg/L	2.0	N/A	2536175	<2.0	2.0	2536175
On-site Measurements							
Temperature (°C) †	Celsius	13.20	N/A	ONSITE	7.100	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NC9854		NC9855	NC9856		
Sampling Date		2024/06/17 08:41		2024/06/16 15:21	2024/06/16 13:44		
COC Number		135796		135796	135796		
	Units	HOW-SW4-Q1-2024 Lab-Dup	QC Batch	HOW-SW5-Q1-2024	HOW-BC-Q1-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	N/A	2534246	0.0018	0.0029	0.0010	2534223
Dissolved organic carbon †	mg/L	N/A	2535289	1.4	3.7	0.20	2535289
Dissolved oxygen †	mg/L	N/A	2534368	9.5	9.5	1.0	2534368
Nitrate (N) and Nitrite(N)	mg/L	0.27	2534239	<0.020	<0.020	0.020	2534239
Nitrates (N-NO3-)	mg/L	0.27	2534239	<0.020	<0.020	0.020	2534239
Nitrites (N-NO2-)	mg/L	<0.020	2534239	<0.020	<0.020	0.020	2534239
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	N/A	2536561	<0.020	<0.020	0.020	2536561
Orthophosphate (P)	mg/L	N/A	2534546	<0.050	<0.050	0.050	2534275
pH	pH	N/A	2534237	6.33	6.01	N/A	2534216
pH (15° C) †	pH	N/A	2534345	6.80	5.68	N/A	2534345
pH (on-site) †	pH	N/A	ONSITE	7.11	6.24	N/A	ONSITE
Phenols-4AAP	mg/L	N/A	2536788	<0.0020	<0.0020	0.0020	2536788
Real Color	UCV	N/A	2534561	6.4	23	2.0	2534264
Sulfides (S2-)	mg/L	N/A	2535747	<0.020	<0.020	0.020	2535747
Turbidity	NTU	N/A	2534169	0.84	0.71	0.10	2534169
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	N/A	2534247	1.9	2.4	1.0	2534224
Bicarbonates (HCO3 as CaCO3) †	mg/L	N/A	2534247	1.9	2.4	1.0	2534224
Carbonate (CO3 as CaCO3) †	mg/L	N/A	2534247	<1.0	<1.0	1.0	2534224
Chloride (Cl)	mg/L	0.40	2534241	0.070	0.065	0.050	2534241
Sulfates (SO4)	mg/L	2.3	2534241	<0.50	0.50	0.50	2534241
Total Dissolved Solids	mg/L	N/A	2536167	18	28	10	2536167
Total suspended solids (TSS)	mg/L	N/A	2536175	<2.0	<2.0	2.0	2536175
On-site Measurements							
Temperature (°C) †	Celsius	N/A	ONSITE	15.70	10.20	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NC9857	NC9858	NC9859		
Sampling Date		2024/06/16 12:51	2024/06/16 14:11	2024/06/16 16:51		
COC Number		135796	135796	135796		
	Units	HOW-BL-Q1-2024	HOW-TL-Q1-2024	HOW-ML-Q1-2024	RDL	QC Batch
CONVENTIONALS						
Conductivity	mS/cm	0.049	0.036	0.022	0.0010	2534223
Dissolved organic carbon †	mg/L	0.42	1.1	2.0	0.20	2535289
Dissolved oxygen †	mg/L	9.8	10	9.8	1.0	2534368
Nitrate (N) and Nitrite(N)	mg/L	<0.020	0.031	<0.020	0.020	2534239
Nitrates (N-NO3-)	mg/L	<0.020	0.031	<0.020	0.020	2534239
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	<0.020	0.020	2534239
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	<0.020	0.020	2536561
Orthophosphate (P)	mg/L	<0.050	<0.050	<0.050	0.050	2534275
pH	pH	7.04	7.09	6.95	N/A	2534216
pH (15° C) †	pH	7.11	7.07	7.25	N/A	2534345
pH (on-site) †	pH	6.68	6.37	6.47	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	<0.0020	<0.0020	0.0020	2536788
Real Color	UCV	<2.0	7.4	8.8	2.0	2534264
Sulfides (S2-)	mg/L	<0.020	<0.020	<0.020	0.020	2535747
Turbidity	NTU	0.47	0.54	1.0	0.10	2534169
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	34	15	7.4	1.0	2534224
Bicarbonates (HCO3 as CaCO3) †	mg/L	34	15	7.4	1.0	2534224
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	<1.0	1.0	2534224
Chloride (Cl)	mg/L	0.13	0.22	0.055	0.050	2534241
Sulfates (SO4)	mg/L	1.9	2.1	2.8	0.50	2534241
Total Dissolved Solids	mg/L	42	42	36	10	2536167
Total suspended solids (TSS)	mg/L	<2.0	<2.0	<2.0	2.0	2536175
On-site Measurements						
Temperature (°C) †	Celsius	8.000	12.10	15.10	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NC9851	NC9852	NC9853	NC9854		
Sampling Date		2024/06/17 08:09	2024/06/17 09:45	2024/06/17 09:58	2024/06/17 08:41		
COC Number		135796	135796	135796	135796		
	Units	HOW-SW1-Q1-2024	HOW-SW2-Q1-2024	HOW-SW3-Q1-2024	HOW-SW4-Q1-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2537030
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2537030

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

Bureau Veritas ID		NC9855	NC9856	NC9857	NC9858		
Sampling Date		2024/06/16 15:21	2024/06/16 13:44	2024/06/16 12:51	2024/06/16 14:11		
COC Number		135796	135796	135796	135796		
	Units	HOW-SW5-Q1-2024	HOW-BC-Q1-2024	HOW-BL-Q1-2024	HOW-TL-Q1-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2537030
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2537030
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2537030

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NC9859		
Sampling Date		2024/06/16 16:51		
COC Number		135796		
	Units	HOW-ML-Q1-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS				
Benzene †	mg/L	<0.0010	0.0010	2537030
Toluene †	mg/L	<0.0010	0.0010	2537030
Ethylbenzene †	mg/L	<0.0010	0.0010	2537030
Total_Xylenes †	mg/L	<0.0020	0.0020	2537030
C6 - C10 (less BTEX) †	mg/L	<0.090	0.090	2537030

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

Dissolved Oxygen: Holding time already past upon reception.: NC9855
pH in water: Holding time already past upon reception.: NC9855
pH Measured @ 15° C: Holding time already past upon reception.: NC9855
Dissolved Oxygen: Holding time already past upon reception.: NC9856
pH in water: Holding time already past upon reception.: NC9856
pH Measured @ 15° C: Holding time already past upon reception.: NC9856
Dissolved Oxygen: Holding time already past upon reception.: NC9857
pH in water: Holding time already past upon reception.: NC9857
pH Measured @ 15° C: Holding time already past upon reception.: NC9857
Dissolved Oxygen: Holding time already past upon reception.: NC9858
pH in water: Holding time already past upon reception.: NC9858
pH Measured @ 15° C: Holding time already past upon reception.: NC9858
Dissolved Oxygen: Holding time already past upon reception.: NC9859
pH in water: Holding time already past upon reception.: NC9859
pH Measured @ 15° C: Holding time already past upon reception.: NC9859

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2534169	K1K	Spiked Blank	Turbidity	2024/06/18		102	%
2534169	K1K	Method Blank	Turbidity	2024/06/18	<0.10		NTU
2534216	ZLI	Spiked Blank	pH	2024/06/18		102	%
2534223	ZLI	Spiked Blank	Conductivity	2024/06/18		102	%
2534223	ZLI	Method Blank	Conductivity	2024/06/18	<0.0010		mS/cm
2534224	ZLI	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/06/18		111	%
2534224	ZLI	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/06/18	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/06/18	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/06/18	<1.0		mg/L
2534237	ZLI	Spiked Blank	pH	2024/06/18		101	%
2534239	LTA	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/06/18		92	%
			Nitrates (N-NO3-)	2024/06/18		92	%
			Nitrites (N-NO2-)	2024/06/18		93	%
2534239	LTA	Method Blank	Nitrate (N) and Nitrite(N)	2024/06/19	<0.020		mg/L
			Nitrates (N-NO3-)	2024/06/19	<0.020		mg/L
			Nitrites (N-NO2-)	2024/06/19	<0.020		mg/L
2534241	LTA	Spiked Blank	Chloride (Cl)	2024/06/18		94	%
			Sulfates (SO4)	2024/06/18		97	%
2534241	LTA	Method Blank	Chloride (Cl)	2024/06/19	<0.050		mg/L
			Sulfates (SO4)	2024/06/19	<0.50		mg/L
2534246	ZLI	Spiked Blank	Conductivity	2024/06/18		100	%
2534246	ZLI	Method Blank	Conductivity	2024/06/18	<0.0010		mS/cm
2534247	ZLI	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/06/18		97	%
2534247	ZLI	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/06/18	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/06/18	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/06/18	<1.0		mg/L
2534264	WTE	Spiked Blank	Real Color	2024/06/18		98	%
2534264	WTE	Method Blank	Real Color	2024/06/18	<2.0		UCV
2534275	HGU	QC Standard	Orthophosphate (P)	2024/06/18		99	%
2534275	HGU	Spiked Blank	Orthophosphate (P)	2024/06/18		100	%
2534275	HGU	Method Blank	Orthophosphate (P)	2024/06/18	<0.050		mg/L
2534345	JCE	Spiked Blank	pH (15° C)	2024/06/18		102	%
2534546	HGU	QC Standard	Orthophosphate (P)	2024/06/19		101	%
2534546	HGU	Spiked Blank	Orthophosphate (P)	2024/06/19		101	%
2534546	HGU	Method Blank	Orthophosphate (P)	2024/06/19	<0.050		mg/L
2534561	WPR	Spiked Blank	Real Color	2024/06/19		100	%
2534561	WPR	Method Blank	Real Color	2024/06/19	<2.0		UCV
2535289	BAG	Spiked Blank	Dissolved organic carbon	2024/06/22		105	%
2535289	BAG	Method Blank	Dissolved organic carbon	2024/06/22	<0.20		mg/L
2535747	LI	Spiked Blank	Sulfides (S2-)	2024/06/21		93	%
2535747	LI	Method Blank	Sulfides (S2-)	2024/06/21	<0.020		mg/L
2536167	SXU	Spiked Blank	Total Dissolved Solids	2024/06/22		101	%
2536167	SXU	Method Blank	Total Dissolved Solids	2024/06/22	<10		mg/L
2536175	A2B	Spiked Blank	Total suspended solids (TSS)	2024/06/22		100	%
2536175	A2B	Method Blank	Total suspended solids (TSS)	2024/06/22	<2.0		mg/L
2536343	ST5	Spiked Blank	Total Extractable Aluminum (Al)	2024/06/26		101	%
			Total Extractable Antimony (Sb)	2024/06/26		109	%
			Total Extractable Silver (Ag)	2024/06/26		107	%
			Total Extractable Arsenic (As)	2024/06/26		102	%
			Total Extractable Barium (Ba)	2024/06/26		106	%
			Total Extractable Beryllium (Be)	2024/06/26		99	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Bismuth (Bi)	2024/06/26		108	%
			Total Extractable Boron (B)	2024/06/26		112	%
			Total Extractable Cadmium (Cd)	2024/06/26		101	%
			Total Extractable Calcium (Ca)	2024/06/26		102	%
			Total Extractable Chromium (Cr)	2024/06/26		101	%
			Total Extractable Cobalt (Co)	2024/06/26		100	%
			Total Extractable Copper (Cu)	2024/06/26		101	%
			Total Extractable Tin (Sn)	2024/06/26		106	%
			Total Extractable Iron (Fe)	2024/06/26		103	%
			Total Extractable Magnesium (Mg)	2024/06/26		103	%
			Total Extractable Manganese (Mn)	2024/06/26		100	%
			Total Extractable Molybdenum (Mo)	2024/06/26		105	%
			Total Extractable Nickel (Ni)	2024/06/26		99	%
			Total Extractable Total phosphorous	2024/06/26		101	%
			Total Extractable Lead (Pb)	2024/06/26		107	%
			Total Extractable Potassium (K)	2024/06/26		101	%
			Total Extractable Selenium (Se)	2024/06/26		100	%
			Total Extractable Sodium (Na)	2024/06/26		100	%
			Total Extractable Strontium (Sr)	2024/06/26		105	%
			Total Extractable Thallium (Tl)	2024/06/26		106	%
			Total Extractable Titanium (Ti)	2024/06/26		100	%
			Total Extractable Uranium (U)	2024/06/26		115	%
			Total Extractable Vanadium (V)	2024/06/26		105	%
			Total Extractable Zinc (Zn)	2024/06/26		96	%
2536343	ST5	Method Blank	Total Extractable Aluminum (Al)	2024/06/26	<10		ug/L
			Total Extractable Antimony (Sb)	2024/06/26	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/06/26	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/06/26	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/06/26	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/06/26	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/06/26	<1.0		ug/L
			Total Extractable Boron (B)	2024/06/26	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/06/26	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/06/26	<500		ug/L
			Total Extractable Chromium (Cr)	2024/06/26	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/06/26	<1.0		ug/L
			Total Extractable Copper (Cu)	2024/06/26	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/06/26	<1000		ug/L
			Total Extractable Tin (Sn)	2024/06/26	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/06/26	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/06/26	<100		ug/L
			Total Extractable Manganese (Mn)	2024/06/26	<1.0		ug/L
			Total Extractable Molybdenum (Mo)	2024/06/26	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/06/26	<2.0		ug/L
			Total Extractable P2O5	2024/06/26	<25		ug/L
			Total Extractable Total phosphorous	2024/06/26	<10		ug/L
			Total Extractable Lead (Pb)	2024/06/26	<0.50		ug/L
			Total Extractable Potassium (K)	2024/06/26	<500		ug/L
			Total Extractable Selenium (Se)	2024/06/26	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/06/26	<500		ug/L
			Total Extractable Strontium (Sr)	2024/06/26	<2.0		ug/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Thallium (Tl)	2024/06/26	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/06/26	<10		ug/L
			Total Extractable Uranium (U)	2024/06/26	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/06/26	2.7, RDL=2.0		ug/L
			Total Extractable Zinc (Zn)	2024/06/26	<7.0		ug/L
2536561	HGU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/06/26		105	%
2536561	HGU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/06/26	<0.020		mg/L
2536719	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/06/24		112	%
			n-Dotriacontane - Extractable	2024/06/24		121	%
			>C10-C16 Hydrocarbons	2024/06/24		98	%
			>C16-C21 Hydrocarbons	2024/06/24		101	%
			>C21-<C32 Hydrocarbons	2024/06/24		100	%
2536719	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/06/24		103	%
			n-Dotriacontane - Extractable	2024/06/24		117	%
			>C10-C16 Hydrocarbons	2024/06/24		93	%
			>C16-C21 Hydrocarbons	2024/06/24		98	%
			>C21-<C32 Hydrocarbons	2024/06/24		100	%
2536719	éE6	Method Blank	Isobutylbenzene - Extractable	2024/06/24		100	%
			n-Dotriacontane - Extractable	2024/06/24		111	%
			>C10-C16 Hydrocarbons	2024/06/24	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/06/24	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/06/24	<0.090		mg/L
2536720	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/06/24		100	%
			n-Dotriacontane - Extractable	2024/06/24		103	%
			>C10-C16 Hydrocarbons	2024/06/24		83	%
			>C16-C21 Hydrocarbons	2024/06/24		87	%
			>C21-<C32 Hydrocarbons	2024/06/24		87	%
2536720	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/06/24		73	%
			n-Dotriacontane - Extractable	2024/06/24		111	%
			>C10-C16 Hydrocarbons	2024/06/24		93	%
			>C16-C21 Hydrocarbons	2024/06/24		98	%
			>C21-<C32 Hydrocarbons	2024/06/24		98	%
2536720	éE6	Method Blank	Isobutylbenzene - Extractable	2024/06/24		29 (1)	%
			n-Dotriacontane - Extractable	2024/06/24		110	%
			>C10-C16 Hydrocarbons	2024/06/24	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/06/24	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/06/24	<0.090		mg/L
2536788	TEX	Spiked Blank	Phenols-4AAP	2024/06/25		97	%
2536788	TEX	Method Blank	Phenols-4AAP	2024/06/25	<0.0020		mg/L
2537030	éE7	Matrix Spike	Benzene	2024/06/20		100	%
			Toluene	2024/06/20		96	%
			Ethylbenzene	2024/06/20		99	%
			Total_Xylenes	2024/06/20		98	%
2537030	éE7	Spiked Blank	Benzene	2024/06/20		94	%
			Toluene	2024/06/20		94	%
			Ethylbenzene	2024/06/20		99	%
			Total_Xylenes	2024/06/20		99	%
2537030	éE7	Method Blank	Benzene	2024/06/20	<0.0010		mg/L
			Toluene	2024/06/20	<0.0010		mg/L
			Ethylbenzene	2024/06/20	<0.0010		mg/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total_Xylenes	2024/06/20	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/06/20	<0.090		mg/L
2537031	EMT	Matrix Spike [NC9859-12]	Reactive silica (SiO2)	2024/06/21		88	%
2537031	EMT	Spiked Blank	Reactive silica (SiO2)	2024/06/21		94	%
2537031	EMT	Method Blank	Reactive silica (SiO2)	2024/06/21	<0.50		mg/L
2539264	ST5	Spiked Blank	Total Extractable Mercury (Hg)	2024/07/05		81	%
2539264	ST5	Method Blank	Total Extractable Mercury (Hg)	2024/07/05	<0.000010		mg/L

RDL = Reportable Detection Limit

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

(1) TEH surrogate(s) not within acceptance limits. Samples tested had insufficient volume to repeat the analytical run.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, Scientific Service Specialist

Cansu Bolukbas
Membre OCQ#2324-095
Cansu Bolukbas, B.Sc., Chemist, Montreal, Analyst II

Frédéric Arnau, B.Sc., Chemist, Montreal, Scientific Service Specialist

Faouzi Sarsi, B.Sc. Chemist, Montréal, SR Analyst

Jonathan Fauvel, B.Sc., Chemist, Montreal, Scientific Specialist

Michelina Cinquino, Analyst II

Phil Deveau, Scientific Specialist (Organics)

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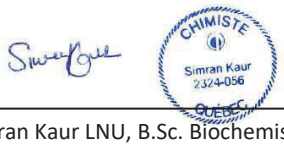
VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:



Simran Kaur LNU, B.Sc. Biochemist, Montreal, Analyst 2

Shu Yang, B.Sc. Chemist, Montreal, Analyst II

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 140218

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/08/13
Report #: R2968345
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C439592
Received: 2024/07/22, 09:00

Sample Matrix: Surface Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	9	N/A	2024/07/22	STL SOP-00038	SM 24 2320-B m
Anions in water	9	N/A	2024/07/23	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	9	N/A	2024/07/23	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	7	N/A	2024/07/22	STL SOP-00038	SM 24 2510-B m
Conductivity in waters	2	N/A	2024/07/26	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	9	2024/07/23	2024/07/26	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	9	2024/08/07	2024/08/12	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	9	2024/07/24	2024/07/24	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	9	2024/07/25	2024/07/28	STL SOP-00062	MA.200–Mét. 1.2 R7 m
Ammonia Nitrogen in water	9	N/A	2024/07/26	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	9	N/A	2024/07/23	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	9	N/A	2024/07/22	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	9	N/A	2024/07/22	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	9	N/A	2024/07/22	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	9	2024/07/23	2024/07/23	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	9	N/A	2024/07/22		Test Kit
Ortho Phosphate-water	9	N/A	2024/07/23	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	9	2024/07/22	2024/07/22	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	4	2024/07/23	2024/07/23	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Total Dissolved Solids	5	2024/07/24	2024/07/24	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	9	N/A	2024/07/22		Thermometer
Turbidity-water	9	N/A	2024/07/23	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	7	2024/07/25	2024/07/29	ATL SOP 00113	Atl. RBCA v3.1 m
TEH in Water (PIRI) (1)	2	2024/07/25	2024/07/30	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	9	2024/07/25	2024/07/25	ATL SOP 00022	EPA 366.0 m
VPH in Water (PIRI) (1)	9	2024/07/23	2024/07/23	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 140218

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/08/13
Report #: R2968345
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C439592
Received: 2024/07/22, 09:00

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
13 Aug 2024 12:49:01

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

==========

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Bureau Veritas Job #: C439592
Report Date: 2024/08/13

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NG8300	NG8301	NG8302	NG8303		
Sampling Date		2024/07/18 09:14	2024/07/18 10:11	2024/07/18 10:31	2024/07/18 08:48		
COC Number		140218	140218	140218	140218		
	Units	HOW-SW1-Q2-2024	HOW-SW2-Q2-2024	HOW-SW3-Q2-2024	HOW-SW4-Q2-2024	RDL	QC Batch
INORGANICS							
Reactive silica (SiO2) †	mg/L	4.9	5.8	4.2	4.6	0.50	2549094
PETROLEUM HYDROCARBONS							
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2550222
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2550222
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2550222
Return to baseline at C32 †	mg/L	NA	NA	NA	NA	N/A	2550222
Hydrocarbon Resemblance †	mg/L	NA	NA	NA	NA	N/A	2550222
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	99	100	101	99	N/A	2550222
n-Dotriacontane - Extractable	%	86	88	89	86	N/A	2550222

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

Bureau Veritas Job #: C439592
Report Date: 2024/08/13

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NG8304		NG8305			NG8306		
Sampling Date		2024/07/17 17:55		2024/07/17 16:05			2024/07/17 15:30		
COC Number		140218		140218			140218		
	Units	HOW-SW5-Q2-2024	RDL	HOW-BC-Q2-2024	RDL	QC Batch	HOW-BL-Q2-2024	RDL	QC Batch
INORGANICS									
Reactive silica (SiO2) †	mg/L	0.86	0.50	4.8	0.50	2549094	5.3	0.50	2549094
PETROLEUM HYDROCARBONS									
>C10-C16 Hydrocarbons †	mg/L	<0.050	0.050	<0.056	0.056	2550222	<0.050	0.050	2550223
>C16-C21 Hydrocarbons †	mg/L	<0.050	0.050	<0.056	0.056	2550222	<0.050	0.050	2550223
>C21-<C32 Hydrocarbons †	mg/L	<0.090	0.090	<0.10	0.10	2550222	<0.090	0.090	2550223
Return to baseline at C32 †	mg/L	NA	N/A	NA	N/A	2550222	NA	N/A	2550223
Hydrocarbon Resemblance †	mg/L	NA	N/A	NA	N/A	2550222	NA	N/A	2550223
Surrogate Recovery (%)									
Isobutylbenzene - Extractable	%	100	N/A	100	N/A	2550222	107	N/A	2550223
n-Dotriacontane - Extractable	%	87	N/A	91 (1)	N/A	2550222	107	N/A	2550223

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable
(1) Elevated TEH RDL(s) due to limited sample.

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Bureau Veritas Job #: C439592
Report Date: 2024/08/13

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NG8307		NG8308		
Sampling Date		2024/07/17 17:15		2024/07/18 07:58		
COC Number		140218		140218		
	Units	HOW-TL-Q2-2024	QC Batch	HOW-ML-Q2-2024	RDL	QC Batch
INORGANICS						
Reactive silica (SiO2) †	mg/L	4.4	2549094	0.52	0.50	2549094
PETROLEUM HYDROCARBONS						
>C10-C16 Hydrocarbons †	mg/L	<0.050	2550223	<0.050	0.050	2550222
>C16-C21 Hydrocarbons †	mg/L	<0.050	2550223	<0.050	0.050	2550222
>C21-<C32 Hydrocarbons †	mg/L	<0.090	2550223	<0.090	0.090	2550222
Return to baseline at C32 †	mg/L	NA	2550223	NA	N/A	2550222
Hydrocarbon Resemblance †	mg/L	NA	2550223	NA	N/A	2550222
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	108	2550223	98	N/A	2550222
n-Dotriacontane - Extractable	%	104	2550223	86	N/A	2550222

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8300		NG8301		
Sampling Date		2024/07/18 09:14		2024/07/18 10:11		
COC Number		140218		140218		
	Units	HOW-SW1-Q2-2024	QC Batch	HOW-SW2-Q2-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	2553242	<0.000010	0.000010	2553242
Total Extractable Aluminum (Al)	ug/L	<10	2548497	39	10	2550454
Total Extractable Antimony (Sb)	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Silver (Ag)	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Arsenic (As)	ug/L	<1.0	2548497	1.0	1.0	2548497
Total Extractable Barium (Ba)	ug/L	<2.0	2548497	2.7	2.0	2548497
Total Extractable Beryllium (Be)	ug/L	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Boron (B) †	ug/L	<50	2548497	<50	50	2548497
Total Extractable Cadmium (Cd)	ug/L	<0.20	2548497	<0.20	0.20	2548497
Total Extractable Calcium (Ca) †	ug/L	3500	2548497	1100	500	2548497
Total Extractable Chromium (Cr)	ug/L	<5.0	2548497	<5.0	5.0	2548497
Total Extractable Cobalt (Co)	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Copper (Cu)	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Total Hardness (CaCO3) ††	ug/L	19000	2548497	5000	1000	2548497
Total Extractable Tin (Sn)	ug/L	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Iron (Fe)	ug/L	<60	2548497	3200	60	2548497
Total Extractable Magnesium (Mg) †	ug/L	2500	2548497	580	100	2548497
Total Extractable Manganese (Mn)	ug/L	2.9	2548497	280	1.0	2548497
Total Extractable Molybdenum (Mo)	ug/L	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Nickel (Ni)	ug/L	<2.0	2548497	<2.0	2.0	2548497
Total Extractable P2O5 ††	ug/L	<25	2548497	32	25	2548497
Total Extractable Total phosphorous	ug/L	<10	2548497	14	10	2548497
Total Extractable Lead (Pb)	ug/L	<0.50	2548497	<0.50	0.50	2548497
Total Extractable Potassium (K) †	ug/L	<500	2548497	<500	500	2548497
Total Extractable Selenium (Se)	ug/L	<3.0	2548497	<3.0	3.0	2548497
Total Extractable Sodium (Na)	ug/L	890	2548497	920	500	2548497
Total Extractable Strontium (Sr) †	ug/L	6.3	2548497	6.7	2.0	2548497
Total Extractable Thallium (Tl)	ug/L	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Titanium (Ti) ††	ug/L	<10	2548497	<10	10	2548497
Total Extractable Uranium (U) ††	ug/L	<1.0	2548497	<1.0	1.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8300		NG8301		
Sampling Date		2024/07/18 09:14		2024/07/18 10:11		
COC Number		140218		140218		
	Units	HOW-SW1-Q2-2024	QC Batch	HOW-SW2-Q2-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Zinc (Zn)	ug/L	<7.0	2548497	<7.0	7.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8302	NG8303		NG8304		
Sampling Date		2024/07/18 10:31	2024/07/18 08:48		2024/07/17 17:55		
COC Number		140218	140218		140218		
	Units	HOW-SW3-Q2-2024	HOW-SW4-Q2-2024	QC Batch	HOW-SW5-Q2-2024	RDL	QC Batch
METALS							
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	2553242	<0.000010	0.000010	2553242
Total Extractable Aluminum (Al)	ug/L	120	<10	2548497	12	10	2550454
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Barium (Ba)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Boron (B) †	ug/L	<50	<50	2548497	<50	50	2548497
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	2548497	<0.20	0.20	2548497
Total Extractable Calcium (Ca) †	ug/L	<500	2600	2548497	<500	500	2548497
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	2548497	<5.0	5.0	2548497
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Total Hardness (CaCO3) ††	ug/L	1200	14000	2548497	<1000	1000	2548497
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Iron (Fe)	ug/L	2200	<60	2548497	65	60	2548497
Total Extractable Magnesium (Mg) †	ug/L	290	2000	2548497	210	100	2548497
Total Extractable Manganese (Mn)	ug/L	140	<1.0	2548497	7.7	1.0	2548497
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable P2O5 ††	ug/L	48	<25	2548497	<25	25	2548497
Total Extractable Total phosphorous	ug/L	21	<10	2548497	<10	10	2548497
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	2548497	<0.50	0.50	2548497
Total Extractable Potassium (K) †	ug/L	<500	<500	2548497	<500	500	2548497
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	2548497	<3.0	3.0	2548497
Total Extractable Sodium (Na)	ug/L	570	770	2548497	640	500	2548497
Total Extractable Strontium (Sr) †	ug/L	3.0	5.7	2548497	<2.0	2.0	2548497
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Titanium (Ti) ††	ug/L	<10	<10	2548497	<10	10	2548497
Total Extractable Uranium (U) ††	ug/L	<1.0	<1.0	2548497	<1.0	1.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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Bureau Veritas Job #: C439592
Report Date: 2024/08/13

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8302	NG8303		NG8304		
Sampling Date		2024/07/18 10:31	2024/07/18 08:48		2024/07/17 17:55		
COC Number		140218	140218		140218		
	Units	**HOW-SW3-Q2-2024**	**HOW-SW4-Q2-2024**	**QC Batch**	**HOW-SW5-Q2-2024**	**RDL**	**QC Batch**
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	2548497	<2.0	2.0	2548497
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	2548497	<7.0	7.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8305	NG8306	NG8307		
Sampling Date		2024/07/17 16:05	2024/07/17 15:30	2024/07/17 17:15		
COC Number		140218	140218	140218		
	Units	HOW-BC-Q2-2024	HOW-BL-Q2-2024	HOW-TL-Q2-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2553242
Total Extractable Aluminum (Al)	ug/L	95	<10	<10	10	2548497
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Barium (Ba)	ug/L	4.2	<2.0	3.0	2.0	2548497
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2548497
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2548497
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2548497
Total Extractable Calcium (Ca) †	ug/L	520	5200	4200	500	2548497
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2548497
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Total Hardness (CaCO3) ††	ug/L	3300	27000	23000	1000	2548497
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2548497
Total Extractable Iron (Fe)	ug/L	380	<60	<60	60	2548497
Total Extractable Magnesium (Mg) †	ug/L	480	3500	3000	100	2548497
Total Extractable Manganese (Mn)	ug/L	34	1.7	8.9	1.0	2548497
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2548497
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2548497
Total Extractable P2O5 ††	ug/L	<25	<25	<25	25	2548497
Total Extractable Total phosphorous	ug/L	10	<10	<10	10	2548497
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2548497
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2548497
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2548497
Total Extractable Sodium (Na)	ug/L	750	870	750	500	2548497
Total Extractable Strontium (Sr) †	ug/L	2.8	6.4	7.6	2.0	2548497
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2548497
Total Extractable Titanium (Ti) ††	ug/L	<10	<10	<10	10	2548497
Total Extractable Uranium (U) ††	ug/L	<1.0	<1.0	<1.0	1.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8305	NG8306	NG8307		
Sampling Date		2024/07/17 16:05	2024/07/17 15:30	2024/07/17 17:15		
COC Number		140218	140218	140218		
	Units	HOW-BC-Q2-2024	HOW-BL-Q2-2024	HOW-TL-Q2-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	<2.0	2.0	2548497
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8308		
Sampling Date		2024/07/18 07:58		
COC Number		140218		
	Units	HOW-ML-Q2-2024	RDL	QC Batch
METALS				
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	0.000010	2553242
Total Extractable Aluminum (Al)	ug/L	20	10	2550454
Total Extractable Antimony (Sb)	ug/L	<1.0	1.0	2548497
Total Extractable Silver (Ag)	ug/L	<1.0	1.0	2548497
Total Extractable Arsenic (As)	ug/L	<1.0	1.0	2548497
Total Extractable Barium (Ba)	ug/L	<2.0	2.0	2548497
Total Extractable Beryllium (Be)	ug/L	<2.0	2.0	2548497
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	1.0	2548497
Total Extractable Boron (B) †	ug/L	<50	50	2548497
Total Extractable Cadmium (Cd)	ug/L	<0.20	0.20	2548497
Total Extractable Calcium (Ca) †	ug/L	2300	500	2548497
Total Extractable Chromium (Cr)	ug/L	<5.0	5.0	2548497
Total Extractable Cobalt (Co)	ug/L	<1.0	1.0	2548497
Total Extractable Copper (Cu)	ug/L	<1.0	1.0	2548497
Total Extractable Total Hardness (CaCO3) ††	ug/L	13000	1000	2548497
Total Extractable Tin (Sn)	ug/L	<2.0	2.0	2548497
Total Extractable Iron (Fe)	ug/L	<60	60	2548497
Total Extractable Magnesium (Mg) †	ug/L	1700	100	2548497
Total Extractable Manganese (Mn)	ug/L	4.9	1.0	2548497
Total Extractable Molybdenum (Mo)	ug/L	<1.0	1.0	2548497
Total Extractable Nickel (Ni)	ug/L	<2.0	2.0	2548497
Total Extractable P2O5 ††	ug/L	<25	25	2548497
Total Extractable Total phosphorous	ug/L	<10	10	2548497
Total Extractable Lead (Pb)	ug/L	<0.50	0.50	2548497
Total Extractable Potassium (K) †	ug/L	<500	500	2548497
Total Extractable Selenium (Se)	ug/L	<3.0	3.0	2548497
Total Extractable Sodium (Na)	ug/L	<500	500	2548497
Total Extractable Strontium (Sr) †	ug/L	4.8	2.0	2548497
Total Extractable Thallium (Tl)	ug/L	<2.0	2.0	2548497
Total Extractable Titanium (Ti) ††	ug/L	<10	10	2548497
Total Extractable Uranium (U) ††	ug/L	<1.0	1.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NG8308		
Sampling Date		2024/07/18 07:58		
COC Number		140218		
	Units	**HOW-ML-Q2-2024**	**RDL**	**QC Batch**
Total Extractable Vanadium (V)	ug/L	<2.0	2.0	2548497
Total Extractable Zinc (Zn)	ug/L	<7.0	7.0	2548497

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NG8300	NG8300	NG8301		
Sampling Date		2024/07/18 09:14	2024/07/18 09:14	2024/07/18 10:11		
COC Number		140218	140218	140218		
	Units	HOW-SW1-Q2-2024	HOW-SW1-Q2-2024 Lab-Dup	HOW-SW2-Q2-2024	RDL	QC Batch
CONVENTIONALS						
Conductivity	mS/cm	0.036	N/A	0.011	0.0010	2547264
Dissolved organic carbon †	mg/L	0.49	N/A	2.4	0.20	2547640
Dissolved oxygen †	mg/L	10	N/A	10	1.0	2547126
Nitrate (N) and Nitrite(N)	mg/L	0.23	0.22	<0.020	0.020	2547363
Nitrates (N-NO3-)	mg/L	0.23	0.22	<0.020	0.020	2547363
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	<0.020	0.020	2547363
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	N/A	<0.020	0.020	2549046
Orthophosphate (P)	mg/L	<0.050	N/A	<0.050	0.050	2547368
pH	pH	6.97	N/A	6.51	N/A	2547259
pH (15° C) †	pH	7.15	N/A	6.61	N/A	2547328
pH (on-site) †	pH	6.77	N/A	6.58	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	<0.0020	0.0020	2547597
Real Color	UCV	2.2	N/A	78	2.0	2547452
Sulfides (S2-)	mg/L	<0.020	N/A	<0.020	0.020	2547173
Turbidity	NTU	0.34	N/A	3.2	0.10	2547376
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	13	N/A	5.7	1.0	2547263
Bicarbonates (HCO3 as CaCO3) †	mg/L	13	N/A	5.7	1.0	2547263
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	<1.0	1.0	2547263
Chloride (Cl)	mg/L	0.41	0.41	<0.050	0.050	2547364
Sulfates (SO4)	mg/L	2.0	2.0	<0.50	0.50	2547364
Total Dissolved Solids	mg/L	33	N/A	36	10	2548079
Total suspended solids (TSS)	mg/L	<2.0	2.0	4.0	2.0	2547946
On-site Measurements						
Temperature (°C) †	Celsius	7.900	N/A	13.90	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NG8302	NG8303		NG8304		
Sampling Date		2024/07/18 10:31	2024/07/18 08:48		2024/07/17 17:55		
COC Number		140218	140218		140218		
	Units	HOW-SW3-Q2-2024	HOW-SW4-Q2-2024	QC Batch	HOW-SW5-Q2-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.0027	0.029	2547264	0.0020	0.0010	2547264
Dissolved organic carbon †	mg/L	4.6	0.51	2547640	1.7	0.20	2547640
Dissolved oxygen †	mg/L	9.8	10	2547126	11	1.0	2547126
Nitrate (N) and Nitrite(N)	mg/L	<0.020	0.40	2547363	<0.020	0.020	2547363
Nitrates (N-NO3-)	mg/L	<0.020	0.40	2547363	<0.020	0.020	2547363
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	2547363	<0.020	0.020	2547363
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	2549046	<0.020	0.020	2549046
Orthophosphate (P)	mg/L	<0.050	<0.050	2547368	<0.050	0.050	2547368
pH	pH	5.93	6.78	2547259	6.42	N/A	2547259
pH (15° C) †	pH	5.94	6.90	2547328	6.31	N/A	2547328
pH (on-site) †	pH	5.49	7.02	ONSITE	7.22	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	<0.0020	2547597	<0.0020	0.0020	2547597
Real Color	UCV	87	<2.0	2547452	6.9	2.0	2547452
Sulfides (S2-)	mg/L	<0.020	<0.020	2547173	<0.020	0.020	2547173
Turbidity	NTU	1.5	0.20	2547376	0.68	0.10	2547376
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	1.9	9.7	2547263	2.0	1.0	2547263
Bicarbonates (HCO3 as CaCO3) †	mg/L	1.9	9.7	2547263	2.0	1.0	2547263
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	2547263	<1.0	1.0	2547263
Chloride (Cl)	mg/L	<0.050	0.56	2547364	0.068	0.050	2547364
Sulfates (SO4)	mg/L	<0.50	1.6	2547364	<0.50	0.50	2547364
Total Dissolved Solids	mg/L	28	35	2548079	28	10	2547717
Total suspended solids (TSS)	mg/L	3.0	<2.0	2547946	5.0	2.0	2547946
On-site Measurements							
Temperature (°C) †	Celsius	16.70	5.900	ONSITE	19.10	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
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N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NG8305	NG8306	NG8307	NG8307		
Sampling Date		2024/07/17 16:05	2024/07/17 15:30	2024/07/17 17:15	2024/07/17 17:15		
COC Number		140218	140218	140218	140218		
	Units	HOW-BC-Q2-2024	HOW-BL-Q2-2024	HOW-TL-Q2-2024	HOW-TL-Q2-2024 Lab-Dup	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.0072	0.048	0.040	0.040	0.0010	2547264
Dissolved organic carbon †	mg/L	2.7	0.45	0.84	N/A	0.20	2547640
Dissolved oxygen †	mg/L	9.8	11	10	N/A	1.0	2547126
Nitrate (N) and Nitrite(N)	mg/L	<0.020	<0.020	0.036	N/A	0.020	2547363
Nitrates (N-NO3-)	mg/L	<0.020	<0.020	0.036	N/A	0.020	2547363
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	<0.020	N/A	0.020	2547363
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	<0.020	N/A	0.020	2549046
Orthophosphate (P)	mg/L	<0.050	<0.050	<0.050	N/A	0.050	2547368
pH	pH	6.06	7.05	7.29	7.29	N/A	2547259
pH (15° C) †	pH	6.08	7.17	7.33	N/A	N/A	2547328
pH (on-site) †	pH	6.25	6.72	6.34	N/A	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	<0.0020	<0.0020	N/A	0.0020	2547597
Real Color	UCV	22	<2.0	3.1	N/A	2.0	2547452
Sulfides (S2-)	mg/L	<0.020	<0.020	<0.020	N/A	0.020	2547173
Turbidity	NTU	1.0	0.29	0.43	N/A	0.10	2547376
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	2.3	23	16	17	1.0	2547263
Bicarbonates (HCO3 as CaCO3) †	mg/L	2.3	23	16	17	1.0	2547263
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	<1.0	<1.0	1.0	2547263
Chloride (Cl)	mg/L	0.093	0.14	0.24	N/A	0.050	2547364
Sulfates (SO4)	mg/L	0.52	1.7	2.3	N/A	0.50	2547364
Total Dissolved Solids	mg/L	84	40	42	N/A	10	2547717
Total suspended solids (TSS)	mg/L	7.0	2.0	3.0	N/A	2.0	2547946
On-site Measurements							
Temperature (°C) †	Celsius	14.40	9.700	17.00	N/A	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
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N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NG8308		
Sampling Date		2024/07/18 07:58		
COC Number		140218		
	Units	**HOW-ML-Q2-2024**	**RDL**	**QC Batch**
CONVENTIONALS				
Conductivity	mS/cm	0.022	0.0010	2547264
Dissolved organic carbon †	mg/L	2.0	0.20	2547640
Dissolved oxygen †	mg/L	10	1.0	2547126
Nitrate (N) and Nitrite(N)	mg/L	<0.020	0.020	2547363
Nitrates (N-NO3-)	mg/L	<0.020	0.020	2547363
Nitrites (N-NO2-)	mg/L	<0.020	0.020	2547363
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	0.020	2549046
Orthophosphate (P)	mg/L	<0.050	0.050	2547368
pH	pH	6.97	N/A	2547259
pH (15° C) †	pH	7.04	N/A	2547328
pH (on-site) †	pH	6.47	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	0.0020	2547597
Real Color	UCV	5.1	2.0	2547452
Sulfides (S2-)	mg/L	<0.020	0.020	2547173
Turbidity	NTU	0.88	0.10	2547376
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	7.4	1.0	2547263
Bicarbonates (HCO3 as CaCO3) †	mg/L	7.4	1.0	2547263
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	1.0	2547263
Chloride (Cl)	mg/L	0.074	0.050	2547364
Sulfates (SO4)	mg/L	2.9	0.50	2547364
Total Dissolved Solids	mg/L	29	10	2548079
Total suspended solids (TSS)	mg/L	3.0	2.0	2547946
On-site Measurements				
Temperature (°C) †	Celsius	15.10	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NG8300	NG8301	NG8302	NG8303		
Sampling Date		2024/07/18 09:14	2024/07/18 10:11	2024/07/18 10:31	2024/07/18 08:48		
COC Number		140218	140218	140218	140218		
	Units	HOW-SW1-Q2-2024	HOW-SW2-Q2-2024	HOW-SW3-Q2-2024	HOW-SW4-Q2-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2550221
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2550221

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

Bureau Veritas ID		NG8304	NG8305	NG8306	NG8307		
Sampling Date		2024/07/17 17:55	2024/07/17 16:05	2024/07/17 15:30	2024/07/17 17:15		
COC Number		140218	140218	140218	140218		
	Units	HOW-SW5-Q2-2024	HOW-BC-Q2-2024	HOW-BL-Q2-2024	HOW-TL-Q2-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2550221
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2550221
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2550221

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: IG

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NG8308		
Sampling Date		2024/07/18 07:58		
COC Number		140218		
	Units	HOW-ML-Q2-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS				
Benzene †	mg/L	<0.0010	0.0010	2550221
Toluene †	mg/L	<0.0010	0.0010	2550221
Ethylbenzene †	mg/L	<0.0010	0.0010	2550221
Total_Xylenes †	mg/L	<0.0020	0.0020	2550221
C6 - C10 (less BTEX) †	mg/L	<0.090	0.090	2550221

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

Dissolved Oxygen: Holding time already past upon reception.: NG8300
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8300
Ortho Phosphate-water: Holding time already past upon reception.: NG8300
Turbidity-water: Holding time already past upon reception.: NG8300
pH Measured @ 15° C: Holding time already past upon reception.: NG8300
pH in water: Holding time already past upon reception.: NG8300
Real Color: Holding time already past upon reception.: NG8300
Dissolved Oxygen: Holding time already past upon reception.: NG8301
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8301
Ortho Phosphate-water: Holding time already past upon reception.: NG8301
Turbidity-water: Holding time already past upon reception.: NG8301
pH Measured @ 15° C: Holding time already past upon reception.: NG8301
pH in water: Holding time already past upon reception.: NG8301
Real Color: Holding time already past upon reception.: NG8301
Dissolved Oxygen: Holding time already past upon reception.: NG8302
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8302
Ortho Phosphate-water: Holding time already past upon reception.: NG8302
Turbidity-water: Holding time already past upon reception.: NG8302
pH Measured @ 15° C: Holding time already past upon reception.: NG8302
pH in water: Holding time already past upon reception.: NG8302
Real Color: Holding time already past upon reception.: NG8302
Dissolved Oxygen: Holding time already past upon reception.: NG8303
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8303
Ortho Phosphate-water: Holding time already past upon reception.: NG8303
Turbidity-water: Holding time already past upon reception.: NG8303
pH Measured @ 15° C: Holding time already past upon reception.: NG8303
pH in water: Holding time already past upon reception.: NG8303
Real Color: Holding time already past upon reception.: NG8303
Dissolved Oxygen: Holding time already past upon reception.: NG8304
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8304
Ortho Phosphate-water: Holding time already past upon reception.: NG8304
Turbidity-water: Holding time already past upon reception.: NG8304
pH Measured @ 15° C: Holding time already past upon reception.: NG8304
pH in water: Holding time already past upon reception.: NG8304
Real Color: Holding time already past upon reception.: NG8304
Dissolved Oxygen: Holding time already past upon reception.: NG8305
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8305
Ortho Phosphate-water: Holding time already past upon reception.: NG8305
Turbidity-water: Holding time already past upon reception.: NG8305
pH Measured @ 15° C: Holding time already past upon reception.: NG8305
pH in water: Holding time already past upon reception.: NG8305
Real Color: Holding time already past upon reception.: NG8305
Dissolved Oxygen: Holding time already past upon reception.: NG8306
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8306
Ortho Phosphate-water: Holding time already past upon reception.: NG8306
Turbidity-water: Holding time already past upon reception.: NG8306
pH Measured @ 15° C: Holding time already past upon reception.: NG8306
pH in water: Holding time already past upon reception.: NG8306
Real Color: Holding time already past upon reception.: NG8306

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Dissolved Oxygen: Holding time already past upon reception.: NG8307
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8307
Ortho Phosphate-water: Holding time already past upon reception.: NG8307
Turbidity-water: Holding time already past upon reception.: NG8307
pH Measured @ 15° C: Holding time already past upon reception.: NG8307
pH in water: Holding time already past upon reception.: NG8307
Real Color: Holding time already past upon reception.: NG8307
Dissolved Oxygen: Holding time already past upon reception.: NG8308
Nitrates(NO3-), Nitrites(NO2-)-water: Holding time already past upon reception.: NG8308
Ortho Phosphate-water: Holding time already past upon reception.: NG8308
Turbidity-water: Holding time already past upon reception.: NG8308
pH Measured @ 15° C: Holding time already past upon reception.: NG8308
pH in water: Holding time already past upon reception.: NG8308
Real Color: Holding time already past upon reception.: NG8308
Sample NG8301, Total Extractable Metals: Test repeated.
Sample NG8304, Total Extractable Metals: Test repeated.
Sample NG8308, Total Extractable Metals: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2547173	LI	Spiked Blank	Sulfides (S2-)	2024/07/22		101	%
2547173	LI	Method Blank	Sulfides (S2-)	2024/07/22	<0.020		mg/L
2547259	KME	Spiked Blank	pH	2024/07/22		102	%
2547263	KME	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/07/22		92	%
2547263	KME	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/07/22	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/07/22	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/07/22	<1.0		mg/L
2547264	KME	Spiked Blank	Conductivity	2024/07/22		97	%
2547264	KME	Method Blank	Conductivity	2024/07/22	0.0013, RDL=0.0010		mS/cm
2547328	JCE	Spiked Blank	pH (15° C)	2024/07/22		101	%
2547363	ZZH	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/07/23		101	%
			Nitrates (N-NO3-)	2024/07/23		101	%
			Nitrites (N-NO2-)	2024/07/23		100	%
2547363	ZZH	Method Blank	Nitrate (N) and Nitrite(N)	2024/07/23	<0.020		mg/L
			Nitrates (N-NO3-)	2024/07/23	<0.020		mg/L
			Nitrites (N-NO2-)	2024/07/23	<0.020		mg/L
2547364	ZZH	Spiked Blank	Chloride (Cl)	2024/07/23		100	%
			Sulfates (SO4)	2024/07/23		99	%
2547364	ZZH	Method Blank	Chloride (Cl)	2024/07/23	<0.050		mg/L
			Sulfates (SO4)	2024/07/23	<0.50		mg/L
2547368	SXU	Spiked Blank	Orthophosphate (P)	2024/07/23		100	%
2547368	SXU	Method Blank	Orthophosphate (P)	2024/07/23	<0.050		mg/L
2547376	M2S	Spiked Blank	Turbidity	2024/07/23		98	%
2547376	M2S	Method Blank	Turbidity	2024/07/23	<0.10		NTU
2547452	SCT	Spiked Blank	Real Color	2024/07/23		98	%
2547452	SCT	Method Blank	Real Color	2024/07/23	<2.0		UCV
2547597	TEX	Spiked Blank	Phenols-4AAP	2024/07/23		94	%
2547597	TEX	Method Blank	Phenols-4AAP	2024/07/23	<0.0020		mg/L
2547640	BAG	Spiked Blank	Dissolved organic carbon	2024/07/26		102	%
2547640	BAG	Method Blank	Dissolved organic carbon	2024/07/26	<0.20		mg/L
2547717	A2B	Spiked Blank	Total Dissolved Solids	2024/07/23		106	%
2547717	A2B	Method Blank	Total Dissolved Solids	2024/07/23	<10		mg/L
2547946	RIY	Spiked Blank	Total suspended solids (TSS)	2024/07/24		105	%
2547946	RIY	Method Blank	Total suspended solids (TSS)	2024/07/24	<2.0		mg/L
2548079	A2B	Spiked Blank	Total Dissolved Solids	2024/07/24		110	%
2548079	A2B	Method Blank	Total Dissolved Solids	2024/07/24	<10		mg/L
2548497	ANB	Spiked Blank	Total Extractable Aluminum (Al)	2024/07/28		125 (1)	%
			Total Extractable Antimony (Sb)	2024/07/28		117	%
			Total Extractable Silver (Ag)	2024/07/28		106	%
			Total Extractable Arsenic (As)	2024/07/28		107	%
			Total Extractable Barium (Ba)	2024/07/28		105	%
			Total Extractable Beryllium (Be)	2024/07/28		102	%
			Total Extractable Bismuth (Bi)	2024/07/28		107	%
			Total Extractable Boron (B)	2024/07/28		103	%
			Total Extractable Cadmium (Cd)	2024/07/28		106	%
			Total Extractable Calcium (Ca)	2024/07/28		110	%
			Total Extractable Chromium (Cr)	2024/07/28		107	%
			Total Extractable Cobalt (Co)	2024/07/28		103	%
			Total Extractable Copper (Cu)	2024/07/28		102	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Tin (Sn)	2024/07/28		116	%
			Total Extractable Iron (Fe)	2024/07/28		111	%
			Total Extractable Magnesium (Mg)	2024/07/28		113	%
			Total Extractable Manganese (Mn)	2024/07/28		109	%
			Total Extractable Molybdenum (Mo)	2024/07/28		109	%
			Total Extractable Nickel (Ni)	2024/07/28		100	%
			Total Extractable Total phosphorous	2024/07/28		107	%
			Total Extractable Lead (Pb)	2024/07/28		107	%
			Total Extractable Potassium (K)	2024/07/28		113	%
			Total Extractable Selenium (Se)	2024/07/28		108	%
			Total Extractable Sodium (Na)	2024/07/28		116	%
			Total Extractable Strontium (Sr)	2024/07/28		108	%
			Total Extractable Thallium (Tl)	2024/07/28		106	%
			Total Extractable Titanium (Ti)	2024/07/28		109	%
			Total Extractable Uranium (U)	2024/07/28		103	%
			Total Extractable Vanadium (V)	2024/07/28		109	%
			Total Extractable Zinc (Zn)	2024/07/28		105	%
2548497	ANB	Method Blank	Total Extractable Aluminum (Al)	2024/07/28	11, RDL=10		ug/L
			Total Extractable Antimony (Sb)	2024/07/28	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/07/28	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/07/28	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/07/28	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/07/28	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/07/28	<1.0		ug/L
			Total Extractable Boron (B)	2024/07/28	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/07/28	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/07/28	<500		ug/L
			Total Extractable Chromium (Cr)	2024/07/28	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/07/28	<1.0		ug/L
			Total Extractable Copper (Cu)	2024/07/28	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/07/28	<500		ug/L
			Total Extractable Tin (Sn)	2024/07/28	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/07/28	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/07/28	<100		ug/L
			Total Extractable Manganese (Mn)	2024/07/28	<1.0		ug/L
			Total Extractable Molybdenum (Mo)	2024/07/28	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/07/28	<2.0		ug/L
			Total Extractable P2O5	2024/07/28	<25		ug/L
			Total Extractable Total phosphorous	2024/07/28	<10		ug/L
			Total Extractable Lead (Pb)	2024/07/28	<0.50		ug/L
			Total Extractable Potassium (K)	2024/07/28	<500		ug/L
			Total Extractable Selenium (Se)	2024/07/28	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/07/28	<500		ug/L
			Total Extractable Strontium (Sr)	2024/07/28	<2.0		ug/L
			Total Extractable Thallium (Tl)	2024/07/28	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/07/28	<10		ug/L
			Total Extractable Uranium (U)	2024/07/28	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/07/28	<2.0		ug/L
			Total Extractable Zinc (Zn)	2024/07/28	<7.0		ug/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2549046	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/07/26		105	%
2549046	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/07/26	<0.020		mg/L
2549094	EMT	Matrix Spike	Reactive silica (SiO2)	2024/07/25		146 (2)	%
2549094	EMT	Spiked Blank	Reactive silica (SiO2)	2024/07/25		83	%
2549094	EMT	Method Blank	Reactive silica (SiO2)	2024/07/25	<0.50		mg/L
2550221	THL	Matrix Spike	Benzene	2024/07/23		92	%
			Toluene	2024/07/23		92	%
			Ethylbenzene	2024/07/23		96	%
			Total_Xylenes	2024/07/23		96	%
2550221	THL	Spiked Blank	Benzene	2024/07/23		94	%
			Toluene	2024/07/23		94	%
			Ethylbenzene	2024/07/23		98	%
			Total_Xylenes	2024/07/23		98	%
2550221	THL	Method Blank	Benzene	2024/07/23	<0.0010		mg/L
			Toluene	2024/07/23	<0.0010		mg/L
			Ethylbenzene	2024/07/23	<0.0010		mg/L
			Total_Xylenes	2024/07/23	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/07/23	<0.090		mg/L
2550222	éE9	Matrix Spike	Isobutylbenzene - Extractable	2024/07/29		100	%
			n-Dotriacontane - Extractable	2024/07/29		88 (3)	%
			>C10-C16 Hydrocarbons	2024/07/29		79	%
			>C16-C21 Hydrocarbons	2024/07/29		82	%
			>C21-<C32 Hydrocarbons	2024/07/29		78	%
2550222	éE9	Spiked Blank	Isobutylbenzene - Extractable	2024/07/29		99	%
			n-Dotriacontane - Extractable	2024/07/29		84	%
			>C10-C16 Hydrocarbons	2024/07/29		91	%
			>C16-C21 Hydrocarbons	2024/07/29		95	%
			>C21-<C32 Hydrocarbons	2024/07/29		90	%
2550222	éE9	Method Blank	Isobutylbenzene - Extractable	2024/07/29		100	%
			n-Dotriacontane - Extractable	2024/07/29		84	%
			>C10-C16 Hydrocarbons	2024/07/29	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/07/29	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/07/29	<0.090		mg/L
2550223	éE9	Matrix Spike	Isobutylbenzene - Extractable	2024/07/26		94	%
			n-Dotriacontane - Extractable	2024/07/26		99	%
			>C10-C16 Hydrocarbons	2024/07/26		81	%
			>C16-C21 Hydrocarbons	2024/07/26		92	%
			>C21-<C32 Hydrocarbons	2024/07/26		80	%
2550223	éE9	Spiked Blank	Isobutylbenzene - Extractable	2024/07/26		97	%
			n-Dotriacontane - Extractable	2024/07/26		101	%
			>C10-C16 Hydrocarbons	2024/07/26		86	%
			>C16-C21 Hydrocarbons	2024/07/26		90	%
			>C21-<C32 Hydrocarbons	2024/07/26		93	%
2550223	éE9	Method Blank	Isobutylbenzene - Extractable	2024/07/26		95	%
			n-Dotriacontane - Extractable	2024/07/26		95	%
			>C10-C16 Hydrocarbons	2024/07/26	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/07/26	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/07/26	<0.090		mg/L
2550454	JGK	Spiked Blank	Total Extractable Aluminum (Al)	2024/07/30		96	%
2550454	JGK	Method Blank	Total Extractable Aluminum (Al)	2024/07/30	<10		ug/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2553242	NET	Spiked Blank	Total Extractable Mercury (Hg)	2024/08/12		97	%
2553242	NET	Method Blank	Total Extractable Mercury (Hg)	2024/08/12	<0.000010		mg/L

RDL = Reportable Detection Limit

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

(1) Recovery or relative percent difference (RPD) for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria

(2) Poor spike recovery due to probable sample matrix interference.

(3) TEH sample contained sediment.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

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VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:

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Your P.O. #: 3000001617
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 144106

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/09/10
Report #: R2976713
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C447785
Received: 2024/08/27, 09:00

Sample Matrix: Surface Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	2	N/A	2024/08/27	STL SOP-00038	SM 24 2320-B m
Total Alkalinity (end point 4.5)-waters	1	N/A	2024/08/28	STL SOP-00038	SM 24 2320-B m
Anions in water	3	N/A	2024/09/07	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	3	N/A	2024/08/28	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	2	N/A	2024/08/27	STL SOP-00038	SM 24 2510-B m
Conductivity in waters	1	N/A	2024/08/28	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	3	2024/09/04	2024/09/05	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	3	2024/08/28	2024/08/29	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	3	N/A	2024/08/31	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	3	2024/08/28	2024/08/30	STL SOP-00062	MA.200–Mét. 1.2 R7 m
Ammonia Nitrogen in water	1	N/A	2024/08/29	STL SOP-00040	MA.300–N 2.0 R2 m
Ammonia Nitrogen in water	1	N/A	2024/08/30	STL SOP-00040	MA.300–N 2.0 R2 m
Ammonia Nitrogen in water	1	N/A	2024/08/31	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	3	N/A	2024/08/28	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	3	N/A	2024/08/27	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	3	N/A	2024/08/27	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	3	N/A	2024/08/27	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	3	N/A	2024/08/29	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	3	N/A	2024/08/27		Test Kit
Ortho Phosphate-water	3	N/A	2024/08/28	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	3	2024/08/29	2024/08/29	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	3	N/A	2024/08/30	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	3	N/A	2024/08/27		Thermometer
Turbidity-water	3	N/A	2024/08/28	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	3	2024/09/03	2024/09/04	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	3	2024/09/03	2024/09/04	ATL SOP 00022	EPA 366.0 m
VPH in Water (PIRI) (1)	3	2024/08/29	2024/08/29	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau

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Your P.O. #: 3000001617
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 144106

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/09/10
Report #: R2976713
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C447785
Received: 2024/08/27, 09:00

Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
10 Sep 2024 10:56:10

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

==========

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For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Aglaia Yannakis, General Manager responsible for Quebec Environmental laboratory operations.

Bureau Veritas Job #: C447785
Report Date: 2024/09/10

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NK5323	NK5324	NK5325		
Sampling Date		2024/08/26 07:50	2024/08/26 08:50	2024/08/26 09:40		
COC Number		144106	144106	144106		
	Units	HOW-SW5-Q3-2024	HOW-BL-Q3-2024	HOW-TL-Q3-2024	RDL	QC Batch
INORGANICS						
Reactive silica (SiO2) †	mg/L	0.89	5.2	4.8	0.50	2563287
PETROLEUM HYDROCARBONS						
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	0.050	2563657
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	0.050	2563657
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	<0.090	0.090	2563657
Return to baseline at C32 †	mg/L	NA	NA	NA	N/A	2563657
Hydrocarbon Resemblance †	mg/L	NA	NA	NA	N/A	2563657
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	107	110	108	N/A	2563657
n-Dotriacontane - Extractable	%	95	97	96	N/A	2563657

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NK5323	NK5324	NK5325		
Sampling Date		2024/08/26 07:50	2024/08/26 08:50	2024/08/26 09:40		
COC Number		144106	144106	144106		
	Units	HOW-SW5-Q3-2024	HOW-BL-Q3-2024	HOW-TL-Q3-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2561043
Total Extractable Aluminum (Al)	ug/L	12	<10	<10	10	2560908
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Barium (Ba)	ug/L	<2.0	<2.0	2.9	2.0	2560908
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2560908
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2560908
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2560908
Total Extractable Calcium (Ca) †	ug/L	<500	6400	4200	500	2560908
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2560908
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Total Hardness (CaCO3) ††	ug/L	2000	34000	24000	1000	2560908
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2560908
Total Extractable Iron (Fe)	ug/L	120	<60	<60	60	2560908
Total Extractable Magnesium (Mg) †	ug/L	290	4400	3200	100	2560908
Total Extractable Manganese (Mn)	ug/L	20	1.3	6.1	1.0	2560908
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2560908
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2560908
Total Extractable P2O5 ††	ug/L	<25	<25	<25	25	2560908
Total Extractable Total phosphorous	ug/L	<10	<10	<10	10	2560908
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2560908
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2560908
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2560908
Total Extractable Sodium (Na)	ug/L	950	1100	980	500	2560908
Total Extractable Strontium (Sr) †	ug/L	2.6	7.1	7.3	2.0	2560908
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2560908
Total Extractable Titanium (Ti)	ug/L	<10	<10	<10	10	2560908
Total Extractable Uranium (U)	ug/L	<1.0	<1.0	<1.0	1.0	2560908

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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Bureau Veritas Job #: C447785
Report Date: 2024/09/10

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NK5323	NK5324	NK5325		
Sampling Date		2024/08/26 07:50	2024/08/26 08:50	2024/08/26 09:40		
COC Number		144106	144106	144106		
	Units	HOW-SW5-Q3-2024	HOW-BL-Q3-2024	HOW-TL-Q3-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	<2.0	2.0	2560908
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2560908

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NK5323	NK5323		NK5324		
Sampling Date		2024/08/26 07:50	2024/08/26 07:50		2024/08/26 08:50		
COC Number		144106	144106		144106		
	Units	HOW-SW5-Q3-2024	HOW-SW5-Q3-2024 Lab-Dup	QC Batch	HOW-BL-Q3-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.0029	N/A	2560834	0.057	0.0010	2560834
Dissolved organic carbon †	mg/L	1.7	N/A	2563286	0.22	0.20	2563286
Dissolved oxygen †	mg/L	9.5	N/A	2560776	9.5	1.0	2560776
Nitrate (N) and Nitrite(N)	mg/L	<0.020	<0.020	2560919	0.028	0.020	2560919
Nitrates (N-NO3-)	mg/L	<0.020	<0.020	2560919	0.028	0.020	2560919
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	2560919	<0.020	0.020	2560919
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	0.020	N/A	2561629	<0.020	0.020	2561739
Orthophosphate (P)	mg/L	<0.050	N/A	2560911	<0.050	0.050	2560911
pH	pH	6.54	N/A	2560798	7.08	N/A	2560798
pH (15° C) †	pH	6.45	N/A	2560866	7.24	N/A	2560866
pH (on-site) †	pH	6.07	N/A	ONSITE	6.53	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	2561795	<0.0020	0.0020	2561795
Real Color	UCV	6.8	N/A	2560957	<2.0	2.0	2560957
Sulfides (S2-)	mg/L	<0.020	<0.020	2561729	<0.020	0.020	2561729
Turbidity	NTU	0.57	N/A	2561079	0.36	0.10	2561079
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	2.3	N/A	2560835	30	1.0	2560835
Bicarbonates (HCO3 as CaCO3) †	mg/L	2.3	N/A	2560835	30	1.0	2560835
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	2560835	<1.0	1.0	2560835
Chloride (Cl)	mg/L	0.071	N/A	2562685	0.18	0.050	2562685
Sulfates (SO4)	mg/L	<0.50	N/A	2562685	1.8	0.50	2562685
Total Dissolved Solids	mg/L	12	N/A	2562022	33	10	2562022
Total suspended solids (TSS)	mg/L	2.0	N/A	2562484	<2.0	2.0	2562484
On-site Measurements							
Temperature (°C) †	Celsius	14.80	N/A	ONSITE	5.600	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NK5325	NK5325		
Sampling Date		2024/08/26 09:40	2024/08/26 09:40		
COC Number		144106	144106		
	Units	HOW-TL-Q3-2024	HOW-TL-Q3-2024 Lab-Dup	RDL	QC Batch
CONVENTIONALS					
Conductivity	mS/cm	0.042	N/A	0.0010	2560834
Dissolved organic carbon †	mg/L	0.70	N/A	0.20	2563286
Dissolved oxygen †	mg/L	9.7	N/A	1.0	2560776
Nitrate (N) and Nitrite(N)	mg/L	<0.020	N/A	0.020	2560919
Nitrates (N-NO3-)	mg/L	<0.020	N/A	0.020	2560919
Nitrites (N-NO2-)	mg/L	<0.020	N/A	0.020	2560919
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	0.020	2562051
Orthophosphate (P)	mg/L	<0.050	N/A	0.050	2560911
pH	pH	7.42	N/A	N/A	2560798
pH (15° C) †	pH	7.74	N/A	N/A	2560866
pH (on-site) †	pH	7.52	N/A	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	0.0020	2561795
Real Color	UCV	2.3	N/A	2.0	2560957
Sulfides (S2-)	mg/L	<0.020	N/A	0.020	2561729
Turbidity	NTU	0.53	N/A	0.10	2561079
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	23	N/A	1.0	2560835
Bicarbonates (HCO3 as CaCO3) †	mg/L	23	N/A	1.0	2560835
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	1.0	2560835
Chloride (Cl)	mg/L	0.30	N/A	0.050	2562685
Sulfates (SO4)	mg/L	2.4	N/A	0.50	2562685
Total Dissolved Solids	mg/L	39	N/A	10	2562022
Total suspended solids (TSS)	mg/L	2.0	N/A	2.0	2562484
On-site Measurements					
Temperature (°C) †	Celsius	15.30	N/A	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NK5323	NK5324	NK5325		
Sampling Date		2024/08/26 07:50	2024/08/26 08:50	2024/08/26 09:40		
COC Number		144106	144106	144106		
	Units	HOW-SW5-Q3-2024	HOW-BL-Q3-2024	HOW-TL-Q3-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS						
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2563656
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2563656
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2563656
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	0.0020	2563656
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	0.090	2563656

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2560798	KME	Spiked Blank	pH	2024/08/27		101	%
2560834	KME	Spiked Blank	Conductivity	2024/08/27		104	%
2560834	KME	Method Blank	Conductivity	2024/08/27	<0.0010		mS/cm
2560835	KME	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/08/27		101	%
2560835	KME	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/08/27	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/08/27	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/08/27	<1.0		mg/L
2560866	WTE	Spiked Blank	pH (15° C)	2024/08/27		102	%
2560908	DPA	QC Standard	Total Extractable Aluminum (Al)	2024/08/30		106	%
			Total Extractable Antimony (Sb)	2024/08/30		104	%
			Total Extractable Silver (Ag)	2024/08/30		118 (1)	%
			Total Extractable Arsenic (As)	2024/08/30		98	%
			Total Extractable Barium (Ba)	2024/08/30		101	%
			Total Extractable Beryllium (Be)	2024/08/30		98	%
			Total Extractable Boron (B)	2024/08/30		102	%
			Total Extractable Cadmium (Cd)	2024/08/30		96	%
			Total Extractable Chromium (Cr)	2024/08/30		99	%
			Total Extractable Cobalt (Co)	2024/08/30		101	%
			Total Extractable Copper (Cu)	2024/08/30		99	%
			Total Extractable Iron (Fe)	2024/08/30		102	%
			Total Extractable Manganese (Mn)	2024/08/30		99	%
			Total Extractable Molybdenum (Mo)	2024/08/30		101	%
			Total Extractable Nickel (Ni)	2024/08/30		99	%
			Total Extractable Lead (Pb)	2024/08/30		100	%
			Total Extractable Strontium (Sr)	2024/08/30		101	%
			Total Extractable Thallium (Tl)	2024/08/30		97	%
			Total Extractable Vanadium (V)	2024/08/30		98	%
			Total Extractable Zinc (Zn)	2024/08/30		97	%
2560908	DPA	Spiked Blank	Total Extractable Aluminum (Al)	2024/08/30		102	%
			Total Extractable Antimony (Sb)	2024/08/30		108	%
			Total Extractable Silver (Ag)	2024/08/30		103	%
			Total Extractable Arsenic (As)	2024/08/30		104	%
			Total Extractable Barium (Ba)	2024/08/30		100	%
			Total Extractable Beryllium (Be)	2024/08/30		101	%
			Total Extractable Bismuth (Bi)	2024/08/30		103	%
			Total Extractable Boron (B)	2024/08/30		104	%
			Total Extractable Cadmium (Cd)	2024/08/30		99	%
			Total Extractable Calcium (Ca)	2024/08/30		103	%
			Total Extractable Chromium (Cr)	2024/08/30		100	%
			Total Extractable Cobalt (Co)	2024/08/30		101	%
			Total Extractable Copper (Cu)	2024/08/30		100	%
			Total Extractable Tin (Sn)	2024/08/30		106	%
			Total Extractable Iron (Fe)	2024/08/30		103	%
			Total Extractable Magnesium (Mg)	2024/08/30		104	%
			Total Extractable Manganese (Mn)	2024/08/30		101	%
			Total Extractable Molybdenum (Mo)	2024/08/30		104	%
			Total Extractable Nickel (Ni)	2024/08/30		99	%
			Total Extractable Total phosphorous	2024/08/30		101	%
			Total Extractable Lead (Pb)	2024/08/30		101	%
			Total Extractable Potassium (K)	2024/08/30		103	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Selenium (Se)	2024/08/30		106	%
			Total Extractable Sodium (Na)	2024/08/30		105	%
			Total Extractable Strontium (Sr)	2024/08/30		103	%
			Total Extractable Thallium (Tl)	2024/08/30		97	%
			Total Extractable Titanium (Ti)	2024/08/30		105	%
			Total Extractable Uranium (U)	2024/08/30		102	%
			Total Extractable Vanadium (V)	2024/08/30		103	%
			Total Extractable Zinc (Zn)	2024/08/30		96	%
2560908	DPA	Method Blank	Total Extractable Aluminum (Al)	2024/08/30	<10		ug/L
			Total Extractable Antimony (Sb)	2024/08/30	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/08/30	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/08/30	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/08/30	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/08/30	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/08/30	<1.0		ug/L
			Total Extractable Boron (B)	2024/08/30	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/08/30	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/08/30	<500		ug/L
			Total Extractable Chromium (Cr)	2024/08/30	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/08/30	<1.0		ug/L
			Total Extractable Copper (Cu)	2024/08/30	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/08/30	<1000		ug/L
			Total Extractable Tin (Sn)	2024/08/30	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/08/30	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/08/30	<100		ug/L
			Total Extractable Manganese (Mn)	2024/08/30	<1.0		ug/L
			Total Extractable Molybdenum (Mo)	2024/08/30	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/08/30	<2.0		ug/L
			Total Extractable P2O5	2024/08/30	<25		ug/L
			Total Extractable Total phosphorous	2024/08/30	<10		ug/L
			Total Extractable Lead (Pb)	2024/08/30	<0.50		ug/L
			Total Extractable Potassium (K)	2024/08/30	<500		ug/L
			Total Extractable Selenium (Se)	2024/08/30	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/08/30	<500		ug/L
			Total Extractable Strontium (Sr)	2024/08/30	<2.0		ug/L
			Total Extractable Thallium (Tl)	2024/08/30	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/08/30	<10		ug/L
			Total Extractable Uranium (U)	2024/08/30	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/08/30	<2.0		ug/L
			Total Extractable Zinc (Zn)	2024/08/30	<7.0		ug/L
2560911	SXU	QC Standard	Orthophosphate (P)	2024/08/28		104	%
2560911	SXU	Spiked Blank	Orthophosphate (P)	2024/08/28		114	%
2560911	SXU	Method Blank	Orthophosphate (P)	2024/08/28	<0.050		mg/L
2560919	GXL	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/08/28		91	%
			Nitrates (N-NO3-)	2024/08/28		92	%
			Nitrites (N-NO2-)	2024/08/28		91	%
2560919	GXL	Method Blank	Nitrate (N) and Nitrite(N)	2024/08/28	<0.020		mg/L
			Nitrates (N-NO3-)	2024/08/28	<0.020		mg/L
			Nitrites (N-NO2-)	2024/08/28	<0.020		mg/L
2560957	LTA	Spiked Blank	Real Color	2024/08/28		99	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2560957	LTA	Method Blank	Real Color	2024/08/28	<2.0		UCV
2561043	JGK	Spiked Blank	Total Extractable Mercury (Hg)	2024/08/29		101	%
2561043	JGK	Method Blank	Total Extractable Mercury (Hg)	2024/08/29	<0.000010		mg/L
2561079	TNG	Spiked Blank	Turbidity	2024/08/28		94	%
2561079	TNG	Method Blank	Turbidity	2024/08/28	<0.10		NTU
2561629	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/29		104	%
2561629	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/29	<0.020		mg/L
2561729	SD9	Spiked Blank	Sulfides (S2-)	2024/08/29		93	%
2561729	SD9	Method Blank	Sulfides (S2-)	2024/08/29	<0.020		mg/L
2561739	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/30		104	%
2561739	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/30	<0.020		mg/L
2561795	HGU	Spiked Blank	Phenols-4AAP	2024/08/29		102	%
2561795	HGU	Method Blank	Phenols-4AAP	2024/08/29	<0.0020		mg/L
2562022	RIY	Spiked Blank	Total Dissolved Solids	2024/08/30		88	%
2562022	RIY	Method Blank	Total Dissolved Solids	2024/08/30	<10		mg/L
2562051	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/31		101	%
2562051	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/08/31	<0.020		mg/L
2562484	A2B	Spiked Blank	Total suspended solids (TSS)	2024/08/31		106	%
2562484	A2B	Method Blank	Total suspended solids (TSS)	2024/08/31	<2.0		mg/L
2562685	LTA	Spiked Blank	Chloride (Cl)	2024/09/07		94	%
			Sulfates (SO4)	2024/09/07		94	%
2562685	LTA	Method Blank	Chloride (Cl)	2024/09/07	<0.050		mg/L
			Sulfates (SO4)	2024/09/07	<0.50		mg/L
2563286	WPR	Spiked Blank	Dissolved organic carbon	2024/09/05		93	%
2563286	WPR	Method Blank	Dissolved organic carbon	2024/09/05	<0.20		mg/L
2563287	EMT	Matrix Spike	Reactive silica (SiO2)	2024/09/04		90	%
2563287	EMT	Spiked Blank	Reactive silica (SiO2)	2024/09/04		90	%
2563287	EMT	Method Blank	Reactive silica (SiO2)	2024/09/04	<0.50		mg/L
2563656	THL	Matrix Spike	Benzene	2024/08/29		100	%
			Toluene	2024/08/29		98	%
			Ethylbenzene	2024/08/29		100	%
			Total_Xylenes	2024/08/29		101	%
2563656	THL	Spiked Blank	Benzene	2024/08/29		102	%
			Toluene	2024/08/29		100	%
			Ethylbenzene	2024/08/29		103	%
			Total_Xylenes	2024/08/29		104	%
2563656	THL	Method Blank	Benzene	2024/08/29	<0.0010		mg/L
			Toluene	2024/08/29	<0.0010		mg/L
			Ethylbenzene	2024/08/29	<0.0010		mg/L
			Total_Xylenes	2024/08/29	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/08/29	<0.090		mg/L
2563657	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/09/04		107	%
			n-Dotriacontane - Extractable	2024/09/04		104	%
			>C10-C16 Hydrocarbons	2024/09/04		87	%
			>C16-C21 Hydrocarbons	2024/09/04		88	%
			>C21-<C32 Hydrocarbons	2024/09/04		94	%
2563657	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/09/04		102	%
			n-Dotriacontane - Extractable	2024/09/04		107	%
			>C10-C16 Hydrocarbons	2024/09/04		103	%
			>C16-C21 Hydrocarbons	2024/09/04		103	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			>C21-<C32 Hydrocarbons	2024/09/04		112	%
2563657	éE6	Method Blank	Isobutylbenzene - Extractable	2024/09/04		91	%
			n-Dotriacontane - Extractable	2024/09/04		94	%
			>C10-C16 Hydrocarbons	2024/09/04	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/09/04	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/09/04	<0.090		mg/L

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

(1) Recovery or relative percent difference (RPD) for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria

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Bureau Veritas Job #: C447785
Report Date: 2024/09/10

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001617
Sampler Initials: DH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cansu Bolukbas
Membre OCQ#2324-095
Cansu Bolukbas, B.Sc., Chemist, Montreal, Analyst II

Faouzi Sarsi, B.Sc. Chemist, Montréal, SR Analyst

Jonathan Fauvel, B.Sc., Chemist, Montreal, Scientific Specialist

Janah Rhyno, Scientific Specialist

Michelina Cinquino, Analyst II

Mira El Masri, M.Sc. Chemist, Montréal, Analyst II

Phil Deveau, Scientific Specialist (Organics)

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VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:

Shu Yang, B.Sc. Chemist, Montreal, Analyst II

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 144291

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/09/12
Report #: R2977279
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C448208
Received: 2024/08/28, 09:00

Sample Matrix: Surface Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	3	N/A	2024/08/28	STL SOP-00038	SM 24 2320-B m
Anions in water	3	N/A	2024/08/29	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	3	N/A	2024/08/29	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	3	N/A	2024/08/28	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	3	2024/09/04	2024/09/05	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	3	2024/08/30	2024/09/03	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	3	N/A	2024/09/03	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	3	2024/08/29	2024/08/29	STL SOP-00062	MA.200–Mét. 1.2 R7 m
Ammonia Nitrogen in water	3	N/A	2024/09/03	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	3	N/A	2024/08/29	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	3	N/A	2024/08/28	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	3	N/A	2024/08/28	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	3	N/A	2024/08/28	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	3	N/A	2024/09/04	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	3	N/A	2024/08/28		Test Kit
Ortho Phosphate-water	3	N/A	2024/08/29	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	3	2024/09/04	2024/09/04	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	3	N/A	2024/08/31	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	3	N/A	2024/08/28		Thermometer
Turbidity-water	3	N/A	2024/08/29	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	2	2024/09/03	2024/09/04	ATL SOP 00113	Atl. RBCA v3.1 m
TEH in Water (PIRI) (1)	1	2024/09/05	2024/09/05	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	3	2024/09/04	2024/09/05	ATL SOP 00022	EPA 366.0 m
VPH in Water (PIRI) (1)	3	2024/08/30	2024/08/30	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in

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Your P.O. #: 3000001770
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 144291

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/09/12
Report #: R2977279
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C448208
Received: 2024/08/28, 09:00

writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
12 Sep 2024 08:05:50

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

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Bureau Veritas Job #: C448208
Report Date: 2024/09/12

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NK6961	NK6962		NK6963		
Sampling Date		2024/08/27 08:10	2024/08/27 08:50		2024/08/27 09:45		
COC Number		144291	144291		144291		
	Units	HOW-SW1-Q3-2024	HOW-SW4-Q3-2024	QC Batch	HOW-ML-Q3-2024	RDL	QC Batch
INORGANICS							
Reactive silica (SiO2) †	mg/L	4.8	5.3	2564304	0.79	0.50	2564304
PETROLEUM HYDROCARBONS							
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	2563657	<0.050	0.050	2564305
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	2563657	<0.050	0.050	2564305
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	2563657	<0.090	0.090	2564305
Return to baseline at C32 †	mg/L	NA	NA	2563657	NA	N/A	2564305
Hydrocarbon Resemblance †	mg/L	NA	NA	2563657	NA	N/A	2564305
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	111	111	2563657	105	N/A	2564305
n-Dotriacontane - Extractable	%	99	97	2563657	121	N/A	2564305

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NK6961	NK6962	NK6963		
Sampling Date		2024/08/27 08:10	2024/08/27 08:50	2024/08/27 09:45		
COC Number		144291	144291	144291		
	Units	HOW-SW1-Q3-2024	HOW-SW4-Q3-2024	HOW-ML-Q3-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2562155
Total Extractable Aluminum (Al)	ug/L	<10	<10	23	10	2561388
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Barium (Ba)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2561388
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2561388
Total Extractable Calcium (Ca) †	ug/L	3300	2100	2000	500	2561388
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2561388
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Total Hardness (CaCO3) ††	ug/L	18000	12000	12000	1000	2561388
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable Iron (Fe)	ug/L	<60	<60	81	60	2561388
Total Extractable Magnesium (Mg) †	ug/L	2400	1600	1600	100	2561388
Total Extractable Manganese (Mn)	ug/L	3.5	<1.0	16	1.0	2561388
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2561388
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable P2O5 ††	ug/L	<25	<25	<25	25	2561388
Total Extractable Total phosphorous	ug/L	<10	<10	<10	10	2561388
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2561388
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2561388
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2561388
Total Extractable Sodium (Na)	ug/L	830	790	<500	500	2561388
Total Extractable Strontium (Sr) †	ug/L	6.4	5.1	4.8	2.0	2561388
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable Titanium (Ti)	ug/L	<10	<10	<10	10	2561388
Total Extractable Uranium (U)	ug/L	<1.0	<1.0	<1.0	1.0	2561388

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NK6961	NK6962	NK6963		
Sampling Date		2024/08/27 08:10	2024/08/27 08:50	2024/08/27 09:45		
COC Number		144291	144291	144291		
	Units	HOW-SW1-Q3-2024	HOW-SW4-Q3-2024	HOW-ML-Q3-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	<2.0	2.0	2561388
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2561388

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NK6961	NK6961	NK6962		
Sampling Date		2024/08/27 08:10	2024/08/27 08:10	2024/08/27 08:50		
COC Number		144291	144291	144291		
	Units	HOW-SW1-Q3-2024	HOW-SW1-Q3-2024 Lab-Dup	HOW-SW4-Q3-2024	RDL	QC Batch
CONVENTIONALS						
Conductivity	mS/cm	0.041	0.040	0.028	0.0010	2561340
Dissolved organic carbon †	mg/L	0.52	N/A	0.36	0.20	2563286
Dissolved oxygen †	mg/L	10	N/A	10	1.0	2561318
Nitrate (N) and Nitrite(N)	mg/L	0.26	N/A	0.55	0.020	2561493
Nitrates (N-NO3-)	mg/L	0.26	N/A	0.55	0.020	2561493
Nitrites (N-NO2-)	mg/L	<0.020	N/A	<0.020	0.020	2561493
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	N/A	<0.020	0.020	2562554
Orthophosphate (P)	mg/L	<0.050	N/A	<0.050	0.050	2561572
pH	pH	7.24	7.09	6.75	N/A	2561304
pH (15° C) †	pH	7.30	N/A	6.79	N/A	2561344
pH (on-site) †	pH	6.19	N/A	6.36	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	<0.0020	0.0020	2563308
Real Color	UCV	<2.0	N/A	<2.0	2.0	2561510
Sulfides (S2-)	mg/L	<0.020	<0.020	<0.020	0.020	2563173
Turbidity	NTU	0.22	N/A	0.14	0.10	2561402
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	17	16	9.1	1.0	2561342
Bicarbonates (HCO3 as CaCO3) †	mg/L	17	16	9.1	1.0	2561342
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	<1.0	1.0	2561342
Chloride (Cl)	mg/L	0.44	N/A	0.81	0.050	2561495
Sulfates (SO4)	mg/L	2.1	N/A	1.1	0.50	2561495
Total Dissolved Solids	mg/L	30	N/A	19	10	2562505
Total suspended solids (TSS)	mg/L	<2.0	N/A	<2.0	2.0	2562626
On-site Measurements						
Temperature (°C) †	Celsius	7.500	N/A	3.200	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NK6963		
Sampling Date		2024/08/27 09:45		
COC Number		144291		
	Units	**HOW-ML-Q3-2024**	**RDL**	**QC Batch**
CONVENTIONALS				
Conductivity	mS/cm	0.025	0.0010	2561340
Dissolved organic carbon †	mg/L	2.2	0.20	2563286
Dissolved oxygen †	mg/L	9.7	1.0	2561318
Nitrate (N) and Nitrite(N)	mg/L	<0.020	0.020	2561493
Nitrates (N-NO3-)	mg/L	<0.020	0.020	2561493
Nitrites (N-NO2-)	mg/L	<0.020	0.020	2561493
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	0.020	2562554
Orthophosphate (P)	mg/L	<0.050	0.050	2561572
pH	pH	6.87	N/A	2561304
pH (15° C) †	pH	7.20	N/A	2561344
pH (on-site) †	pH	6.39	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	0.0020	2563308
Real Color	UCV	6.6	2.0	2561510
Sulfides (S2-)	mg/L	<0.020	0.020	2563173
Turbidity	NTU	0.92	0.10	2561402
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	8.3	1.0	2561342
Bicarbonates (HCO3 as CaCO3) †	mg/L	8.3	1.0	2561342
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	1.0	2561342
Chloride (Cl)	mg/L	0.082	0.050	2561495
Sulfates (SO4)	mg/L	3.0	0.50	2561495
Total Dissolved Solids	mg/L	19	10	2562505
Total suspended solids (TSS)	mg/L	<2.0	2.0	2562626
On-site Measurements				
Temperature (°C) †	Celsius	16.10	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

Bureau Veritas Job #: C448208
Report Date: 2024/09/12

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NK6961	NK6962	NK6963		
Sampling Date		2024/08/27 08:10	2024/08/27 08:50	2024/08/27 09:45		
COC Number		144291	144291	144291		
	Units	HOW-SW1-Q3-2024	HOW-SW4-Q3-2024	HOW-ML-Q3-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS						
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2564303
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2564303
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	0.0010	2564303
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	0.0020	2564303
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	0.090	2564303

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

CONVENTIONAL PARAMETERS (SURFACE WATER)

Dissolved oxygen: Sample container contained head space. NK6963

Results relate only to the items tested.

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2561304	KME	Spiked Blank	pH	2024/08/28		101	%
2561340	KME	Spiked Blank	Conductivity	2024/08/28		101	%
2561340	KME	Method Blank	Conductivity	2024/08/28	<0.0010		mS/cm
2561342	KME	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/08/28		104	%
2561342	KME	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/08/28	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/08/28	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/08/28	<1.0		mg/L
2561344	WTE	Spiked Blank	pH (15° C)	2024/08/28		102	%
2561388	DPA	Spiked Blank	Total Extractable Aluminum (Al)	2024/08/29		98	%
			Total Extractable Antimony (Sb)	2024/08/29		107	%
			Total Extractable Silver (Ag)	2024/08/29		105	%
			Total Extractable Arsenic (As)	2024/08/29		103	%
			Total Extractable Barium (Ba)	2024/08/29		100	%
			Total Extractable Beryllium (Be)	2024/08/29		99	%
			Total Extractable Bismuth (Bi)	2024/08/29		103	%
			Total Extractable Boron (B)	2024/08/29		97	%
			Total Extractable Cadmium (Cd)	2024/08/29		101	%
			Total Extractable Calcium (Ca)	2024/08/29		100	%
			Total Extractable Chromium (Cr)	2024/08/29		101	%
			Total Extractable Cobalt (Co)	2024/08/29		101	%
			Total Extractable Copper (Cu)	2024/08/29		99	%
			Total Extractable Tin (Sn)	2024/08/29		107	%
			Total Extractable Iron (Fe)	2024/08/29		100	%
			Total Extractable Magnesium (Mg)	2024/08/29		89	%
			Total Extractable Manganese (Mn)	2024/08/29		101	%
			Total Extractable Molybdenum (Mo)	2024/08/29		100	%
			Total Extractable Nickel (Ni)	2024/08/29		97	%
			Total Extractable Total phosphorous	2024/08/29		96	%
			Total Extractable Lead (Pb)	2024/08/29		101	%
			Total Extractable Potassium (K)	2024/08/29		94	%
			Total Extractable Selenium (Se)	2024/08/29		106	%
			Total Extractable Sodium (Na)	2024/08/29		100	%
			Total Extractable Strontium (Sr)	2024/08/29		103	%
			Total Extractable Thallium (Tl)	2024/08/29		96	%
			Total Extractable Titanium (Ti)	2024/08/29		102	%
			Total Extractable Uranium (U)	2024/08/29		101	%
			Total Extractable Vanadium (V)	2024/08/29		103	%
			Total Extractable Zinc (Zn)	2024/08/29		98	%
2561388	DPA	Method Blank	Total Extractable Aluminum (Al)	2024/08/29	<10		ug/L
			Total Extractable Antimony (Sb)	2024/08/29	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/08/29	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/08/29	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/08/29	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/08/29	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/08/29	<1.0		ug/L
			Total Extractable Boron (B)	2024/08/29	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/08/29	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/08/29	<500		ug/L
			Total Extractable Chromium (Cr)	2024/08/29	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/08/29	<1.0		ug/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Copper (Cu)	2024/08/29	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/08/29	<1000		ug/L
			Total Extractable Tin (Sn)	2024/08/29	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/08/29	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/08/29	<100		ug/L
			Total Extractable Manganese (Mn)	2024/08/29	<1.0		ug/L
			Total Extractable Molybdenum (Mo)	2024/08/29	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/08/29	<2.0		ug/L
			Total Extractable P2O5	2024/08/29	<25		ug/L
			Total Extractable Total phosphorous	2024/08/29	<10		ug/L
			Total Extractable Lead (Pb)	2024/08/29	<0.50		ug/L
			Total Extractable Potassium (K)	2024/08/29	<500		ug/L
			Total Extractable Selenium (Se)	2024/08/29	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/08/29	<500		ug/L
			Total Extractable Strontium (Sr)	2024/08/29	<2.0		ug/L
			Total Extractable Thallium (Tl)	2024/08/29	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/08/29	<10		ug/L
			Total Extractable Uranium (U)	2024/08/29	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/08/29	<2.0		ug/L
			Total Extractable Zinc (Zn)	2024/08/29	<7.0		ug/L
2561402	K1K	Spiked Blank	Turbidity	2024/08/29		100	%
2561402	K1K	Method Blank	Turbidity	2024/08/29	<0.10		NTU
2561493	GXL	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/08/29		95	%
			Nitrates (N-NO3-)	2024/08/29		93	%
			Nitrites (N-NO2-)	2024/08/29		96	%
2561493	GXL	Method Blank	Nitrate (N) and Nitrite(N)	2024/08/29	<0.020		mg/L
			Nitrates (N-NO3-)	2024/08/29	<0.020		mg/L
			Nitrites (N-NO2-)	2024/08/29	<0.020		mg/L
2561495	GXL	Spiked Blank	Chloride (Cl)	2024/08/29		94	%
			Sulfates (SO4)	2024/08/29		97	%
2561495	GXL	Method Blank	Chloride (Cl)	2024/08/29	<0.050		mg/L
			Sulfates (SO4)	2024/08/29	<0.50		mg/L
2561510	NQI	Spiked Blank	Real Color	2024/08/29		99	%
2561510	NQI	Method Blank	Real Color	2024/08/29	<2.0		UCV
2561572	SXU	QC Standard	Orthophosphate (P)	2024/08/29		103	%
2561572	SXU	Spiked Blank	Orthophosphate (P)	2024/08/29		107	%
2561572	SXU	Method Blank	Orthophosphate (P)	2024/08/29	<0.050		mg/L
2562155	ST5	Spiked Blank	Total Extractable Mercury (Hg)	2024/09/03		99	%
2562155	ST5	Method Blank	Total Extractable Mercury (Hg)	2024/09/03	<0.000010		mg/L
2562505	JCT	Spiked Blank	Total Dissolved Solids	2024/08/31		96	%
2562505	JCT	Method Blank	Total Dissolved Solids	2024/08/31	<10		mg/L
2562554	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/09/03		96	%
2562554	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/09/03	<0.020		mg/L
2562626	AMJ	Spiked Blank	Total suspended solids (TSS)	2024/09/03		91	%
2562626	AMJ	Method Blank	Total suspended solids (TSS)	2024/09/03	<2.0		mg/L
2563173	LI	Spiked Blank	Sulfides (S2-)	2024/09/04		103	%
2563173	LI	Method Blank	Sulfides (S2-)	2024/09/04	<0.020		mg/L
2563286	WPR	Spiked Blank	Dissolved organic carbon	2024/09/05		93	%
2563286	WPR	Method Blank	Dissolved organic carbon	2024/09/05	<0.20		mg/L
2563308	HGU	Spiked Blank	Phenols-4AAP	2024/09/04		100	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2563308	HGU	Method Blank	Phenols-4AAP	2024/09/04	<0.0020		mg/L
2563657	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/09/04		107	%
			n-Dotriacontane - Extractable	2024/09/04		104	%
			>C10-C16 Hydrocarbons	2024/09/04		87	%
			>C16-C21 Hydrocarbons	2024/09/04		88	%
			>C21-<C32 Hydrocarbons	2024/09/04		94	%
2563657	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/09/04		102	%
			n-Dotriacontane - Extractable	2024/09/04		107	%
			>C10-C16 Hydrocarbons	2024/09/04		103	%
			>C16-C21 Hydrocarbons	2024/09/04		103	%
			>C21-<C32 Hydrocarbons	2024/09/04		112	%
2563657	éE6	Method Blank	Isobutylbenzene - Extractable	2024/09/04		91	%
			n-Dotriacontane - Extractable	2024/09/04		94	%
			>C10-C16 Hydrocarbons	2024/09/04	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/09/04	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/09/04	<0.090		mg/L
2564303	THL	Matrix Spike	Benzene	2024/08/30		99	%
			Toluene	2024/08/30		98	%
			Ethylbenzene	2024/08/30		100	%
			Total_Xylenes	2024/08/30		100	%
2564303	THL	Spiked Blank	Benzene	2024/08/30		104	%
			Toluene	2024/08/30		103	%
			Ethylbenzene	2024/08/30		106	%
			Total_Xylenes	2024/08/30		106	%
2564303	THL	Method Blank	Benzene	2024/08/30	<0.0010		mg/L
			Toluene	2024/08/30	<0.0010		mg/L
			Ethylbenzene	2024/08/30	<0.0010		mg/L
			Total_Xylenes	2024/08/30	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/08/30	<0.090		mg/L
2564304	EMT	Matrix Spike	Reactive silica (SiO2)	2024/09/05		NC	%
2564304	EMT	Spiked Blank	Reactive silica (SiO2)	2024/09/05		90	%
2564304	EMT	Method Blank	Reactive silica (SiO2)	2024/09/05	<0.50		mg/L
2564305	éE9	Matrix Spike	Isobutylbenzene - Extractable	2024/09/05		108	%
			n-Dotriacontane - Extractable	2024/09/05		104	%
			>C10-C16 Hydrocarbons	2024/09/05		90	%
			>C16-C21 Hydrocarbons	2024/09/05		93	%
			>C21-<C32 Hydrocarbons	2024/09/05		87	%
2564305	éE9	Spiked Blank	Isobutylbenzene - Extractable	2024/09/05		96	%
			n-Dotriacontane - Extractable	2024/09/05		110	%
			>C10-C16 Hydrocarbons	2024/09/05		94	%
			>C16-C21 Hydrocarbons	2024/09/05		98	%
			>C21-<C32 Hydrocarbons	2024/09/05		90	%
2564305	éE9	Method Blank	Isobutylbenzene - Extractable	2024/09/05		83	%
			n-Dotriacontane - Extractable	2024/09/05		114	%
			>C10-C16 Hydrocarbons	2024/09/05	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/09/05	<0.050		mg/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			>C21-<C32 Hydrocarbons	2024/09/05	<0.090		mg/L

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

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Bureau Veritas Job #: C448208
Report Date: 2024/09/12

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001770
Sampler Initials: DH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, Scientific Service Specialist

Cansu Bolukbas
Membre OCQ#2324-095
Cansu Bolukbas, B.Sc., Chemist, Montreal, Analyst II

Jonathan Fauvel, B.Sc., Chemist, Montreal, Scientific Specialist

Phil Deveau, Scientific Specialist (Organics)

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QUÉBEC
Shu Yang, B.Sc. Chemist, Montreal, Analyst II

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Your P.O. #: 3000001868
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 149896

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/10/23
Report #: R2991730
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C457894
Received: 2024/10/08, 09:40

Sample Matrix: Surface Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	4	N/A	2024/10/09	STL SOP-00038	SM 24 2320-B m
Anions in water	4	N/A	2024/10/08	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	4	N/A	2024/10/09	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	4	N/A	2024/10/09	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	4	2024/10/09	2024/10/09	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	4	2024/10/16	2024/10/18	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	4	N/A	2024/10/08	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	4	2024/10/10	2024/10/13	STL SOP-00062	MA.200–Mét. 1.2 R9 m
Ammonia Nitrogen in water	3	N/A	2024/10/15	STL SOP-00040	MA.300–N 2.0 R2 m
Ammonia Nitrogen in water	1	N/A	2024/10/18	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	4	N/A	2024/10/08	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	4	N/A	2024/10/08	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	4	N/A	2024/10/09	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	4	N/A	2024/10/08	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	4	N/A	2024/10/12	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	4	N/A	2024/10/08		Test Kit
Ortho Phosphate-water	4	N/A	2024/10/09	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	4	2024/10/12	2024/10/12	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	4	N/A	2024/10/09	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	4	N/A	2024/10/08		Thermometer
Turbidity-water	4	N/A	2024/10/09	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	4	2024/10/15	2024/10/15	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	4	2024/10/11	2024/10/15	ATL SOP 00022	EPA 366.0 m
ModTPH (T1) Calc. for Water (1)	4	2024/10/08	2024/10/16	N/A	Atl. RBCA v3 m
VPH in Water (PIRI) (1)	4	2024/10/10	2024/10/10	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

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Your P.O. #: 3000001868
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 149896

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/10/23
Report #: R2991730
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C457894

Received: 2024/10/08, 09:40

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
23 Oct 2024 11:11:37

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

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Bureau Veritas Job #: C457894
Report Date: 2024/10/23

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NP6343	NP6344	NP6345	NP6346		
Sampling Date		2024/10/07 09:05	2024/10/07 08:32	2024/10/07 09:51	2024/10/07 10:38		
COC Number		149896	149896	149896	149896		
	Units	HOW-BC-Q4-2024	HOW-BLQ4-2024	HOW-TL-Q4-2024	How-ML-Q4-2024	RDL	QC Batch
INORGANICS							
Reactive silica (SiO2) †	mg/L	4.3	6.0	5.3	<0.50	0.50	2580378
PETROLEUM HYDROCARBONS							
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2580377
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2580377
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2580377
Return to baseline at C32 †	mg/L	NA	NA	NA	NA	N/A	2580377
Hydrocarbon Resemblance †	mg/L	NA	NA	NA	NA	N/A	2580377
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	92	103	95	93	N/A	2580377
n-Dotriacontane - Extractable	%	115	128	120	117	N/A	2580377

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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Bureau Veritas Job #: C457894
Report Date: 2024/10/23

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NP6343	NP6344	NP6345	NP6346		
Sampling Date		2024/10/07 09:05	2024/10/07 08:32	2024/10/07 09:51	2024/10/07 10:38		
COC Number		149896	149896	149896	149896		
	Units	HOW-BC-Q4-2024	HOW-BLQ4-2024	HOW-TL-Q4-2024	How-ML-Q4-2024	RDL	QC Batch
METALS							
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	2580524
Total Extractable Aluminum (Al)	ug/L	100	<10	<10	13	10	2578480
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Barium (Ba)	ug/L	3.0	<2.0	3.4	<2.0	2.0	2578480
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	2578480
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Boron (B) †	ug/L	<50	<50	<50	<50	50	2578480
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	2578480
Total Extractable Calcium (Ca) †	ug/L	530	5400	4200	1900	500	2578480
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	2578480
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Copper (Cu)	ug/L	1.2	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Total Hardness (CaCO3) ††	ug/L	3800	30000	25000	11000	1000	2578480
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	2578480
Total Extractable Iron (Fe)	ug/L	1300	<60	<60	<60	60	2578480
Total Extractable Magnesium (Mg) †	ug/L	610	4000	3400	1600	100	2578480
Total Extractable Manganese (Mn)	ug/L	130	2.3	6.7	1.9	1.0	2578480
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	2578480
Total Extractable P2O5 ††	ug/L	49	<25	<25	<25	25	2578480
Total Extractable Total phosphorous	ug/L	21	<10	<10	<10	10	2578480
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	2578480
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	<500	500	2578480
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	<3.0	3.0	2578480
Total Extractable Sodium (Na)	ug/L	840	890	810	<500	500	2578480
Total Extractable Strontium (Sr) †	ug/L	3.2	6.8	7.4	4.5	2.0	2578480
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	2578480
Total Extractable Titanium (Ti)	ug/L	<10	<10	<10	<10	10	2578480
Total Extractable Uranium (U)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	2578480

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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Bureau Veritas Job #: C457894
Report Date: 2024/10/23

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NP6343	NP6344	NP6345	NP6346		
Sampling Date		2024/10/07 09:05	2024/10/07 08:32	2024/10/07 09:51	2024/10/07 10:38		
COC Number		149896	149896	149896	149896		
	Units	HOW-BC-Q4-2024	HOW-BLQ4-2024	HOW-TL-Q4-2024	How-ML-Q4-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	2578480
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	<7.0	7.0	2578480

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NP6343	NP6343		NP6344		
Sampling Date		2024/10/07 09:05	2024/10/07 09:05		2024/10/07 08:32		
COC Number		149896	149896		149896		
	Units	HOW-BC-Q4-2024	HOW-BC-Q4-2024 Lab-Dup	QC Batch	HOW-BLQ4-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.011	N/A	2577410	0.056	0.0010	2577410
Dissolved organic carbon †	mg/L	2.9	2.8	2577767	0.34	0.20	2577767
Dissolved oxygen †	mg/L	8.7	N/A	2577415	11	1.0	2577415
Nitrate (N) and Nitrite(N)	mg/L	<0.020	N/A	2577311	<0.020	0.020	2577311
Nitrates (N-NO3-)	mg/L	<0.020	N/A	2577311	<0.020	0.020	2577311
Nitrites (N-NO2-)	mg/L	<0.020	N/A	2577311	<0.020	0.020	2577311
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	N/A	2581725	<0.020	0.020	2579438
Orthophosphate (P)	mg/L	<0.050	N/A	2577465	<0.050	0.050	2577465
pH	pH	6.34	N/A	2577356	6.60	N/A	2577356
pH (15° C) †	pH	6.00	N/A	2577372	7.24	N/A	2577372
pH (on-site) †	pH	5.91	N/A	ONSITE	7.18	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	2579327	<0.0020	0.0020	2579327
Real Color	UCV	47	N/A	2577462	<2.0	2.0	2577462
Sulfides (S2-)	mg/L	<0.020	N/A	2579387	<0.020	0.020	2579387
Turbidity	NTU	2.9	N/A	2577461	0.32	0.10	2577461
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	4.3	N/A	2577409	28	1.0	2577409
Bicarbonates (HCO3 as CaCO3) †	mg/L	4.3	N/A	2577409	28	1.0	2577409
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	2577409	<1.0	1.0	2577409
Chloride (Cl)	mg/L	0.20	N/A	2577315	0.14	0.050	2577315
Sulfates (SO4)	mg/L	1.0	N/A	2577315	2.2	0.50	2577315
Total Dissolved Solids	mg/L	22	N/A	2577624	37	10	2577624
Total suspended solids (TSS)	mg/L	7.0	N/A	2577269	2.0	2.0	2577269
On-site Measurements							
Temperature (°C) †	Celsius	6.100	N/A	ONSITE	5.200	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NP6345	NP6345	NP6346		
Sampling Date		2024/10/07 09:51	2024/10/07 09:51	2024/10/07 10:38		
COC Number		149896	149896	149896		
	Units	HOW-TL-Q4-2024	HOW-TL-Q4-2024 Lab-Dup	How-ML-Q4-2024	RDL	QC Batch
CONVENTIONALS						
Conductivity	mS/cm	0.047	N/A	0.021	0.0010	2577410
Dissolved organic carbon †	mg/L	0.62	N/A	1.9	0.20	2577767
Dissolved oxygen †	mg/L	11	N/A	11	1.0	2577415
Nitrate (N) and Nitrite(N)	mg/L	0.051	N/A	<0.020	0.020	2577311
Nitrates (N-NO3-)	mg/L	0.051	N/A	<0.020	0.020	2577311
Nitrites (N-NO2-)	mg/L	<0.020	N/A	<0.020	0.020	2577311
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	N/A	<0.020	0.020	2579438
Orthophosphate (P)	mg/L	<0.050	N/A	<0.050	0.050	2577465
pH	pH	6.70	N/A	6.27	N/A	2577356
pH (15° C) †	pH	7.42	N/A	7.05	N/A	2577372
pH (on-site) †	pH	7.54	N/A	7.49	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	N/A	<0.0020	0.0020	2579327
Real Color	UCV	<2.0	N/A	2.4	2.0	2577462
Sulfides (S2-)	mg/L	<0.020	<0.020	<0.020	0.020	2579387
Turbidity	NTU	0.48	0.52	0.57	0.10	2577461
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	22	N/A	7.1	1.0	2577409
Bicarbonates (HCO3 as CaCO3) †	mg/L	22	N/A	7.1	1.0	2577409
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	N/A	<1.0	1.0	2577409
Chloride (Cl)	mg/L	0.29	N/A	0.057	0.050	2577315
Sulfates (SO4)	mg/L	2.6	N/A	3.2	0.50	2577315
Total Dissolved Solids	mg/L	29	N/A	23	10	2577624
Total suspended solids (TSS)	mg/L	<2.0	N/A	<2.0	2.0	2577269
On-site Measurements						
Temperature (°C) †	Celsius	6.100	N/A	7.400	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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Bureau Veritas Job #: C457894
Report Date: 2024/10/23

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NP6343	NP6344	NP6345	NP6346		
Sampling Date		2024/10/07 09:05	2024/10/07 08:32	2024/10/07 09:51	2024/10/07 10:38		
COC Number		149896	149896	149896	149896		
	Units	HOW-BC-Q4-2024	HOW-BLQ4-2024	HOW-TL-Q4-2024	How-ML-Q4-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2580375
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2580375
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2580375
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2580375
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2580375
Modified TPH (Tier1) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2580376

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QC Batch = Quality Control Batch
† Parameter is not accreditable

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GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

CONVENTIONAL PARAMETERS (SURFACE WATER)

Dissolved oxygen: presence of head space (NP6344)

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2577269	RAI	Spiked Blank	Total suspended solids (TSS)	2024/10/08		97	%
2577269	RAI	Method Blank	Total suspended solids (TSS)	2024/10/08	<2.0		mg/L
2577311	ZZH	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/10/08		101	%
			Nitrates (N-NO3-)	2024/10/08		100	%
			Nitrites (N-NO2-)	2024/10/08		101	%
2577311	ZZH	Method Blank	Nitrate (N) and Nitrite(N)	2024/10/08	<0.020		mg/L
			Nitrates (N-NO3-)	2024/10/08	<0.020		mg/L
			Nitrites (N-NO2-)	2024/10/08	<0.020		mg/L
2577315	ZZH	Spiked Blank	Chloride (Cl)	2024/10/08		101	%
			Sulfates (SO4)	2024/10/08		99	%
2577315	ZZH	Method Blank	Chloride (Cl)	2024/10/08	<0.050		mg/L
			Sulfates (SO4)	2024/10/08	<0.50		mg/L
2577356	ZLI	Spiked Blank	pH	2024/10/09		101	%
2577372	GKR	Spiked Blank	pH (15° C)	2024/10/08		101	%
2577409	ZLI	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/10/09		99	%
2577409	ZLI	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/10/09	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/10/09	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/10/09	<1.0		mg/L
2577410	ZLI	Spiked Blank	Conductivity	2024/10/09		98	%
2577410	ZLI	Method Blank	Conductivity	2024/10/09	<0.0010		mS/cm
2577461	SCT	Spiked Blank	Turbidity	2024/10/09		99	%
2577461	SCT	Method Blank	Turbidity	2024/10/09	<0.10		NTU
2577462	SCT	Spiked Blank	Real Color	2024/10/09		97	%
2577462	SCT	Method Blank	Real Color	2024/10/09	<2.0		UCV
2577465	SXU	QC Standard	Orthophosphate (P)	2024/10/09		102	%
2577465	SXU	Spiked Blank	Orthophosphate (P)	2024/10/09		101	%
2577465	SXU	Method Blank	Orthophosphate (P)	2024/10/09	<0.050		mg/L
2577624	AMJ	Spiked Blank	Total Dissolved Solids	2024/10/09		90	%
2577624	AMJ	Method Blank	Total Dissolved Solids	2024/10/09	<10		mg/L
2577767	ZZH	Spiked Blank	Dissolved organic carbon	2024/10/09		98	%
2577767	ZZH	Method Blank	Dissolved organic carbon	2024/10/09	<0.20		mg/L
2578480	ST5	Spiked Blank	Total Extractable Aluminum (Al)	2024/10/13		102	%
			Total Extractable Antimony (Sb)	2024/10/13		111	%
			Total Extractable Silver (Ag)	2024/10/13		104	%
			Total Extractable Arsenic (As)	2024/10/13		102	%
			Total Extractable Barium (Ba)	2024/10/13		101	%
			Total Extractable Beryllium (Be)	2024/10/13		97	%
			Total Extractable Bismuth (Bi)	2024/10/13		104	%
			Total Extractable Boron (B)	2024/10/13		100	%
			Total Extractable Cadmium (Cd)	2024/10/13		100	%
			Total Extractable Calcium (Ca)	2024/10/13		100	%
			Total Extractable Chromium (Cr)	2024/10/13		102	%
			Total Extractable Cobalt (Co)	2024/10/13		102	%
			Total Extractable Copper (Cu)	2024/10/13		96	%
			Total Extractable Tin (Sn)	2024/10/13		107	%
			Total Extractable Iron (Fe)	2024/10/13		94	%
			Total Extractable Magnesium (Mg)	2024/10/13		106	%
			Total Extractable Manganese (Mn)	2024/10/13		103	%
			Total Extractable Molybdenum (Mo)	2024/10/13		107	%
			Total Extractable Nickel (Ni)	2024/10/13		100	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Total phosphorous	2024/10/13		100	%
			Total Extractable Lead (Pb)	2024/10/13		103	%
			Total Extractable Potassium (K)	2024/10/13		98	%
			Total Extractable Selenium (Se)	2024/10/13		100	%
			Total Extractable Sodium (Na)	2024/10/13		102	%
			Total Extractable Strontium (Sr)	2024/10/13		103	%
			Total Extractable Thallium (Tl)	2024/10/13		101	%
			Total Extractable Titanium (Ti)	2024/10/13		104	%
			Total Extractable Uranium (U)	2024/10/13		101	%
			Total Extractable Vanadium (V)	2024/10/13		102	%
			Total Extractable Zinc (Zn)	2024/10/13		96	%
2578480	ST5	Method Blank	Total Extractable Aluminum (Al)	2024/10/13	<10		ug/L
			Total Extractable Antimony (Sb)	2024/10/13	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/10/13	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/10/13	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/10/13	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/10/13	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/10/13	<1.0		ug/L
			Total Extractable Boron (B)	2024/10/13	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/10/13	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/10/13	<500		ug/L
			Total Extractable Chromium (Cr)	2024/10/13	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/10/13	<1.0		ug/L
			Total Extractable Copper (Cu)	2024/10/13	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/10/13	<1000		ug/L
			Total Extractable Tin (Sn)	2024/10/13	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/10/13	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/10/13	<100		ug/L
			Total Extractable Manganese (Mn)	2024/10/13	<1.0		ug/L
			Total Extractable Molybdenum (Mo)	2024/10/13	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/10/13	<2.0		ug/L
			Total Extractable P2O5	2024/10/13	<25		ug/L
			Total Extractable Total phosphorous	2024/10/13	<10		ug/L
			Total Extractable Lead (Pb)	2024/10/13	<0.50		ug/L
			Total Extractable Potassium (K)	2024/10/13	<500		ug/L
			Total Extractable Selenium (Se)	2024/10/13	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/10/13	<500		ug/L
			Total Extractable Strontium (Sr)	2024/10/13	<2.0		ug/L
			Total Extractable Thallium (Tl)	2024/10/13	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/10/13	<10		ug/L
			Total Extractable Uranium (U)	2024/10/13	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/10/13	<2.0		ug/L
			Total Extractable Zinc (Zn)	2024/10/13	<7.0		ug/L
2579327	TEX	Spiked Blank	Phenols-4AAP	2024/10/12		102	%
2579327	TEX	Method Blank	Phenols-4AAP	2024/10/12	<0.0020		mg/L
2579387	VPL	Spiked Blank	Sulfides (S2-)	2024/10/12		91	%
2579387	VPL	Method Blank	Sulfides (S2-)	2024/10/12	<0.020		mg/L
2579438	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/15		104	%
2579438	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/15	<0.020		mg/L
2580375	THL	Matrix Spike	Benzene	2024/10/10		93	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Toluene	2024/10/10		95	%
			Ethylbenzene	2024/10/10		95	%
			Total_Xylenes	2024/10/10		98	%
2580375	THL	Spiked Blank	Benzene	2024/10/10		100	%
			Toluene	2024/10/10		99	%
			Ethylbenzene	2024/10/10		97	%
			Total_Xylenes	2024/10/10		100	%
2580375	THL	Method Blank	Benzene	2024/10/10	<0.0010		mg/L
			Toluene	2024/10/10	<0.0010		mg/L
			Ethylbenzene	2024/10/10	<0.0010		mg/L
			Total_Xylenes	2024/10/10	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/10/10	<0.090		mg/L
2580377	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/10/15		103	%
			n-Dotriacontane - Extractable	2024/10/15		124	%
			>C10-C16 Hydrocarbons	2024/10/15		110	%
			>C16-C21 Hydrocarbons	2024/10/15		109	%
			>C21-<C32 Hydrocarbons	2024/10/15		116	%
2580377	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/10/15		92	%
			n-Dotriacontane - Extractable	2024/10/15		118	%
			>C10-C16 Hydrocarbons	2024/10/15		105	%
			>C16-C21 Hydrocarbons	2024/10/15		105	%
			>C21-<C32 Hydrocarbons	2024/10/15		111	%
2580377	éE6	Method Blank	Isobutylbenzene - Extractable	2024/10/15		93	%
			n-Dotriacontane - Extractable	2024/10/15		112	%
			>C10-C16 Hydrocarbons	2024/10/15	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/10/15	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/10/15	<0.090		mg/L
2580378	EMT	Matrix Spike	Reactive silica (SiO2)	2024/10/15		94	%
2580378	EMT	Spiked Blank	Reactive silica (SiO2)	2024/10/15		94	%
2580378	EMT	Method Blank	Reactive silica (SiO2)	2024/10/15	<0.50		mg/L
2580524	ST5	Spiked Blank	Total Extractable Mercury (Hg)	2024/10/18		104	%
2580524	ST5	Method Blank	Total Extractable Mercury (Hg)	2024/10/18	<0.000010		mg/L
2581725	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/18		103	%
2581725	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/18	<0.020		mg/L

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Bureau Veritas Job #: C457894
Report Date: 2024/10/23

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cansu Bolukbas
Membre OCQ#2324-095
Cansu Bolukbas, B.Sc., Chemist, Montreal, Analyst II

Faouzi Sarsi, B.Sc. Chemist, Montréal, SR Analyst

Jonathan Fauvel, B.Sc., Chemist, Montreal, Scientific Specialist

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Michelina Cinquino, Analyst II

Mira El Masri, M.Sc. Chemist, Montréal, Analyst II

Phil Deveau, Scientific Specialist (Organics)

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:

Simran Kaur LNU, B.Sc. Biochemist, Montreal, Analyst 2

Shu Yang, B.Sc. Chemist, Montreal, Analyst II

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Your P.O. #: 3000001868
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 150628

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/10/29
Report #: R2993715
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C459724
Received: 2024/10/15, 13:30

Sample Matrix: Surface Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Alkalinity (end point 4.5)-waters	5	N/A	2024/10/16	STL SOP-00038	SM 24 2320-B m
Anions in water	5	N/A	2024/10/16	STL SOP-00014	MA.300–Ions 1.3 R6 m
Real Color	5	N/A	2024/10/15	STL SOP-00046	MA103 - Col. 2.0
Conductivity in waters	5	N/A	2024/10/16	STL SOP-00038	SM 24 2510-B m
Dissolved Organic Carbon (2)	5	2024/10/16	2024/10/17	STL SOP-00243	SM 23 5310-B m
Total Extractable Hg Cold Vapour AF	3	2024/10/23	2024/10/25	STL SOP-00276	EPA 1631,rev. E m
Total Suspended Solids	5	N/A	2024/10/16	STL SOP-00015	MA.104–S.S. 2.0 m
Total Extractable Metals	5	2024/10/18	2024/10/19	STL SOP-00062	MA.200–Mét. 1.2 R9 m
Ammonia Nitrogen in water	5	N/A	2024/10/17	STL SOP-00040	MA.300–N 2.0 R2 m
Nitrates(NO3-), Nitrites(NO2-)-water	5	N/A	2024/10/16	STL SOP-00014	MA.300–Ions 1.3 R6 m
Dissolved Oxygen	5	N/A	2024/10/15	STL SOP-00008	MA.315–DBO 1.1 R3 m
pH in water	5	N/A	2024/10/16	STL SOP-00038	MA.100–pH 1.1 R3 m
pH Measured @ 15° C	5	N/A	2024/10/15	STL SOP-00016	MA.100–pH 1.1 R6 m
Total Phenols by 4-AAP in water	4	N/A	2024/10/16	STL SOP-00033	MA404–I.Phé 2.2 R2 m
Total Phenols by 4-AAP in water	1	N/A	2024/10/17	STL SOP-00033	MA404–I.Phé 2.2 R2 m
pH (site)- waters	5	N/A	2024/10/15		Test Kit
Ortho Phosphate-water	5	N/A	2024/10/16	STL SOP-00003	MA.303–P 1.1 R2 m
Sulfides (as S2-)-water	5	2024/10/17	2024/10/17	STL SOP-00273	SM4500-S2 rev.23m.
Total Dissolved Solids	5	N/A	2024/10/17	STL SOP-00050	MA.115–S.D. 1.0 R4 m
Temperature (site)	5	N/A	2024/10/15		Thermometer
Turbidity-water	5	N/A	2024/10/15	STL SOP-00022	MA.103–Tur. 1.0 R5 m
TEH in Water (PIRI) (1)	5	2024/10/21	2024/10/22	ATL SOP 00113	Atl. RBCA v3.1 m
Reactive Silica(SiO2) (1)	5	2024/10/21	2024/10/22	ATL SOP 00022	EPA 366.0 m
ModTPH (T1) Calc. for Water (1)	5	2024/10/15	2024/10/23	N/A	Atl. RBCA v3 m
VPH in Water (PIRI) (1)	5	2024/10/18	2024/10/18	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

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Your P.O. #: 3000001868
Your Project #: Howse surface water
Site Location: Howse
Your C.O.C. #: 150628

Attention: TSMC Environnement

TATA STEEL MINERALS CANADA
1000, RUE SHERBROOKE OUEST
BUREAU 1120
MONTRÉAL, QC
CANADA H3A 3G4

Report Date: 2024/10/29
Report #: R2993715
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C459724

Received: 2024/10/15, 13:30

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
Note: RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, Suit 105, 200 Bluewater Rd. , Bedford, NS, B4B1G9
(2) DOC present in the sample should be considered as non-purgeable DOC

Note: All parameters included in the present certificate are accredited by the Québec Ministry of the Environment, unless stated otherwise.

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
29 Oct 2024 17:33:01

Please direct all questions regarding this Certificate of Analysis to:
Cloe Christine, Project Manager
Email: cloe.christine@bureauveritas.com
Phone# (438)220-2660

==========

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For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Aglaia Yannakis, General Manager responsible for Quebec Environmental laboratory operations.

Bureau Veritas Job #: C459724
Report Date: 2024/10/29

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

RESULTS OF ANALYSES OF SURFACE WATER

Bureau Veritas ID		NQ6514	NQ6515	NQ6516	NQ6517		
Sampling Date		2024/10/14 10:18	2024/10/14 08:33	2024/10/14 08:46	2024/10/14 09:53		
COC Number		150628	150628	150628	150628		
	Units	HOW-SW1-Q4-2024	HOW-SW2-2024	HOW-SW3-Q4-2024	HOW-SW4-Q4-2024	RDL	QC Batch
INORGANICS							
Reactive silica (SiO2) †	mg/L	5.7	7.9	4.0	5.7	0.50	2583161
PETROLEUM HYDROCARBONS							
>C10-C16 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2583838
>C16-C21 Hydrocarbons †	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2583838
>C21-<C32 Hydrocarbons †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2583838
Return to baseline at C32 †	mg/L	NA	NA	NA	NA	N/A	2583838
Hydrocarbon Resemblance †	mg/L	NA	NA	NA	NA	N/A	2583838
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	113	112	109	114	N/A	2583838
n-Dotriacontane - Extractable	%	115	106	105	107	N/A	2583838

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

Bureau Veritas ID		NQ6518		
Sampling Date		2024/10/14 07:54		
COC Number		150628		
	Units	HOW-SW5-Q4-2024	RDL	QC Batch
INORGANICS				
Reactive silica (SiO2) †	mg/L	1.2	0.50	2583161
PETROLEUM HYDROCARBONS				
>C10-C16 Hydrocarbons †	mg/L	<0.050	0.050	2583838
>C16-C21 Hydrocarbons †	mg/L	<0.050	0.050	2583838
>C21-<C32 Hydrocarbons †	mg/L	<0.090	0.090	2583838
Return to baseline at C32 †	mg/L	NA	N/A	2583838
Hydrocarbon Resemblance †	mg/L	NA	N/A	2583838
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	109	N/A	2583838
n-Dotriacontane - Extractable	%	93	N/A	2583838

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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Bureau Veritas Job #: C459724
Report Date: 2024/10/29

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NQ6514	NQ6515	NQ6516		
Sampling Date		2024/10/14 10:18	2024/10/14 08:33	2024/10/14 08:46		
COC Number		150628	150628	150628		
	Units	HOW-SW1-Q4-2024	HOW-SW2-2024	HOW-SW3-Q4-2024	RDL	QC Batch
METALS						
Total Extractable Mercury (Hg) ††	mg/L	<0.000010	<0.000010	<0.000010	0.000010	2583805
Total Extractable Aluminum (Al)	ug/L	<10	36	73	10	2581527
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Barium (Ba)	ug/L	<2.0	2.7	<2.0	2.0	2581527
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	<2.0	2.0	2581527
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Boron (B) †	ug/L	<50	<50	<50	50	2581527
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	<0.20	0.20	2581527
Total Extractable Calcium (Ca) †	ug/L	3100	1100	<500	500	2581527
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	5.0	2581527
Total Extractable Cobalt (Co)	ug/L	<1.0	1.1	<1.0	1.0	2581527
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Total Hardness (CaCO3) ††	ug/L	18000	5200	2000	1000	2581527
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	2581527
Total Extractable Iron (Fe)	ug/L	<60	3100	1400	60	2581527
Total Extractable Magnesium (Mg) †	ug/L	2500	620	270	100	2581527
Total Extractable Manganese (Mn)	ug/L	4.6	330	27	1.0	2581527
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	<1.0	1.0	2581527
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	2.0	2581527
Total Extractable P2O5 ††	ug/L	<25	<25	44	25	2581527
Total Extractable Total phosphorous	ug/L	<10	<10	19	10	2581527
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	<0.50	0.50	2581527
Total Extractable Potassium (K) †	ug/L	<500	<500	<500	500	2581527
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	<3.0	3.0	2581527
Total Extractable Sodium (Na)	ug/L	760	880	610	500	2581527
Total Extractable Strontium (Sr) †	ug/L	5.4	6.7	2.2	2.0	2581527
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	<2.0	2.0	2581527
Total Extractable Titanium (Ti)	ug/L	<10	<10	<10	10	2581527
Total Extractable Uranium (U)	ug/L	<1.0	<1.0	<1.0	1.0	2581527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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Bureau Veritas Job #: C459724
Report Date: 2024/10/29

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NQ6514	NQ6515	NQ6516		
Sampling Date		2024/10/14 10:18	2024/10/14 08:33	2024/10/14 08:46		
COC Number		150628	150628	150628		
	Units	HOW-SW1-Q4-2024	HOW-SW2-2024	HOW-SW3-Q4-2024	RDL	QC Batch
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	<2.0	2.0	2581527
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	<7.0	7.0	2581527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NQ6517	NQ6518		
Sampling Date		2024/10/14 09:53	2024/10/14 07:54		
COC Number		150628	150628		
	Units	HOW-SW4-Q4-2024	HOW-SW5-Q4-2024	RDL	QC Batch
METALS					
Total Extractable Aluminum (Al)	ug/L	<10	<10	10	2581527
Total Extractable Antimony (Sb)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Silver (Ag)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Arsenic (As)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Barium (Ba)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable Beryllium (Be)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable Bismuth (Bi) ††	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Boron (B) †	ug/L	<50	<50	50	2581527
Total Extractable Cadmium (Cd)	ug/L	<0.20	<0.20	0.20	2581527
Total Extractable Calcium (Ca) †	ug/L	2100	<500	500	2581527
Total Extractable Chromium (Cr)	ug/L	<5.0	<5.0	5.0	2581527
Total Extractable Cobalt (Co)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Copper (Cu)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Total Hardness (CaCO3) ††	ug/L	12000	1800	1000	2581527
Total Extractable Tin (Sn)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable Iron (Fe)	ug/L	<60	<60	60	2581527
Total Extractable Magnesium (Mg) †	ug/L	1600	240	100	2581527
Total Extractable Manganese (Mn)	ug/L	<1.0	3.1	1.0	2581527
Total Extractable Mercury (Hg)	ug/L	<0.10	<0.10	0.10	2581527
Total Extractable Molybdenum (Mo)	ug/L	<1.0	<1.0	1.0	2581527
Total Extractable Nickel (Ni)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable P2O5 ††	ug/L	<25	<25	25	2581527
Total Extractable Total phosphorous	ug/L	<10	<10	10	2581527
Total Extractable Lead (Pb)	ug/L	<0.50	<0.50	0.50	2581527
Total Extractable Potassium (K) †	ug/L	<500	<500	500	2581527
Total Extractable Selenium (Se)	ug/L	<3.0	<3.0	3.0	2581527
Total Extractable Sodium (Na)	ug/L	760	590	500	2581527
Total Extractable Strontium (Sr) †	ug/L	5.0	<2.0	2.0	2581527
Total Extractable Thallium (Tl)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable Titanium (Ti)	ug/L	<10	<10	10	2581527
Total Extractable Uranium (U)	ug/L	<1.0	<1.0	1.0	2581527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
†† Parameter is not accreditable
† Parameter is not accredited

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

TOTAL EXTRACTABLE METALS (SURFACE WATER)

Bureau Veritas ID		NQ6517	NQ6518		
Sampling Date		2024/10/14 09:53	2024/10/14 07:54		
COC Number		150628	150628		
	Units	**HOW-SW4-Q4-2024**	**HOW-SW5-Q4-2024**	**RDL**	**QC Batch**
Total Extractable Vanadium (V)	ug/L	<2.0	<2.0	2.0	2581527
Total Extractable Zinc (Zn)	ug/L	<7.0	<7.0	7.0	2581527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Bureau Veritas 889 Montée de Liesse, Ville St-Laurent, Québec, Canada H4T 1P5 Tel: (514) 448-9001 Fax: (514) 448-9199 Ligne sans frais : 1-877-462-9926

Bureau Veritas Job #: C459724
Report Date: 2024/10/29

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NQ6514	NQ6515	NQ6516	NQ6517		
Sampling Date		2024/10/14 10:18	2024/10/14 08:33	2024/10/14 08:46	2024/10/14 09:53		
COC Number		150628	150628	150628	150628		
	Units	HOW-SW1-Q4-2024	HOW-SW2-2024	HOW-SW3-Q4-2024	HOW-SW4-Q4-2024	RDL	QC Batch
CONVENTIONALS							
Conductivity	mS/cm	0.040	0.014	0.0030	0.027	0.0010	2580137
Dissolved organic carbon †	mg/L	0.43	1.9	2.9	0.23	0.20	2580623
Dissolved oxygen †	mg/L	11	11	11	11	1.0	2580122
Nitrate (N) and Nitrite(N)	mg/L	0.29	<0.020	0.10	0.57	0.020	2580125
Nitrates (N-NO3-)	mg/L	0.29	<0.020	0.10	0.57	0.020	2580125
Nitrites (N-NO2-)	mg/L	<0.020	<0.020	<0.020	<0.020	0.020	2580125
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	<0.020	<0.020	<0.020	<0.020	0.020	2581017
Orthophosphate (P)	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	2580158
pH	pH	6.98	6.49	5.98	6.60	N/A	2580075
pH (15° C) †	pH	7.17	6.45	6.04	6.64	N/A	2580128
pH (on-site) †	pH	7.33	6.74	6.24	7.71	N/A	ONSITE
Phenols-4AAP	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2580609
Real Color	UCV	<2.0	77	63	<2.0	2.0	2580160
Sulfides (S2-)	mg/L	<0.020	<0.020	<0.020	<0.020	0.020	2581110
Turbidity	NTU	0.45	5.5	2.2	0.35	0.10	2580152
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	16	7.1	2.0	8.7	1.0	2580138
Bicarbonates (HCO3 as CaCO3) †	mg/L	16	7.1	2.0	8.7	1.0	2580138
Carbonate (CO3 as CaCO3) †	mg/L	<1.0	<1.0	<1.0	<1.0	1.0	2580138
Chloride (Cl)	mg/L	0.43	0.089	0.25	0.82	0.050	2580127
Sulfates (SO4)	mg/L	2.3	<0.50	<0.50	1.1	0.50	2580127
Total Dissolved Solids	mg/L	<10	12	<10	18	10	2581094
Total suspended solids (TSS)	mg/L	<2.0	4.0	4.0	<2.0	2.0	2580406
On-site Measurements							
Temperature (°C) †	Celsius	1.600	2.100	2.400	1.500	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable
N/A = Not Applicable

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TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

CONVENTIONAL PARAMETERS (SURFACE WATER)

Bureau Veritas ID		NQ6517	NQ6518		
Sampling Date		2024/10/14 09:53	2024/10/14 07:54		
COC Number		150628	150628		
	Units	HOW-SW4-Q4-2024 Lab-Dup	HOW-SW5-Q4-2024	RDL	QC Batch
CONVENTIONALS					
Conductivity	mS/cm	N/A	0.0025	0.0010	2580137
Dissolved organic carbon †	mg/L	N/A	1.6	0.20	2580623
Dissolved oxygen †	mg/L	N/A	11	1.0	2580122
Nitrate (N) and Nitrite(N)	mg/L	N/A	<0.020	0.020	2580125
Nitrates (N-NO3-)	mg/L	N/A	<0.020	0.020	2580125
Nitrites (N-NO2-)	mg/L	N/A	<0.020	0.020	2580125
Nitrogen ammonia (N-NH4+ and N-NH3)	mg/L	N/A	<0.020	0.020	2581017
Orthophosphate (P)	mg/L	N/A	<0.050	0.050	2580158
pH	pH	N/A	6.29	N/A	2580075
pH (15° C) †	pH	N/A	6.50	N/A	2580128
pH (on-site) †	pH	N/A	6.61	N/A	ONSITE
Phenols-4AAP	mg/L	N/A	<0.0020	0.0020	2580609
Real Color	UCV	N/A	3.9	2.0	2580160
Sulfides (S2-)	mg/L	<0.020	<0.020	0.020	2581110
Turbidity	NTU	N/A	0.63	0.10	2580152
Alkalinity Total (as CaCO3) pH 4.5 †	mg/L	N/A	2.6	1.0	2580138
Bicarbonates (HCO3 as CaCO3) †	mg/L	N/A	2.6	1.0	2580138
Carbonate (CO3 as CaCO3) †	mg/L	N/A	<1.0	1.0	2580138
Chloride (Cl)	mg/L	N/A	0.063	0.050	2580127
Sulfates (SO4)	mg/L	N/A	<0.50	0.50	2580127
Total Dissolved Solids	mg/L	N/A	<10	10	2581094
Total suspended solids (TSS)	mg/L	N/A	<2.0	2.0	2580406
On-site Measurements					
Temperature (°C) †	Celsius	N/A	1.900	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
† Parameter is not accreditable

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Bureau Veritas Job #: C459724
Report Date: 2024/10/29

TATA STEEL MINERALS CANADA
Client Project #: Howse surface water
Site Location: Howse
Your P.O. #: 3000001868
Sampler Initials: JFD

SUBCONTRACTED ANALYSIS (SURFACE WATER)

Bureau Veritas ID		NQ6514	NQ6515	NQ6516	NQ6517		
Sampling Date		2024/10/14 10:18	2024/10/14 08:33	2024/10/14 08:46	2024/10/14 09:53		
COC Number		150628	150628	150628	150628		
	Units	HOW-SW1-Q4-2024	HOW-SW2-2024	HOW-SW3-Q4-2024	HOW-SW4-Q4-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS							
Benzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2583836
Toluene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2583836
Ethylbenzene †	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	2583836
Total_Xylenes †	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	2583836
C6 - C10 (less BTEX) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2583836
Modified TPH (Tier1) †	mg/L	<0.090	<0.090	<0.090	<0.090	0.090	2583837

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

Bureau Veritas ID		NQ6518		
Sampling Date		2024/10/14 07:54		
COC Number		150628		
	Units	HOW-SW5-Q4-2024	RDL	QC Batch
PETROLEUM HYDROCARBONS				
Benzene †	mg/L	<0.0010	0.0010	2583836
Toluene †	mg/L	<0.0010	0.0010	2583836
Ethylbenzene †	mg/L	<0.0010	0.0010	2583836
Total_Xylenes †	mg/L	<0.0020	0.0020	2583836
C6 - C10 (less BTEX) †	mg/L	<0.090	0.090	2583836
Modified TPH (Tier1) †	mg/L	<0.090	0.090	2583837

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
† Parameter is not accreditable

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GENERAL COMMENTS

Please note that the test pH (site)- waters was performed on site by the client.
Please note that the test Temperature (site) was performed on site by the client.

CONVENTIONAL PARAMETERS (SURFACE WATER)

Dissolved oxygen: presence of head space. (NQ6514,NQ6515,NQ6516,NQ6518)

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
2580075	ZLI	Spiked Blank	pH	2024/10/15		100	%
2580125	M2S	Spiked Blank	Nitrate (N) and Nitrite(N)	2024/10/15		95	%
			Nitrates (N-NO3-)	2024/10/15		97	%
			Nitrites (N-NO2-)	2024/10/15		92	%
2580125	M2S	Method Blank	Nitrate (N) and Nitrite(N)	2024/10/15	<0.020		mg/L
			Nitrates (N-NO3-)	2024/10/15	<0.020		mg/L
			Nitrites (N-NO2-)	2024/10/15	<0.020		mg/L
2580127	M2S	Spiked Blank	Chloride (Cl)	2024/10/15		94	%
			Sulfates (SO4)	2024/10/15		96	%
2580127	M2S	Method Blank	Chloride (Cl)	2024/10/15	<0.050		mg/L
			Sulfates (SO4)	2024/10/15	<0.50		mg/L
2580128	HSS	Spiked Blank	pH (15° C)	2024/10/15		101	%
2580137	ZLI	Spiked Blank	Conductivity	2024/10/15		109	%
2580137	ZLI	Method Blank	Conductivity	2024/10/15	<0.0010		mS/cm
2580138	ZLI	Spiked Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/10/15		103	%
2580138	ZLI	Method Blank	Alkalinity Total (as CaCO3) pH 4.5	2024/10/15	<1.0		mg/L
			Bicarbonates (HCO3 as CaCO3)	2024/10/15	<1.0		mg/L
			Carbonate (CO3 as CaCO3)	2024/10/15	<1.0		mg/L
2580152	HSS	Spiked Blank	Turbidity	2024/10/15		94	%
2580152	HSS	Method Blank	Turbidity	2024/10/15	<0.10		NTU
2580158	SD9	QC Standard	Orthophosphate (P)	2024/10/16		96	%
2580158	SD9	Spiked Blank	Orthophosphate (P)	2024/10/16		90	%
2580158	SD9	Method Blank	Orthophosphate (P)	2024/10/16	<0.050		mg/L
2580160	SCT	Spiked Blank	Real Color	2024/10/15		101	%
2580160	SCT	Method Blank	Real Color	2024/10/15	<2.0		UCV
2580406	NSH	Spiked Blank	Total suspended solids (TSS)	2024/10/16		95	%
2580406	NSH	Method Blank	Total suspended solids (TSS)	2024/10/16	<2.0		mg/L
2580609	HGU	Spiked Blank	Phenols-4AAP	2024/10/16		103	%
2580609	HGU	Method Blank	Phenols-4AAP	2024/10/16	<0.0020		mg/L
2580623	ZZH	Spiked Blank	Dissolved organic carbon	2024/10/17		104	%
2580623	ZZH	Method Blank	Dissolved organic carbon	2024/10/17	<0.20		mg/L
2581017	SXU	Spiked Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/17		105	%
2581017	SXU	Method Blank	Nitrogen ammonia (N-NH4+ and N-NH3)	2024/10/17	<0.020		mg/L
2581094	NSH	Spiked Blank	Total Dissolved Solids	2024/10/17		92	%
2581094	NSH	Method Blank	Total Dissolved Solids	2024/10/17	<10		mg/L
2581110	ABX	Spiked Blank	Sulfides (S2-)	2024/10/17		88	%
2581110	ABX	Method Blank	Sulfides (S2-)	2024/10/17	<0.020		mg/L
2581527	DPA	Spiked Blank	Total Extractable Aluminum (Al)	2024/10/20		110	%
			Total Extractable Antimony (Sb)	2024/10/20		118	%
			Total Extractable Silver (Ag)	2024/10/20		102	%
			Total Extractable Arsenic (As)	2024/10/20		111	%
			Total Extractable Barium (Ba)	2024/10/20		106	%
			Total Extractable Beryllium (Be)	2024/10/20		104	%
			Total Extractable Bismuth (Bi)	2024/10/20		115	%
			Total Extractable Boron (B)	2024/10/20		111	%
			Total Extractable Cadmium (Cd)	2024/10/20		108	%
			Total Extractable Calcium (Ca)	2024/10/20		108	%
			Total Extractable Chromium (Cr)	2024/10/20		107	%
			Total Extractable Cobalt (Co)	2024/10/20		108	%
			Total Extractable Copper (Cu)	2024/10/20		104	%

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Tin (Sn)	2024/10/20		121 (1)	%
			Total Extractable Iron (Fe)	2024/10/20		112	%
			Total Extractable Magnesium (Mg)	2024/10/20		110	%
			Total Extractable Manganese (Mn)	2024/10/20		109	%
			Total Extractable Mercury (Hg)	2024/10/20		116	%
			Total Extractable Molybdenum (Mo)	2024/10/20		114	%
			Total Extractable Nickel (Ni)	2024/10/20		102	%
			Total Extractable Total phosphorous	2024/10/20		105	%
			Total Extractable Lead (Pb)	2024/10/20		111	%
			Total Extractable Potassium (K)	2024/10/20		106	%
			Total Extractable Selenium (Se)	2024/10/20		112	%
			Total Extractable Sodium (Na)	2024/10/20		120	%
			Total Extractable Strontium (Sr)	2024/10/20		110	%
			Total Extractable Thallium (Tl)	2024/10/20		109	%
			Total Extractable Titanium (Ti)	2024/10/20		114	%
			Total Extractable Uranium (U)	2024/10/20		111	%
			Total Extractable Vanadium (V)	2024/10/20		109	%
			Total Extractable Zinc (Zn)	2024/10/20		107	%
2581527	DPA	Method Blank	Total Extractable Aluminum (Al)	2024/10/19	<10		ug/L
			Total Extractable Antimony (Sb)	2024/10/19	<1.0		ug/L
			Total Extractable Silver (Ag)	2024/10/19	<1.0		ug/L
			Total Extractable Arsenic (As)	2024/10/19	<1.0		ug/L
			Total Extractable Barium (Ba)	2024/10/19	<2.0		ug/L
			Total Extractable Beryllium (Be)	2024/10/19	<2.0		ug/L
			Total Extractable Bismuth (Bi)	2024/10/19	<1.0		ug/L
			Total Extractable Boron (B)	2024/10/19	<50		ug/L
			Total Extractable Cadmium (Cd)	2024/10/19	<0.20		ug/L
			Total Extractable Calcium (Ca)	2024/10/19	<500		ug/L
			Total Extractable Chromium (Cr)	2024/10/19	<5.0		ug/L
			Total Extractable Cobalt (Co)	2024/10/19	<1.0		ug/L
			Total Extractable Copper (Cu)	2024/10/19	<1.0		ug/L
			Total Extractable Total Hardness (CaCO3)	2024/10/19	<1000		ug/L
			Total Extractable Tin (Sn)	2024/10/19	<2.0		ug/L
			Total Extractable Iron (Fe)	2024/10/19	<60		ug/L
			Total Extractable Magnesium (Mg)	2024/10/19	<100		ug/L
			Total Extractable Manganese (Mn)	2024/10/19	<1.0		ug/L
			Total Extractable Mercury (Hg)	2024/10/19	<0.10		ug/L
			Total Extractable Molybdenum (Mo)	2024/10/19	<1.0		ug/L
			Total Extractable Nickel (Ni)	2024/10/19	<2.0		ug/L
			Total Extractable P2O5	2024/10/19	<25		ug/L
			Total Extractable Total phosphorous	2024/10/19	<10		ug/L
			Total Extractable Lead (Pb)	2024/10/19	<0.50		ug/L
			Total Extractable Potassium (K)	2024/10/19	<500		ug/L
			Total Extractable Selenium (Se)	2024/10/19	<3.0		ug/L
			Total Extractable Sodium (Na)	2024/10/19	<500		ug/L
			Total Extractable Strontium (Sr)	2024/10/19	<2.0		ug/L
			Total Extractable Thallium (Tl)	2024/10/19	<2.0		ug/L
			Total Extractable Titanium (Ti)	2024/10/19	<10		ug/L
			Total Extractable Uranium (U)	2024/10/19	<1.0		ug/L
			Total Extractable Vanadium (V)	2024/10/19	<2.0		ug/L

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	Units
			Total Extractable Zinc (Zn)	2024/10/19	<7.0		ug/L
2583161	EMT	Matrix Spike	Reactive silica (SiO2)	2024/10/22		92	%
2583161	EMT	Spiked Blank	Reactive silica (SiO2)	2024/10/22		94	%
2583161	EMT	Method Blank	Reactive silica (SiO2)	2024/10/22	<0.50		mg/L
2583805	ST5	Spiked Blank	Total Extractable Mercury (Hg)	2024/10/25		101	%
2583805	ST5	Method Blank	Total Extractable Mercury (Hg)	2024/10/25	<0.000010		mg/L
2583836	THL	Matrix Spike	Benzene	2024/10/18		97	%
			Toluene	2024/10/18		94	%
			Ethylbenzene	2024/10/18		92	%
			Total_Xylenes	2024/10/18		95	%
2583836	THL	Spiked Blank	Benzene	2024/10/18		101	%
			Toluene	2024/10/18		101	%
			Ethylbenzene	2024/10/18		100	%
			Total_Xylenes	2024/10/18		102	%
2583836	THL	Method Blank	Benzene	2024/10/18	<0.0010		mg/L
			Toluene	2024/10/18	<0.0010		mg/L
			Ethylbenzene	2024/10/18	<0.0010		mg/L
			Total_Xylenes	2024/10/18	<0.0020		mg/L
			C6 - C10 (less BTEX)	2024/10/18	<0.090		mg/L
2583838	éE6	Matrix Spike	Isobutylbenzene - Extractable	2024/10/22		112	%
			n-Dotriacontane - Extractable	2024/10/22		98	%
			>C10-C16 Hydrocarbons	2024/10/22		101	%
			>C16-C21 Hydrocarbons	2024/10/22		90	%
			>C21-<C32 Hydrocarbons	2024/10/22		87	%
2583838	éE6	Spiked Blank	Isobutylbenzene - Extractable	2024/10/22		104	%
			n-Dotriacontane - Extractable	2024/10/22		113	%
			>C10-C16 Hydrocarbons	2024/10/22		102	%
			>C16-C21 Hydrocarbons	2024/10/22		96	%
			>C21-<C32 Hydrocarbons	2024/10/22		93	%
2583838	éE6	Method Blank	Isobutylbenzene - Extractable	2024/10/22		102	%
			n-Dotriacontane - Extractable	2024/10/22		98	%
			>C10-C16 Hydrocarbons	2024/10/22	<0.050		mg/L
			>C16-C21 Hydrocarbons	2024/10/22	<0.050		mg/L
			>C21-<C32 Hydrocarbons	2024/10/22	<0.090		mg/L

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

(1) Recovery or relative percent difference (RPD) for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cansu Bolukbas
Membre OCQ#2324-095
Cansu Bolukbas, B.Sc., Chemist, Montreal, Analyst II

Ernlie Publicover, Scientific Specialist

Faouzi Sarsi, B.Sc. Chemist, Montréal, SR Analyst

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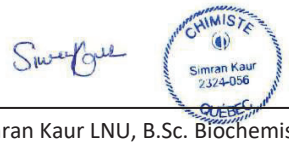
VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:



Simran Kaur LNU, B.Sc. Biochemist, Montreal, Analyst 2

Shu Yang, B.Sc. Chemist, Montreal, Analyst II

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APPENDIX II – LAKE WATER LEVELS MONITORING REPORT

Aquasphera

February 27, 2025

Tata Steel Minerals Canada Ltd
1000, rue Sherbrooke West, bureau 1120
Montreal (Québec) H3A 3G4

Attention: Mr. Pallav Sinha, Environmental Manager

Subject: Monitoring Report – Lakes Water Levels for 2024 and Corrective Measures

---

Dear Mr. Sinha,

We are pleased to submit the monitoring report carried out by our firm for the above-mentioned project. Please do not hesitate to contact our office if you have any questions or comments.

1 INTRODUCTION

This monitoring report presents estimated daily water surface elevations based on hydrometric data recorded at five sites (Morley, Triangle, Pinette, Burnetta, and O'Nelly lakes).

For the period from June 17, 2024, to October 13, 2024, water depths were monitored using *Levelogger 5* data loggers (manufactured by Solinst). Atmospheric pressure was monitored at all sites using *Barologger 5* data loggers (manufactured by Solinst).

2 WATER LEVEL MONITORING

2.1 FIELD DATA

2.1.1 EQUIPMENT

Prior to summer 2023, *Rugged TROLL 200* and *BaroTROLL* loggers were installed on the five sites and were left there year-round to collect data. However, problems with ice pressure and vandalism damaged some of the probes, requiring their replacement.

All new *Levelogger 5* and *Barologger 5* loggers were installed by Groupe Géos and Aquasphera between August 23 and 29, 2023, at the 5 sites (Burnetta, Morley, O'Nelly, Pinette, and Triangle lakes) to replace the *Rugged TROLL 200* and *BaroTROLL* loggers. All sites are equipped with both types of probes (*Levelogger 5* and *Barologger 5*). The probes at three sites (Burnetta, Morley, and Triangle) were installed in the same locations as the old probes (*Rugged TROLL-200*). The probes at two sites (O'Nelly and Pinette lakes) were installed in new locations to reduce visibility and minimize the risk of vandalism.

2.1.2 COORDINATES AND ELEVATIONS

For the 2024 data collection period, probe coordinates and elevations are based on a survey conducted on September 11, 2024. Surveys were performed by TSMC staff to record marker, probe, and water levels at Morley, Triangle, Pinette and O'Nelly lakes sites.

For the Burnetta Lake site, it was not possible to record coordinates since no signal is available in this remote area. However, the coordinates from a handheld GPS taken in 2018 by Groupe Hémisphères (now Groupe Géos) can be considered for now.

2.1.3 DATA

Data used for this report was collected by a TSMC environmental technician and submitted to Aquasphera and Groupe Géos for processing.

Meteorological data from the Environment Canada Schefferville Cote-Nord station were compiled by Aquasphera.

2.2 RESULTS

Figures 1 to 5 present estimated water levels for Burnetta, Morley, O'Nelly, Pinette and Triangle lakes. The water depths were converted into absolute elevations using data from the survey conducted on September 11, 2024, and atmospheric pressure data. The conversion was roughly estimated for the Burnetta Lake site, as only coordinates from a handheld GPS in 2018 are available.

To convert water depths to water elevations, probe elevation must be determined. Typically, the water elevation is surveyed using a precise GPS, and water depth given by the probe at the same moment is noted. The difference between these two values gives the probe elevation.

Probe elevations are presented in Table 1. These values come from the survey carried out in August 2023 by TSMC during the installation of the new probes, as well as another survey carried out in September 2024. It is important to note that the probes were removed at the end of the data collection period in 2023 to avoid ice-induced damage during the winter months. The probes were reinstalled in June 2024, which may explain the differences in the probe elevations when comparing the 2023 and 2024 results.

Table 1: Probe Elevation

Site	2023	2024
Burnetta	524	524
Morley	674.81	674.82
O'Nelly	661.30	661.16
Pinette	635.10	635.18
Triangle	583.43	583.48

Burnetta Lake

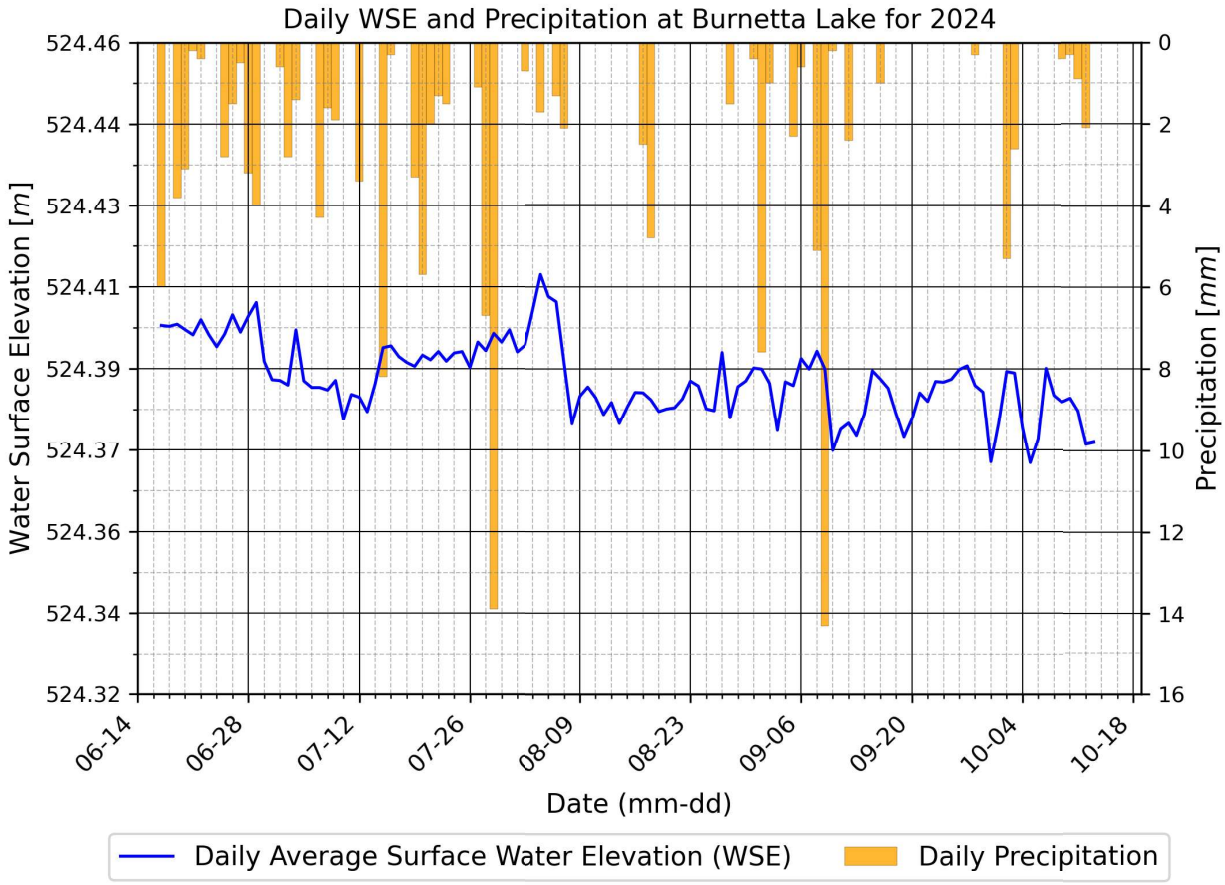


Figure 1: Daily average Water Surface Elevation and Precipitation at Burnetta Lake site

Morley Lake

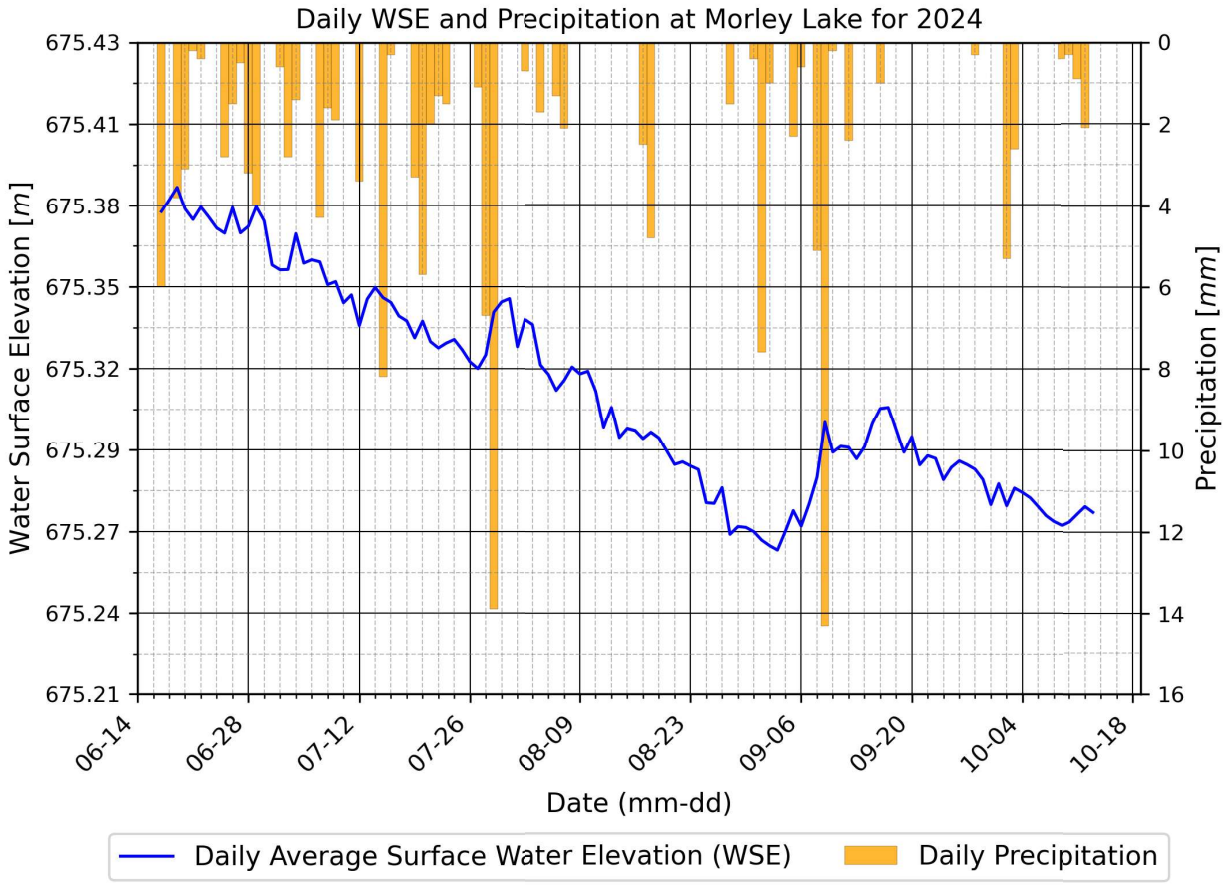


Figure 2: Daily average Water Surface Elevation and Precipitation at Morley Lake site

O'Nelly Lake

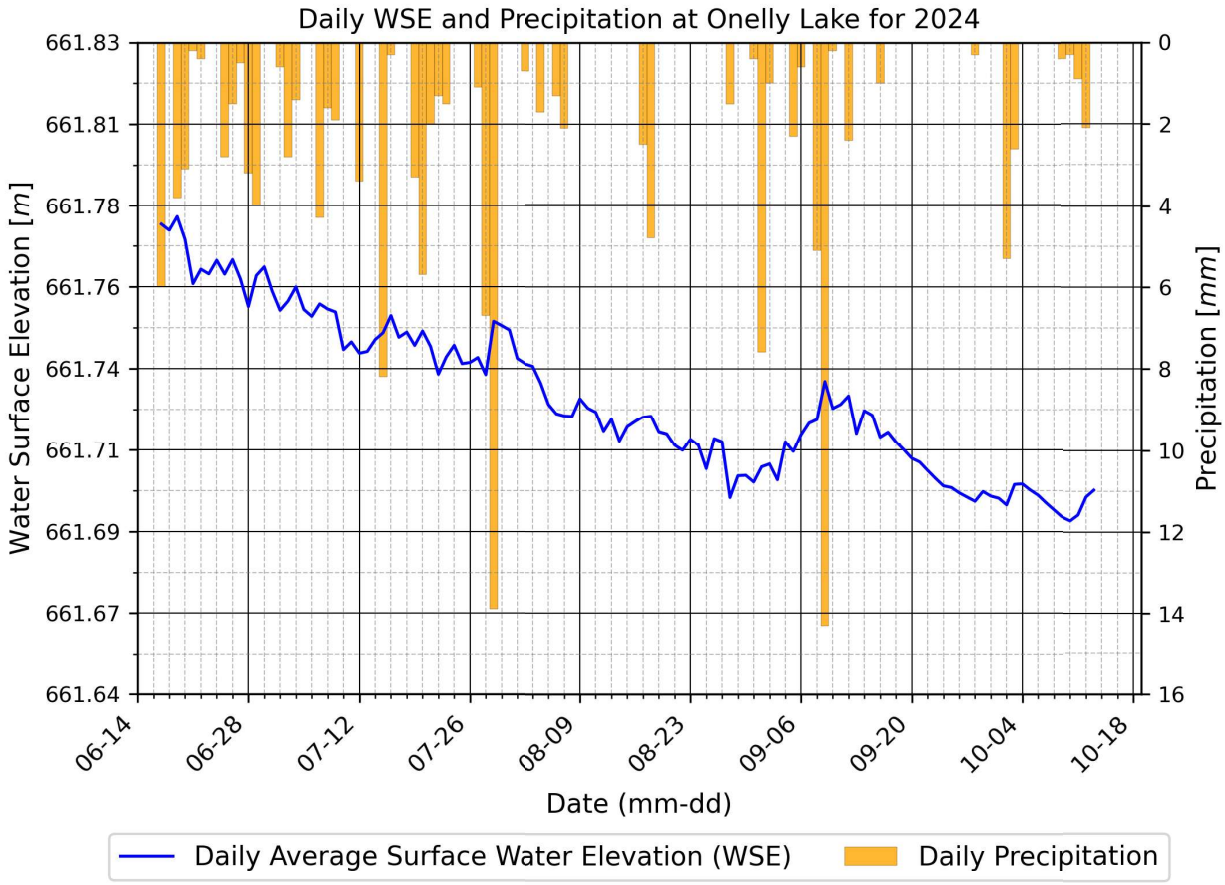


Figure 3: Daily average Water Surface Elevation and Precipitation at O'Nelly Lake site

Pinette Lake

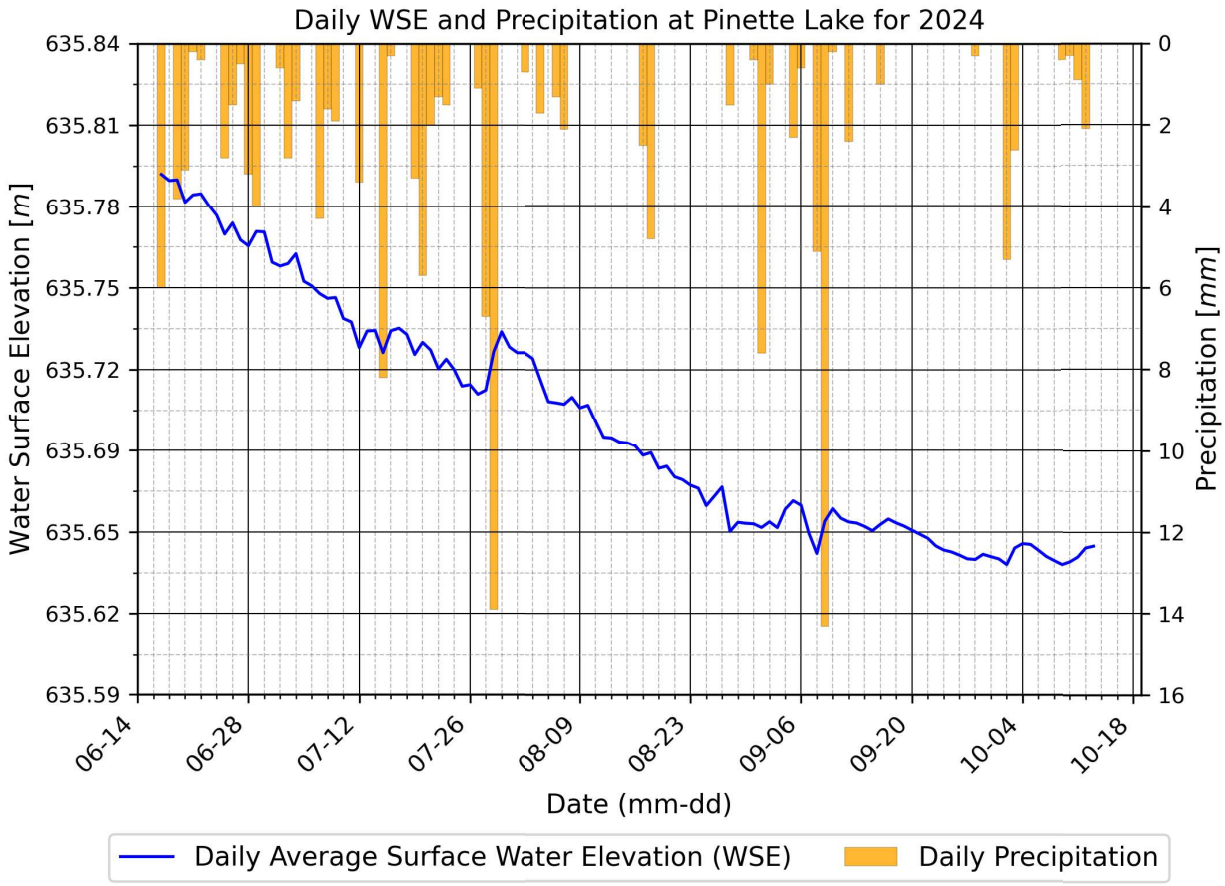


Figure 4: Daily average Water Surface Elevation and Precipitation at Pinette Lake site

Triangle Lake

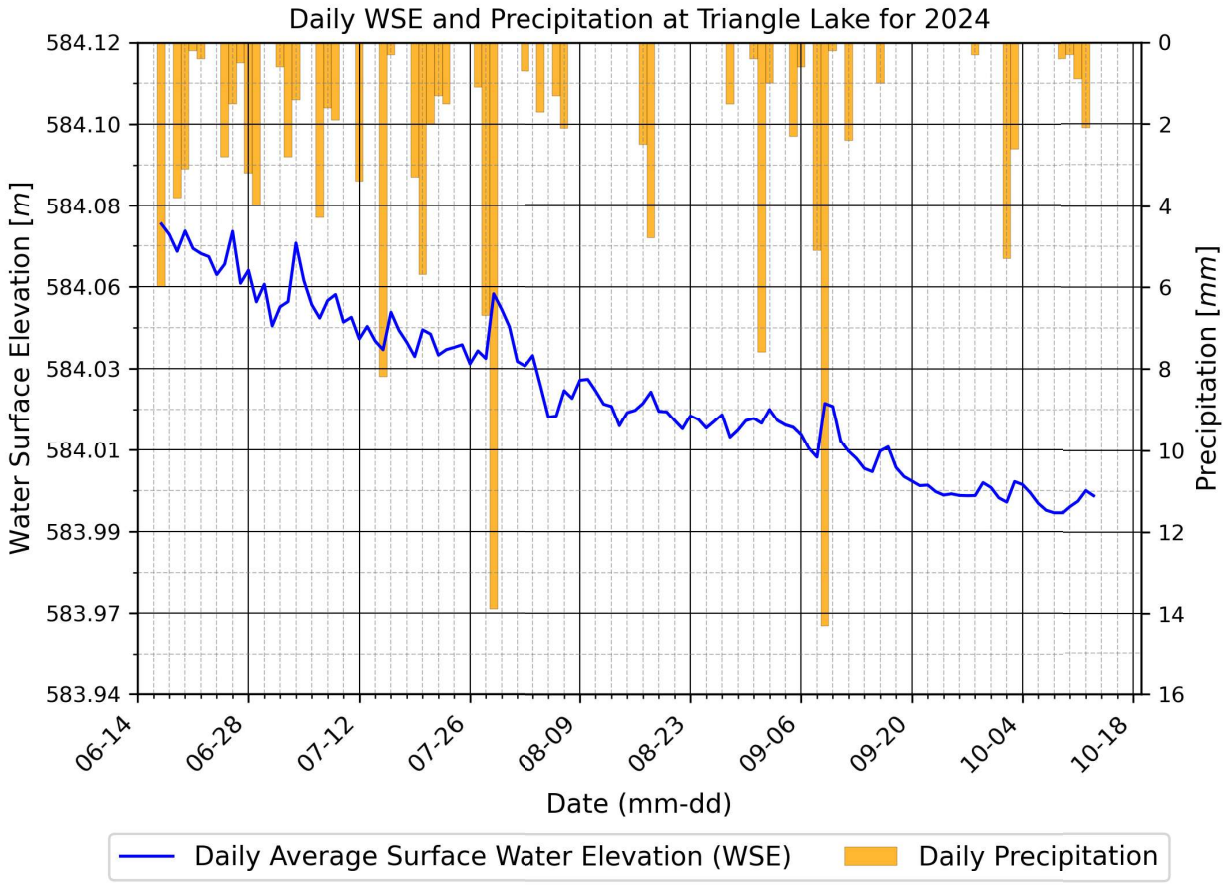


Figure 5: Daily average Water Surface Elevation and Precipitation at Triangle Lake site

2.2.1 ANNUAL WATER SURFACE ELEVATION (WSE) STATISTICS FOR 2024

Annual statistics on WSE variations were calculated by combining recent results with the ones used in the 2019-2023 reports. Table 2 shows the extremes and the average annual value of daily WSE at each site.

Table 2: Annual water surface elevation statistics

Year	Min (m)	Max (m)	Average (m)
Burnetta			
2019-2023	524.16	524.59	524.40
2024	524.32	524.41	524.39
Morley			
2019-2023	674.99	675.52	675.27
2024	674.82	675.38	675.31
O'Nelly			
2019-2023	661.27	661.81	661.67
2024	661.59	661.78	661.73
Pinette			
2019-2023	635.33	636.33	635.64
2024	635.63	635.79	635.70
Triangle			
2019-2023	583.80	584.51	583.97
2024	583.95	584.07	584.03

By analyzing these results, one notable difference stands out. Among the five sites, Morley Lake is the only one where the recorded WSE fell outside the minimum and maximum range established in previous years. The recorded minimum WSE decreased by approximately 17 cm compared to the prior years. However, the average WSE, remained consistent with historical values.

3 CONCLUSIONS AND RECOMMENDATIONS

Water-level data was compiled for five lakes sites (Burnetta, Morley, O'Nelly, Pinette Triangle lakes) from June 17 to October 13, 2024, using the new loggers installed in 2023. Data indicated that the WSE during this period remained generally consistent with previous reports from 2019 to 2023. However, one notable deviation was observed at Morley Lake, where the recorded minimum WSE was approximately 17 cm lower than in previous years, despite the average WSE remaining stable.

The following recommendations from the 2023 report are maintained:

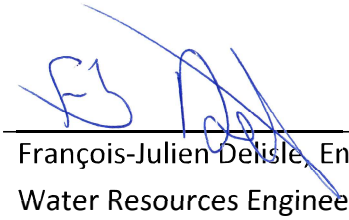
1. The surface water temperature must be constantly monitored to ensure that probes are removed before the lakes freeze over. Probes should not be removed too early to ensure that as much data as possible is collected.
2. A minimum of three site visits should be scheduled per year: one to install the probes after freezing periods, one to maintain the equipment (floating plants, etc.), and one to collect the data and remove the probes prior to the freezing period.
3. There is still no good survey data available for Burnetta Lake and a proper field survey should be completed to collect probe elevation, marker, and water levels. This information is needed to ensure that loggers operate properly and that water levels are appropriately calculated.
4. Rain gauges should be installed at each lake site, or at least at TSMC environmental team's building, to ensure that more precise precipitation data from the area is collected.
5. Probe elevation should be verified with the survey nail after the freeze period when the equipment is reinstalled.

4 SCOPE AND LIMITATIONS

This document is published in accordance with and subject to an agreement between Aquasphera, Groupe Géos and the Client (TSMC) for whom it has been prepared. It is limited to issues raised by the Client in its commitment and prepared using the standard skill and care commonly exercised by Engineering Scientists in the preparation of such documents. It has been prepared using data collected by TSMC, Groupe Géos and Aquasphera. This document is meant to be read as a whole, and sections or parts thereof should not be read or interpreted out of context. This document is confidential and the property of the Client.

Prepared by:

Kaël Boucher, CEP
Hydraulic and Hydrology Specialist
OIQ 6 073 993



François-Julien Delisle, Eng., M. Sc.
Water Resources Engineer
Technical Manager
OIQ 144 155

APPENDIX III – WETLAND WATER LEVELS MONITORING REPORT

www.groupegeos.ca

Montréal, January 30th, 2025

By email

Pallav Sinha
Corporate Environmental Manager
TATA Steel Minerals Canada Limited
1000, Sherbrooke West, Suite 1120
Montréal (Québec) H3A 3G4

Object: Howse wetland water levels, 2024 campaign
Direct Shipping Ore (DSO) Project—Newfoundland and Labrador

Ref.: PR185-52-24

Mr. Sinha,

We are pleased to submit the technical report on the above-mentioned project.

1 CONTEXT

Tata Steel Minerals Canada (TSMC) is developing an open-pit iron ore mine in Newfoundland and Labrador, with an estimated extraction of approximately 46 Mt of iron ore over the Howse Property Iron Mine Project's (Howse Project) 15-year lifespan.

In 2014, an environmental assessment was conducted in accordance with the requirements of the *Canadian Environmental Assessment Act, 2012*. As a result, the Howse Project was approved with several conditions. In compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*, TSMC must ensure that migratory bird populations and their habitat are not adversely affected by the Howse Project development, operation, and decommissioning.

To meet these requirements, TSMC, in collaboration with Groupe GÉOS (formerly Groupe Hémisphères), developed a follow-up program to assess potential adverse environmental effects of the Howse Project on wetland functions that support migratory birds and to evaluate the effectiveness of the proposed mitigation measures.

This document presents the work mandated to Groupe GÉOS by TSMC regarding water-level monitoring in wetlands. It presents the results of the sixth year of monitoring, along with data from previous years (2018 to 2024).

2 METHODOLOGY

The bottom of water wells, anchored in deep mineral soil, are used to monitor water level fluctuations across wetlands. The surface elevation of wetland soil is not constant: it expands and contracts as it becomes waterlogged or dries out. Therefore, using soil levels next to wells as a reference altitude would provide inaccurate data. While water levels measured from the well bottom cannot be used to compare absolute levels between wells, this method ensures precise interannual comparisons and allows the comparison of water-level variations across wetlands.

Water levels were measured once in 2020, 2021, 2023 and three times in 2024. No measurements were taken in 2022.

3 RESULTS

This section presents well data collected from 2018 to 2024. Well locations are presented in Figure 3 of appendix A and well photographs are presented in appendix B.

3.1 Condition of Observation

Table 1 presents the measurement dates and past precipitations. Total precipitations was recorded for two timeframes: 1 month and 6 months. Since the reported data were obtained from the Schefferville weather station, located more than 25 km away from the wells, they are presented as an indicator of seasonal dryness.

In 2019, wells WMW05, -06, -08, -24 and -29 were not measured due to unfavourable field conditions or because of jammed water well caps. In 2024, wells WMW01, -08 and -29 were often dry, those measurements were not included in the calculation.

Table 1 Dates of measurements

Year	Dates	Sampled wells	Past precipitations[1] (mm)	
			1 month	6 months
2018	2018-08-17 to 2018-08-20	Wells WMW01, 02, 03, 04, 05, 18 and 19	157	361
	2018-09-09 to 2018-09-10	All wells but WMW08	129	463
	2018-09-15 to 2018-09-16	All wells	113	465
	2018-09-30 to 2018-10-03	All wells	64[2]	507
2019	2019-08-01 to 2019-08-02	All wells but WMW05, 06, 08, 24, and 29	110[2]	245
2020	2020-08-23 to 2020-09-07	All wells	99	372
2021	2021-07-03	All wells	10	203
2022	-	No measurements done in 2022	---	---
2023	2023-08-02 to 2023-08-03	All wells	92	232

Year	Dates	Sampled wells	Past precipitations[1] (mm)	
			1 month	6 months
2024	2024-07-20	All wells, WMW29 was dry	57	214
	2024-08-16	All wells, WMW01, 08 and 29 were dry	45	248
	2024-10-05 to 2024-10-06	All wells, WMW01, 08 and 29 were dry	40	278

Note 1. Sum of total precipitation for the months before the measurements, data from the Schefferville weather station; missing data were considered as no precipitation. **Note 2**. More than 10% of missing data.

3.2 Average Water-Level

Average water levels and variations in water levels are grouped by well locations for comparison. The wells are grouped into three areas: North-West of Howse pit (12 wells); South-East of Howse pit (7 wells); and the Triangle Lake area (2 wells).

Average water levels were relatively similar across all areas (Table 3). However, since water levels depend on the installation depth of each well, water-level variation is a more reliable indicator of site conditions.

Table 2 Average yearly water-level

Well	Water level in the wells (m)						
	2018[1]	2019	2020	2021	2023	2024[1]	Average
North-West of Howse pit							
WMW11	0.58	0.72	0.63	0.56	0.55	0.40	0.57 ±0.04
WMW12	1.10	1.14	1.05	1.07	1.02	0.98	1.06 ±0.02
WMW13	0.62	1.02	1.09	1.07	1.08	0.94	0.97 ±0.07
WMW16	0.69	0.70	0.67	0.71	0.71	0.63	0.68 ±0.01
WMW18	1.04	0.94	0.07	0.81	0.86	0.68	0.73 ±0.14
WMW19	0.96	0.97	0.88	1.13	0.86	1.05	0.98 ±0.04
WMW21	1.08	0.74	0.73	0.71	0.74	0.47	0.75 ±0.08
WMW22	0.71	0.73	0.25	0.70	0.71	0.26	0.56 ±0.10
WMW24	1.01	-	0.13	0.56	0.60	0.35	0.53 ±0.15
WMW25	0.52	0.48	0.57	0.02	0.52	0.26	0.39 ±0.09
WMW26	0.73	0.74	0.24	0.67	0.75	0.61	0.62 ±0.08
WMW27	1.16	1.07	0.99	0.99	0.92	0.82	0.99 ±0.05
Average	0.85 ±0.07	0.84 ±0.06	0.61 ±0.1	0.75 ±0.09	0.77 ±0.05	0.62 ±0.08	0.74 ±0.04

Well	Water level in the wells (m)						
	2018[1]	2019	2020	2021	2023	2024[1]	Average
South-East of Howse pit							
WMW01	0.73	0.75	0.23	0.75	0.79	0.32	0.59 ±0.10
WMW02	0.56	0.62	0.60	0.47	0.55	0.44	0.54 ±0.03
WMW03	1.20	1.17	0.48	1.05	1.14	1.03	1.01 ±0.11
WMW04	0.63	0.67	0.51	0.52	0.66	0.41	0.57 ±0.04
WMW05	1.05	-	0.16	1.04	1.12	0.96	0.87 ±0.18
WMW06	0.74	-	0.87	1.05	0.84	0.78	0.85 ±0.05
WMW08	0.98	-	0.98	0.98	0.91	0.24	0.82 ±0.15
Average	0.84 ±0.09	0.8 ±0.13	0.55 ±0.11	0.84 ±0.1	0.86 ±0.08	0.67 ±0.12	0.76 ±0.05
Triangle Lake Area							
WMW29	0.90	-	0.77	0.91	-	-	0.86 ±0.04
WMW30	0.75	1.27	0.66	0.62	0.57	0.50	0.73 ±0.11
Average	0.82 ±0.07	1.27	0.72 ±0.05	0.77 ±0.14	0.57	0.50	0.78 ±0.11

Note 1. Numbers in parentheses represent the number of measurements that year, if not presented the number is 1.

3.3 Water-Level Variation

In general, measurements from 2020 and 2024 indicated low water levels, suggesting dry seasons, while those from 2018 and 2019 showed high water levels, corresponding to wet seasons (Table 2). However, water levels were less consistent across the areas in certain years: in 2021 and 2022, they were average in the northwest wells, high in the southeast wells and low in the Triangle Lake area wells (Figure 1).

The northwest and southeast areas exhibited comparable water level variations and followed similar trends over the years. In contrast, the Triangle Lake Area appeared to follow a distinct pattern. However, since only two wells are installed in this area, the observed trend may be influenced by the small sample size.

Although no statistical analyses were conducted, precipitation levels over the past month explain the interannual pattern in both northwest and southeast wells. Summer precipitation reached its highest levels in 2018 and 2019 among the monitored years, while 2024 recorded a significantly dryer season.

Table 3 Annual Water-level Variation per Area

Area	Water level variation (annual—average) (m)						
	2018	2019	2020	2021	2023	2024	Average
North-West	**0.11 ±0.06** Min: -0.35 Max: 0.48	**0.03 ±0.05** Min: -0.53 Max: 0.21	**-0.13 ± 0.07** Min: -0.66 Max: 0.18	**0.01 ±0.04** Min: -0.37 Max: 0.16	**0.04 ±0.03** Min: -0.12 Max: 0.15	**-0.12 ± 0.03** Min: -0.30 Max: 0.07	-
South-East	**0.09 ±0.04** Min: -0.12 Max: 0.18	**0.12 ±0.02** Min: 0.08 Max: 0.16	**-0.20 ± 0.13** Min: -0,70 Max: 0.17	**0.09 ±0.04** Min : -0.07 Max : 0.19	**0.11 ± 0.04** Min : -0.01 Max : 0.25	**-0.15 ± 0.08** Min : -0.58 Max : 0.10	-
Triangle Lake	**0.03 ±0.01** Min : 0.02 Max : 0.04	**0.54** Min : --- Max : 0.54	**-0.08 ± 0.01** Min : -0.09 Max : -0.07	**-0.03 ± 0.08** Min : -0.11 Max : 0.05	**-0.16** Min : --- Max : -0.16	**-0.23** Min : --- Max : -0.23	-

Note. Presented are annual averages per area ± standard error.

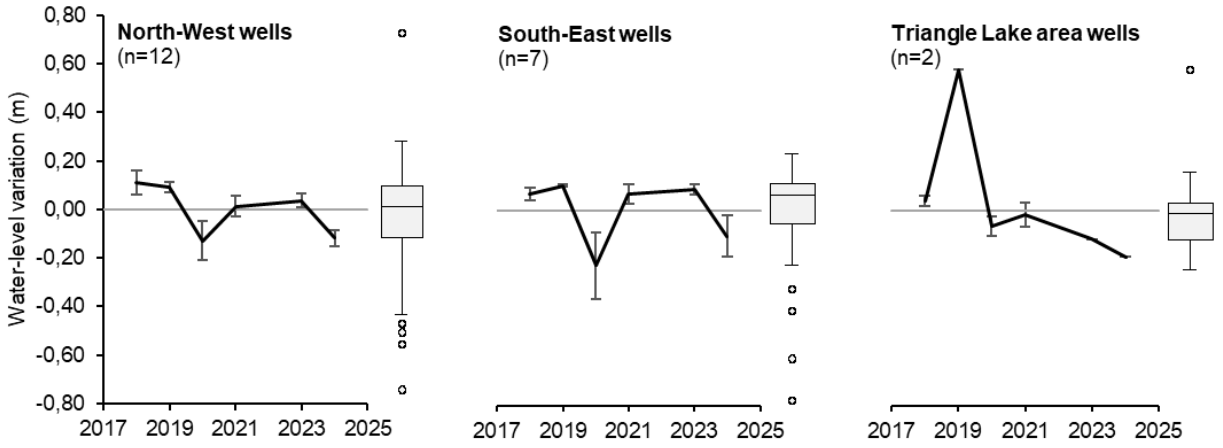


Figure 1 Water Level Variation, 2018–2024

Note. The boxplots represent all measurements for each area.

3.4 Seasonal Variation

Only 2018 and 2024 allow for an analysis of seasonal variation, as each well was measured only once in 2019, 2020, 2021 and 2023. Water level variations in the northwest area were unstable, showing important differences between measurement campaigns, particularly in 2018. In contrast, seasonal variations in the southeast and Triangle Lake areas were less pronounced but still present (Figure 2).

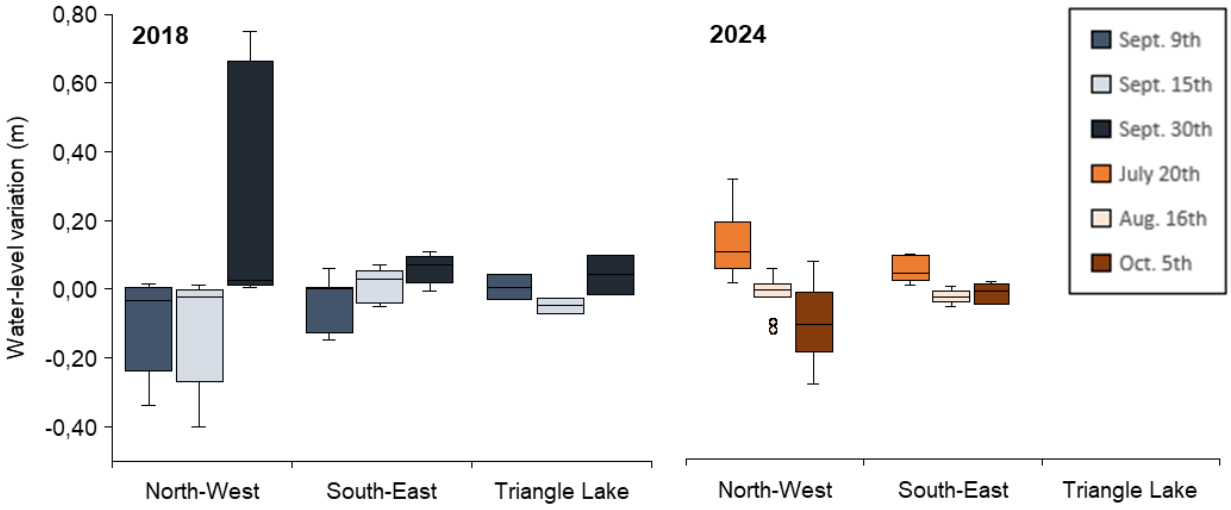


Figure 2 Water-level variation for each campaign in 2018 and 2024

4 RECOMMENDATIONS

Since seasonal variations are significant, it is recommended to increase the frequency of water-level monitoring to at least three times per year: June, August, and October. A single annual measurement may introduce a substantial bias due to the high seasonal variability in water levels. Standardizing the sampling date—for example, in early August each year—could help mitigate this bias. However, the responsiveness of water levels in the studied wetlands to recent precipitation events may still obscure interannual variations and the impact of mining activities.

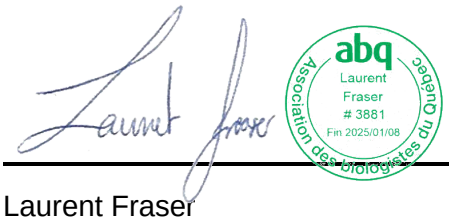
To minimize data gaps, it is recommended to always carry appropriate tools (e.g., hammer and chisel) when conducting water-level measurements, in case of a jammed well cap.

Finally, wells WMW01, WMW08, and WMW29 were often dry. While these results are informative, they are difficult to incorporate into the analysis. Additionally, well WMW25 has shown critically low water levels in certain years. Since mining activities are expected to lower water levels in nearby wetlands, increasing the frequency of this type of result, it is recommended to deepen wells WMW01, WMW08, WMW25, and WMW29 by installing new PVC piping.

5 QUALITY ASSURANCE

Groupe GÉOS possesses an internal quality control program based on a review and approval of all concepts and document production by a senior professional. The program considers the management, the control of documentation, the personnel's continuous training, as well as the quality assurance of the deliverables. The system also includes a tight control of the field work and the prevention and safety measures specific to the project.

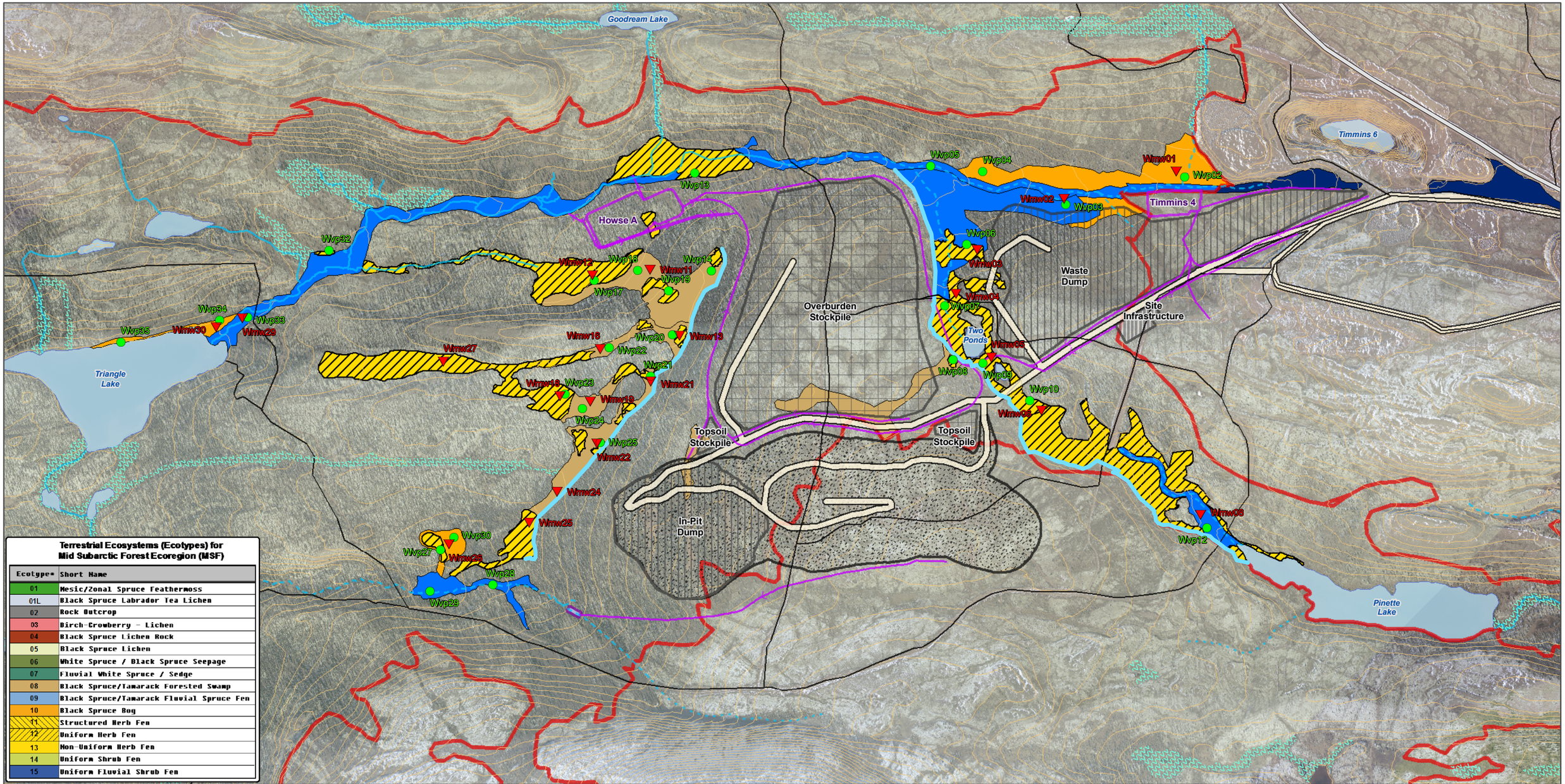
In the hope that everything is compliant, please accept, Mr. Sinha, our cordial regards.



Laurent Fraser
Biologist, M.Sc., Project director—Natural Environment Department

APPENDIX A
Figures

Figure 3 Waterwell locations



Terrestrial Ecosystems (Ecotypes) for Mid Subarctic Forest Ecoregion (MSF)

Ecotype	Short Name
01	Mesic/Zonal Spruce Feathermoss
01L	Black Spruce Labrador Tea Lichen
02	Rock Outcrop
03	Birch-Crowberry - Lichen
04	Black Spruce Lichen Rock
05	Black Spruce Lichen
06	White Spruce / Black Spruce Seepage
07	Fluvial White Spruce / Sedge
08	Black Spruce/Tamarack Forested Swamp
09	Black Spruce/Tamarack Fluvial Spruce Fen
10	Black Spruce Bog
11	Structured Herb Fen
12	Uniform Herb Fen
13	Non-Uniform Herb Fen
14	Uniform Shrub Fen
15	Uniform Fluvial Shrub Fen

LEGEND

Wetland survey
- Wetland vegetation point
- Active piezometer
- Wetland Delineation

Basemap
- Contour Line (5m)
- Ecoregion Boundary
- Existing Road

Howse Proposed Infrastructures
- Proposed Howse Pit
- Proposed Topsoil/Overburden Stockpile
- Proposed Waste Dump/In-Pit Dump
- Proposed Site Infrastructure
- Proposed Sedimentation Pond
- Proposed Dissipation Pool
- Haul Road
- Proposed Ditch and Outlet

Hydrography
- Permanent Watercourse
- Intermittent Watercourse
- Storm Runoff
- Water Body
- Other Wetland

FILE, PROJECT, DATE, AUTHOR:
GH-0917 , PR185-38-18, 2018-12-20, jfbrisard

N

0 150 300 450 600
Meters

UTM 19N NAD 83 SCALE: 1:15 000

SOURCES:
Basemap
Government of Canada, NTDB, 1:50,000, 1979 Government of NL and government of Quebec, Boundary used for claims
SNC Lavalin, Groupe Hémisphères, Hydrology update, 2013

Infrastructure and Mining Components
New Millennium Capital Corp., Mining sites and roads
Howse Minerals Limited/ MET-CHEM Howse Deposit Design for General Layout, 2015

HOWSE PROPERTY PROJECT

Wetlands monitoring stations

Follow Up Program

Groupe Hemispheres
1001, rue De l'Eglise, Suite 208, Québec (QC) Canada, G1V 3V7
1453, rue Beaubien est, Bureau 301, Montréal (QC) Canada, H2G 3C6

Figure 1

APPENDIX B
Tables

Table A 1 Well water measurements from 2018 to 2024

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW03	2018-08-17	09:00	LF, CC, SB, MT	0,50	1,71	1,21	
WMW04	2018-08-17	09:30	LF, CC, SB, MT	1,05	1,71	0,66	
WMW05	2018-08-17	08:30	LF, CC, SB, MT	0,68	1,71	1,03	
WMW01	2018-08-20	16:00	LF, LJ	0,99	1,71	0,72	
WMW02	2018-08-20	16:30	LF, LJ	1,35	1,71	0,36	
WMW18	2018-08-20	17:30	LF, LJ	1,20	1,71	0,51	
WMW19	2018-08-20	18:00	LF, LJ	0,81	1,71	0,90	
WMW01	2018-09-09	-	SB, LF	1,11	1,71	0,60	
WMW02	2018-09-09	-	SB, LF	1,09	1,71	0,62	
WMW03	2018-09-09	-	SB, LF	0,51	1,71	1,20	
WMW04	2018-09-09	-	SB, LF	1,08	1,71	0,63	
WMW05	2018-09-09	-	SB, LF	0,79	1,71	0,92	
WMW06	2018-09-09	-	SB, LF	1,12	1,71	0,59	
WMW22	2018-09-09	-	SB, LF	1,04	1,71	0,67	
WMW24	2018-09-09	-	SB, LF	1,04	1,71	0,67	
WMW25	2018-09-09	-	SB, LF	1,22	1,71	0,49	
WMW26	2018-09-09	-	SB, LF	0,97	1,71	0,74	
WMW11	2018-09-10	-	SB, LF	1,16	1,71	0,55	
WMW12	2018-09-10	-	SB, LF	0,59	1,71	1,12	
WMW13	2018-09-10	-	SB, LF	1,16	1,71	0,55	
WMW16	2018-09-10	-	SB, LF	1,01	1,71	0,70	
WMW18	2018-09-10	-	SB, LF	0,73	1,71	0,98	
WMW19	2018-09-10	-	SB, LF	1,04	1,71	0,67	
WMW21	2018-09-10	-	SB, LF	0,93	1,71	0,78	
WMW27	2018-09-10	-	SB, LF	0,54	1,71	1,17	
WMW29	2018-09-10	-	SB, LF	0,77	1,71	0,94	
WMW30	2018-09-10	-	SB, LF	0,99	1,71	0,72	
WMW03	2018-09-15	17:35	JC, ST	0,53	1,71	1,18	
WMW04	2018-09-15	17:40	JC, ST	1,13	1,71	0,58	
WMW05	2018-09-15	16:55	JC, ST	0,59	1,71	1,12	
WMW06	2018-09-15	17:05	JC, ST	0,92	1,71	0,79	

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW01	2018-09-16	14:30	JC, ST	0,95	1,71	0,76	
WMW02	2018-09-16	14:10	JC, ST	1,12	1,71	0,59	
WMW08	2018-09-16	-	JC, ST	0,77	1,71	0,94	
WMW11	2018-09-16	09:20	JC, ST	1,12	1,71	0,59	
WMW12	2018-09-16	09:05	JC, ST	0,63	1,71	1,08	
WMW13	2018-09-16	-	JC, ST	1,10	1,71	0,61	
WMW16	2018-09-16	08:45	JC, ST	1,04	1,71	0,67	
WMW18	2018-09-16	-	JC, ST	0,76	1,71	0,95	
WMW19	2018-09-16	-	JC, ST	1,15	1,71	0,56	
WMW21	2018-09-16	08:15	JC, ST	0,96	1,71	0,75	
WMW22	2018-09-16	10:20	JC, ST	1,00	1,71	0,71	
WMW24	2018-09-16	11:55	JC, ST	1,07	1,71	0,64	
WMW25	2018-09-16	11:45	JC, ST	1,18	1,71	0,53	
WMW26	2018-09-16	11:25	JC, ST	1,01	1,71	0,70	
WMW27	2018-09-16	11:00	JC, ST	0,56	1,71	1,15	
WMW29	2018-09-16	-	JC, ST	0,84	1,71	0,87	
WMW30	2018-09-16	-	JC, ST	1,03	1,71	0,68	
WMW29	2018-09-28	-	ST, DB	0,83	1,71	0,88	
WMW30	2018-09-28	-	ST, DB	0,86	1,71	0,85	
WMW01	2018-09-30	15:30	ST, DB	0,89	1,71	0,82	
WMW02	2018-09-30	-	ST, DB	1,04	1,71	0,67	
WMW03	2018-09-30	16:35	ST, DB	0,52	1,71	1,19	
WMW04	2018-09-30	17:00	ST, DB	1,06	1,71	0,65	
WMW05	2018-09-30	17:15	ST, DB	0,59	1,71	1,12	
WMW06	2018-09-30	17:30	ST, DB	0,88	1,71	0,83	
WMW08	2018-10-01	17:35	ST, DB	0,69	1,71	1,02	
WMW26	2018-10-01	17:05	ST, DB	0,97	1,71	0,74	
WMW18	2018-10-02	17:25	ST, DB		1,71	1,71	
WMW19	2018-10-02	17:15	ST, DB		1,71	1,71	
WMW22	2018-10-02	17:00	ST, DB	0,97	1,71	0,74	
WMW24	2018-10-02	16:15	ST, DB		1,71	1,71	

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW25	2018-10-02	16:30	ST, DB	1,18	1,71	0,53	
WMW27	2018-10-02	17:50	ST, DB	0,54	1,71	1,17	
WMW11	2018-10-03	10:25	ST, DB	1,12	1,71	0,59	
WMW12	2018-10-03	10:05	ST, DB	0,60	1,71	1,11	
WMW13	2018-10-03	10:40	ST, DB	1,00	1,71	0,71	
WMW16	2018-10-03	09:50	ST, DB	1,00	1,71	0,71	
WMW21	2018-10-03	09:30	ST, DB		1,71	1,71	
WMW01	2019-08-01	-	-	0,96	1,71	0,75	
WMW02	2019-08-01	-	-	1,09	1,71	0,62	
WMW03	2019-08-01	-	-	0,54	1,71	1,17	
WMW04	2019-08-01	-	-	1,04	1,71	0,67	
WMW05	2019-08-01	-	-	0,00	1,71	-	NA
WMW06	2019-08-01	-	-	0,00	1,71	-	NA
WMW08	2019-08-01	-	-	0,00	1,71	-	NA
WMW11	2019-08-01	-	-	0,99	1,71	0,72	
WMW12	2019-08-01	-	-	0,57	1,71	1,14	
WMW13	2019-08-01	-	-	0,69	1,71	1,02	
WMW16	2019-08-01	-	-	1,01	1,71	0,70	
WMW18	2019-08-01	-	-	0,77	1,71	0,94	
WMW19	2019-08-01	-	-	0,74	1,71	0,97	
WMW21	2019-08-01	-	-	0,97	1,71	0,74	
WMW22	2019-08-01	-	-	0,98	1,71	0,73	
WMW24	2019-08-01	-	-	0,00	1,71	-	NA
WMW25	2019-08-01	-	-	1,23	1,71	0,48	
WMW26	2019-08-01	-	-	0,97	1,71	0,74	
WMW27	2019-08-01	-	-	0,64	1,71	1,07	
WMW29	2019-08-01	-	-	0,00	1,71	-	NA
WMW30	2019-08-01	-	-	0,44	1,71	1,27	
WMW03	2020-08-23	15:55	Adam Calvert	1,23	1,71	0,48	
WMW04	2020-08-23	15:49	Adam Calvert	1,20	1,71	0,51	
WMW05	2020-08-23	15:33	Adam Calvert	1,55	1,71	0,16	

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW27	2020-08-26	10:11	Adam Calvert	0,72	1,71	0,99	
WMW30	2020-08-26	09:38	Adam Calvert	1,05	1,71	0,66	
WMW06	2020-09-05	07:39	J.F. Dion	0,84	1,71	0,87	
WMW01	2020-09-06	17:55	J.F. Dion	1,48	1,71	0,23	
WMW02	2020-09-06	17:39	J.F. Dion	1,11	1,71	0,60	
WMW11	2020-09-06	13:28	J.F. Dion	1,08	1,71	0,63	
WMW12	2020-09-06	12:57	J.F. Dion	0,66	1,71	1,05	
WMW13	2020-09-06	13:42	J.F. Dion	0,62	1,71	1,09	
WMW16	2020-09-06	12:42	J.F. Dion	1,04	1,71	0,67	
WMW18	2020-09-06	11:41	J.F. Dion	1,64	1,71	0,07	
WMW19	2020-09-06	12:08	J.F. Dion	0,83	1,71	0,88	
WMW21	2020-09-06	12:29	J.F. Dion	0,98	1,71	0,73	
WMW22	2020-09-06	11:23	J.F. Dion	1,46	1,71	0,25	
WMW24	2020-09-06	11:05	J.F. Dion	1,58	1,71	0,13	
WMW26	2020-09-06	10:24	J.F. Dion	1,47	1,71	0,24	
WMW29	2020-09-06	16:31	J.F. Dion	0,94	1,71	0,77	
WMW08	2020-09-07	17:13	J.F. Dion	0,73	1,71	0,98	
WMW25	2020-10-02	10:48	J.F. Dion	1,14	1,71	0,57	
WMW01	2021-07-03	15:36	JFD, JMcG	0,96	1,71	0,75	
WMW02	2021-07-03	15:50	JFD, JMcG	1,24	1,71	0,47	
WMW03	2021-07-03	16:39	JFD, JMcG	0,66	1,71	1,05	
WMW04	2021-07-03	16:33	JFD, JMcG	1,19	1,71	0,52	
WMW05	2021-07-03	16:12	JFD, JMcG	0,67	1,71	1,04	
WMW06	2021-07-03	16:20	JFD, JMcG	0,66	1,71	1,05	
WMW08	2021-07-03	17:02	JFD, JMcG	0,73	1,71	0,98	
WMW11	2021-07-03	11:00	JFD, JMcG	1,15	1,71	0,56	
WMW12	2021-07-03	11:57	JFD, JMcG	0,64	1,71	1,07	
WMW13	2021-07-03	10:48	JFD, JMcG	0,64	1,71	1,07	
WMW16	2021-07-03	11:10	JFD, JMcG	1,00	1,71	0,71	
WMW18	2021-07-03	11:22	JFD, JMcG	0,90	1,71	0,81	
WMW19	2021-07-03	10:25	JFD, JMcG	0,58	1,71	1,13	

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW21	2021-07-03	10:38	JFD, JMcG	1,00	1,71	0,71	
WMW22	2021-07-03	10:13	JFD, JMcG	1,01	1,71	0,70	
WMW24	2021-07-03	10:01	JFD, JMcG	1,15	1,71	0,56	
WMW25	2021-07-03	09:54	JFD, JMcG	1,69	1,71	0,02	
WMW26	2021-07-03	09:22	JFD, JMcG	1,04	1,71	0,67	
WMW27	2021-07-03	11:38	JFD, JMcG	0,72	1,71	0,99	
WMW29	2021-07-03	12:45	JFD, JMcG	0,80	1,71	0,91	
WMW30	2021-07-03	12:51	JFD, JMcG	1,09	1,71	0,62	
WMW11	2023-08-02	12:42	JFD, JP	1,16	1,71	0,55	
WMW12	2023-08-02	12:53	JFD, JP	0,69	1,71	1,02	
WMW13	2023-08-02	12:35	JFD, JP	0,63	1,71	1,08	
WMW16	2023-08-02	12:10	JFD, JP	1,00	1,71	0,71	
WMW18	2023-08-02	12:04	JFD, JP	0,85	1,71	0,86	Well push up
WMW19	2023-08-02	11:57	JFD, JP	0,85	1,71	0,86	
WMW21	2023-08-02	12:21	JFD, JP	0,97	1,71	0,74	
WMW22	2023-08-02	11:49	JFD, JP	1,00	1,71	0,71	
WMW24	2023-08-02	11:37	JFD, JP	1,12	1,71	0,60	Casing slanted
WMW25	2023-08-02	10:45	JFD, JP	1,20	1,71	0,52	
WMW26	2023-08-02	10:57	JFD, JP	0,96	1,71	0,75	
WMW27	2023-08-02	11:17	JFD, JP	0,79	1,71	0,92	Well push up
WMW29	2023-08-02	13:43	JFD, JP	DRY	1,71	-	DRY
WMW30	2023-08-02	13:50	JFD, JP	1,14	1,71	0,57	
WMW01	2023-08-03	11:16	JFD, JP	0,92	1,71	0,79	
WMW02	2023-08-03	11:03	JFD, JP	1,16	1,71	0,55	No Cap
WMW03	2023-08-03	10:41	JFD, JP	0,57	1,71	1,14	
WMW04	2023-08-03	10:34	JFD, JP	1,05	1,71	0,66	No Cap
WMW05	2023-08-03	10:05	JFD, JP	0,59	1,71	1,12	Well really push up
WMW06	2023-08-03	10:13	JFD, JP	0,87	1,71	0,84	
WMW08	2023-08-03	09:38	JFD, JP	0,80	1,71	0,91	Well push up a little bit
WMW01	2024-07-20	14:33	JFD	1,39	1,71	0,32	
WMW02	2024-07-20	14:48	JFD	1,27	1,71	0,44	No Cap

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW03	2024-07-20	15:23	JFD	0,65	1,71	1,06	
WMW04	2024-07-20	15:12	JFD	1,27	1,71	0,44	No Cap
WMW05	2024-07-20	15:49	JFD	0,66	1,71	1,05	
WMW06	2024-07-20	15:57	JFD	0,84	1,71	0,87	
WMW08	2024-07-20	16:31	JFD	1,47	1,71	0,24	
WMW11	2024-07-20	11:24	JFD	1,26	1,71	0,45	
WMW12	2024-07-20	11:12	JFD	0,69	1,71	1,02	
WMW13	2024-07-20	11:35	JFD	0,71	1,71	1,01	
WMW16	2024-07-20	11:02	JFD	0,97	1,71	0,74	
WMW18	2024-07-20	10:25	JFD	0,94	1,71	0,78	
WMW19	2024-07-20	10:14	JFD	0,44	1,71	1,27	artesian condition
WMW21	2024-07-20	11:43	JFD	1,05	1,71	0,66	
WMW22	2024-07-20	10:12	JFD	1,14	1,71	0,57	
WMW24	2024-07-20	10:02	JFD	1,25	1,71	0,46	
WMW25	2024-07-20	09:51	JFD	1,28	1,71	0,43	
WMW26	2024-07-20	09:40	JFD	1,02	1,71	0,69	
WMW27	2024-07-20	10:40	JFD	0,88	1,71	0,83	
WMW29	2024-07-20	12:39	JFD	DRY	1,71	-	DRY
WMW30	2024-07-20	12:49	JFD	1,17	1,71	0,55	
WMW01	2024-08-16	17:06	JFD	DRY	1,71	-	DRY
WMW02	2024-08-16	16:33	JFD	1,29	1,71	0,42	No Cap
WMW03	2024-08-16	16:21	JFD	0,72	1,71	0,99	
WMW04	2024-08-16	16:13	JFD	1,32	1,71	0,39	No Cap
WMW05	2024-08-16	15:43	JFD	0,81	1,71	0,91	
WMW06	2024-08-16	15:53	JFD	0,97	1,71	0,74	
WMW08	2024-08-16	14:19	JFD	DRY	1,71		DRY
WMW11	2024-08-16	12:56	JFD	1,43	1,71	0,28	
WMW12	2024-08-16	12:49	JFD	0,75	1,71	0,97	
WMW13	2024-08-16	13:06	JFD	0,80	1,71	0,91	
WMW16	2024-08-16	12:01	JFD	1,02	1,71	0,69	
WMW18	2024-08-16	11:54	JFD	1,02	1,71	0,69	

Table A 1 Water measurements, 2018-2024

Well	Date (AA/MM/DD)	Time (HH:MM)	Observer	Measure (m)	PVC Length (m)	Water Level = (B - A)	Well status
WMW19	2024-08-16	11:43	JFD	0,70	1,71	1,02	artesian cond.
WMW21	2024-08-16	13:17	JFD	1,22	1,71	0,49	
WMW22	2024-08-16	11:32	JFD	1,48	1,71	0,23	
WMW24	2024-08-16	11:20	JFD	1,37	1,71	0,34	
WMW25	2024-08-16	11:12	JFD	1,45	1,71	0,26	
WMW26	2024-08-16	11:04	JFD	1,20	1,71	0,51	
WMW27	2024-08-16	12:18	JFD	0,90	1,71	0,81	
WMW29	2024-08-16	14:48	JFD	DRY	1,71	-	DRY
WMW30	2024-08-16	14:54	JFD	1,21	1,71	0,50	
WMW01	2024-10-05	14:38	JFD	DRY	1,71	-	DRY
WMW02	2024-10-05	14:11	JFD	1,26	1,71	0,45	
WMW03	2024-10-05	13:57	JFD	0,67	1,71	1,04	
WMW04	2024-10-05	13:47	JFD	1,29	1,71	0,42	
WMW05	2024-10-05	13:05	JFD	0,78	1,71	0,93	
WMW06	2024-10-05	13:18	JFD	0,98	1,71	0,73	
WMW08	2024-10-05	11:42	JFD	DRY	1,71	-	DRY
WMW29	2024-10-05	12:17	JFD	DRY	1,71	-	DRY
WMW30	2024-10-05	12:26	JFD	1,26	1,71	0,45	
WMW11	2024-10-06	11:23	JFD	1,23	1,71	0,48	
WMW12	2024-10-06	11:11	JFD	0,77	1,71	0,95	
WMW13	2024-10-06	11:33	JFD	0,81	1,71	0,90	
WMW16	2024-10-06	11:44	JFD	1,24	1,71	0,47	
WMW18	2024-10-06	10:30	JFD	1,14	1,71	0,57	
WMW19	2024-10-06	10:22	JFD	0,85	1,71	0,86	
WMW21	2024-10-06	11:52	JFD	1,45	1,71	0,26	
WMW22	2024-10-06	12:00	JFD	1,73	1,71	-0,02	
WMW24	2024-10-06	10:04	JFD	1,47	1,71	0,24	
WMW25	2024-10-06	09:57	JFD	1,63	1,71	0,08	
WMW26	2024-10-06	09:48	JFD	1,08	1,71	0,63	
WMW27	2024-10-06	10:45	JFD	0,90	1,71	0,81	