



Talison Kinetic Leach Testing

**Progressive Kinetic Tailings and Waste
Rock Leach Test Results (Aug 2022 to
Dec 2023)**

Talison Lithium Pty Ltd

30 May 2024

→ **The Power of Commitment**



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Executive Summary

Long-term kinetic leaching tests were conducted on **waste rock** and **tailings** from the Greenbushes Lithium Mine operated by Talison Lithium Pty Ltd. The objective of the tests was to further understand the long-term concentrations and duration of leaching of Contaminants of Potential Concern (CoPCs), as identified in previous short-term leaching tests and geochemical assessments. This investigation is in response to a request for information by Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) on the Greenbushes Mine Expansion Mining Proposal and Mine Closure Plan relating to metalliferous and saline drainage risk from the existing and future waste rock.

This report summarises the kinetic leaching results from August 2022 to December 2023 (18 months) with respect to comparison against relevant guidelines (i.e., site-specific drinking water guidelines and freshwater ecology protection guidelines). The kinetic test methods employed the column/drum leach in a large scale (around 100 kg per column/drum), with reference to the national guidelines for prevention of acidic mine drainage (Commonwealth of Australia, 2016).

Four kinds of typical waste rocks (Granofels, Amphibolite, Dolerite and Pegmatite, including the proportional mixture of them) and homogeneous tailings samples were tested.

During the 18-month leaching, deionized (DI) water was used as leach agent to mimic the local rainfall, and leachates were collected at intervals to analyse the CoPCs, major ions, pH and electrical conductivity (EC).

The **Waste Rock** leaching results indicated the following:

- A negligible risk for acid generation and occurrence of saline drainage exists from waste rock, given the low sulphate (indicator of acid), the low major-ion concentrations and neutral pH.
- Concentrations of Al, Cd, Cs, Mo, Ni, U and Zn did not return results at concentrations above the drinking water and freshwater ecology guidelines and therefore, should not require management to reduce risks posed to the receiving environment.
- Concentrations of the As, Li, Rb, Sb, Tl, and V were above one or more of the relevant guidelines. Of these, Li and V concentrations are persistent (long term declining trends not discernible), while the remaining CoPCs should fall below, or be close to, the guidelines over the short term (estimated to be within 5 years based on extrapolation of trends).
- Of the four waste rock types (Granofels, Amphibolite, Dolerite, and Pegmatite) the Pegmatite waste rock leaches relatively high concentrations of CoPCs (As, Li, Rb, Sb, Tl, U, and V) for longer durations than the remaining three waste rock types. During design of future waste rock landforms, consideration should be given to increased mitigation/management of seepage from Pegmatite waste, compared to that of the remaining three types of waste rock.

The **Tailings** leaching results indicated the following:

- The tailings leaching results were initially mildly alkaline and brackish with elevated metal concentrations consistent with that of the decant waters (e.g.: elevated sulphate, lithium). In the two months following, the tailings leach waters became neutral and fresh with lower dissolved metal concentrations, the occurrence of which is inferred to reflect the flushing of the decant (ore process water) from the tailings pore spaces.
- Following the flushing, a negligible risk for acid generation and occurrence of saline drainage is indicated (neutral pH, low sulphate, low salinity).
- The concentrations of Cd, Cs, Mo, Ni, U, V and Zn did not return leaching results above the drinking water and freshwater ecology guidelines and, consequently these metals should not require management to reduce risks posed to the receiving environment.
- The leaching concentrations of As, Al, Li, Sb, Rb and Tl were above one or more of the relevant guidelines, and the analysis of the trends indicates the concentrations are likely to persist above the guidelines, estimated as greater than a decade.

Considering the elevated leaching concentrations of several CoPCs above the guidelines across different types of waste rocks and tailings, kinetic leach testing should be continued for a further 6-12 months to observe longer term trends in persistent CoPCs.

The laboratory analysis should be tailored to include only those CoPCs which exhibit concentrations above the guidelines and, although simulated infiltration will continue, the frequency of laboratory analysis may be reduced where deemed appropriate (e.g.: stabilised trends).

This report is subject to and must be read in conjunction with, the limitations set out in **Section 1.4** and the assumptions and qualifications contained throughout the Report.

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Appendix D	Graphs of Kinetic Leaching Results

1. Introduction

1.1 Background

The Greenbushes Mine is operated by Talison Lithium Pty Ltd (Talison) and located south of the town of Greenbushes, ~250 km south of Perth, Western Australia. The Department of Mines, Industry Regulation and Safety (DEMIRS), on review of the latest Mine Closure Plan (MCP) prepared by GHD (2021), required further information on leaching concentrations of Contaminants of Potential Concern (CoPCs) from mine waste at mine closure.

The geochemical characteristics of the mine waste on the mine site have been investigated in a series of studies. The results showed that the occurrence of acidic metalliferous/saline drainage was low (GHD, 2022a), but a number of metals were found in leachates under neutral conditions at concentrations that may pose an adverse risk to surface water systems that are in hydraulic connection with seepage derived from the waste rock.

In a recent study on waste rock and tailings (GHD, 2022b), in which short-term kinetic leach testing was undertaken, a total of 13 metals were deemed as CoPCs (i.e., Sb, As, Cd, Cs, Cr, Li, Mo, Ni, Rb, Tl, V, U and Zn). CoPCs refer to those metals recorded at concentrations above the relevant guidelines or baseline. As a result, GHD was engaged by Talison to complete long-term kinetic leaching tests on tailings and waste rock from the mine site to further understand the characteristics and risks posed by CoPCs in leaching solutions.

1.2 Purpose of this Report

This report summarises the results of kinetic leach tests completed between August 2022 to December 2023, compares these to relevant Water Quality Guidelines (WQGs), and makes recommendations on the continuation of the testing.

1.3 Scope of Work

The scope of work was as follows:

- Bulk samples of waste rock (amphibolite, dolerite, granofels, pegmatite, and mixed) and mine tailings were collected from the mine site by GHD and transported to the Landloch laboratory in Bibra Lake.
- Kinetic leach tests were set up and conducted on the supplied waste rock and tailings samples by Landloch using the methodology outlined in **Section 2.2**.
- Bulk samples were analysed for total elemental composition and deionised (DI) water Australian Standard Leaching Protocol (ALSP) leaching for verification purposes.
- Samples of leachate from the kinetic testing were analysed for the CoPCs against relevant WQGs.
- Completion of this summary report

1.4 Limitations

This report has been prepared by GHD for Talison Lithium Pty Ltd and may only be used and relied on by Talison Lithium Pty Ltd for the purpose agreed between GHD and Talison Lithium Pty Ltd as set out in **Section 1.2** above.

GHD otherwise disclaims responsibility to any person other than Talison Lithium Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in **Section 1.3** and are subject to the scope limitations set out in this report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring after the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

2. Methodology

2.1 Collection of Samples

Waste rocks and tailings samples comprised the following:

- **Amphibolite:** drill-hole core.
- **Dolerite:** drill-hole core.
- **Granofels:** drill-hole core.
- **Pegmatite:** rock clasts and sandy/stoney clays (weathered pegmatite).
- **Tailings:** silty sand tailings material – homogeneous derived from the Tailings dam 2.

The waste rock core samples were collected by Talison personnel, with the exception of the granofels material, which was collected on site from core trays by GHD field staff. The waste rock (drill hole core) was considered to reflect a randomised sampling methodology.

The samples were collected and transported to the Landloch laboratory in bulk bags.

2.2 Kinetic Leaching Test

2.2.1 Overview

The kinetic leaching test is a scaled column leach and humidity test, which is a classic method to assess the kinetic geochemical behaviour of mine wastes (Commonwealth of Australia, 2016). This method subjects mine waste samples to sequential flushing and drying cycles and can be conducted on small samples (as small as 2 kg) in laboratory and on large samples (up to 1,000 tonnes) in the field. Larger column sizes result in more realistic the scaling factors (e.g., particle size). The samples tested in this study were in the order of 100 kg.

2.2.2 Equipment Setup

The waste rock and tailings materials to be tested were placed in 100 L high-density polyethylene (HDPE) drums as follows:

- Amphibolite (Drum 1, Drum 2, and Drum 3).
- Dolerite (Drum 1, Drum 2, and Drum 3).
- Granofels (Drum 1, Drum 2, and Drum 3).
- Pegmatite (Drum 1, Drum 2, and Drum 3).
- Mixed waste rock (Drum 1 and Drum 2).
- Tailings (Drum 1, Drum 2, and Drum 3).

The testing setup is shown in **Figure 1**, which shows the drums placed on an elevated stand to allow drainage and leachate collection. Tap fittings were installed at the bottom of the drums to drain the leachate. DI water was added to the drums each week and allowed to flow through the material into labelled plastic containers positioned below the stand. The drums were covered with lids to prevent dust ingress, evaporation of DI water, and possible externally derived metal contamination (e.g., dust). Photos of the leach test setups for the various materials are presented in **Appendix A**.

2.2.3 Kinetic Testing Procedure

DI water for the testing was equilibrated with the atmosphere for at least 24 hours prior to use. 2.5 L of DI water was poured over the materials in each drum using a watering can to simulate rainfall (~20 mm/week) and the resulting leachate allowed to drain and collect in the containers. Samples of the leachate were taken and submitted to ALS Environmental, a NATA accredited laboratory, for analysis of pH, electrical conductivity (EC), metals and major ions. The samples were collected in according to standard sampling procedures in bottles provided by the laboratory and then submitted to the laboratory under Chain of Custody (CoC) documentation.

Leachate samples were collected and analysed on a weekly basis for the first two months of testing, then tested on a fortnightly basis until June 2023, and then tested approximately monthly thereafter.



Figure 1: Kinetic Test Setup

3. Quality Assurance and Quality Control

3.1 Overview

The following QA/QC procedures applied to the kinetic testing:

- The HDPE drums were decontaminated with Decon 90 and rinsed prior to the test setup.
- DI water was placed in the empty drums and allowed to sit for a representative period, following which drum blank samples were taken and tested for dissolved metals.
- Blank samples of the DI water used to simulate rainfall were taken periodically (and following receipt of new batches of DI water) and tested for dissolved metals.
- Leachate samples were duplicated and sent to the ALS laboratory as blind samples.
- Leachate samples were duplicated and sent to a secondary laboratory (EnviroLab Services).

The quality assurance and quality control results are outlined in the following sections.

3.2 Blind Frequency

The QC sampling frequency was ~1:25, and the results of the Relative Percentage Differences (RPDs) are shown in **Appendix B**. A total of 11 out of 810 RPDs (1.3%) exceeded the RPD limit criteria (**Table 1**). Eight out of these 11 exceedances were for total cation and ionic balances, which are calculated parameters from several independent analytes and are therefore subject to cumulative uncertainty. These analytes, subject to the cation and anion balance do not constitute the elements of concern for this study - salinity concentrations - which is leaching at very low concentrations from the waste rock and tailings. The remaining three exceedances relate to elements Mo, Rb and Sn, which are considered acceptable given their low rate of exceedance occurrence, and that the elements did not show repeated exceedances.

Table 1: Adopted RPD Assessment Criteria

Concentration × Limit of Reporting	Relative Percent Difference Limit (%)
1 – 10	200
10 – 30	50
> 30	30

3.3 Blank Samples

A total of four blank samples were analysed, including three blank samples of DI water and one sample from the empty drums prior to setting up the test. Concentrations of Ba, B and Cu were reported to be greater than the Limit of reporting (LoR) in the blank samples. The concentrations are likely derived from the drum material, but are acceptable occurrences given that Ba, B and Cu are not elements of concern for this study.

3.4 QA/QC Summary

Overall, the QC results are considered to be acceptable to draw meaningful conclusions regarding the leach water quality.

4. Kinetic Leach Test Results

4.1 Overview

The laboratory test results are provided in **Appendix C** and the relevant CoPCs are graphed and presented in **Appendix D**. Trends are discussed for the CoPCs, major ions, pH, EC, and alkalinity.

4.2 Assessment Criteria

Site specific WQGs for the CoPCs have been developed for the mine site receiving environment by (GHD, 2023), a summary of which is provide in **Table 2**. In this report, the test results have been compared against the drinking water and freshwater ecology guidelines since these are generally the most sensitive guidelines.

Table 2: Summary of Adopted Water Quality Guidelines (Derived and Published)¹

CoPC (filtered)	Water quality guidelines (mg/L)				
	Agricultural use - Livestock	Agricultural use - Irrigation	Aquatic Environment	Potable use	Non-potable use
Aluminium	5	5	0.055	0.2	NR
Antimony	0.15	NR	0.09	0.003	0.06
Arsenic	0.5	0.1	0.013	0.01	0.2
Cadmium	0.01	0.01	0.001	0.002	0.04
Caesium	2.0	NR	0.1	0.08	1.6
Chromium (III+VI)	1.0	0.1	0.004	0.05	1.0
Copper	0.5	0.2	0.0014	2.0	40
Lithium	0.82	2.5	2.0	0.007	0.14
Manganese	10	0.2	1.9	0.5	10
Molybdenum	0.15	0.01	0.034	0.05	1.0
Nickel	1.0	0.2	0.05	0.02	0.4
Rubidium	0.39	NR	0.017	0.014	0.28
Thallium	0.13	0.001	0.00003	0.00004	0.0008
Uranium	0.2	0.01	0.0005	0.02	0.4
Vanadium	0.1	0.1	0.0006	0.0002	0.004
Zinc	20	2	0.04	3	60
Sulfate	1000	NR	429	250	NR
Nitrate (as N)	90	NR	2.4	50	NR

¹ GHD 2023
NR - Not required,

4.3 Waste Rock

4.3.1 CoPCs Leaching Concentrations Over Time

The graphs of the CoPC concentrations of leachate from the waste rock types over time were compared to the drinking water and freshwater ecology guidelines and are presented in **Appendix D**.

The results (graphs) (**Appendix D**) are also summarised in **Table 3**, which shows that concentrations of Cd, Cs, Mo, Ni, U and Zn did not return leaching results at concentrations above the drinking water and freshwater ecology guidelines (over the 18 months). These CoPCs are not discussed further herein.

The graphs of CoPCs which exceeded the guidelines over the period (Al, As, Li, Rb, Sb, Tl, V) are reproduced from **Appendix D** in the following **Figure 2** to **Figure 8**. The Figures indicate the following trend observations over the 18-month leaching period, a summary of which is presented in **Table 4**:

- **Aluminium:** Apart from one pegmatite sample (Drum 3) the concentration of Al (**Figure 2**) in the remaining samples was lower than the drinking water and ecological guidelines. Pegmatite Drum 3 showed an increasing trend of Al which is considered due to the high clay content in the samples (saproplitic pegmatite clays).
- **Arsenic:** The concentrations of As (**Figure 3**), indicate declining trends in the waste rock types granofels, dolerite, and amphibolite, with stabilised and/or increased As concentrations evident in the pegmatite. The trends indicate that concentrations of As may fall below the guidelines for dolerite and amphibolite over the short term (estimated to be within 1 to 3 years), while granofels may fall below guidelines over the long term (estimated > 10 years).
- **Lithium:** The concentrations of Li (**Figure 4**) exceed the drinking water guidelines (but not ecological) in all waste rock types, excluding the Amphibolite. The concentration trends may indicate a weak decline, indicating that Li leaching from waste rock above guidelines could persist over the long term (estimated > 10 years).
- **Rubidium and Thallium:** Excluding one pegmatite sample (Drum 3) and the two drums of mixed waste rock, the concentrations of both Rb (**Figure 5**) and Tl (**Figure 7**), do not exceed the drinking water and ecological guidelines. The samples in the pegmatite Drum 3 and the mixed waste rock drums are considered to reflect the contribution from the saproplitic pegmatite clays within the drums.
- **Antimony:** Concentrations of Sb (**Figure 6**) do not exceed the freshwater ecology guidelines but do exceed the drinking water guidelines in all waste rock types excluding the Amphibolite (over the leaching period). The graphs indicate that pegmatite concentrations are persistent, while the remaining waste rock types exhibit declining trends (granofels, dolerite, amphibolite), supporting that Sb concentrations may decline close to the guidelines within five years or so.
- **Vanadium:** The concentrations of V (**Figure 8**) indicate that trends have stabilised with exceedances of drinking water guidelines in all waste rock types, and ecology guidelines exceeded in the granofels and pegmatites. The trends indicate that concentrations of V do not appear to be declining over time, and that V concentrations may persist to leach over the guidelines over the coming decades.

Based on the observations noted above, which are summarised and presented in **Table 4**, the following conclusions can be drawn:

- Of the four waste rock types, pegmatite waste rock leaches relatively high concentrations of CoPCs (Al, As, Li, Rb, Sb, Tl, V), for longer durations than the remaining three waste rock types.
- Of the CoPCs (Al, As, Li, Rb, Sb, Tl, V), Li and V concentrations above the drinking water guidelines are persistent and estimates of the duration above the guidelines could be greater than 10 years.
- Otherwise, the concentrations of the remaining CoPCs (As, Sb) should fall below, or be close to, the guidelines over the short term - estimated to within 5 years (extrapolation of trends).

Table 3: Summary of CoPCs in Waste Rock Leachate Exceeding WQGs after 18 Months of Testing²

CoPC ³	Above Drinking Water Guideline ?					Above Freshwater Ecology Guideline ?				
	Amphibolite	Dolerite	Granofels	Pegmatite	Mix	Amphibolite	Dolerite	Granofels	Pegmatite	Mix
Aluminium	No	No	No	No	No	No	No	No	Yes (1)	Yes (1)
Arsenic	No	Yes (3)	Yes (2)	Yes (3)	Yes (2)	No	Yes (3)	Yes (2)	Yes (3)	Yes (2)
Antimony	No	Yes (3)	Yes (2)	Yes (3)	Yes (2)	No	No	No	No	No
Cadmium	No	No	No	No	No	No	No	No	No	No
Caesium	No	No	No	No	No	No	No	No	No	No
Chromium	No	No	No	No	No	No	No	No	No	No
Lithium	No	Yes (3)	Yes (3)	Yes (3)	Yes (2)	No	No	No	No	No
Molybdenum	No	No	No	No	No	No	No	No	No	No
Nickel	No	No	No	No	No	No	No	No	No	No
Rubidium	No	No	No	Yes (1)	Yes (2)	No	No	No	Yes (1)	Yes (2)
Thallium	No	No	No	Yes (1)	Yes (2)	No	No	No	Yes (1)	Yes (2)
Uranium	No	No	No	No	No	No	No	No	No	No
Vanadium	Yes (3)	Yes (3)	Yes (3)	Yes (2)	Yes (2)	No	No	Yes (2)	Yes (1)	Yes (2)
Zinc	No	No	No	No	No	No	No	No	No	No

² The number of drum samples (out of 3, excepting Mixed which is out of 2) with exceedance are indicated by parentheses.

³ **Green text** indicates CoPCs should not pose a risk to the receiving environment (below most sensitive guidelines)

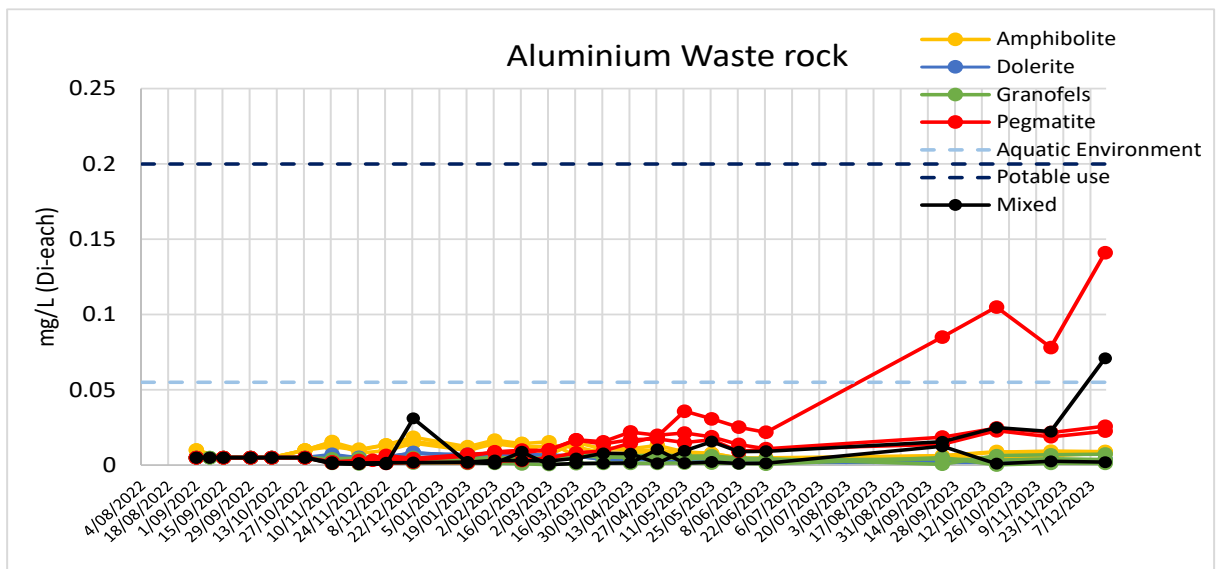


Figure 2: Aluminium Concentrations Trend in Waste Rock Leachates

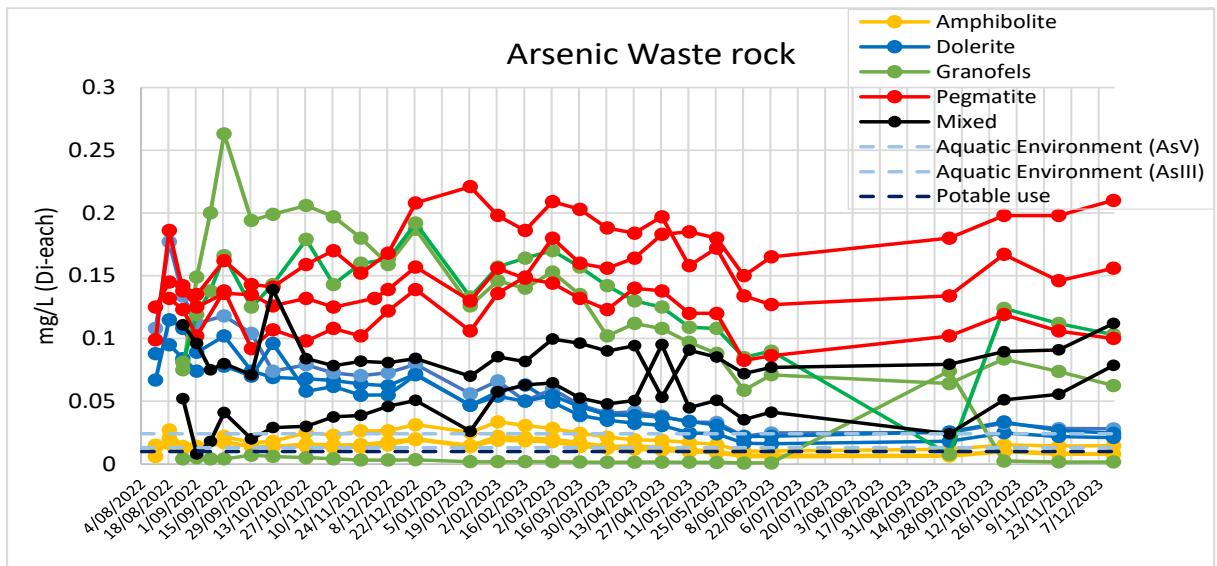


Figure 3: Arsenic Concentrations Trends in Waste Rock Leachates

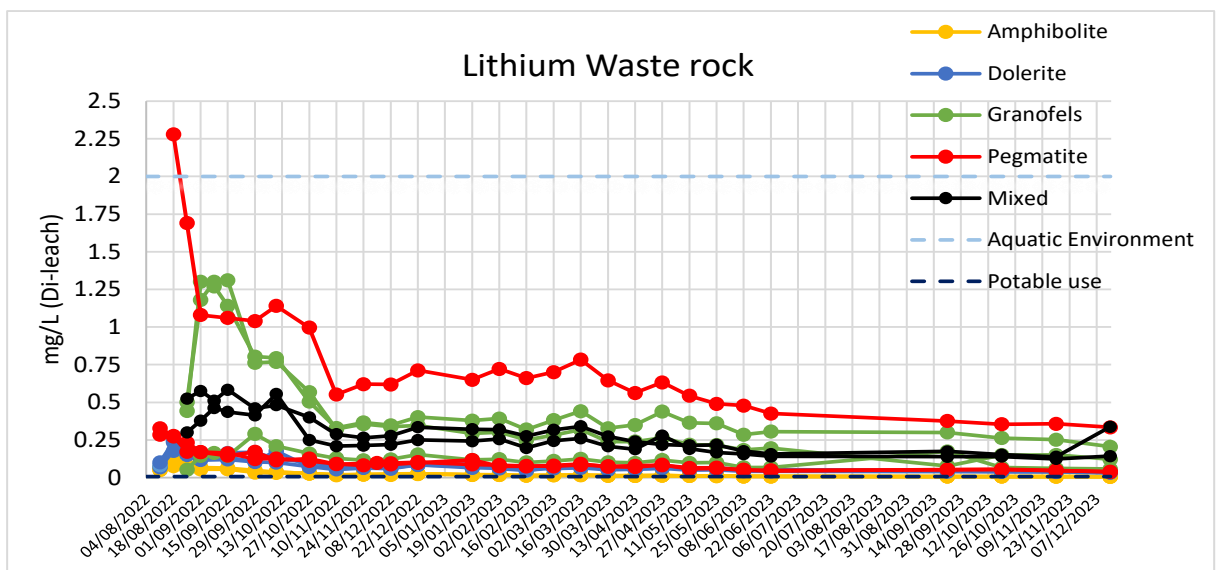


Figure 4: Lithium Concentrations Trends in Waste Rock Leachates

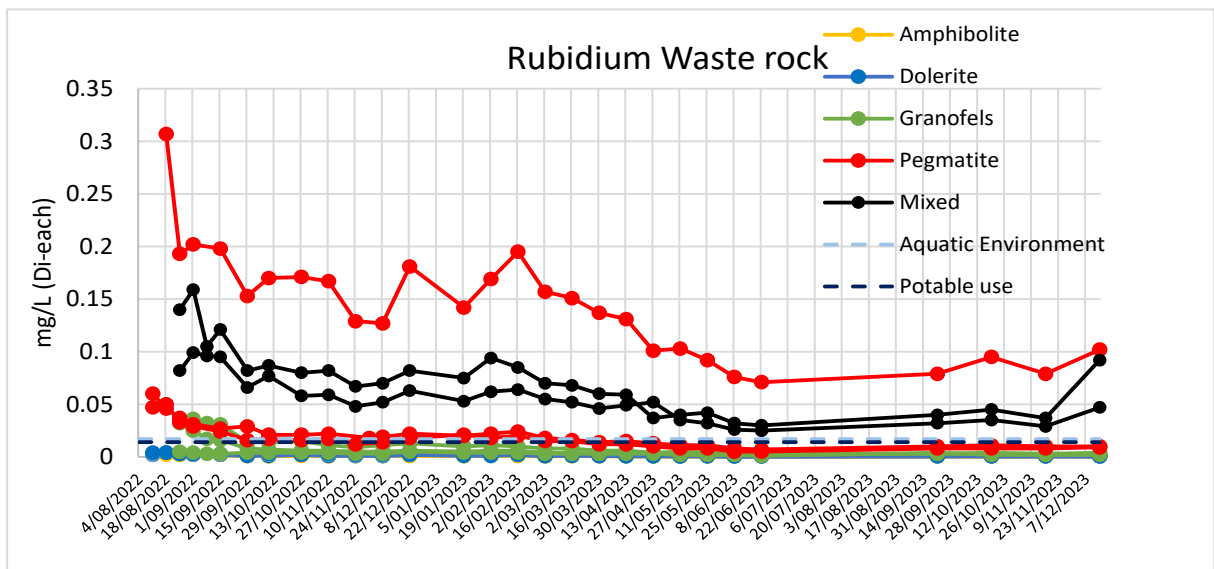


Figure 5: Rubidium Concentrations Trends in Waste Rock Leachates

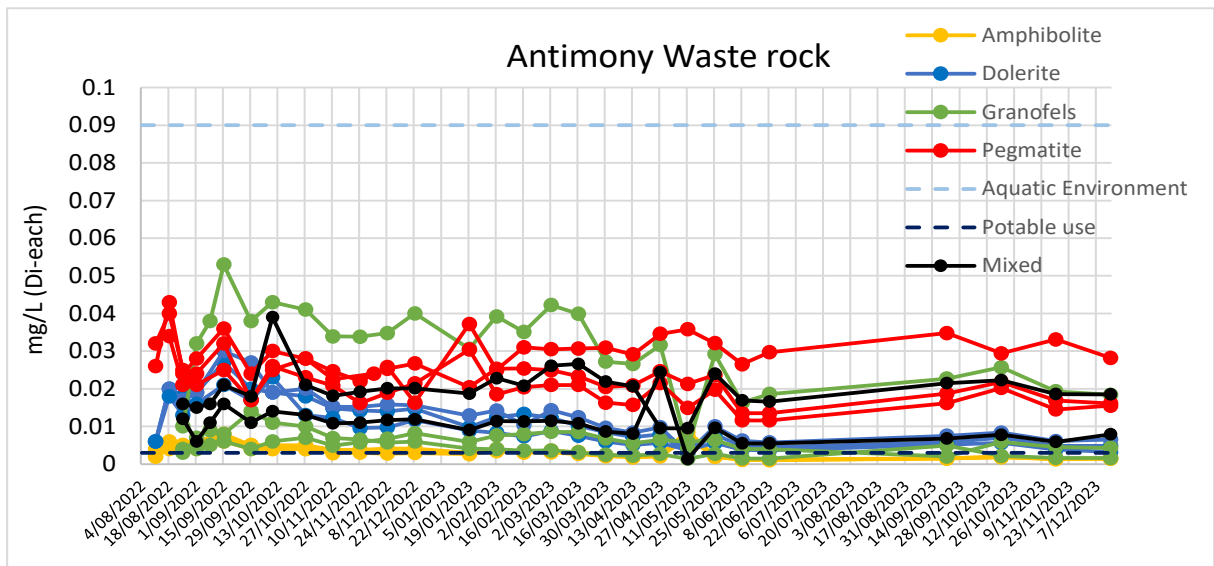


Figure 6: Antimony Concentration Trends in Waste Rock Leachates

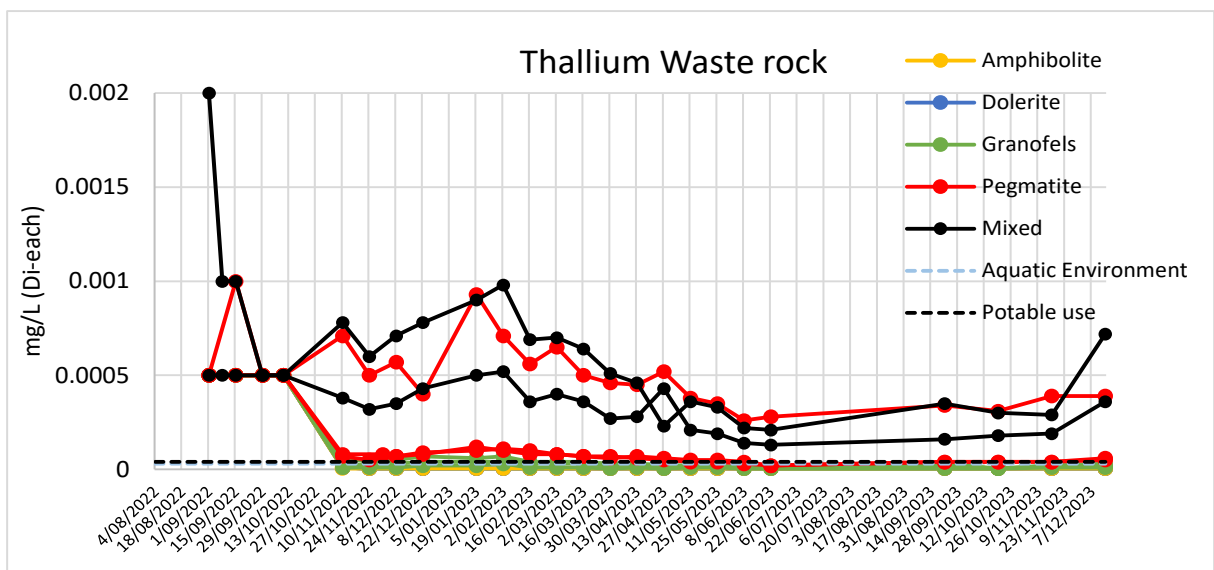


Figure 7: Thallium Concentration Trends in Waste Rock Leachates

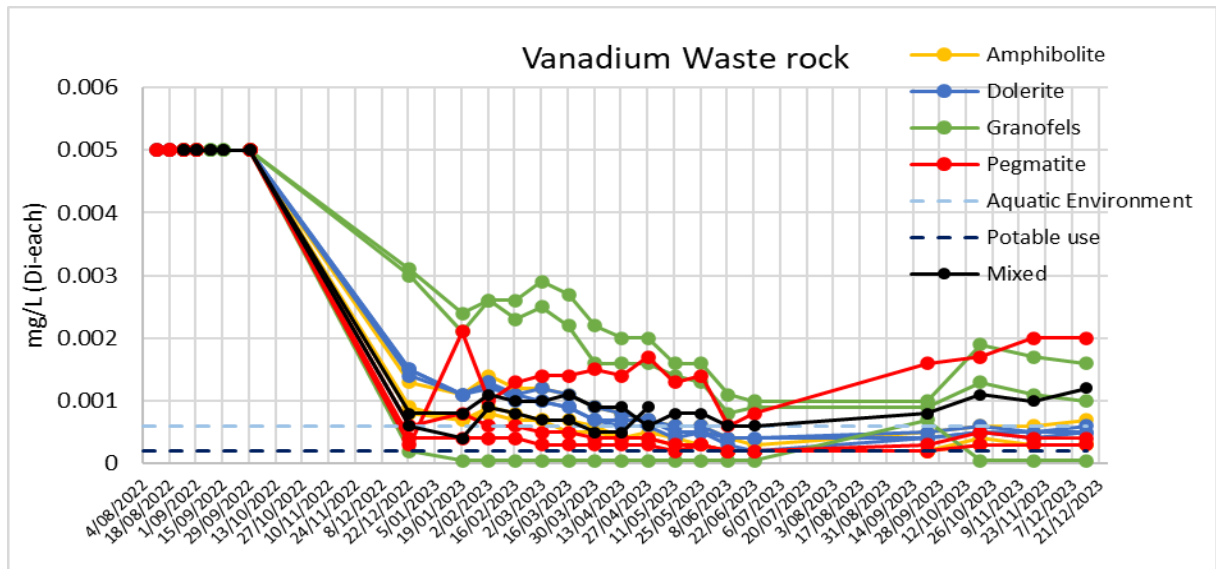


Figure 8: Vanadium Concentrations Trends in Waste Rock Leachates

Table 4: Estimates of Persistence of CoPCs in Waste Rock above WQGs (Years)

CoPC	Waste rock type ⁴			
	Amphibolite	Dolerite	Granofels	Pegmatite
Aluminium	NA	NA	NA	> 10?
Arsenic	1 to 3	1 to 3	5	> 10?
Antimony	NA	1 to 3	>5?	> 10?
Lithium	NA	>10?	>10?	>10?
Rubidium	NA	NA	NA	3 ⁵
Thallium	NA	NA	NA	3 ⁵
Vanadium	>10?	>10?	>10?	>10?

4.3.2 Other Physio-Chemical Indicators

4.3.2.1 pH

The trend of the pH is shown in **Figure 9**, which indicates the following:

- The pH of the leachates from all waste rock samples was slightly acidic (5.6) to neutral (7.6) with a similar decreasing pH trend of ~1 pH unit being noted for most waste rock types over the 18-month test period.
- The leachate samples from all Amphibolite and Dolerite drums were neutral throughout testing, whilst leachate samples from one Granofels drum (Granofels 1) and two Pegmatite drums (Pegmatite 1 and 2) changed from circum-neutral to slightly acidic.
- The leachate samples from the two drums of mixed waste rock were generally neutral.

⁴ NA - Not above guidelines

⁵ Duration likely reflects the contribution/dissolution from pegmatite saprolitic clays.

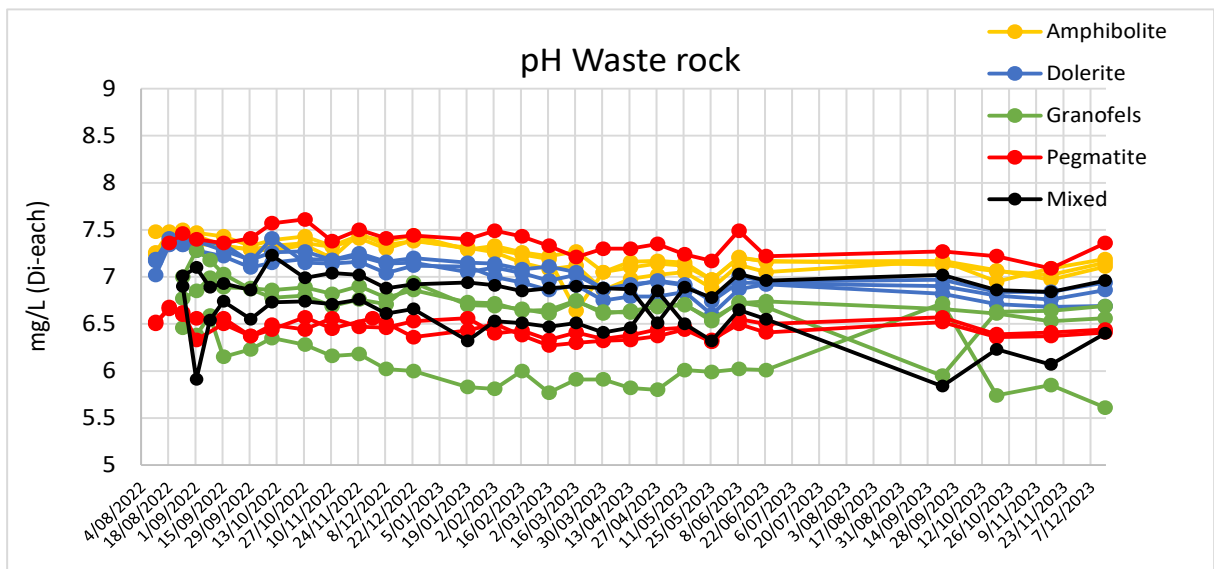


Figure 9: pH Trends in Waste Rock Leachates

4.3.2.2 Sulphate

It is noted that the concentration of SO_4 in all samples were lower than both the drinking water and freshwater ecology guidelines in all the leachate samples over the test period and generally showed decline trends (see **Figure 10**). The low concentrations of sulphate indicate the low concentration of sulphides and low potential for formation of acid conditions.

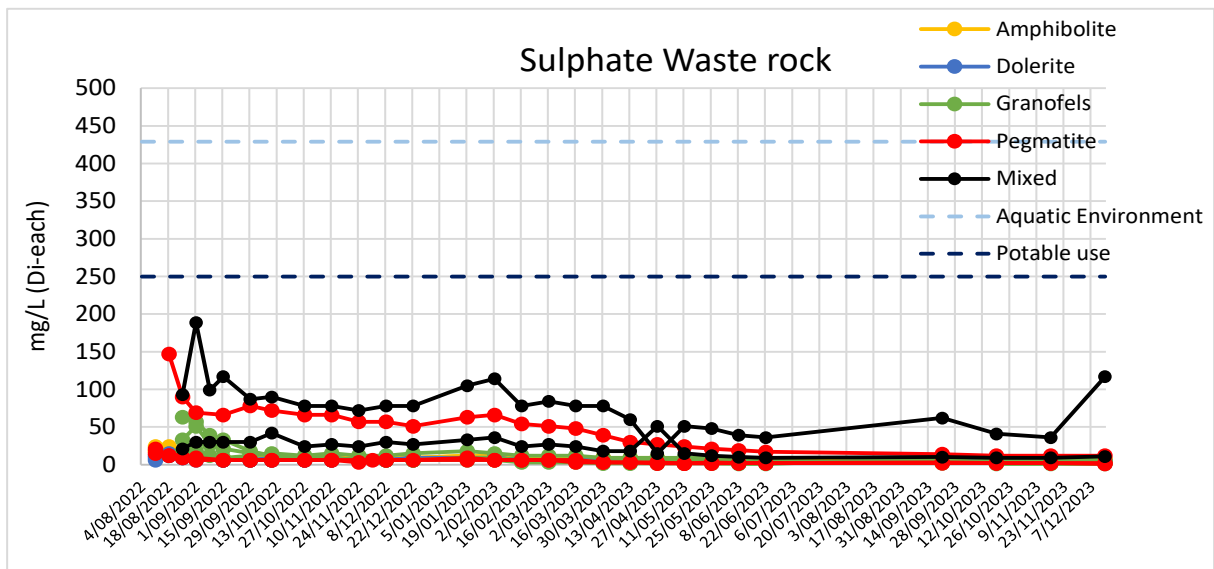


Figure 10: Sulphate Concentration Trends in Waste Rock Leachates

4.4 Tailings

4.4.1 CoPCs Leaching Concentrations Over Time

The tailings material, divided in three drums, reflects one origin (homogeneous tailings source), therefore the average concentrations of the three drums should be considered to reflect tailings source concentrations, as discussed herein.

The plots of the CoPC concentrations of the leachate from the tailings over time compared to the drinking water and freshwater ecology guidelines are presented in **Appendix D** and summarised in **Table 5**, from which the following is noted:

- The concentrations of Cd, Cs, Mo, Ni, U, V and Zn were lower than both the drinking water and freshwater ecology guidelines in all the leachate samples over the period of the test period and, as a consequence, are not discussed further.
- **Aluminium:** The concentrations of Al (**Figure 11**) in the leachate remains above the above the freshwater ecology guideline. Long term concentration trends are not readily discernible, although declining concentrations are evident in one of the drums (Drum 3)
- **Antimony:** The concentrations of Sb (**Figure 12**) were higher than the drinking water guideline (below aquatic) in the three drums over the test period. (Drum 2 exceeded the freshwater ecology guideline for the first six months). Long term concentration trends are not readily discernible, however, Drum 2 presented a declining trend.
- The concentrations of As, Li, Rb, and Tl in the leachate from almost all tailings samples exceeded both the drinking water and freshwater ecology guidelines throughout the test period, and show the following trends:
 - The **Arsenic** concentrations (**Figure 13**) indicate a general stable trend towards the last 4 months of testing (note log scale on Y axis). Long term concentration trends are not readily discernible.
 - The **Lithium** concentrations (**Figure 14**) persistent (after an initial fall), the duration of which is not readily discernible from the graphs.
 - The **Rubidium** concentrations (**Figure 15**) are persistent (after an initial fall), the duration of which appears to may persist for an estimated 3 to 5 additional years before approaching or falling below the guidelines.
 - **Thallium:** After an initial fall, the Tl concentrations (**Figure 16**) appears to be stabilising but exhibit a weak downward trend. The concentrations may persist for an estimated 3 additional years before being close to, or falling below, the guidelines.

Based on the observations noted above, which are summarised and presented in **Table 6**, the following conclusions can be drawn:

- The concentrations of Al, Sb, Li, Rb and As above the guidelines are persistent (long term declining trends not discernible) and estimates of the duration above the guidelines could not be reliably estimated (e.g., leaching duration greater than 10 years?)
- Otherwise, the concentrations of the remaining CoPCs and Tl should fall below, or be close to, the guidelines over the short term, estimated at within 5 years (based on extrapolation of trends).

Table 5: Summary of CoPCs in Tailings Leachate Exceeding Guidelines at 18 Months of Testing

CoPC	Above Drinking Water Guideline	Above Freshwater Ecology Guideline
Aluminium	No	Yes
Arsenic	Yes	Yes
Antimony	Yes	No
Cadmium	No	No
Caesium	No	No
Chromium	No	No
Lithium	Yes	Yes
Molybdenum	No	No
Nickel	No	No
Rubidium	Yes	Yes
Thallium	Yes	Yes
Uranium	No	No
Vanadium	No	No
Zinc	No	No

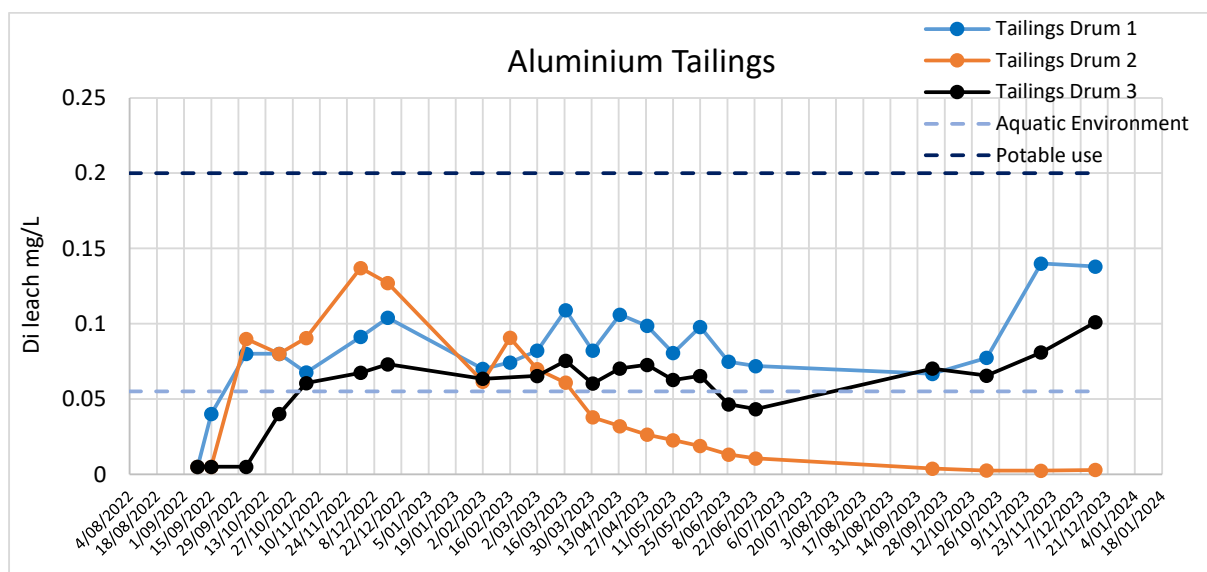


Figure 11: Aluminium Concentration Trends in Tailing Leachates

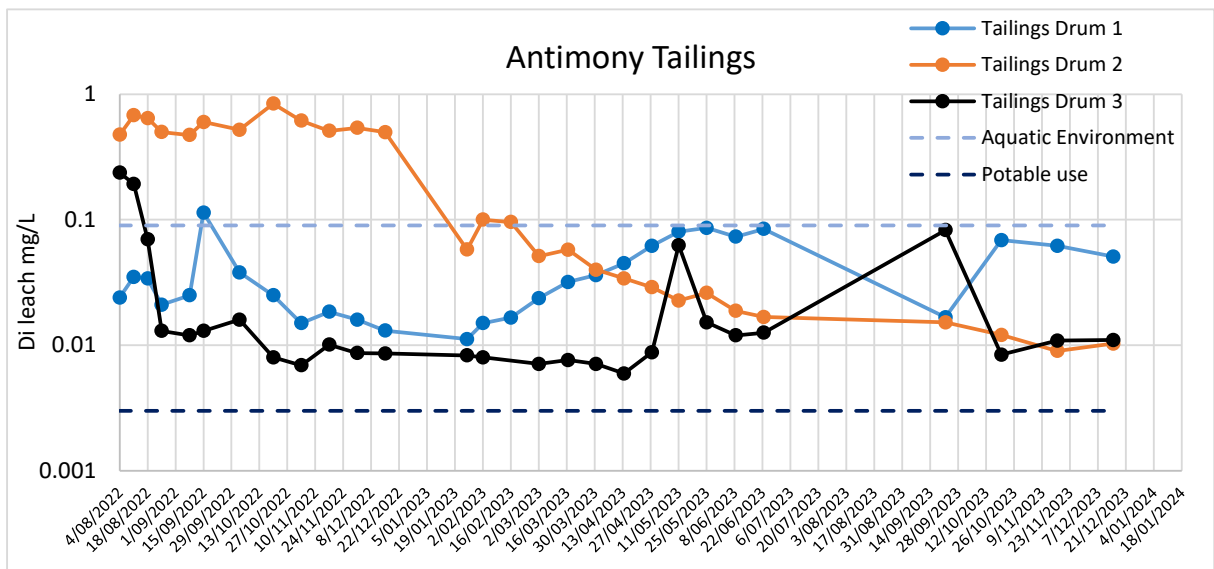


Figure 12: Antimony Concentration Trends in Tailing Leachates

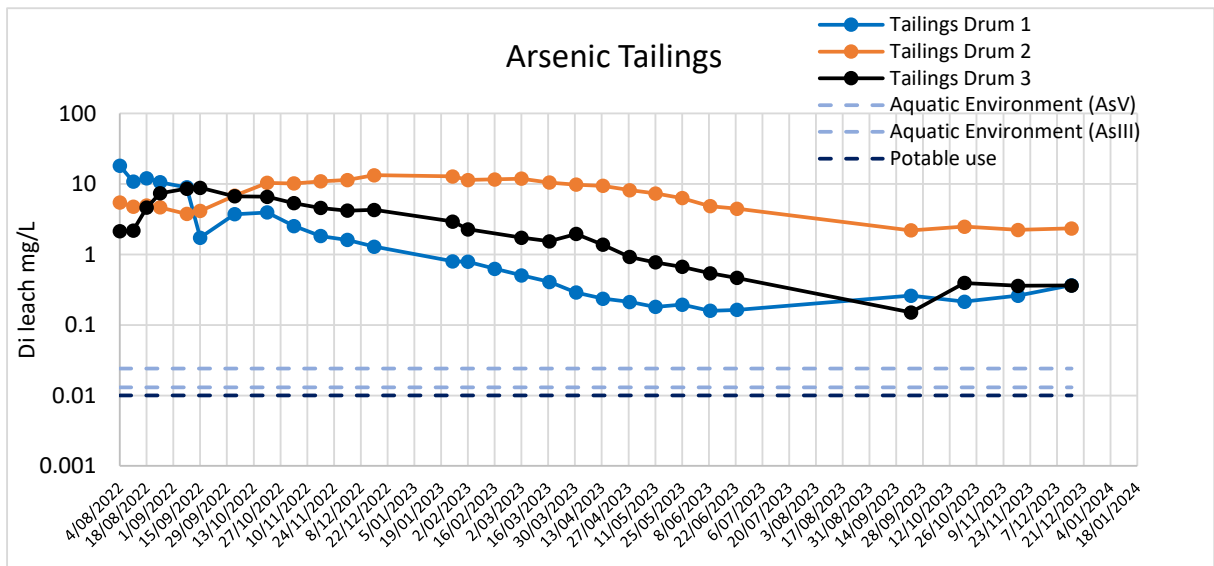


Figure 13: Arsenic Concentration Trends in Tailing Leachates

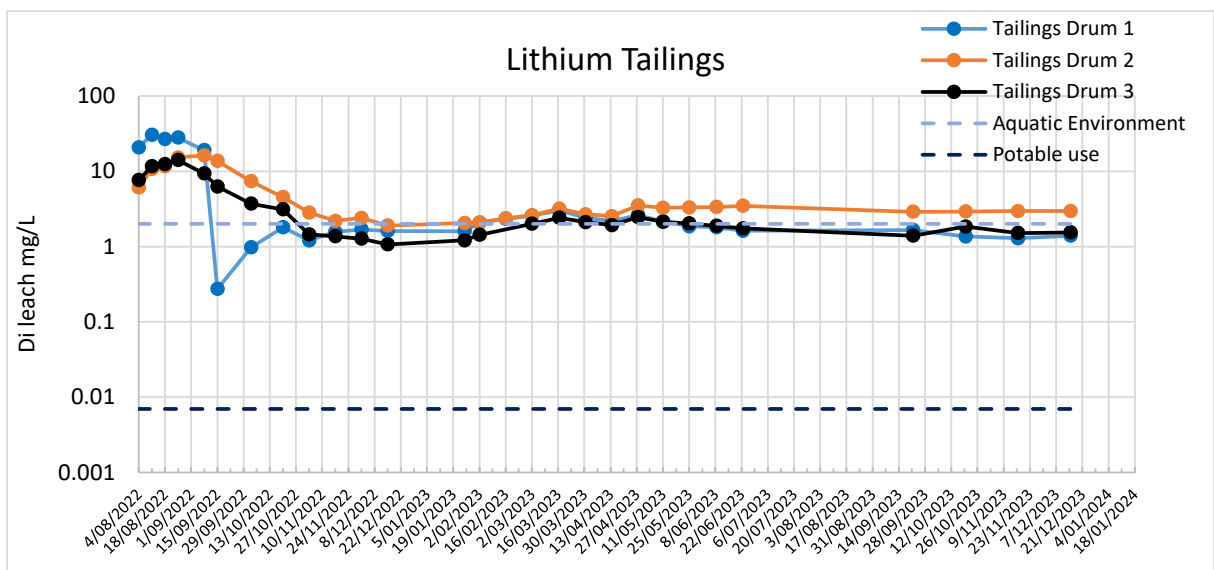


Figure 14: Lithium Concentration Trends in Tailing Leachates

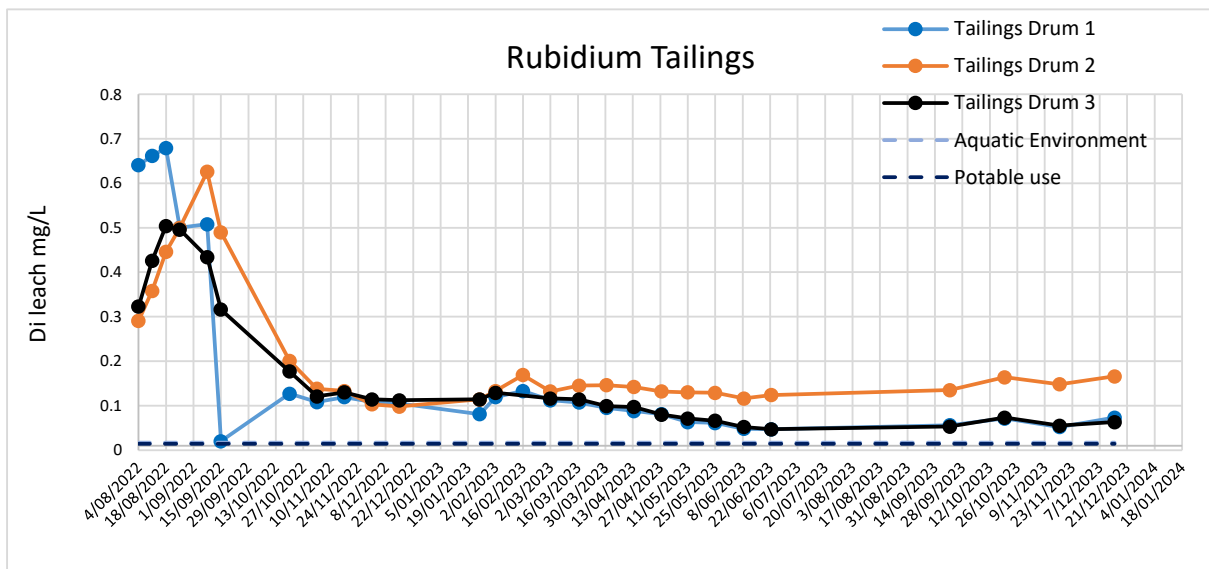


Figure 15: Rubidium Concentration Trends in Tailing Leachates

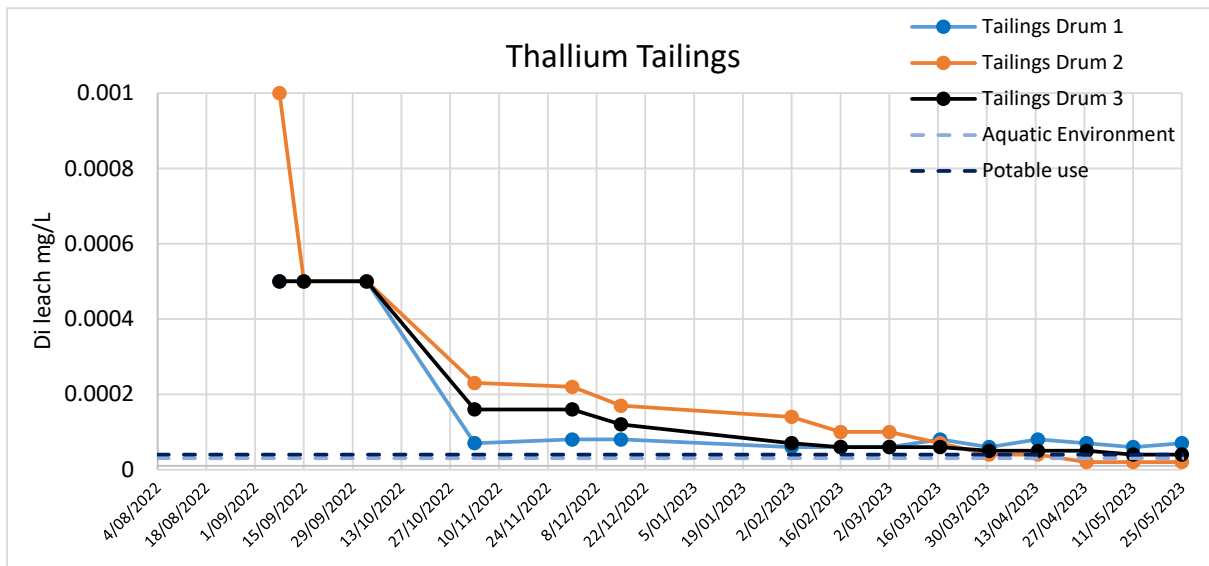


Figure 16: Thallium Concentration Trends in Tailing Leachates

Table 6: Estimates of Persistence of CoPC in Tailings above WQGs (Years).

CoPC	Drums1,2 3 (average)
Aluminium	>10?
Arsenic	>10?
Antimony	>10?
Lithium	>10?
Rubidium	> 10?
Thallium	3

4.4.2 Other Physio-Chemical Indicators

4.4.2.1 pH

The trends of the pH shown in **Figure 17** indicate that the pH of the leachate from all three tailing samples was neutral to alkaline with a stable trend towards the last 4 months of the test period. The final analysis results indicated a range of 7.3 to 7.8 pH units.

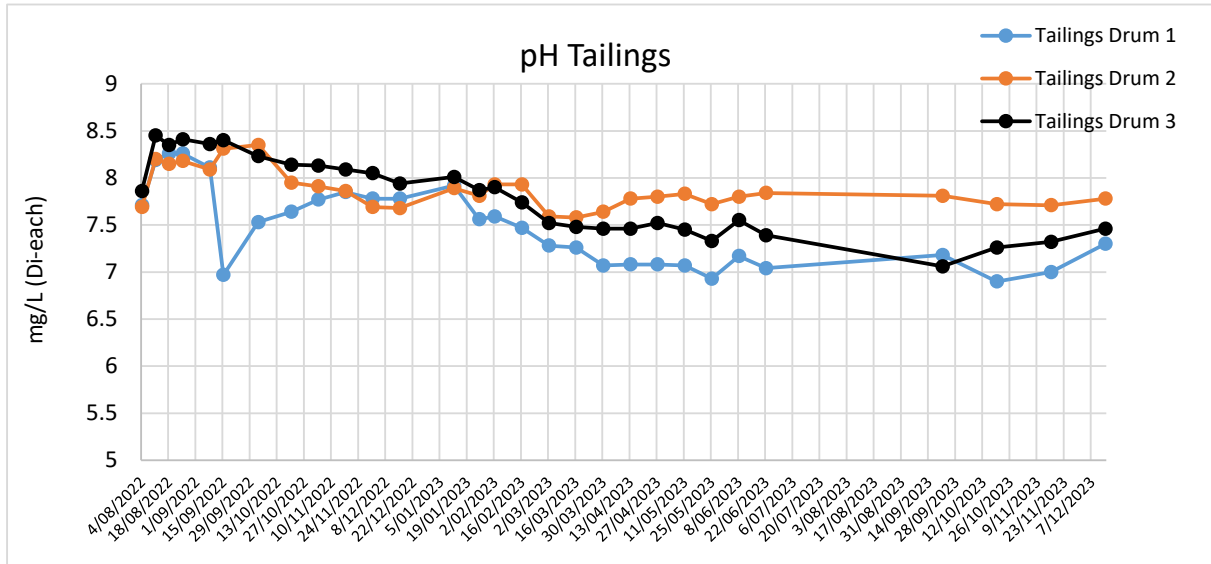


Figure 17: pH Trends in Tailings Leachates

4.4.2.2 Sulphate

The SO₄ concentrations (see **Figure 18**) were below both the drinking water guideline and freshwater ecology guideline after the first month of testing.

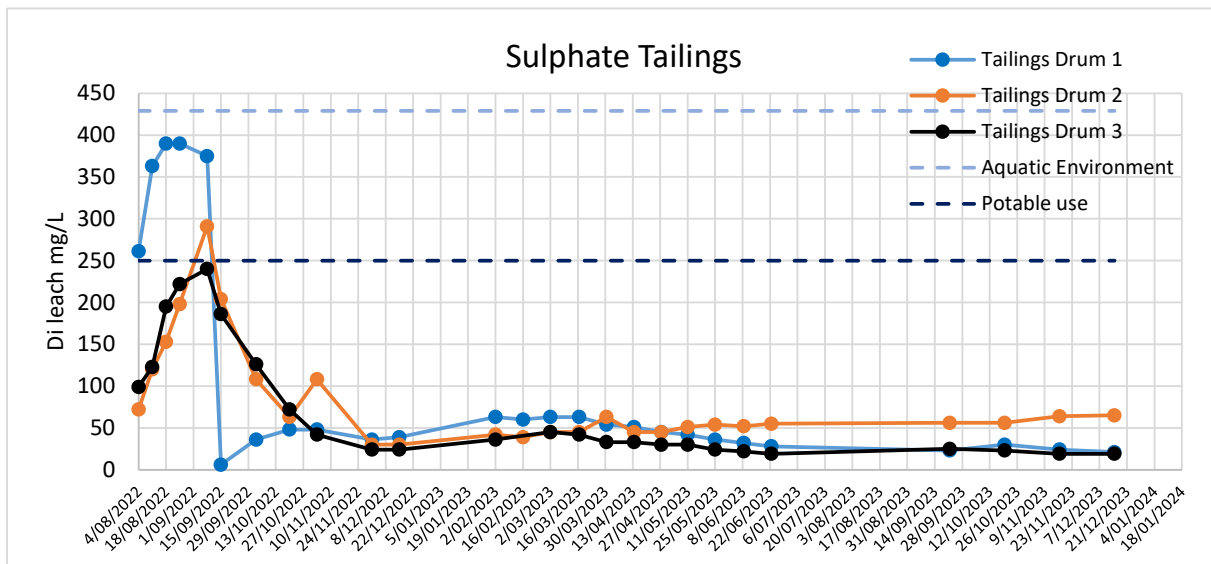


Figure 18: Sulphate Concentrations Trends in Tailings Leachates

5. Conclusions and Recommendations

The **Waste Rock** leaching results indicated the following:

- A negligible risk for acid generation and occurrence of saline drainage from waste rock, given the low sulphate (indicator of acid) low major-ion concentrations and neutral pH.
- Concentrations of Cd, Cs, Mo, Ni, U and Zn did not return results at concentrations above the drinking water and freshwater ecology guidelines and, as a consequence, should not require management to reduce risks posed to the receiving environment.
- Concentrations of Al, As, Li, Rb, Sb, Tl, U, and V were above one or more of the relevant guidelines. Of these, Li and V concentrations are persistent (long term declining trends not discernible), while the remaining CoPCs should fall below, or be close to, the guidelines over the short term (estimated to be within 5 years based on extrapolation of trends, see summary table below).
- Of the four waste rock types (Granofels, Amphibolite, Dolerite, and Pegmatite) the Pegmatite waste rock leaches relatively high concentrations of CoPCs (Al, As, Li, Rb, Sb, Tl, U, and V) for longer durations than the remaining three waste rock types (see summary table below). During design of future waste rock landforms, consideration should be given to increased mitigation/management of seepage from Pegmatite waste, compared to that of the remaining three types of waste rock (subject to risk assessment findings).

Waste Rock Summary Table: Estimates of Persistence of CoPCs above WQGs (Years)

CoPC ⁶	Waste rock type ⁷			
	Amphibolite	Dolerite	Granofels	Pegmatite
Aluminium	NA	NA	NA	> 10?
Arsenic	1 to 3	1 to 3	5	> 10?
Antimony	NA	5	5	> 10?
Lithium	NA	>10?	>10?	>10?
Rubidium	NA	NA	NA	3 ⁸
Thallium	NA	NA	NA	3 ⁸
Vanadium	>10?	>10?	>10?	>10?

* duration likely reflects the contribution/dissolution from pegmatite saprolitic clays

The **Tailings** leaching results indicated the following:

- The tailings leaching results were initially mildly alkaline and brackish with elevated metal concentrations consistent with that of the decant waters (e.g.: elevated sulphate, lithium). In the two months following, the tailings leach waters became neutral and fresh with lower dissolved metal concentrations, the occurrence of which is inferred to reflect the flushing of the decant (ore process water) from the tailings pore spaces. Following the flushing, a negligible risk for acid generation and occurrence of saline drainage is indicated.
- The concentrations of Cd, Cs, Mo, Ni, U, V and Zn did not return leaching results above the drinking water and freshwater ecology guidelines and consequently, these metals should not require management to reduce risks posed to the receiving environment.
- The leaching concentrations of As, Al, Li, Sb, Rb and Tl were above one or more of the relevant guidelines. Of these concentrations, Al, Sb, and Li are persistent (long term declining trends not discernible), otherwise the concentrations of As, Rb, and Tl should fall below, or be close to the guidelines over the short term (estimated at within 5 years based on extrapolation of trends, see summary table below).

⁶ Concentrations above drinking water, and/or freshwater aquatic guidelines.

⁷ NA = Not above guidelines.

⁸ Duration likely reflects the contribution/dissolution from pegmatite saprolitic clays.

Tailings Summary Table: Estimates of Persistence of CoPCs above WQGs (Years)

CoPC ⁹	Drums ^{1,2 3} (averaged)
Aluminium	>10?
Arsenic	>10?
Antimony	>10?
Lithium	>10?
Rubidium	> 10?
Thallium	3

Considering the elevated leaching concentrations of several CoPCs above the guidelines across different types of waste rocks and tailings, kinetic leach testing should be continued to confirm the observed declining trends and discern any long-term trends of those CoPCs that are persistent.

The laboratory analysis should be tailored to include only those CoPCs which exhibit concentrations above the guidelines (i.e. Al, As, Sb, Li, Rb, Tl, and V), and the analysis frequency should be reduced where appropriate (e.g.: should the current recommended quarterly sampling frequency result in a low change in concentrations after two sampling events, then the frequency can be increased to six monthly).

⁹ Concentrations above drinking water, and/or freshwater aquatic guidelines

6. References

- Commonwealth of Australia. (2016). *Leading Practice Sustainable Development Program for the Mining Industry. Prevention of Acid and Metalliferous Drainage. September 2016.*
- GHD. (2021). *Greenbushes Lithium Mine: 2021 Mine Closure Plan. Report to Talison Lithium Pty Ltd. Revision 3. Referenced 12553569. Date 30 November 2021.*
- GHD. (2022a). *Talison Greenbushes Lithium Mine Waste rock landform leaching risk assessment. Unpublished report prepared for Talison Lithium Australia Pty Ltd, May 2022.*
- GHD. (2022b). *Talison Greenbushes Lithium Mine Waste rock landform leaching risk assessment. Unpublished report prepared for Talison Lithium Australia Pty Ltd, May 2022.*
- GHD. (2023). *TSF4 Seepage Assessment, Development of Site Specific Water Quality Guidelines, Sep. 2022, Ref 12575610.*
- GHD. (2023). *TSF4 Seepage Assessment: Tailings LEAF Leach Testing. Report prepared for Talison Lithium Pty Ltd. February 2023, Ref 12575610.*

Appendices

Appendix A

Photos of Test Setups

1. Experimental setting – General



Plate 1 *Kinetic leaching test set-up 1*



Plate 2 *Kinetic leaching test set-up*

2. Experimental setting – Amphibolite



Plate 3 *Raw drill cores of amphibolite as received*



Plate 4 *Equipment setup of leaching test for amphibolite*

3. Experimental setting – Dolerite



Plate 5 *Raw drill cores of dolerite as received*



Plate 6 *Equipment setup of leaching test for dolerite*

4. Experimental setting – Granofels



Plate 7 *Raw drill cores of granofels as received*

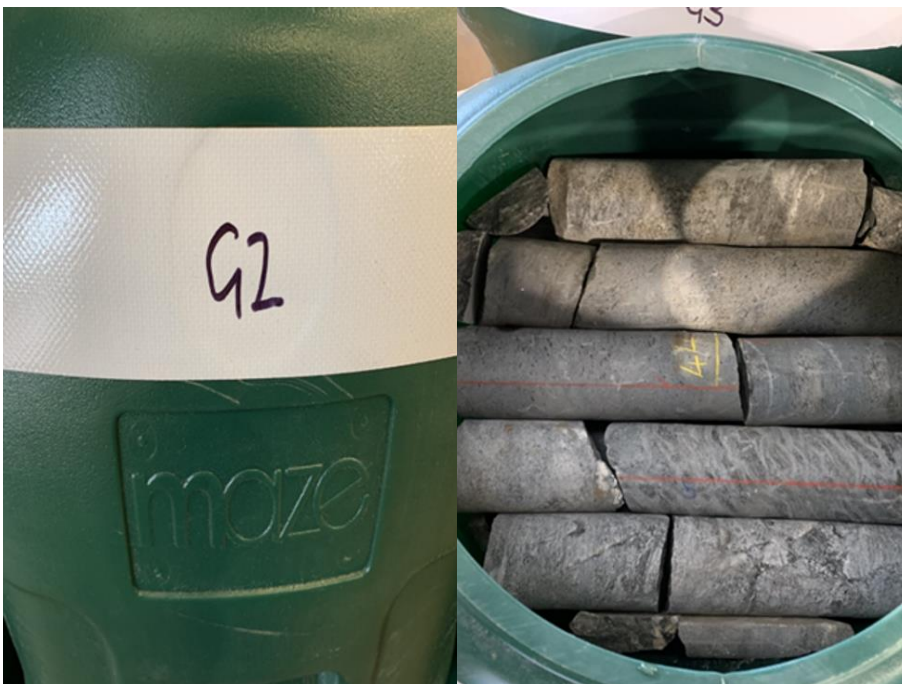


Plate 8 *Equipment setup of leaching test for granofels*

5. Experimental setting – Pegmatite

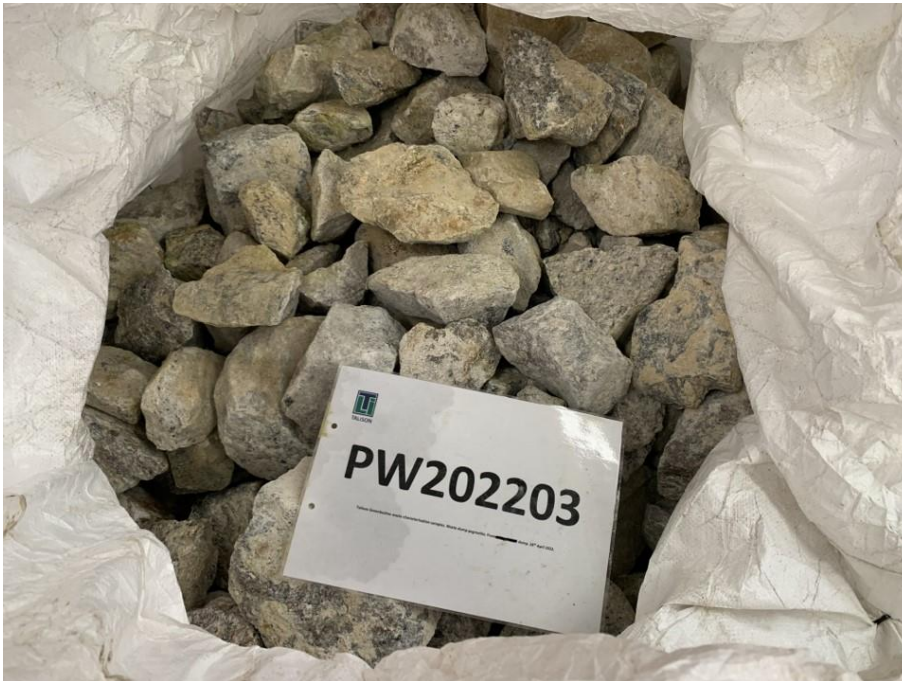


Plate 9 *Raw samples of pegmatite as received*



Plate 10 *Equipment setup of leaching test for pegmatite*

6. Experimental setting – Tailings



Plate 11 *Raw tailing materials as received*



Plate 12 *Equipment setup of leaching test for tailings*

7. Experimental setting – Mix



Plate 13 *Equipment setup of leaching test for Mix*

Appendix B

Relative Percentage Difference Tables



Appendix B
Table B1
Relative percentage difference (RPD) table

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

Location Code Date Field ID Matrix Type Sample Type Lab Report Number			Amphibolite Drum 1		RPD	Dolerite Drum 2		RPD	Dolerite Drum 1		RPD												
			11 Aug 2022				18 Aug 2022		01 Sep 2022														
			A1	DI		B2	Leachate		20220811	Blind		1	20220811	D1	DI	B2	Leachate	20220901	Blind	3	20220901		
			Water				Water					Water				Water							
			Normal				Field_D					Normal				Field_D							
			EP2210362				EP2210362					EP2210698				EP2210698				EP2211329			
	Unit	EQL																					
Inorganics																							
pH (Lab)	pH units	0.01		7.48		7.50		0		7.41		7.49		1		7.28		7.25		0			
Electrical conductivity (lab)	µS/cm	1		122		128		5		101		103		2		54		54		0			
Acidity & Alkalinity																							
Alkalinity (Carbonate as CaCO3)	mg/L	1		<1		<1		0		<1		<1		0		<1		<1		0			
Alkalinity (Bicarbonate as CaCO3)	mg/L	1		21		18		15		20		18		11		10		11		10			
Alkalinity (Hydroxide as CaCO3)	mg/L	1		<1		<1		0		<1		<1		0		<1		<1		0			
Alkalinity (total as CaCO3)	mg/L	1		21		18		15		20		18		11		10		11		10			
Major Ions																							
Calcium (filtered)	mg/L	1		15		15		0		9		9		0		3		3		0			
Magnesium (filtered)	mg/L	1		2		2		0		1		1		0		<1		<1		0			
Potassium (filtered)	mg/L	1		<1		<1		0		<1		<1		0		<1		<1		0			
Sodium (filtered)	mg/L	1		4		4		0		9		9		0		5		5		0			
Chloride	mg/L	1		9		9		0		11		11		0		6		5		18			
Fluoride	mg/L	0.1		<0.1		<0.1		0		<0.1		<0.1		0		<0.1		<0.1		0			
Cations Total	meg/L	0.01		1.09		1.09		0		0.92		0.92		0		0.37		0.37		0			
Anions Total	meg/L	0.01		1.05		1.05		0		0.96		0.90		6		0.47		0.46		2			
Ionic Balance	%	0.01		1.82		1.70		7		1.96		1.31		40		12.6		11.7		7			
Organic Indicators																							
Sulfur as S (filtered)	mg/L	1		8		8		0		5		5		0		2		2		0			
Metals																							
Niobium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Rhenium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Tantalum (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Aluminium (filtered)	mg/L	0.0002		-		-		-		-		-		-		<0.01		<0.01		0			
Antimony (filtered)	mg/L	0.00005		0.002		0.002		0		0.020		0.020		0		0.019		0.019		0			
Arsenic (filtered)	mg/L	0.0001		0.006		0.008		29		0.177		0.179		1		0.089		0.091		2			
Barium (filtered)	mg/L	0.0002		<0.001		<0.001		0		0.017		0.016		6		0.006		0.006		0			
Beryllium (filtered)	mg/L	0.00002		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Boron (filtered)	mg/L	0.001		0.06		0.07		15		0.10		0.11		10		0.06		0.05		18			
Cadmium (filtered)	mg/L	0.00002		<0.0001		<0.0001		0		<0.0001		<0.0001		0		<0.0001		<0.0001		0			
Cerium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Caesium (filtered)	mg/L	0.001		<0.001		<0.001		0		0.002		0.002		0		0.002		0.002		0			
Chromium (III+VI) (filtered)	mg/L	0.0002		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Cobalt (filtered)	mg/L	0.00002		0.018		0.019		5		<0.001		<0.001		0		<0.001		<0.001		0			
Copper (filtered)	mg/L	0.00005		0.007		0.007		0		0.006		0.006		0		0.001		0.001		0			
Gallium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Germanium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Hafnium (filtered)	mg/L	0.01		<0.01		<0.01		0		<0.01		<0.01		0		<0.01		<0.01		0			
Iron (filtered)	mg/L	0.002		<0.05		<0.05		0		<0.05		<0.05		0		<0.05		<0.05		0			
Lanthanum (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Lead (filtered)	mg/L	0.00005		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Lithium (filtered)	mg/L	0.00002		0.050		0.052		4		0.242		0.253		4		0.117		0.127		8			
Manganese (filtered)	mg/L	0.00005		0.035		0.036		3		<0.001		<0.001		0		0.002		0.003		40			
Mercury (filtered)	mg/L	0.0001		<0.0001		<0.0001		0		<0.0001		<0.0001		0		<0.0001		<0.0001		0			
Molybdenum (filtered)	mg/L	0.00005		<0.001		<0.001		0		0.001		0.002		67		<0.001		<0.001		0			
Nickel (filtered)	mg/L	0.0002		0.061		0.062		2		0.046		0.046		0		0.003		0.003		0			
Rubidium (filtered)	mg/L	0.001		0.002		0.002		0		0.004		0.003		29		0.002		0.003		40			
Strontium (filtered)	mg/L	0.00005		0.014		0.013		7		0.028		0.028		0		0.014		0.014		0			
Selenium (filtered)	mg/L	0.0001		<0.01		<0.01		0		<0.01		<0.01		0		<0.01		<0.01		0			
tellurium (filtered)	mg/L	0.00005		<0.005		<0.005		0		<0.005		<0.005		0		<0.005		<0.005		0			
Silver (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Tungsten (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		0.001		0		<0.001		<0.001		0			
Thorium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Thallium (filtered)	mg/L	0.00001		-		-		-		-		-		-		<0.001		<0.001		0			
Titanium (filtered)	mg/L	0.0002		<0.01		<0.01		0		<0.01		<0.01		0		<0.01		<0.01		0			
Uranium (filtered)	mg/L	0.000005		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Tin (filtered)	mg/L	0.0002		0.045		0.045		0		0.018		0.018		0		0.036		0.037		3			
Vanadium (filtered)	mg/L	0.0001		<0.01		<0.01		0		<0.01		<0.01		0		<0.01		<0.01		0			
Yttrium (filtered)	mg/L	0.001		<0.001		<0.001		0		<0.001		<0.001		0		<0.001		<0.001		0			
Zinc (filtered)	mg/L	0.0005		0.008		0.008		0		0.006		0.006		0		<0.005		<0.005		0			



Appendix B
Table B1
Relative percentage difference (RPD) table

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

		Granofels Drum 3				Granofels Drum 2				Pegmatite Drum 3				
		08 Sep 2022				29 Sep 2022				29 Sep 2022				
		G3_DI_B2_Leachate_20220908		Blind_4_20220908		G2_DI_B2_Leachate_20220929		Blind_6_20220929		P3_DI_B2_Leachate_20220929		Blind_5_20220929		
		Water		Water		Water		Water		Water		Water		
		Normal		Field_D		Normal		Field_D		Normal		Field_D		
EP2211675		EP2211675		RPD	EP2212853		EP2212853		RPD	EP2212853		EP2212853		RPD
	Unit													
Inorganics														
pH (Lab)	pH units	7.18	7.09	1	6.88	6.95	1	7.41	7.42	0				
Electrical conductivity (lab)	µS/cm	208	205	1	52	54	4	332	337	1				
Acidity & Alkalinity														
Alkalinity (Carbonate as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0				
Alkalinity (Bicarbonate as CaCO3)	mg/L	11	10	10	6	7	15	64	63	2				
Alkalinity (Hydroxide as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0				
Alkalinity (total as CaCO3)	mg/L	11	10	10	6	7	15	64	63	2				
Major Ions														
Calcium (filtered)	mg/L	11	12	9	1	2	67	7	10	35				
Magnesium (filtered)	mg/L	5	5	0	<1	<1	0	5	6	18				
Potassium (filtered)	mg/L	2	2	0	<1	<1	0	3	3	0				
Sodium (filtered)	mg/L	15	15	0	4	5	22	35	42	18				
Chloride	mg/L	31	30	3	2	2	0	15	15	0				
Fluoride	mg/L	<0.1	<0.1	0	<0.1	<0.1	0	0.2	0.2	0				
Cations Total	meg/L	1.66	1.71	3	0.22	0.32	37	2.36	2.90	21				
Anions Total	meg/L	1.86	1.80	3	0.43	0.45	5	3.16	3.10	2				
Ionic Balance	%	5.68	2.33	84	31.1	16.9	59	14.5	3.36	125				
Organic Indicators														
Sulfur as S (filtered)	mg/L	13	14	7	5	5	0	26	26	0				
Metals														
Niobium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Rhenium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Tantalum (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Aluminium (filtered)	mg/L	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0				
Antimony (filtered)	mg/L	0.005	0.005	0	0.038	0.048	23	0.017	0.023	30				
Arsenic (filtered)	mg/L	0.138	0.142	3	0.194	0.258	28	0.092	0.118	25				
Barium (filtered)	mg/L	0.002	0.003	40	<0.001	<0.001	0	0.002	0.003	40				
Beryllium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Boron (filtered)	mg/L	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0				
Cadmium (filtered)	mg/L	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0				
Cerium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Caesium (filtered)	mg/L	0.004	0.004	0	0.002	0.003	40	0.050	0.058	15				
Chromium (III+VI) (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0				
Cobalt (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0				
Copper (filtered)	mg/L	0.003	0.003	0	<0.001	<0.001	0	<0.001	<0.001	0				
Gallium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Germanium (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0				
Hafnium (filtered)	mg/L	<0.01	<0.01	0	-	-	-	-	-	-				
Iron (filtered)	mg/L	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0				
Lanthanum (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Lead (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Lithium (filtered)	mg/L	1.30	1.35	4	0.804	0.950	17	1.04	1.31	23				
Manganese (filtered)	mg/L	0.046	0.046	0	0.004	0.006	40	0.036	0.047	27				
Mercury (filtered)	mg/L	<0.0001	<0.0001	0	-	-	-	-	-	-				
Molybdenum (filtered)	mg/L	0.005	0.006	18	<0.001	<0.001	0	<0.001	<0.001	0				
Nickel (filtered)	mg/L	<0.001	<0.001	0	0.001	0.002	67	<0.001	<0.001	0				
Rubidium (filtered)	mg/L	0.032	0.032	0	0.008	0.011	32	0.153	0.179	16				
Strontium (filtered)	mg/L	0.075	0.079	5	0.006	0.008	29	0.017	0.022	26				
Selenium (filtered)	mg/L	<0.01	<0.01	0	-	-	-	-	-	-				
tellurium (filtered)	mg/L	<0.005	<0.005	0	-	-	-	-	-	-				
Silver (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Tungsten (filtered)	mg/L	0.002	0.002	0	<0.001	<0.001	0	<0.001	<0.001	0				
Thorium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Thallium (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0				
Titanium (filtered)	mg/L	<0.01	<0.01	0	-	-	-	-	-	-				
Uranium (filtered)	mg/L	0.002	0.002	0	<0.001	<0.001	0	<0.001	<0.001	0				
Tin (filtered)	mg/L	0.034	0.035	3	0.058	0.057	2	0.035	0.052	39				
Vanadium (filtered)	mg/L	<0.01	<0.01	0	-	-	-	-	-	-				
Yttrium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-				
Zinc (filtered)	mg/L	0.018	0.020	11	<0.005	<0.005	0	<0.005	<0.005	0				



Appendix B
Table B1
Relative percentage difference (RPD) table

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Unit	Granofels Drum 1			Pegmatite Drum 2			Pegmatite Drum 1		
		10 Nov 2022		RPD	24 Nov 2022		RPD	19 Jan 2023		RPD
		G1_DI_B2_Leachate_20221110	BLIND_7_20221110		P2_DI_B2_Leachate_20221124	BLIND_8_20221124		P1_DI_B2_Leachate_20230119	Blind_9_20230119	
		Water	Water		Water	Water		Water	Water	
		Normal	Field_D		Normal	Field_D		Normal	Field_D	
		EP2215141	EP2215141		EP2215947	EP2215947		EP2300690	EP2300690	
Inorganics										
pH (Lab)	pH units	6.16	6.32	3	6.47	6.56	1	6.43	6.42	0
Electrical conductivity (lab)	µS/cm	39	40	3	20	20	0	24	24	0
Acidity & Alkalinity										
Alkalinity (Carbonate as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0
Alkalinity (Bicarbonate as CaCO3)	mg/L	2	2	0	2	2	0	2	2	0
Alkalinity (Hydroxide as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0
Alkalinity (total as CaCO3)	mg/L	2	2	0	2	2	0	2	2	0
Major Ions										
Calcium (filtered)	mg/L	2	3	40	<1	<1	0	1	1	0
Magnesium (filtered)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0
Potassium (filtered)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0
Sodium (filtered)	mg/L	2	3	40	2	2	0	2	2	0
Chloride	mg/L	<1	1	0	<1	<1	0	<1	<1	0
Fluoride	mg/L	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
Cations Total	meq/L	0.19	0.28	38	0.09	0.09	0	0.14	0.14	0
Anions Total	meq/L	0.31	0.34	9	0.12	0.12	0	0.18	0.18	0
Ionic Balance	%	-	-	-	17.2	17.2	0	15.1	-	-
Organic Indicators										
Sulfur as S (filtered)	mg/L	5	5	0	1	1	0	2	2	0
Metals										
Niobium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Rhenium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Tantalum (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Aluminium (filtered)	mg/L	0.0012	0.0016	29	0.0030	0.0029	3	0.0060	0.0060	0
Antimony (filtered)	mg/L	0.00689	0.00684	1	0.0162	0.0164	1	0.0204	0.0204	0
Arsenic (filtered)	mg/L	0.0042	0.0041	2	0.152	0.156	3	0.13	0.135	4
Barium (filtered)	mg/L	0.0026	0.0026	0	<0.0002	<0.0002	0	<0.0002	<0.0002	0
Beryllium (filtered)	mg/L	-	-	-	-	-	-	0.00004	0.00004	0
Boron (filtered)	mg/L	0.082	0.078	5	0.079	0.082	4	0.086	0.082	5
Cadmium (filtered)	mg/L	<0.00002	<0.00002	0	0.00004	0.00004	0	0.00003	0.00003	0
Cerium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Caesium (filtered)	mg/L	<0.001	0.002	67	0.007	0.008	13	0.010	0.011	10
Chromium (III+VI) (filtered)	mg/L	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.0002	0
Cobalt (filtered)	mg/L	0.00302	0.00301	0	0.00005	0.00004	22	0.00004	0.00004	0
Copper (filtered)	mg/L	0.00069	0.00071	3	0.00013	0.00014	7	0.00014	0.00015	7
Gallium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Germanium (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Hafnium (filtered)	mg/L	-	-	-	-	-	-	<0.01	<0.01	0
Iron (filtered)	mg/L	<0.002	0.002	0	0.002	0.002	0	0.004	0.002	67
Lanthanum (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Lead (filtered)	mg/L	-	-	-	-	-	-	<0.00005	<0.00005	0
Lithium (filtered)	mg/L	0.128	0.158	21	0.0814	0.0851	4	0.0871	0.0903	4
Manganese (filtered)	mg/L	0.00990	0.00993	0	0.00952	0.00910	5	0.0101	0.0100	1
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-
Molybdenum (filtered)	mg/L	0.00006	<0.00005	18	0.00172	0.00278	47	0.00006	0.00006	0
Nickel (filtered)	mg/L	0.0064	0.0064	0	0.0005	0.0005	0	0.0005	0.0004	22
Rubidium (filtered)	mg/L	0.004	0.005	22	0.012	0.013	8	0.020	0.020	0
Strontium (filtered)	mg/L	0.00939	0.0107	13	0.00124	0.00121	2	0.00208	0.00195	6
Selenium (filtered)	mg/L	-	-	-	-	-	-	<0.0001	<0.0001	0
tellurium (filtered)	mg/L	-	-	-	-	-	-	<0.00005	<0.00005	0
Silver (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Tungsten (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Thorium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Thallium (filtered)	mg/L	<0.00002	0.00002	0	0.00005	0.00004	22	0.00010	0.00009	11
Titanium (filtered)	mg/L	-	-	-	-	-	-	<0.0002	<0.0002	0
Uranium (filtered)	mg/L	0.000054	0.000057	5	0.000111	0.000108	3	0.000141	0.000129	9
Tin (filtered)	mg/L	0.0388	0.0390	1	0.0701	0.0677	3	0.0592	0.0607	3
Vanadium (filtered)	mg/L	-	-	-	-	-	-	0.0004	0.0004	0
Yttrium (filtered)	mg/L	-	-	-	-	-	-	<0.001	<0.001	0
Zinc (filtered)	mg/L	0.0326	0.0332	2	0.0009	0.0010	11	0.0016	0.0016	0



Appendix B
Table B1
Relative percentage difference (RPD) table

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

		Tailings Drum 1				Amphibolite Drum 3				Amphibolite Drum 2			
		16 Feb 2023		02 Mar 2023		16 Mar 2023							
		T1_DI_B3_Leachate_20230216	Blind_10_20230216	A3_DI_B3_Leachate_20230302		Blind_11_20230302	A2_DI_B3_Leachate_20230316	Blind_12_20230316					
		Water	Water	Water		Water	Water	Water					
		Normal	Field_D	Normal		Field_D	Normal	Field_D					
		EP2302018	EP2302018	RPD	EP2302667		EP2302667	RPD	EP2303327		EP2303327	RPD	
	Unit												
Inorganics													
pH (Lab)	pH units	7.47	7.49	0	7.19	7.23	1	7.27	7.31	1			
Electrical conductivity (lab)	µS/cm	179	178	1	40	41	2	39	40	3			
Acidity & Alkalinity													
Alkalinity (Carbonate as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Alkalinity (Bicarbonate as CaCO3)	mg/L	26	25	4	10	10	0	12	11	9			
Alkalinity (Hydroxide as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Alkalinity (total as CaCO3)	mg/L	26	25	4	10	10	0	12	11	9			
Major Ions													
Calcium (filtered)	mg/L	3	4	29	4	5	22	5	5	0			
Magnesium (filtered)	mg/L	2	3	40	<1	<1	0	<1	<1	0			
Potassium (filtered)	mg/L	2	3	40	<1	<1	0	<1	<1	0			
Sodium (filtered)	mg/L	20	24	18	1	1	0	2	2	0			
Chloride	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Fluoride	mg/L	0.2	0.2	0	<0.1	<0.1	0	<0.1	<0.1	0			
Cations Total	meq/L	1.24	1.57	23	0.24	0.29	19	0.34	0.34	0			
Anions Total	meq/L	1.87	1.81	3	0.37	0.37	0	0.38	0.36	5			
Ionic Balance	%	20.5	7.22	96	-	-	-	-	-	-			
Organic Indicators													
Sulfur as S (filtered)	mg/L	20	20	0	3	3	0	3	3	0			
Metals													
Niobium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Rhenium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Tantalum (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Aluminium (filtered)	mg/L	0.0743	0.0796	7	0.0155	0.0161	4	0.0152	0.0153	1			
Antimony (filtered)	mg/L	0.0166	0.0158	5	0.00319	0.00322	1	0.00317	0.00327	3			
Arsenic (filtered)	mg/L	0.626	0.61	3	0.0178	0.0184	3	0.0171	0.0183	7			
Barium (filtered)	mg/L	0.0002	<0.0002	0	0.0006	0.0007	15	0.0003	0.0003	0			
Beryllium (filtered)	mg/L	<0.00002	<0.00002	0	-	-	-	-	-	-			
Boron (filtered)	mg/L	0.12	0.115	4	0.266	0.255	4	0.276	0.266	4			
Cadmium (filtered)	mg/L	<0.00002	<0.00002	0	<0.00002	<0.00002	0	<0.00002	<0.00002	0			
Cerium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Caesium (filtered)	mg/L	0.037	0.037	0	<0.001	<0.001	0	<0.001	<0.001	0			
Chromium (III+VI) (filtered)	mg/L	<0.0002	0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.0002	0			
Cobalt (filtered)	mg/L	0.00006	0.00007	15	<0.00002	<0.00002	0	<0.00002	<0.00002	0			
Copper (filtered)	mg/L	0.00021	0.00020	5	0.00028	0.00028	0	0.00037	0.00039	5			
Gallium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Germanium (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0			
Hafnium (filtered)	mg/L	<0.01	<0.01	0	-	-	-	-	-	-			
Iron (filtered)	mg/L	0.302	0.311	3	<0.002	<0.002	0	<0.002	<0.002	0			
Lanthanum (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Lead (filtered)	mg/L	<0.00005	<0.00005	0	-	-	-	-	-	-			
Lithium (filtered)	mg/L	2.32	2.66	14	0.0155	0.0165	6	0.0174	0.0207	17			
Manganese (filtered)	mg/L	0.839	0.82	2	0.00009	0.00009	0	0.00005	0.00006	18			
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-			
Molybdenum (filtered)	mg/L	0.00277	0.00256	8	0.00007	0.00011	44	<0.00005	0.00008	46			
Nickel (filtered)	mg/L	0.0003	0.0003	0	0.0006	0.0006	0	0.0004	0.0004	0			
Rubidium (filtered)	mg/L	0.133	0.136	2	<0.001	0.001	0	0.001	0.002	67			
Strontium (filtered)	mg/L	0.0153	0.0146	5	0.00484	0.00479	1	0.00434	0.00438	1			
Selenium (filtered)	mg/L	<0.0001	<0.0001	0	-	-	-	-	-	-			
tellurium (filtered)	mg/L	<0.00005	<0.00005	0	-	-	-	-	-	-			
Silver (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Tungsten (filtered)	mg/L	0.002	0.002	0	<0.001	<0.001	0	<0.001	<0.001	0			
Thorium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Thallium (filtered)	mg/L	0.00006	0.00006	0	<0.00001	<0.00001	0	<0.00001	<0.00001	0			
Titanium (filtered)	mg/L	<0.0002	<0.0002	0	-	-	-	-	-	-			
Uranium (filtered)	mg/L	0.000090	0.000098	9	0.000015	0.000018	18	0.000019	0.000018	5			
Tin (filtered)	mg/L	0.0611	0.0580	5	0.0312	0.0312	0	0.0310	0.0324	4			
Vanadium (filtered)	mg/L	<0.0001	<0.0001	0	-	-	-	-	-	-			
Yttrium (filtered)	mg/L	<0.001	<0.001	0	-	-	-	-	-	-			
Zinc (filtered)	mg/L	0.0009	0.0010	11	0.0015	0.0008	61	0.0021	0.0018	15			



Appendix B
Table B1
Relative percentage difference (RPD) table

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

		Dolerite Drum 3				Mixed Drum 1				Tailings Drum 3			
		13 Apr 2023				27 Apr 2023				25 May 2023			
		D3_DI_B3_Leachate_20230413		Blind_13_20230413		M1_DI_B3_Leachate_20230427		Blind_14_20230427		T3_DI_B3_Leachate_20230525		Blind_15_20230525	
		Water		Water		Water		Water		Water		Water	
		Normal		Field_D		Normal		Field_D		Normal		Field_D	
		EP2304866		EP2304866		RPD	EP2305524			EP2305524	RPD	EP2306959	
	Unit												
Inorganics													
pH (Lab)	pH units	6.79	6.88	1	6.51	6.55	1	7.33	7.29	1			
Electrical conductivity (lab)	µS/cm	22	22	0	145	146	1	107	106	1			
Acidity & Alkalinity													
Alkalinity (Carbonate as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	5	0	3	3	0	29	30	3			
Alkalinity (Hydroxide as CaCO3)	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Alkalinity (total as CaCO3)	mg/L	5	5	0	3	3	0	29	30	3			
Major Ions													
Calcium (filtered)	mg/L	2	2	0	8	8	0	<1	<1	0			
Magnesium (filtered)	mg/L	<1	<1	0	4	4	0	<1	<1	0			
Potassium (filtered)	mg/L	<1	<1	0	<1	<1	0	1	1	0			
Sodium (filtered)	mg/L	2	2	0	7	7	0	11	11	0			
Chloride	mg/L	<1	<1	0	<1	<1	0	<1	<1	0			
Fluoride	mg/L	<0.1	<0.1	0	<0.1	<0.1	0	0.2	0.2	0			
Cations Total	meq/L	0.19	0.19	0	1.03	1.03	0	0.50	0.50	0			
Anions Total	meq/L	0.20	0.20	0	1.14	1.10	4	1.10	1.12	2			
Ionic Balance	%	4.40	4.40	0	5.04	3.19	45	37.2	37.9	2			
Organic Indicators													
Sulfur as S (filtered)	mg/L	2	2	0	17	17	0	8	8	0			
Metals													
Niobium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Rhenium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Tantalum (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Aluminium (filtered)	mg/L	0.0043	0.0038	12	0.0012	0.0012	0	0.0537	0.0653	19			
Antimony (filtered)	mg/L	0.00508	0.00504	1	0.00951	0.00997	5	0.0146	0.0152	4			
Arsenic (filtered)	mg/L	0.0386	0.0385	0	0.0532	0.0564	6	0.656	0.667	2			
Barium (filtered)	mg/L	0.0022	0.0021	5	0.0030	0.0031	3	<0.0002	<0.0002	0			
Beryllium (filtered)	mg/L	-	-	-	0.00019	0.00018	5	-	-	-			
Boron (filtered)	mg/L	0.256	0.252	2	0.245	0.233	5	0.239	0.243	2			
Cadmium (filtered)	mg/L	<0.00002	<0.00002	0	0.00010	0.00012	18	<0.00002	<0.00002	0			
Cerium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Caesium (filtered)	mg/L	0.002	0.002	0	0.022	0.022	0	0.016	0.016	0			
Chromium (III+VI) (filtered)	mg/L	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	0.0002	0			
Cobalt (filtered)	mg/L	0.00019	0.00018	5	0.00054	0.00054	0	<0.00002	0.00002	0			
Copper (filtered)	mg/L	0.00040	0.00041	2	0.00068	0.00072	6	<0.00005	<0.00005	0			
Gallium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Germanium (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0			
Hafnium (filtered)	mg/L	-	-	-	<0.01	<0.01	0	-	-	-			
Iron (filtered)	mg/L	<0.002	<0.002	0	<0.002	<0.002	0	0.065	0.079	19			
Lanthanum (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Lead (filtered)	mg/L	-	-	-	<0.00005	<0.00005	0	-	-	-			
Lithium (filtered)	mg/L	0.0552	0.0549	1	0.279	0.277	1	2.05	2.03	1			
Manganese (filtered)	mg/L	0.00134	0.00136	1	0.0216	0.0214	1	0.157	0.158	1			
Mercury (filtered)	mg/L	-	-	-	-	-	-	-	-	-			
Molybdenum (filtered)	mg/L	<0.00005	0.00005	0	0.00016	0.00016	0	0.00091	0.00087	4			
Nickel (filtered)	mg/L	0.0007	0.0006	15	0.0223	0.0235	5	<0.0002	<0.0002	0			
Rubidium (filtered)	mg/L	<0.001	0.002	67	0.052	0.046	12	0.064	0.066	3			
Strontium (filtered)	mg/L	0.00503	0.00485	4	0.0173	0.0181	5	0.00906	0.00936	3			
Selenium (filtered)	mg/L	-	-	-	0.0003	0.0002	40	-	-	-			
tellurium (filtered)	mg/L	-	-	-	<0.00005	<0.00005	0	-	-	-			
Silver (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Tungsten (filtered)	mg/L	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0			
Thorium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Thallium (filtered)	mg/L	<0.00001	<0.00001	0	0.00043	0.00040	7	0.00004	0.00004	0			
Titanium (filtered)	mg/L	-	-	-	<0.0002	<0.0002	0	-	-	-			
Uranium (filtered)	mg/L	<0.000005	<0.000005	0	0.000058	0.000053	9	0.000100	0.000105	5			
Tin (filtered)	mg/L	0.0242	0.0242	0	0.0480	0.0502	4	0.108	0.11	2			
Vanadium (filtered)	mg/L	-	-	-	0.0006	0.0006	0	-	-	-			
Yttrium (filtered)	mg/L	-	-	-	<0.001	<0.001	0	-	-	-			
Zinc (filtered)	mg/L	0.0057	0.0058	2	0.0104	0.0109	5	<0.0005	<0.0005	0			

Appendix C

Laboratory Analyses Results



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Inorganics		Acidity & Alkalinity				Major Ions									Nutrients		Organic Indicators	
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L
EQL	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Drinking Water												250							
Talison Greenbushes Site-specific WQG, Freshwater Ecological												429							
Talison Greenbushes Site-specific WQG, Irrigation																			
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																			
	DI Batch 1 20220726	EP2210272	26 Jul 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DI Batch2 20220802	EP2210272	02 Aug 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DI Batch3 2023125	EP2301024	25 Jan 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	<1
	DI Batch4 20230622	EP2308375	22 Jun 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	<1	<1
	DI Batch5 20230921	EP2313151	21 Sep 2023	5.76	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<1	<1
	T1 DI B1 20220726	EP2210272	26 Jul 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tailings IBC Decant 2022	EP2210272	26 Jul 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	7.48	122	<1	21	<1	21	15	2	<1	4	9	18	<0.1	1.09	1.05	1.82	0.14	-	8
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	7.40	118	<1	22	<1	22	14	2	<1	7	10	20	<0.1	1.17	1.14	1.28	0.04	-	8
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	7.47	83	<1	21	<1	21	9	2	<1	6	6	11	<0.1	0.87	0.82	3.36	0.03	-	5
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	7.35	65	<1	15	<1	15	5	<1	<1	5	4	8	<0.1	0.47	0.58	10.7	0.03	-	4
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	7.33	43	<1	16	<1	16	5	<1	<1	4	3	5	<0.1	0.42	0.51	-	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	7.29	43	<1	15	<1	15	4	<1	<1	3	2	4	<0.1	0.33	0.44	14.2	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	7.28	40	<1	13	<1	13	5	<1	<1	3	1	5	<0.1	0.38	0.39	1.56	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	7.34	38	<1	13	<1	13	6	<1	<1	4	8	4	<0.1	0.47	0.57	-	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	7.20	37	<1	13	<1	13	4	<1	<1	3	<1	4	<0.1	0.33	0.34	1.92	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2215947	24 Nov 2022	7.46	38	<1	13	<1	13	4	<1	<1	3	1	4	<0.1	0.33	0.37	5.86	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	7.34	37	<1	13	<1	13	4	<1	<1	3	<1	5	<0.1	0.33	0.36	4.86	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	7.38	36	<1	10	<1	10	3	<1	<1	3	<1	6	<0.1	0.28	0.32	-	-	-	2
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	7.31	44	<1	12	<1	12	5	<1	<1	2	1	9	<0.1	0.34	0.46	-	-	-	3
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	7.26	42	<1	11	<1	11	5	<1	<1	2	1	8	<0.1	0.34	0.41	-	-	-	3
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	7.15	39	<1	10	<1	10	3	<1	<1	2	<1	7	<0.1	0.24	0.34	18.7	-	-	3
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	7.08	34	<1	8	<1	8	3	<1	<1	1	<1	6	<0.1	0.19	0.28	-	-	-	3
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	7.12	34	<1	9	<1	9	4	<1	<1	2	<1	7	<0.1	0.29	0.32	-	-	-	3
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	6.86	30	<1	8	<1	8	3	<1	<1	1	<1	6	<0.1	0.19	0.28	19.2	-	-	2
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	6.98	31	<1	8	<1	8	4	<1	<1	3	<1	7	<0.1	0.33	0.30	3.86	-	-	2
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	7.02	30	<1	8	<1	8	2	<1	<1	2	<1	6	<0.1	0.19	0.28	20.8	-	-	2
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2306239	11 May 2023	7.05	29	<1	9	<1	9	3	<1	<1	4	<1	4	<0.1	0.32	0.26	10.3	-	-	2
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2306959	25 May 2023	6.88	29	<1	9	<1	9	1	<1	<1	2	<1	4	<0.1	0.14	0.26	31.6	-	-	2
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	7.13	22	<1	6	<1	6	3	<1	<1	2	<1	3	<0.1	0.24	0.18	13.0	-	-	1
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2308375	22 Jun 2023	7.05	23	<1	8	<1	8	1	<1	<1	1	<1	3	<0.1	0.09	0.22	40.8	-	-	1
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	7.17	28	<1	7	<1	7	2	<1	<1	2	<1	5	<0.1	0.19	0.24	-	-	-	2
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	6.95	26	<1	8	<1	8	3	<1	<1	2	<1	3	<0.1	0.24	0.22	-	-	-	2
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	7.09	24	<1	8	<1	8	2	<1	<1	1	<1	4	0.1	0.14	0.24	25.8	-	-	1
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	7.19	26	<1	7	<1	7	3	<1	<1	2	<1	4	<0.1	0.24	0.22	2.95	-	-	1
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	7.24	98	<1	13	<1	13	12	1	<1	3	8	17	<0.1	0.81	0.84	1.68	0.13	-	6
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	7.45	110	<1	22	<1	22	13	2	<1	6	11	16	<0.1	1.07	1.08	0.40	0.05	-	6
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	7.50	88	<1	23	<1	23	8	1	<1	5	7	10	<0.1	0.70	0.86	-	0.03	-	4
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	7.47	71	<1	16	<1	16	6	<1	<1	5	5	8	<0.1	0.52	0.63	9.65	0.02	-	3
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	7.43	49	<1	22	<1	22	6	<1	<1	4	3	6	<0.1	0.47	0.65	-	-	-	2
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	7.33	50	<1	17	<1	17	5	<1	<1	4	2	6	<0.1	0.42	0.52	10.3	-	-	2
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	7.39	50	<1	16	<1	16	6	<1	<1	3	2	6	<0.1	0.43	0.50	-	-	-	3
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	7.43	47	<1	16	<1	16	7	<1	<1	3	9	5	<0.1	0.48	0.68	-	-	-	2
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	7.33	47	<1	16	<1	16	6	<1	<1	3	1	6	<0.1	0.43	0.47	4.75	-	-	3
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	7.44	46	<1	14	<1	14	6	<1	<1	3	<1	6	<0.1	0.43	0.40	3.02	-	-	2
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	7.38	47	<1	16	<1	16	6	<1	<1	3	1	7	<0.1	0.43	0.49	6.90	-	-	3
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	7.44	49	<1	14	<1	14	5	<1	<1	3	<1	8	<0.1	0.38	0.45	-	-	-	3
Amphibolite Drum 2	A2 DI B2 Leachate 2023	EP2300690	19 Jan 2023	7.29	50	<1	12	<1	12	6	<1	<1	2	2	11	<0.1	0.39	0.52	-	-	-	4
Amphibolite Drum 2	A2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	7.33	49	<1	13	<1	13	6	<1	<1	2	1	10	<0.1	0.39	0.50	-	-	-	4
Amphibolite Drum 2	A2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	7.26	41	<1	11	<1	11	3	<1	<1	3	<1	7	<0.1	0.28	0.36	13.2	-	-	3
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	7.22	39	<1	11	<1	11	5	<1	<1	1	<1	6	<0.1	0.29	0.34	-	-	-	2
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2303327	16 Mar 2023	7.27	39	<1	12	<1	12	5	<1	<1	2	<1	7	<0.1	0.34	0.38	-	-	-	3
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2304234	30 Mar 2023	7.05	35	<1	10	<1	10	4	<1	<1	1	<1	6	<0.1	0.24	0.32	14.4	-	-	3
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2304866	13 Apr 2023	7.16	37	<1	11	<1	11	5	<1	<1	2	<1	7	<0.1	0.34	0.36	4.13	-	-	2
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2305524	27 Apr 2023	7.17	38	<1	11	<1	11	2	<1	<1	2	<1	7	<0.1	0.19	0.36	32.4	-	-	2
Amphibolite Drum 2	A2 DI B3 Leachate 2023	EP2306239	11 May 2023	7.15	36	<1	11	<1	11	4	&											



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)	Lanthanum (filtered)	Me
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQL	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002	0.001	
Talison Greenbushes Site-specific WQG, Drinking Water				0.2	0.003	0.01				0.002		0.08	0.05		2						
Talison Greenbushes Site-specific WQG, Freshwater Ecological				0.055	0.09	0.013				0.0016		0.1	0.007		0.0014						
Talison Greenbushes Site-specific WQG, Irrigation				5		0.1				0.01			0.1		0.2						
Talison Greenbushes Site-specific WQG, Livestock				5	0.15	0.5				0.01		2	1		0.5						
Talison Greenbushes Site-specific WQG, Recreational					0.08	0.2				0.04		1.8	1		40						

Location Code	Field ID	Lab Report Number	Date																					
	DI Batch 1 20220726	EP2210272	26 Jul 2022	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	0.34	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
	DI Batch2 20220802	EP2210272	02 Aug 2022	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	0.11	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
	DI Batch3 2023125	EP2301024	25 Jan 2023	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.21	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
	DI Batch4 20230622	EP2308375	22 Jun 2023	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	0.22	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
	DI Batch5 20230921	EP2313151	21 Sep 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T1 DI B1 20220726	EP2210272	26 Jul 2022	<0.001	<0.001	<0.001	-	<0.001	<0.001	0.004	<0.001	0.40	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
	Tailings IBC Decant 2022	EP2210272	26 Jul 2022	<0.001	<0.001	<0.001	-	0.331	5.11	<0.001	<0.001	0.07	<0.0001	<0.001	0.048	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.002	0.006	<0.001	<0.001	0.06	<0.0001	<0.001	<0.001	<0.001	<0.001	0.018	0.007	<0.001	<0.001	<0.01	<0.05	<0.001
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.005	0.021	<0.001	<0.001	0.11	<0.0001	<0.001	0.001	<0.001	0.011	0.009	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.004	0.012	<0.001	<0.001	0.08	<0.0001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.004	0.012	<0.001	<0.001	0.08	<0.0001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.006	0.022	<0.001	-	0.05	<0.0001	-	<0.001	<0.001	<0.001	0.001	-	<0.001	-	<0.05	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.004	0.017	<0.001	-	<0.05	<0.0001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.004	0.018	<0.001	-	<0.05	<0.0001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	-	-	0.01	0.004	0.025	<0.001	-	0.09	<0.0001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	-	-	0.0156	0.00290	0.0229	0.0003	-	0.083	<0.0002	-	<0.001	<0.0002	0.00008	0.00087	-	<0.001	-	0.004	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	-	-	0.0080	0.00300	0.0264	<0.0002	-	0.07	<0.0002	-	<0.001	<0.0002	0.00004	0.00048	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	-	-	0.0095	0.00276	0.0265	0.0003	-	0.069	<0.0002	-	<0.001	<0.0002	0.00002	0.00056	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0147	0.00293	0.0314	0.0003	<0.00002	0.068	<0.0002	<0.001	<0.001	<0.0002	<0.00002	0.00061	<0.001	<0.001	<0.01	<0.002	<0.001	
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0097	0.00265	0.0252	0.0002	<0.00002	0.076	<0.0002	<0.001	<0.001	<0.0002	0.00002	0.00063	<0.001	<0.001	<0.01	<0.002	<0.001	
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	-	-	0.0142	0.00342	0.0336	0.0004	-	0.091	<0.0002	-	<0.001	<0.0002	0.00002	0.00060	-	<0.001	-	0.004	-	-
Amphibolite Drum 1	A1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0119	0.00303	0.0307	0.0003	<0.00002	0.118	<0.0002	<0.001	<0.001	<0.0002	0.00003	0.00063	<0.001	<0.001	<0.01	0.004	<0.001	
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	-	-	0.0126	0.00310	0.0284	0.0002	-	0.265	<0.0002	-	<0.001	<0.0002	<0.00002	0.00082	-	<0.001	-	0.008	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	-	-	0.0121	0.00268	0.0245	0.0002	-	0.275	<0.0002	-	<0.001	<0.0002	<0.00002	0.00060	-	<0.001	-	0.002	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0080	0.00209	0.0214	<0.0002	<0.00002	0.235	<0.0002	<0.001	<0.001	<0.0002	<0.00002	0.00054	<0.001	<0.001	<0.01	<0.002	<0.001	
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	-	-	0.0079	0.00174	0.0193	<0.0002	-	0.248	<0.0002	-	<0.001	<0.0002	0.00002	0.00067	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0078	0.00203	0.0189	0.0004	<0.00002	0.299	<0.0002	<0.001	<0.001	<0.0002	<0.00002	0.00064	<0.001	<0.001	<0.01	<0.002	<0.001	
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2306239	11 May 2023	-	-	-	0.0071	0.00178	0.0172	<0.0002	-	0.254	<0.0002	-	<0.001	<0.0002	<0.00002	0.00040	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2306959	25 May 2023	-	-	-	0.0058	0.00196	0.0154	<0.0002	-	0.241	<0.0002	-	<0.001	<0.0002	0.00002	0.00043	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	-	-	-	0.0040	0.00113	0.0102	<0.0002	-	0.265	<0.0002	-	<0.001	<0.0002	0.00004	0.00020	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B3 Leachate 2023	EP2308375	22 Jun 2023	-	-	-	0.0037	0.00106	0.0104	<0.0002	-	0.238	<0.0002	-	<0.001	<0.0002	0.00002	0.00041	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	-	-	-	0.0048	0.00153	0.0118	0.0003	-	0.267	<0.0002	-	<0.001	<0.0002	0.00004	0.00015	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	-	-	-	0.0050	0.00179	0.0152	<0.0002	-	0.328	<0.0002	-	<0.001	<0.0002	<0.00002	0.00043	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	-	-	-	0.0063	0.00138	0.0143	0.0002	-	0.309	<0.0002	-	<0.001	<0.0002	0.00003	0.00050	-	<0.001	-	<0.002	-	-
Amphibolite Drum 1	A1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	-	-	-	0.0079	0.00154	0.0145	0.0002	-	0.288	<0.0002	-	0.004	<0.0002	0.00003	0.00056	-	<0.001	-	<0.002	-	-
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.002	0.006	<0.001	<0.001	0.09	<0.0001	<0.001	<0.001	<0.001	0.015	0.006	<0.001	<0.001	<0.01	<0.05	<0.001	
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.004	0.027	<0.001	<0.001	0.10	<0.0001	<0.001	0.001	<0.001	0.008	0.012	<0.001	<0.001	<0.01	<0.05	<0.001	
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.005	0.012	<0.001	<0.001	0.09	<0.0001	<0.001	<0.001	<0.001	0.002	0.002	<0.001	<0.001	<0.01	<0.05	<0.001	
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	0.01	0.006	0.012	<0.001	<0.001	0.07	<0.0001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.008	0.017	<0.001	-	0.06	<0.0001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-	-
Amphibolite Drum 2	A2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.005	0.014	<0.001	-	<0.05	<0.0.											



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leach

				als																			
				Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL				0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.0001	0.001	0.001	0.00001	0.0002	0.00005	0.0002	0.0001	0.001	0.0005
Talison Greenbushes Site-specific WQG, Drinking Water					0.007	0.5		0.05	0.002	0.014							0.00004		0.017		0.0002		3
Talison Greenbushes Site-specific WQG, Freshwater Ecological					2	1.9		0.034	0.08	0.017							0.00003		0.0005		0.0006		0.06
Talison Greenbushes Site-specific WQG, Irrigation					2.5	0.2		0.01	0.2								0.001		0.01		0.1		2
Talison Greenbushes Site-specific WQG, Livestock					0.82	10		0.15	1	0.39							0.13		0.2		0.1		20
Talison Greenbushes Site-specific WQG, Recreational					0.14	10		1	0.4	0.28							0.0008		0.34		0.004		80
Location Code	Field ID	Lab Report Number	Date																				
	DI Batch 1_20220726	EP2210272	26 Jul 2022	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	<0.001	<0.01	<0.001	<0.005
	DI Batch2_20220802	EP2210272	02 Aug 2022	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	<0.001	<0.01	<0.001	<0.005
	DI Batch3_2023125	EP2301024	25 Jan 2023	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.005
	DI Batch4_20230622	EP2308375	22 Jun 2023	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.005
	DI Batch5_20230921	EP2313151	21 Sep 2023	-	-	-	<0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T1 DI B1_20220726	EP2210272	26 Jul 2022	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.001	<0.01	<0.001	<0.005
	Tailings IBC Decant_2022	EP2210272	26 Jul 2022	<0.001	3.09	0.010	<0.0001	0.007	0.002	0.164	0.033	<0.01	<0.005	<0.001	0.004	<0.001	-	<0.01	0.009	<0.001	<0.01	<0.001	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2210362	11 Aug 2022	<0.001	0.050	0.035	<0.0001	0.061	0.002	0.014	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	-	<0.01	0.001	0.045	<0.01	<0.001	0.008
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2210698	18 Aug 2022	<0.001	0.076	0.020	<0.0001	0.002	0.099	0.003	0.015	<0.01	<0.005	<0.001	0.001	<0.001	-	<0.01	0.001	0.024	<0.01	<0.001	0.006
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2210938	25 Aug 2022	<0.001	0.063	0.008	<0.0001	0.015	0.002	0.010	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	-	<0.01	0.011	<0.01	<0.001	<0.001	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2211329	01 Sep 2022	<0.001	0.055	0.007	<0.0001	0.005	0.002	0.007	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.025	<0.01	<0.001	<0.001	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2212096	15 Sep 2022	-	0.056	0.006	-	<0.001	0.003	0.002	0.006	-	-	-	<0.001	-	<0.001	-	0.029	-	-	-	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2212853	29 Sep 2022	-	0.034	0.003	-	<0.001	0.002	0.001	0.004	-	-	-	<0.001	-	<0.001	-	0.017	-	-	-	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2213555	10 Oct 2022	-	0.031	<0.001	-	<0.001	0.001	0.001	0.004	-	-	-	<0.001	-	<0.001	-	0.040	-	-	-	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2214520	27 Oct 2022	-	0.028	0.002	-	<0.001	0.001	0.002	0.005	-	-	-	<0.001	-	-	<0.01	<0.001	0.024	-	-	<0.005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2215141	10 Nov 2022	-	0.0159	0.00147	-	0.00010	0.0010	0.002	0.00340	-	-	-	<0.001	-	<0.00002 ²¹	-	0.000056	0.0282	-	-	0.0013
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2215947	24 Nov 2022	-	0.0199	0.00111	-	0.00054	0.0008	0.001	0.00321	-	-	-	<0.001	-	<0.00001	-	0.000029	0.0196	-	-	<0.0005
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2217105	08 Dec 2022	-	0.0179	0.00057	-	0.00009	0.0007	0.001	0.00380	-	-	-	<0.001	-	<0.00001	-	0.000034	0.0247	-	-	0.0010
Amphibolite Drum 1	A1 DI B2 Leachate_2022	EP2217545	22 Dec 2022	<0.00005	0.0233	0.00014	-	0.00009	0.0006	0.001	0.00327	0.0002	<0.00005	<0.001	0.001	<0.001	<0.00001	<0.0002	0.000031	0.0258	0.0013	<0.001	0.0008
Amphibolite Drum 1	A1 DI B2 Leachate_2023	EP2300690	19 Jan 2023	<0.00005	0.0196	0.00073	-	0.00007	0.0007	0.001	0.00457	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000023	0.0310	0.0011	<0.001	0.0015
Amphibolite Drum 1	A1 DI B2 Leachate_2023	EP2301296	02 Feb 2023	-	0.0184	0.00065	-	0.00008	0.0006	0.001	0.00455	-	-	-	<0.001	-	<0.00001	-	0.000026	0.0373	-	-	0.0018
Amphibolite Drum 1	A1 DI B2 Leachate_2023	EP2302018	16 Feb 2023	<0.00005	0.0144	0.00044	-	0.00006	0.0006	0.001	0.00451	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000023	0.0394	0.0012	<0.001	0.0022
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2302667	02 Mar 2023	-	0.0167	0.00025	-	<0.00005	0.0005	<0.001	0.00359	-	-	-	<0.001	-	<0.00001	-	0.000018	0.0333	-	-	0.0014
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2303327	16 Mar 2023	-	0.0173	0.00014	-	<0.00005	0.0004	0.001	0.00339	-	-	-	<0.001	-	<0.00001	-	0.000017	0.0205	-	-	0.0018
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2304234	30 Mar 2023	<0.00005	0.0129	0.00010	-	<0.00005	0.0004	<0.001	0.00311	0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000014	0.0198	0.0009	<0.001	0.0016
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2304866	13 Apr 2023	-	0.0124	0.00022	-	<0.00005	0.0005	<0.001	0.00334	-	-	-	<0.001	-	<0.00001	-	0.000011	0.0136	-	-	0.0019
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2305524	27 Apr 2023	<0.00005	0.0141	0.00017	-	<0.00005	0.0004	<0.001	0.00311	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000014	0.0118	0.0007	<0.001	0.0012
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2306239	11 May 2023	-	0.0117	0.00021	-	<0.00005	0.0005	<0.001	0.00289	-	-	-	<0.001	-	<0.00001	-	0.000016	0.0121	0.0006	-	0.0011
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2306959	25 May 2023	-	0.0107	0.00018	-	<0.00005	0.0005	<0.001	0.00290	-	-	-	<0.001	-	<0.00001	-	0.000012	0.0095	-	-	0.0016
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2307721	08 Jun 2023	-	0.00804	0.00019	-	<0.00005	0.0004	<0.001	0.00210	-	-	-	<0.001	-	<0.00001	-	0.000015	0.0054	-	-	0.0013
Amphibolite Drum 1	A1 DI B3 Leachate_2022	EP2308375	22 Jun 2023	-	0.00813																		



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Inorganics		Acidity & Alkalinity				Major Ions										Nutrients		Organic Indicators
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L
EQL	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Drinking Water												250							
Talison Greenbushes Site-specific WQG, Freshwater Ecological												429							
Talison Greenbushes Site-specific WQG, Irrigation																			
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																				
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	7.17	53	<1	11	<1	11	6	<1	<1	3	5	7	<0.1	0.43	0.51	8.19	0.50	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	7.34	85	<1	15	<1	15	8	<1	<1	8	10	10	<0.1	0.75	0.79	2.78	0.21	-	4	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	7.34	73	<1	13	<1	13	6	<1	<1	6	8	8	<0.1	0.56	0.65	-	0.11	-	3	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	7.28	54	<1	10	<1	10	3	<1	<1	5	6	5	<0.1	0.37	0.47	12.6	0.16	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	7.22	38	<1	12	<1	12	4	<1	<1	4	4	5	<0.1	0.37	0.46	-	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	7.10	40	<1	11	<1	11	3	<1	<1	4	4	5	<0.1	0.32	0.44	14.9	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	7.15	39	<1	10	<1	10	4	<1	<1	4	2	6	<0.1	0.37	0.38	1.00	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	7.19	36	<1	12	<1	12	4	<1	<1	4	8	5	<0.1	0.37	0.57	-	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	7.18	37	<1	11	<1	11	4	<1	<1	3	1	2	<0.1	0.33	0.29	6.53	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215947	24 Nov 2022	7.22	33	<1	9	<1	9	3	<1	<1	3	1	6	<0.1	0.28	0.33	8.60	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	7.14	32	<1	8	<1	8	3	<1	<1	3	<1	6	<0.1	0.28	0.28	0.81	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	7.15	36	<1	9	<1	9	3	<1	<1	3	1	8	<0.1	0.28	0.37	-	-	-	3	
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	7.05	37	<1	7	<1	7	4	<1	<1	3	<1	10	<0.1	0.33	0.35	2.65	-	-	3	
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	7.04	29	<1	7	<1	7	2	<1	<1	2	<1	6	<0.1	0.19	0.26	17.3	-	-	2	
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	7.10	36	<1	7	<1	7	3	<1	<1	3	1	7	<0.1	0.28	0.31	5.66	-	-	3	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	6.96	30	<1	6	<1	6	2	<1	<1	2	<1	7	<0.1	0.19	0.26	-	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	7.02	26	<1	6	<1	6	3	<1	<1	2	<1	6	<0.1	0.24	0.24	-	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	6.87	25	<1	6	<1	6	2	<1	<1	1	<1	6	<0.1	0.14	0.24	26.2	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	6.92	29	<1	6	<1	6	3	<1	<1	3	<1	7	<0.1	0.28	0.26	2.67	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	6.95	24	<1	6	<1	6	<1	<1	<1	2	<1	5	<0.1	0.09	0.22	44.0	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306239	11 May 2023	6.91	23	<1	6	<1	6	2	<1	<1	2	<1	5	<0.1	0.19	0.22	9.05	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306959	25 May 2023	6.76	24	<1	7	<1	7	<1	<1	<1	2	<1	4	<0.1	0.09	0.22	43.9	-	-	2	
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	7.01	20	<1	5	<1	5	2	<1	<1	2	<1	2	<0.1	0.19	0.14	13.8	-	-	1	
Dolerite Drum 1	D1 DI B4 Leachate 2023	EP2308375	22 Jun 2023	6.95	19	<1	6	<1	6	<1	<1	<1	1	<1	3	<0.1	0.04	0.18	61.5	-	-	1	
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	6.97	23	<1	5	<1	5	2	<1	<1	2	<1	5	<0.1	0.19	0.20	4.40	-	-	2	
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	6.84	23	<1	5	<1	5	2	<1	<1	2	<1	4	<0.1	0.19	0.18	-	-	-	2	
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	6.84	20	<1	6	<1	6	2	<1	<1	1	<1	4	<0.1	0.14	0.20	17.3	-	-	1	
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	6.94	20	<1	5	<1	5	2	<1	<1	2	<1	4	<0.1	0.19	0.18	0.98	-	-	1	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	7.19	62	<1	10	<1	10	7	<1	<1	3	5	9	<0.1	0.48	0.53	4.80	0.45	-	3	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	7.41	101	<1	20	<1	20	9	1	<1	9	11	12	<0.1	0.92	0.96	1.96	0.17	-	5	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	7.37	81	<1	16	<1	16	7	<1	<1	7	9	10	<0.1	0.65	0.78	-	0.14	-	3	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	7.38	69	<1	10	<1	10	4	<1	<1	6	7	7	<0.1	0.46	0.54	8.21	0.12	-	3	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	7.28	48	<1	14	<1	14	4	<1	<1	5	5	6	<0.1	0.42	0.54	-	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	7.18	46	<1	12	<1	12	5	<1	<1	6	4	5	<0.1	0.51	0.46	5.56	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	7.26	40	<1	11	<1	11	4	<1	<1	4	2	5	<0.1	0.37	0.38	0.89	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	7.27	38	<1	11	<1	11	4	<1	<1	4	9	5	<0.1	0.37	0.58	-	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	7.18	37	<1	11	<1	11	3	<1	<1	4	2	5	<0.1	0.32	0.38	-	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	7.25	34	<1	10	<1	10	3	<1	<1	4	1	5	<0.1	0.32	0.33	1.28	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	7.16	35	<1	9	<1	9	3	<1	<1	4	1	6	<0.1	0.32	0.33	1.41	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	7.20	36	<1	9	<1	9	2	<1	<1	3	1	12	<0.1	0.23	0.46	33.1	-	-	2	
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2300690	19 Jan 2023	7.15	41	<1	9	<1	9	4	<1	<1	3	<1	9	<0.1	0.33	0.37	5.32	-	-	3	
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	7.14	35	<1	8	<1	8	3	<1	<1	3	1	7	<0.1	0.28	0.33	8.73	-	-	3	
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	7.08	32	<1	8	<1	8	2	<1	<1	3	<1	6	<0.1	0.23	0.28	10.6	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	7.11	29	<1	6	<1	6	2	<1	<1	2	<1	6	<0.1	0.19	0.24	-	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2303327	16 Mar 2023	7.05	27	<1	6	<1	6	2	<1	<1	3	<1	6	<0.1	0.23	0.24	-	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2304234	30 Mar 2023	6.87	24	<1	6	<1	6	2	<1	<1	1	<1	5	<0.1	0.14	0.22	22.0	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2304866	13 Apr 2023	6.90	25	<1	6	<1	6	2	<1	<1	3	<1	6	<0.1	0.23	0.24	3.05	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2305524	27 Apr 2023	6.96	24	<1	6	<1	6	<1	<1	<1	2	<1	5	<0.1	0.09	0.22	44.0	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2306239	11 May 2023	6.92	23	<1	6	<1	6	2	<1	<1	2	<1	4	<0.1	0.19	0.20	4.20	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2306959	25 May 2023	6.74	21	<1	6	<1	6	<1	<1	<1	2	1	4	<0.1	0.09	0.23	45.3	-	-	2	
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2307721	08 Jun 2023	6.94	18	<1	5	<1	5	2	<1	<1	2	<1	3	<0.1	0.19	0.16	7.00	-	-	1	
Dolerite Drum 2	D2 DI B4 Leachate 2023	EP2308375	22 Jun 2023	6.93	15	<1	5	<1	5	<1	<1	<1	2	<1	2	<0.1	0.09	0.14	23.9	-	-	<1	
Dolerite Drum 2	D2 DI B5 Leachate 2023	EP2313151	21 Sep 2023	6.90	20	<1	4	<1	4	1	<1	<1	2	<1	4	<0.1	0.14	0.16	8.77	-	-	2	
Dolerite Drum 2	D2 DI B5 Leachate 2023	EP2314662	19 Oct 2023	6.80	21	<1	5	<1	5	2	<1	<1	2	<1	4	<0.1	0.19	0.18	-	-	-	1	
Dolerite Drum 2	D2 DI B5 Leachate 2023	EP2316387	16 Nov 2023	6.76	17	<1	5	<1	5	1	<1	<1	1	<1	4	<0.1	0.09	0.18	32.5	-	-	1	
Dolerite Drum 2	D2 DI B5 Leachate 2023	EP2317814	14 Dec 2023	6.86	19	<1	4	<1	4	2	<1	<1	2	<1	4	<0.1	0.19	0.16	6.74	-	-	1	



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)	Lanthanum (filtered)	Me
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQL	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002	0.001	
Talison Greenbushes Site-specific WQG, Drinking Water				0.2	0.003	0.01				0.002		0.08	0.05		2						
Talison Greenbushes Site-specific WQG, Freshwater Ecological				0.055	0.09	0.013				0.0016		0.1	0.007		0.0014						
Talison Greenbushes Site-specific WQG, Irrigation				5		0.1				0.01			0.1		0.2						
Talison Greenbushes Site-specific WQG, Livestock				5	0.15	0.5				0.01		2	1		0.5						
Talison Greenbushes Site-specific WQG, Recreational					0.06	0.2				0.04		1.6	1		40						

Location Code	Field ID	Lab Report Number	Date																				
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.006	0.067	0.009	<0.001	0.08	<0.0001	<0.001	0.003	<0.001	<0.001	0.004	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.020	0.115	0.010	<0.001	0.10	<0.0001	<0.001	0.003	<0.001	<0.001	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.018	0.108	0.007	<0.001	0.11	<0.0001	<0.001	0.002	<0.001	<0.001	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.019	0.089	0.006	<0.001	0.06	<0.0001	<0.001	0.002	<0.001	<0.001	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.027	0.102	0.005	-	<0.05	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.020	0.074	0.004	-	<0.05	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.019	0.069	0.003	-	<0.05	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.018	0.068	0.003	-	0.07	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	-	-	0.0060	0.0148	0.0666	0.0028	-	0.084	<0.0002	-	0.002	<0.0002	<0.0002	0.00047	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	-	-	0.0041	0.0142	0.0638	0.0021	-	0.075	<0.0002	-	0.002	<0.0002	<0.0002	0.00328	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	-	-	0.0049	0.0140	0.0623	0.0024	-	0.067	<0.0002	-	0.002	<0.0002	<0.0002	0.00042	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0084	0.0147	0.0717	0.0024	<0.0002	0.073	<0.0002	<0.001	0.002	<0.0002	0.00002	0.00047	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0061	0.00980	0.0467	0.0023	<0.0002	0.086	<0.0002	<0.001	0.002	<0.0002	0.00005	0.00037	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0065	0.0133	0.0629	0.0026	<0.0002	0.09	<0.0002	<0.001	0.002	<0.0002	0.00008	0.00051	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	-	-	0.0080	0.0125	0.0576	0.0022	-	0.078	<0.0002	-	0.002	0.0007	0.00007	0.00043	-	<0.001	-	0.009	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	-	-	0.0055	0.0123	0.0493	0.0017	-	0.257	<0.0002	-	0.002	<0.0002	0.00009	0.00039	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	-	-	0.0069	0.0101	0.0387	0.0015	-	0.288	<0.0002	-	0.002	<0.0002	0.00010	0.00022	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0042	0.00842	0.0349	0.0014	<0.0002	0.257	<0.0002	<0.001	0.001	<0.0002	0.00008	0.00029	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	-	-	0.0042	0.00718	0.0325	0.0016	-	0.258	<0.0002	-	0.002	<0.0002	0.00016	0.00044	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0043	0.00790	0.0307	0.0011	<0.0002	0.302	<0.0002	<0.001	0.001	<0.0002	0.00015	0.00045	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306239	11 May 2023	-	-	-	0.0030	0.00622	0.0247	0.0010	-	0.242	<0.0002	-	0.001	<0.0002	0.00014	0.00028	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306959	25 May 2023	-	-	-	0.0035	0.00787	0.0240	0.0010	-	0.258	<0.0002	-	0.001	<0.0002	0.00014	0.00042	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	-	-	-	0.0021	0.00478	0.0166	0.0007	-	0.274	<0.0002	-	<0.001	<0.0002	0.00014	0.00007	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B4 Leachate 2023	EP2308375	22 Jun 2023	-	-	-	0.0022	0.00452	0.0162	0.0007	-	0.259	<0.0002	-	<0.001	<0.0002	0.00015	0.00033	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	-	-	-	0.0023	0.00579	0.0181	0.0010	-	0.268	<0.0002	-	0.001	<0.0002	0.00016	<0.00005	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	-	-	-	0.0024	0.00698	0.0248	0.0010	-	0.323	<0.0002	-	0.001	<0.0002	0.00008	0.00031	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	-	-	-	0.0035	0.00485	0.0220	0.0010	-	0.33	<0.0002	-	0.001	<0.0002	0.00020	0.00035	-	<0.001	-	<0.002	-
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	-	-	-	0.0038	0.00486	0.0211	0.0008	-	0.302	<0.0002	-	0.001	<0.0002	0.00014	0.00026	-	<0.001	-	<0.002	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.006	0.108	0.013	<0.001	0.08	<0.0001	<0.001	0.002	<0.001	<0.001	0.006	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.020	0.177	0.017	<0.001	0.10	<0.0001	<0.001	0.002	<0.001	<0.001	0.006	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.017	0.134	0.011	<0.001	0.11	<0.0001	<0.001	0.002	<0.001	<0.001	0.003	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.019	0.112	0.011	<0.001	0.07	<0.0001	<0.001	0.002	<0.001	<0.001	0.003	<0.001	<0.001	<0.01	<0.05	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.030	0.118	0.010	-	0.06	<0.0001	-	0.002	<0.001	<0.001	0.002	-	<0.001	-	<0.05	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.027	0.104	0.008	-	0.06	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.019	0.074	0.005	-	<0.05	<0.0001	-	0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.020	0.079	0.006	-	0.08	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	-	-	0.0062	0.0152	0.0726	0.0043	-	0.083	<0.0002	-	0.002	<0.0002	0.00004	0.00061	-	<0.001	-	<0.002	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	-	-	0.0051	0.0152	0.0704	0.0035	-	0.082	<0.0002	-	0.001	<0.0002	0.00002	0.00050	-	<0.001	-	<0.002	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	-	-	0.0050	0.0158	0.0727	0.0039	-	0.068	<0.0002	-	0.001	<0.0002	<0.0002	0.00058	-	<0.001	-	<0.002	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0084	0.0156	0.0794	0.0036	<0.0002	0.06	<0.0002	<0.001	0.002	<0.0002	0.00002	0.00053	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0058	0.0129	0.0559	0.0042	<0.0002	0.077	<0.0002	<0.001	0.002	<0.0002	0.00004	0.00054	<0.001	<0.001	<0.01	0.002	<0.001
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	-	-	0.0084	0.0142	0.0662	0.0033	-	0.111	<0.0002	-	0.002	<0.0002	0.00006	0.00053	-	<0.001	-	0.002	-
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0071	0.0104	0.0502	0.0017	<0.0002	0.077	<0.0002	<0.001	0.002	<0.0002	0.00007	0.00030	<0.001	<0.001	<0.01	<0.002	<0.001
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	-	-	0.0068	0.0143	0.0598	0.0025													



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.001	0.001	0.001	0.00001	0.0002	0.000005	0.0002	0.0001	0.001	0.0005
Talison Greenbushes Site-specific WQG, Drinking Water		0.007	0.5		0.05	0.002	0.014							0.00004		0.017		0.0002		3
Talison Greenbushes Site-specific WQG, Freshwater Ecological		2	1.9		0.034	0.08	0.017							0.00003		0.0005		0.0006		0.06
Talison Greenbushes Site-specific WQG, Irrigation		2.5	0.2		0.01	0.2								0.001		0.01		0.1		2
Talison Greenbushes Site-specific WQG, Livestock		0.82	10		0.15	1	0.39							0.13		0.2		0.1		20
Talison Greenbushes Site-specific WQG, Recreational		0.14	10		1	0.4	0.28							0.0008		0.34		0.004		80

Location Code	Field ID	Lab Report Number	Date																	
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	0.069	0.010	<0.0001	<0.001	0.011	0.002	0.013	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	<0.005
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	0.177	0.002	<0.0001	<0.001	0.023	0.004	0.023	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	<0.005
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	0.150	0.002	<0.0001	<0.001	0.005	0.003	0.018	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	<0.005
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	0.117	0.002	<0.0001	<0.001	0.003	0.002	0.014	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.005
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	0.120	0.002	-	<0.001	0.002	0.002	0.012	-	-	-	<0.001	-	<0.001	<0.001	0.023	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	0.104	<0.001	-	<0.001	<0.001	0.001	0.009	-	-	-	<0.001	-	<0.001	<0.001	0.019	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	0.100	<0.001	-	<0.001	0.002	0.001	0.009	-	-	-	<0.001	-	<0.001	<0.001	0.032	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	0.074	<0.001	-	<0.001	0.002	0.002	0.008	-	-	-	<0.001	-	<0.01	<0.001	0.029	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	0.0538	0.00010	-	0.00016	0.0012	0.001	0.00796	-	-	-	<0.001	-	<0.00002 ²¹	0.000060	0.0257	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	0.0643	<0.00005	-	0.00080	0.0009	0.001	0.00640	-	-	-	<0.0001	-	<0.00001	0.000028	0.0251	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	0.0586	0.00014	-	0.00011	0.0009	0.001	0.00773	-	-	-	<0.001	-	<0.00001	0.000041	0.0312	-
Dolerite Drum 1	D1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.00005	0.0843	0.00009	-	0.00014	0.0010	0.002	0.00799	0.0007	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000034	0.0377	0.0015
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.00005	0.0647	0.00070	-	0.00011	0.0010	0.001	0.00858	0.0006	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000025	0.0342	0.0011
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	0.0636	0.00153	-	0.00017	0.0009	0.002	0.00799	0.0011	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000029	0.0518	0.0011
Dolerite Drum 1	D1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	0.0635	0.00084	-	0.00012	0.0009	0.001	0.00827	-	-	-	<0.001	-	<0.00001	-	0.000022	0.0415
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	0.0597	0.00100	-	0.00009	0.0008	0.001	0.00694	-	-	-	<0.001	-	<0.00001	-	0.000016	0.0380
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	0.0646	0.00088	-	0.00008	0.0007	0.001	0.00605	-	-	-	<0.001	-	<0.00001	-	0.000012	0.0329
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.00005	0.0509	0.00056	-	0.00008	0.0006	0.001	0.00582	0.0003	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000011	0.0245	0.0007
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	0.0561	0.00106	-	0.00008	0.0009	0.001	0.00688	-	-	-	<0.001	-	<0.00001	-	0.000014	0.0164
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.00005	0.0616	0.00097	-	0.00007	0.0008	0.001	0.00582	0.0004	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000014	0.0297	0.0006
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306239	11 May 2023	-	0.0504	0.00091	-	0.00007	0.0008	<0.001	0.00486	-	-	-	<0.001	-	<0.00001	-	0.000007	0.0126
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2306959	25 May 2023	-	0.0526	0.00096	-	0.00007	0.0007	<0.001	0.00509	-	-	-	<0.001	-	<0.00001	-	0.000010	0.0169
Dolerite Drum 1	D1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	-	0.0426	0.00078	-	<0.00005	0.0007	<0.001	0.00393	-	-	-	<0.001	-	<0.00001	-	0.000013	0.0090
Dolerite Drum 1	D1 DI B4 Leachate 2023	EP2308375	22 Jun 2023	-	0.0417	0.00069	-	<0.00005	0.0007	<0.001	0.00439	-	-	-	<0.001	-	<0.00001	-	0.000014	0.0116
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	-	0.0391	0.00088	-	<0.00005	0.0008	<0.001	0.00497	-	-	-	<0.001	-	<0.00001	-	0.000013	0.0124
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	-	0.0385	0.00066	-	<0.00005	0.0008	0.001	0.00364	-	-	-	<0.001	-	<0.00001	-	0.000006	0.0163
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	-	0.0373	0.00128	-	0.00007	0.0011	0.001	0.00421	-	-	-	<0.001	-	<0.00001	-	0.000011	0.0174
Dolerite Drum 1	D1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	-	0.0328	0.00084	-	0.00005	0.0009	<0.001	0.00441	-	-	-	<0.001	-	<0.00001	-	0.000009	0.0181
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	0.081	0.012	<0.0001	<0.001	0.014	0.002	0.016	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.010
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	0.242	<0.001	<0.0001	0.001	0.046	0.004	0.028	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.018
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	0.198	0.002	<0.0001	<0.001	0.009	0.003	0.020	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.011
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	0.166	0.001	<0.0001	<0.001	0.005	0.002	0.018	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.015
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	0.164	<0.001	-	<0.001	0.003	0.002	0.016	-	-	-	<0.001	-	<0.001	<0.001	0.022	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	0.169	<0.001	-	<0.001	0.003	0.002	0.013	-	-	-	<0.001	-	<0.001	<0.001	0.020	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	0.123	<0.001	-	<0.001	0.002	0.002	0.009	-	-	-	<0.001	-	<0.001	<0.001	0.046	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	0.102	0.001	-	<0.001	0.002	0.002	0.010	-	-	-	<0.001	-	<0.01	<0.001	0.028	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	0.0706	0.00084	-	0.00030	0.0014	0.002	0.00804	-	-	-	<0.001	-	<0.00002 ²¹	0.000070	0.0272	-
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	0.0795	0.00035	-	0.00083	0.0011	0.001	0.00693	-	-	-	<0.001	-	<0.00001	-	0.000046	0.0298
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	0.0803	0.00021	-	0.00022	0.0010	0.001	0.00810	-	-	-	<0.001	-	<0.00001	-	0.000055	0.0330
Dolerite Drum 2	D2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.00005	0.0870	0.00050	-	0.00025	0.0010	0.002	0.00783	0.0012	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000046	0.0398	0.0014
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.00005	0.0916	0.00134	-	0.00020	0.0010	0.002	0.00992	0.0010	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000039	0.0413	0.0011
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	0.0780	0.00190	-	0.00018	0.0007	0.002	0.00788	-	-	-	<0.001	-	<0.00001	-	0.000036	0.0260
Dolerite Drum 2	D2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	0.0456	0.00073	-	0.00008	0.0009	0.002	0.00742	0.0005	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000020	0.0447	0.0010
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	0.0728	0.00108	-	0.00015	0.0006	0.001	0.00689	-	-	-	<0.001	-	<0.00001	-	0.000022	0.0398
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	0.0799	0.00131	-	0.00012	0.0008	0.002	0.00643	-	-	-	<0.001	-	<0.00001	-	0.000017	0.0445
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.00005	0.0610	0.00102	-	0.00012	0.0006	0.001	0.00544	0.0006	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000019	0.0283	0.0007
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	0.0657	0.00145	-	0.00011	0.0008	0.002	0.00600	-	-	-	<0.001	-	<0.00001	-	0.000016	0.0234
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.00005	0.0775	0.00149	-	0.00011	0.0008	0.001	0.00537	0.0006	<0.00005	<0.001	<0.001	<0.00001	<0.00002	0.000019	0.0637	0.0007
Dolerite Drum 2	D2 DI B3 Leachate 2023	EP2306239	11 May 2023	-	0.0621	0.00145	-	0.00011	0.0010	0.001	0.00491	-	-	-	<0.001	-	<0.00001	-	0.000017	0.0



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

EQL	Inorganics		Acidity & Alkalinity				Major Ions										Nutrients		Organic Indicators
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L
	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Drinking Water												250							
Talison Greenbushes Site-specific WQG, Freshwater Ecological												429							
Talison Greenbushes Site-specific WQG, Irrigation																			
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																				
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	6.46	61	<1	2	<1	2	6	<1	<1	2	3	18	<0.1	0.39	0.50	-	0.52	-	6	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	6.38	57	<1	2	<1	2	3	1	<1	3	4	16	<0.1	0.36	0.48	14.5	0.35	-	6	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	6.59	48	<1	2	<1	2	2	1	<1	2	3	12	<0.1	0.27	0.37	-	0.24	-	4	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	6.15	26	<1	2	<1	2	2	<1	<1	2	2	8	<0.1	0.19	0.26	-	0.11	-	3	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	6.23	38	<1	2	<1	2	2	1	<1	4	2	10	<0.1	0.36	0.30	7.80	-	-	4	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	6.35	38	<1	2	<1	2	2	<1	<1	3	1	12	<0.1	0.23	0.32	-	-	-	5	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	6.28	35	<1	2	<1	2	2	<1	<1	3	1	11	<0.1	0.23	0.30	-	-	-	4	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	6.16	39	<1	2	<1	2	2	<1	<1	2	<1	13	<0.1	0.19	0.31	-	-	-	5	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	6.18	35	<1	1	<1	1	2	<1	<1	2	<1	11	<0.1	0.19	0.25	14.3	-	-	4	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	6.02	35	<1	1	<1	1	2	<1	<1	2	<1	11	<0.1	0.19	0.25	-	-	-	4	
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	6.00	41	<1	1	<1	1	2	<1	<1	2	<1	14	<0.1	0.19	0.31	-	-	-	5	
Granofels Drum 1	G1_D1_B2_Leachate_2023	EP2300690	19 Jan 2023	5.83	49	<1	1	<1	1	4	1	<1	2	1	18	<0.1	0.37	0.42	-	-	-	6	
Granofels Drum 1	G1_D1_B2_Leachate_2023	EP2301296	02 Feb 2023	5.81	38	<1	1	<1	1	2	<1	<1	2	1	12	<0.1	0.19	0.30	-	-	-	5	
Granofels Drum 1	G1_D1_B2_Leachate_2023	EP2302018	16 Feb 2023	6.00	31	<1	<1	<1	<1	1	<1	<1	2	1	11	<0.1	0.14	0.26	30.5	-	-	4	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2302667	02 Mar 2023	5.77	27	<1	1	<1	1	1	<1	<1	<1	<1	10	<0.1	0.05	0.23	-	-	-	4	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2303327	16 Mar 2023	5.91	27	<1	<1	<1	<1	2	<1	<1	2	<1	9	<0.1	0.19	0.19	-	-	-	4	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2304234	30 Mar 2023	5.91	23	<1	<1	<1	<1	1	<1	<1	<1	<1	8	<0.1	0.05	0.17	53.9	-	-	3	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2304866	13 Apr 2023	5.82	26	<1	<1	<1	<1	2	<1	<1	2	<1	10	<0.1	0.19	0.21	5.42	-	-	3	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2305524	27 Apr 2023	5.80	24	<1	<1	<1	<1	<1	<1	<1	2	<1	8	<0.1	0.09	0.17	31.4	-	-	3	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2306239	11 May 2023	6.01	22	<1	1	<1	1	1	<1	<1	2	<1	7	<0.1	0.14	0.16	9.53	-	-	3	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2306959	25 May 2023	5.99	21	<1	<1	<1	<1	<1	<1	<1	1	<1	8	<0.1	0.04	0.17	58.6	-	-	3	
Granofels Drum 1	G1_D1_B3_Leachate_2023	EP2307721	08 Jun 2023	6.02	15	<1	5	<1	5	<1	<1	<1	1	<1	5	<0.1	0.04	0.20	64.8	-	-	2	
Granofels Drum 1	G1_D1_B4_Leachate_2023	EP2308375	22 Jun 2023	6.01	14	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	<0.1	<0.01	0.10	100	-	-	2	
Granofels Drum 1	G1_D1_B5_Leachate_2023	EP2313151	21 Sep 2023	6.72	12	<1	3	<1	3	<1	<1	<1	2	<1	2	<0.1	0.09	0.10	7.74	-	-	<1	
Granofels Drum 1	G1_D1_B5_Leachate_2023	EP2314662	19 Oct 2023	5.74	20	<1	<1	<1	<1	1	<1	<1	1	<1	6	<0.1	0.09	0.12	-	-	-	2	
Granofels Drum 1	G1_D1_B5_Leachate_2023	EP2316387	16 Nov 2023	5.85	17	<1	<1	<1	<1	1	<1	<1	<1	<1	7	<0.1	0.05	0.14	49.0	-	-	2	
Granofels Drum 1	G1_D1_B5_Leachate_2023	EP2317814	14 Dec 2023	5.61	18	<1	<1	<1	<1	1	<1	<1	2	<1	6	<0.1	0.14	0.12	4.57	-	-	2	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	6.77	102	<1	5	<1	5	8	2	1	6	6	30	<0.1	0.85	0.89	2.49	0.67	-	11	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	6.85	147	<1	5	<1	5	8	2	1	10	7	51	<0.1	1.02	1.36	14.0	0.46	-	17	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	6.99	96	<1	7	<1	7	4	1	<1	8	5	26	<0.1	0.63	0.82	-	0.34	-	9	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	6.89	60	<1	7	<1	7	2	<1	<1	6	3	18	<0.1	0.36	0.60	-	0.28	-	7	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	6.88	52	<1	6	<1	6	1	<1	<1	4	2	12	<0.1	0.22	0.43	31.1	-	-	5	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	6.86	40	<1	5	<1	5	1	<1	<1	4	1	10	<0.1	0.22	0.34	-	-	-	4	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	6.89	32	<1	6	<1	6	<1	<1	<1	4	<1	7	<0.1	0.17	0.26	-	-	-	3	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	6.82	29	<1	6	<1	6	<1	<1	<1	3	<1	7	<0.1	0.13	0.26	-	-	-	3	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	6.90	25	<1	5	<1	5	<1	<1	<1	3	<1	6	<0.1	0.13	0.22	26.5	-	-	2	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	6.78	25	<1	4	<1	4	<1	<1	<1	3	<1	6	<0.1	0.13	0.20	-	-	-	2	
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	6.86	26	<1	5	<1	5	<1	<1	<1	3	<1	6	<0.1	0.13	0.22	-	-	-	2	
Granofels Drum 2	G2_D1_B2_Leachate_2023	EP2300690	19 Jan 2023	6.73	26	<1	4	<1	4	<1	<1	<1	3	<1	8	<0.1	0.13	0.25	-	-	-	3	
Granofels Drum 2	G2_D1_B2_Leachate_2023	EP2301296	02 Feb 2023	6.72	25	<1	4	<1	4	<1	<1	<1	3	<1	6	<0.1	0.13	0.20	-	-	-	3	
Granofels Drum 2	G2_D1_B2_Leachate_2023	EP2302018	16 Feb 2023	6.64	20	<1	3	<1	3	<1	<1	<1	2	<1	5	<0.1	0.09	0.16	30.7	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2302667	02 Mar 2023	6.65	20	<1	4	<1	4	<1	<1	<1	1	<1	6	<0.1	0.04	0.20	-	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2303327	16 Mar 2023	6.75	19	<1	4	<1	4	<1	<1	<1	2	<1	5	<0.1	0.09	0.18	-	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2304234	30 Mar 2023	6.61	16	<1	3	<1	3	<1	<1	<1	1	<1	4	<0.1	0.04	0.14	53.4	-	-	1	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2304866	13 Apr 2023	6.64	19	<1	3	<1	3	<1	<1	<1	2	<1	6	<0.1	0.09	0.18	36.0	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2305524	27 Apr 2023	6.68	18	<1	3	<1	3	<1	<1	<1	2	<1	5	<0.1	0.09	0.16	30.7	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2306239	11 May 2023	6.70	16	<1	4	<1	4	<1	<1	<1	2	<1	4	<0.1	0.09	0.16	30.4	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2306959	25 May 2023	6.55	16	<1	3	<1	3	<1	<1	<1	2	<1	4	<0.1	0.09	0.14	24.4	-	-	2	
Granofels Drum 2	G2_D1_B3_Leachate_2023	EP2307721	08 Jun 2023	6.72	12	<1	5	<1	5	<1	<1	<1	2	<1	3	<0.1	0.09	0.16	30.2	-	-	1	
Granofels Drum 2	G2_D1_B4_Leachate_2023	EP2308375	22 Jun 2023	6.74	13	<1	4	<1	4	<1	<1	<1	1	<1	3	<0.1	0.04	0.14	53.2	-	-	1	
Granofels Drum 2	G2_D1_B5_Leachate_2023	EP2313151	21 Sep 2023	6.66	16	<1	3	<1	3	<1	<1	<1	2	<1	4	<0.1	0.09	0.14	-	-	-	1	
Granofels Drum 2	G2_D1_B5_Leachate_2023	EP2314662	19 Oct 2023	6.61	16	<1	3	<1	3	<1	<1	<1	2	<1	3	<0.1	0.09	0.12	-	-	-	1	
Granofels Drum 2	G2_D1_B5_Leachate_2023	EP2316387	16 Nov 2023	6.53	13	<1	3	<1	3	<1	<1	<1	1	<1	4	<0.1	0.04	0.14	53.4	-	-	1	
Granofels Drum 2	G2_D1_B5_Leachate_2023	EP2317814	14 Dec 2023	6.56	12	<1	2	<1	2	<1	<1	<1	1	<1	3	<0.1	0.04	0.10	40.4	-	-	1	
Granofels Drum 3	G3_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	7.00	195	<1	8	<1	8	18	5	2	10	10	66	<0.1	1.80	1.82	0.56	0.26	-	21	
Granofels Drum 3	G3_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	7.28	242	<1	10	<1	10	14	6	2											



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)	Lanthanum (filtered)	Me
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002	0.001	
Talison Greenbushes Site-specific WQG, Drinking Water				0.2	0.003	0.01				0.002		0.08	0.05	2							
Talison Greenbushes Site-specific WQG, Freshwater Ecological				0.055	0.09	0.013				0.0016		0.1	0.007	0.0014							
Talison Greenbushes Site-specific WQG, Irrigation				5		0.1				0.01		0.1		0.2							
Talison Greenbushes Site-specific WQG, Livestock				5	0.15	0.5				0.01		2	1	0.5							
Talison Greenbushes Site-specific WQG, Recreational					0.06	0.2				0.04		1.6	1	40							

Location Code	Field ID	Lab Report Number	Date																				
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.003	0.004	0.007	<0.001	0.11	<0.0001	<0.001	0.002	<0.001	0.003	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.007	0.005	0.006	<0.001	0.06	<0.0001	<0.001	0.001	<0.001	0.003	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.009	0.004	0.003	<0.001	<0.05	<0.0001	<0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.008	0.004	0.002	<0.001	0.06	<0.0001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.014	0.007	<0.001	-	0.08	<0.0001	-	0.001	<0.001	0.003	<0.001	-	<0.001	-	<0.05	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.011	0.006	0.002	-	<0.05	<0.0001	-	<0.001	<0.001	0.002	<0.001	-	<0.001	-	<0.05	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.010	0.005	0.003	-	0.08	<0.0001	-	0.001	<0.001	0.003	<0.001	-	<0.001	-	<0.05	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	-	-	-	0.0012	0.00689	0.0042	0.0026	-	0.082	<0.0002	-	<0.001	<0.002	0.00302	0.00069	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	-	-	-	0.0008	0.00650	0.0031	0.0020	-	0.077	<0.0002	-	<0.001	<0.002	0.00292	0.00059	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	-	-	-	0.0013	0.00572	0.0032	0.0030	-	0.072	<0.0002	-	<0.001	<0.002	0.00334	0.00096	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0014	0.00598	0.0034	0.0028	<0.0002	0.07	<0.0002	<0.001	0.002	<0.002	0.00470	0.00085	<0.001	<0.001	<0.01	<0.002	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0012	0.00407	0.0018	0.0041	<0.0002	0.089	<0.0002	<0.001	0.001	<0.002	0.00638	0.00092	<0.001	<0.001	<0.01	<0.002	<0.001
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2301296	02 Feb 2023	-	-	-	0.0012	0.00398	0.0018	0.0032	-	0.084	<0.0002	-	0.001	<0.002	0.00427	0.00068	-	<0.001	-	0.003	-
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0008	0.00358	0.0018	0.0021	<0.0002	0.084	<0.0002	<0.001	0.001	<0.002	0.00412	0.00055	<0.001	<0.001	<0.01	0.002	<0.001
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2302667	02 Mar 2023	-	-	-	0.0004	0.00362	0.0018	0.0023	-	0.256	<0.0002	-	<0.001	<0.002	0.00345	0.00073	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2303327	16 Mar 2023	-	-	-	0.0010	0.00308	0.0016	0.0022	-	0.286	<0.0002	-	<0.001	<0.002	0.00302	0.00067	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0012	0.00244	0.0014	0.0018	<0.0002	0.262	<0.0002	<0.001	<0.001	<0.002	0.00242	0.00071	<0.001	<0.001	<0.01	<0.002	<0.001
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2304866	13 Apr 2023	-	-	-	0.0012	0.00224	0.0015	0.0019	-	0.257	<0.0002	-	<0.001	<0.002	0.00279	0.00114	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0012	0.00267	0.0015	0.0015	<0.0002	0.296	<0.0002	<0.001	<0.001	<0.002	0.00233	0.00093	<0.001	<0.001	<0.01	<0.002	<0.001
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2306239	11 May 2023	-	-	-	0.0014	0.00212	0.0014	0.0015	-	0.256	<0.0002	-	<0.001	<0.002	0.00186	0.00074	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2306959	25 May 2023	-	-	-	0.0013	0.00272	0.0013	0.0012	-	0.272	<0.0002	-	<0.001	<0.002	0.00179	0.00104	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2307721	08 Jun 2023	-	-	-	0.0013	0.00146	0.0008	0.0008	-	0.288	<0.0002	-	<0.001	<0.002	0.00110	0.00079	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B4_Leachate_2022	EP2308375	22 Jun 2023	-	-	-	0.0007	0.00145	0.0008	0.0008	-	0.266	<0.0002	-	<0.001	<0.002	0.00104	0.00096	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2313151	21 Sep 2023	-	-	-	0.0051	0.00495	0.0740	0.0003	-	0.294	<0.0002	-	<0.001	<0.002	0.00019	0.00006	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2314662	19 Oct 2023	-	-	-	<0.0002	0.00216	0.0024	0.0010	-	0.364	<0.0002	-	<0.001	<0.002	0.00111	0.00070	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2316387	16 Nov 2023	-	-	-	0.0012	0.00164	0.0016	0.0010	-	0.32	<0.0002	-	<0.001	<0.002	0.00123	0.00098	-	<0.001	-	<0.002	-
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2317814	14 Dec 2023	-	-	-	0.0011	0.00160	0.0016	0.0011	-	0.301	<0.0002	-	<0.001	<0.002	0.00123	0.00088	-	<0.001	-	<0.002	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.010	0.075	0.005	<0.001	0.08	0.0002	0.001	0.006	<0.001	0.002	0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.032	0.149	0.004	<0.001	0.06	<0.0001	<0.001	0.006	<0.001	0.002	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.038	0.200	0.002	<0.001	<0.05	<0.0001	<0.001	0.004	<0.001	0.002	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.053	0.263	0.001	<0.001	0.05	<0.0001	0.001	0.004	<0.001	0.002	0.002	<0.001	<0.001	<0.01	<0.05	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.038	0.194	<0.001	-	<0.05	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.043	0.199	<0.001	-	<0.05	<0.0001	-	0.002	<0.001	<0.001	<0.001	-	<0.001	-	<0.05	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.041	0.206	<0.001	-	0.08	<0.0001	-	0.002	<0.001	<0.001	0.001	-	<0.001	-	<0.05	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	-	-	-	0.0042	0.0339	0.197	0.0005	-	0.082	<0.0002	-	0.002	<0.002	0.00004	0.00100	-	<0.001	-	0.002	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	-	-	-	0.0046	0.0338	0.18	0.0003	-	0.071	<0.0002	-	0.002	<0.002	0.00003	0.00081	-	<0.001	-	0.003	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	-	-	-	0.0051	0.0348	0.159	0.0005	-	0.078	<0.0002	-	0.002	<0.002	0.00002	0.00100	-	<0.001	-	0.004	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0051	0.0400	0.187	0.0004	<0.0002	0.065	<0.0002	<0.001	0.002	<0.002	0.00003	0.00086	<0.001	<0.001	<0.01	0.002	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0043	0.0306	0.126	0.0006	<0.0002	0.089	0.00002	<0.001	0.002	<0.002	0.00002	0.00070	<0.001	<0.001	<0.01	0.002	<0.001
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2301296	02 Feb 2023	-	-	-	0.0050	0.0392	0.146	0.0004	-	0.076	<0.0002	-	0.002	0.0002	<0.00002	0.00075	-	<0.001	-	0.002	-
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0045	0.0351	0.14	0.0003	<0.0002	0.082	<0.0002	<0.001	0.002	<0.002	<0.00002	0.00060	<0.001	<0.001	<0.01	<0.002	<0.001
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2302667	02 Mar 2023	-	-	-	0.0048	0.0422	0.153	0.0004	-	0.266	<0.0002	-	0.002	0.0006	<0.00002	0.00069	-	<0.001	-	0.008	-
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2303327	16 Mar 2023	-	-	-	0.0061	0.0399	0.135	0.0004	-	0.27	<0.0002	-	0.001	<0.002	<0.00002	0.00070	-	<0.001	-	<0.002	-
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2304234	30 Mar 20																				



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

EQI	als																			
	Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.001	0.001	0.001	0.00001	0.0002	0.000005	0.0002	0.0001	0.001	0.0005
Talison Greenbushes Site-specific WQG, Drinking Water		0.007	0.5		0.05	0.002	0.014							0.00004		0.017		0.0002		3
Talison Greenbushes Site-specific WQG, Freshwater Ecological		2	1.9		0.034	0.08	0.017							0.00003		0.0005		0.0006		0.06
Talison Greenbushes Site-specific WQG, Irrigation		2.5	0.2		0.01	0.2								0.001		0.01		0.1		2
Talison Greenbushes Site-specific WQG, Livestock		0.82	10		0.15	1	0.39							0.13		0.2		0.1		20
Talison Greenbushes Site-specific WQG, Recreational		0.14	10		1	0.4	0.28							0.0008		0.34		0.004		80

Location Code	Field ID	Lab Report Number	Date																				
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	<0.001	0.053	0.011	<0.0001	<0.001	0.006	0.005	0.020	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.005	<0.01	<0.001	0.012
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	<0.001	0.144	0.012	<0.0001	<0.001	0.006	0.004	0.018	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.014	<0.01	<0.001	0.012
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	<0.001	0.164	0.012	<0.0001	<0.001	0.006	0.003	0.012	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.023	<0.01	<0.001	0.008
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	<0.001	0.144	0.011	<0.0001	<0.001	0.005	0.003	0.009	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.028	<0.01	<0.001	0.006
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	-	0.290	0.011	-	<0.001	0.006	0.004	0.009	-	-	-	<0.001	-	<0.001	-	<0.001	0.007	-	-	0.011
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	-	0.209	0.008	-	<0.001	0.006	0.004	0.009	-	-	-	<0.001	-	<0.001	-	<0.001	0.035	-	-	0.014
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	-	0.160	0.009	-	<0.001	0.006	0.004	0.009	-	-	-	<0.001	-	-	<0.01	<0.001	0.032	-	-	0.024
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	-	0.128	0.00990	-	0.00006	0.0064	0.004	0.00939	-	-	-	<0.001	-	<0.000027	-	0.000054	0.0388	-	-	0.0326
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	-	0.116	0.00923	-	0.00073	0.0062	0.003	0.00757	-	-	-	<0.001	-	0.00001	-	0.000037	0.0358	-	-	0.0348
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	-	0.121	0.0125	-	<0.00005	0.0074	0.003	0.00934	-	-	-	<0.001	-	0.00001	-	0.000060	0.0467	-	-	0.0632
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	<0.00005	0.154	0.0165	-	0.00008	0.0107	0.005	0.0113	0.0006	<0.00005	<0.001	<0.001	<0.001	0.00002	<0.0002	0.000063	0.0543	0.0002	<0.001	0.0749
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2300690	19 Jan 2023	<0.00005	0.118	0.0254	-	<0.00005	0.0130	0.004	0.0170	0.0005	<0.00005	<0.001	<0.001	<0.001	0.00002	<0.0002	0.000084	0.0860	<0.0001	<0.001	0.109
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2301296	02 Feb 2023	-	0.122	0.0217	-	<0.00005	0.0095	0.004	0.0111	-	-	-	<0.001	-	0.00003	-	0.000082	0.0736	-	-	0.0720
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2302018	16 Feb 2023	<0.00005	0.101	0.0176	-	<0.00005	0.0090	0.004	0.0101	0.0005	<0.00005	<0.001	<0.001	<0.001	0.00001	<0.0002	0.000073	0.0630	<0.0001	<0.001	0.0706
Granofels Drum 1	G1_D1_B2_Leachate_2022	EP2302667	02 Mar 2023	-	0.111	0.0173	-	<0.00005	0.0076	0.003	0.00828	-	-	-	<0.001	-	0.00001	-	0.000095	0.0638	-	-	0.0596
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2303327	16 Mar 2023	-	0.124	0.0164	-	<0.00005	0.0066	0.003	0.00810	-	-	-	<0.001	-	0.00001	-	0.000108	0.0510	-	-	0.0532
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2304234	30 Mar 2023	<0.00005	0.102	0.0124	-	<0.00005	0.0053	0.003	0.00667	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000097	0.0477	<0.0001	<0.001	0.0470
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2304866	13 Apr 2023	-	0.0976	0.0142	-	<0.00005	0.0064	0.003	0.00814	-	-	-	<0.001	-	0.00001	-	0.000104	0.0402	-	-	0.0425
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2305524	27 Apr 2023	<0.00005	0.117	0.0125	-	<0.00005	0.0054	0.003	0.00699	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.00001	<0.0002	0.000111	0.0403	<0.0001	<0.001	0.0307
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2306239	11 May 2023	-	0.0984	0.0106	-	<0.00005	0.0043	0.002	0.00576	-	-	-	<0.001	-	0.00001	-	0.000107	0.0318	<0.0001	-	0.0284
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2306959	25 May 2023	-	0.1	0.0100	-	<0.00005	0.0042	0.002	0.00571	-	-	-	<0.001	-	0.00001	-	0.000095	0.0303	-	-	0.0232
Granofels Drum 1	G1_D1_B3_Leachate_2022	EP2307721	08 Jun 2023	-	0.0675	0.00651	-	<0.00005	0.0026	0.002	0.00357	-	-	-	<0.001	-	<0.00001	-	0.000101	0.0219	-	-	0.0158
Granofels Drum 1	G1_D1_B4_Leachate_2022	EP2308375	22 Jun 2023	-	0.0675	0.00549	-	<0.00005	0.0028	0.001	0.00373	-	-	-	<0.001	-	<0.00001	-	0.000094	0.0231	-	-	0.0139
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2313151	21 Sep 2023	-	0.174	0.00292	-	0.00069	<0.0002	0.004	0.00134	-	-	-	<0.001	-	<0.00001	-	0.000066	0.0252	-	-	0.0023
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2314662	19 Oct 2023	-	0.0670	0.00828	-	<0.00005	0.0035	0.002	0.00385	-	-	-	<0.001	-	<0.00001	-	0.000036	0.0331	-	-	0.0124
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2316387	16 Nov 2023	-	0.0610	0.00872	-	<0.00005	0.0039	0.002	0.00454	-	-	-	<0.001	-	0.00001	-	0.000071	0.0392	-	-	0.0149
Granofels Drum 1	G1_D1_B5_Leachate_2022	EP2317814	14 Dec 2023	-	0.0569	0.00924	-	<0.00005	0.0038	0.003	0.00446	-	-	-	<0.001	-	0.00001	-	0.000061	0.0359	-	-	0.0152
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2210938	25 Aug 2022	<0.001	0.442	0.103	<0.0001	0.002	0.005	0.032	0.034	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	0.001	0.047	<0.01	<0.001	0.006
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211329	01 Sep 2022	<0.001	1.30	0.113	<0.0001	0.002	0.006	0.025	0.042	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	0.003	0.050	<0.01	<0.001	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2211675	08 Sep 2022	<0.001	1.27	0.050	<0.0001	0.002	0.004	0.017	0.020	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	0.004	0.030	<0.01	<0.001	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212096	15 Sep 2022	<0.001	1.14	0.026	<0.0001	0.002	0.003	0.016	0.014	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	0.004	0.036	<0.01	<0.001	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2212853	29 Sep 2022	-	0.804	0.004	-	<0.001	0.001	0.008	0.006	-	-	-	<0.001	-	<0.001	-	<0.001	0.058	-	-	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2213555	10 Oct 2022	-	0.794	0.001	-	<0.001	0.001	0.007	0.006	-	-	-	<0.001	-	<0.001	-	0.001	0.039	-	-	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2214520	27 Oct 2022	-	0.505	0.002	-	<0.001	<0.001	0.006	0.004	-	-	-	<0.001	-	-	<0.01	0.002	0.034	-	-	<0.005
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215141	10 Nov 2022	-	0.33	0.00142	-	0.00091	0.0006	0.006	0.00345	-	-	-	<0.001	-	0.00003	-	0.00129	0.0367	-	-	0.0034
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2215947	24 Nov 2022	-	0.366	0.00076	-	0.00147	0.0004	0.005	0.00273	-	-	-	<0.001	-	0.00002	-	0.000924	0.0666	-	-	0.0028
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217105	08 Dec 2022	-	0.348	0.00039	-	0.00084	0.0004	0.005	0.00301	-	-	-	<0.001	-	0.00003	-	0.000992	0.0671	-	-	0.0056
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2217545	22 Dec 2022	<0.00005	0.402	0.00042	-	0.00106	0.0005	0.006	0.00290	0.0005	<0.00005	<0.001	<0.001	<0.001	0.00004	<0.0002	0.000107	0.0913	0.0030	<0.001	0.0060
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2300690	19 Jan 2023	<0.00005	0.379	0.00063	-	0.00094	0.0006	0.005	0.00342	0.0003	<0.00005	<0.001	<0.001	<0.001	0.00004	<0.0002	0.000672	0.146	0.0021	<0.001	0.0128
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2301296	02 Feb 2023	-	0.392	0.00032	-	0.00093	0.0006	0.006	0.00305	-	-	-	<0.001	-	0.00004	-	0.000864	0.0912	-	-	0.0096
Granofels Drum 2	G2_D1_B2_Leachate_2022	EP2302018	16 Feb 2023	<0.00005	0.319	0.00059	-	0.00077	0.0006	0.006	0.00250	0.0004	<0.00005	<0.001	<0.001	<0.001	0.00003	<0.0002	0.000756	0.0901	0.0023	<0.001	0.0109
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2302667	02 Mar 2023	-	0.382	0.00078	-	0.00075	0.0005	0.004	0.00231	-	-	-	<0.001	-	0.00003	-	0.000759	0.102	-	-	0.0099
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2303327	16 Mar 2023	-	0.441	0.00100	-	0.00069	0.0005	0.004	0.00201	-	-	-	<0.001	-	0.00003	-	0.000790	0.0872	-	-	0.0103
Granofels Drum 2	G2_D1_B3_Leachate_2022	EP2304234	30 Mar 2023	<0.00005	0.328	0.00070	-	0.00046	0.0004	0.003	0.00178	0.0002	<0.00005	<0.001	<0.001	<0.001	0.00002	<0.0002	0.000549	0.0570	0.0016		



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Inorganics		Acidity & Alkalinity				Major Ions										Nutrients		Organic Indicators
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
EQL	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Drinking Water												250							
Talison Greenbushes Site-specific WQG, Freshwater Ecological												429							
Talison Greenbushes Site-specific WQG, Irrigation																			
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																	
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2210938	25 Aug 2022	7.01	115	<1	10	<1	10	4	3	2	12	9	18	0.1	1.02	0.83	-	6.18
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211329	01 Sep 2022	7.10	193	<1	10	<1	10	8	5	2	17	15	28	0.1	1.60	1.20	14.1	2.32
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211675	08 Sep 2022	6.89	220	<1	12	<1	12	10	6	2	20	17	29	0.1	1.91	1.32	-	0.30
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212096	15 Sep 2022	6.93	167	<1	12	<1	12	9	5	2	18	13	27	<0.1	1.69	1.17	-	1.96
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212853	29 Sep 2022	6.86	149	<1	12	<1	12	6	4	1	14	10	27	0.1	1.26	1.08	7.63	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2213555	10 Oct 2022	7.23	182	<1	20	<1	20	9	5	2	20	9	36	0.2	1.78	1.40	-	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2214520	27 Oct 2022	6.99	103	<1	10	<1	10	5	3	1	12	6	23	0.1	1.04	0.85	-	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215141	10 Nov 2022	7.04	99	<1	11	<1	11	4	2	1	10	4	25	0.2	0.82	0.85	1.69	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215947	24 Nov 2022	7.02	94	<1	8	<1	8	4	2	1	9	3	24	0.1	0.78	0.74	2.43	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2217105	08 Dec 2022	6.88	101	<1	8	<1	8	4	2	1	9	3	27	0.1	0.78	0.81	1.60	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2217545	22 Dec 2022	6.92	93	<1	9	<1	9	3	2	1	9	3	24	0.1	0.73	0.76	-	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2300690	19 Jan 2023	6.94	103	<1	8	<1	8	4	3	1	9	2	33	0.1	0.86	0.90	2.25	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2301296	02 Feb 2023	6.91	96	<1	7	<1	7	4	2	1	9	3	28	0.1	0.78	0.81	1.65	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2302018	16 Feb 2023	6.85	79	<1	6	<1	6	2	2	<1	8	2	25	0.1	0.61	0.70	6.45	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2302667	02 Mar 2023	6.88	81	<1	7	<1	7	3	2	<1	6	2	25	0.1	0.58	0.72	-	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2303327	16 Mar 2023	6.90	71	<1	6	<1	6	3	2	<1	7	2	21	0.1	0.62	0.61	-	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304234	30 Mar 2023	6.88	63	<1	7	<1	7	3	2	<1	5	1	18	0.1	0.53	0.54	1.03	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304866	13 Apr 2023	6.87	62	<1	7	<1	7	3	2	<1	6	1	18	0.1	0.58	0.54	2.90	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2305524	27 Apr 2023	6.51	145	<1	3	<1	3	8	4	<1	7	<1	52	<0.1	1.03	1.14	5.04	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306239	11 May 2023	6.89	52	<1	7	<1	7	2	1	<1	5	1	13	<0.1	0.40	0.44	4.67	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306959	25 May 2023	6.78	46	<1	7	<1	7	<1	<1	<1	4	<1	12	0.1	0.17	0.39	38.3	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2307721	08 Jun 2023	7.03	41	<1	10	<1	10	2	1	<1	4	<1	10	0.1	0.36	0.41	6.79	-
Mixed Drum 1	M1 D1 B4 Leachate	2022EP2308375	22 Jun 2023	6.96	38	<1	6	<1	6	<1	<1	<1	4	<1	9	0.1	0.17	0.31	27.7	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2313151	21 Sep 2023	7.02	42	<1	7	<1	7	1	<1	<1	5	<1	10	0.1	0.27	0.35	-	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2314662	19 Oct 2023	6.86	42	<1	6	<1	6	2	1	<1	4	<1	9	0.1	0.36	0.31	-	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2316387	16 Nov 2023	6.84	36	<1	6	<1	6	1	<1	<1	3	<1	9	0.1	0.18	0.31	26.0	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2317814	14 Dec 2023	6.96	46	<1	9	<1	9	2	1	<1	4	1	11	0.1	0.36	0.44	10.2	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2210938	25 Aug 2022	6.90	324	<1	10	<1	10	18	12	2	23	19	89	0.1	2.94	2.59	6.31	3.16
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211329	01 Sep 2022	5.91	489	<1	1	<1	1	37	20	3	26	19	173	<0.1	4.70	4.16	6.12	2.02
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211675	08 Sep 2022	6.54	294	<1	5	<1	5	17	10	2	20	14	80	0.1	2.59	2.16	9.09	1.46
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212096	15 Sep 2022	6.74	292	<1	7	<1	7	20	10	2	21	13	96	0.1	2.78	2.50	5.30	0.93
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212853	29 Sep 2022	6.55	231	<1	5	<1	5	13	8	1	15	9	72	0.1	1.98	1.85	3.45	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2213555	10 Oct 2022	6.73	227	<1	6	<1	6	14	8	2	16	7	77	0.1	2.10	1.92	4.56	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2214520	27 Oct 2022	6.74	219	<1	7	<1	7	16	7	2	15	6	74	0.1	2.08	1.85	-	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2215141	10 Nov 2022	6.71	199	<1	6	<1	6	14	6	1	13	5	70	0.1	1.78	1.72	1.86	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2215947	24 Nov 2022	6.76	191	<1	6	<1	6	13	6	1	12	4	71	0.1	1.69	1.71	0.61	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2217105	08 Dec 2022	6.61	199	<1	4	<1	4	13	6	2	12	4	79	0.1	1.72	1.84	3.43	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2217545	22 Dec 2022	6.66	199	<1	5	<1	5	13	6	2	12	3	78	0.1	1.72	1.81	-	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2300690	19 Jan 2023	6.32	244	<1	3	<1	3	18	8	2	11	3	101	0.1	2.09	2.25	3.72	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2301296	02 Feb 2023	6.53	239	<1	4	<1	4	19	8	2	12	3	85	0.1	2.18	1.93	5.96	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2302018	16 Feb 2023	6.51	192	<1	3	<1	3	13	6	1	10	2	86	0.1	1.60	1.91	8.66	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2302667	02 Mar 2023	6.47	187	<1	3	<1	3	13	6	1	8	2	75	0.1	1.52	1.68	-	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2303327	16 Mar 2023	6.51	176	<1	3	<1	3	13	6	1	9	2	74	0.1	1.56	1.66	3.03	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2304234	30 Mar 2023	6.41	166	<1	3	<1	3	12	5	1	7	1	72	<0.1	1.34	1.59	8.43	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2304866	13 Apr 2023	6.46	158	<1	3	<1	3	12	5	1	7	1	63	0.1	1.34	1.40	2.17	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2305524	27 Apr 2023	6.85	61	<1	7	<1	7	1	<1	<1	6	1	16	0.1	0.31	0.50	23.4	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2306239	11 May 2023	6.50	123	<1	3	<1	3	8	4	<1	6	1	39	<0.1	0.99	0.90	4.72	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2306959	25 May 2023	6.32	126	<1	3	<1	3	7	4	<1	6	<1	46	<0.1	0.94	1.02	3.99	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2307721	08 Jun 2023	6.65	102	<1	5	<1	5	8	4	<1	5	<1	39	<0.1	0.94	0.91	1.83	-
Mixed Drum 2	M2 D1 B4 Leachate	2022EP2308375	22 Jun 2023	6.55	97	<1	3	<1	3	5	2	<1	4	<1	36	<0.1	0.59	0.81	15.8	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2313151	21 Sep 2023	5.84	168	<1	<1	<1	<1	15	6	<1	6	<1	62	0.1	1.50	1.29	7.60	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2314662	19 Oct 2023	6.23	114	<1	2	<1	2	9	4	<1	5	<1	41	<0.1	1.00	0.89	-	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2316387	16 Nov 2023	6.07	96	<1	1	<1	1	7	3	<1	3	<1	36	<0.1	0.73	0.77	2.86	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2317814	14 Dec 2023	6.40	270	<1	2	<1	2	24	10	2	10	2	117	0.2	2.51	2.53	0.51	-



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)	Lanthanum (filtered)	Me
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQL	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002	0.001	
Talison Greenbushes Site-specific WQG, Drinking Water				0.2	0.003	0.01				0.002		0.08	0.05		2						
Talison Greenbushes Site-specific WQG, Freshwater Ecological				0.055	0.09	0.013				0.0016		0.1	0.007		0.0014						
Talison Greenbushes Site-specific WQG, Irrigation				5		0.1				0.01			0.1								
Talison Greenbushes Site-specific WQG, Livestock				5	0.15	0.5				0.01		2	1		0.5						
Talison Greenbushes Site-specific WQG, Recreational					0.05	0.2				0.04		1.5	1		40						

Location Code	Field ID	Lab Report Number	Date																		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.016	0.111	0.001	<0.001	0.07	<0.0001	<0.001	0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.015	0.096	0.003	<0.001	<0.05	<0.0001	<0.001	0.033	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211675	08 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.016	0.075	0.005	<0.001	<0.05	<0.0001	<0.001	0.033	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212096	15 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.021	0.080	0.004	<0.001	<0.05	<0.0001	<0.001	0.033	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212853	29 Sep 2022	-	-	-	<0.01	0.018	0.071	0.002	-	<0.05	<0.0001	-	0.024	<0.001	<0.001	<0.001	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2213555	10 Oct 2022	-	-	-	<0.01	0.039	0.139	0.003	-	<0.05	<0.0001	-	0.027	<0.001	<0.001	<0.001	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2214520	27 Oct 2022	-	-	-	<0.01	0.021	0.084	0.002	-	0.07	<0.0001	-	0.022	<0.001	<0.001	<0.001	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215141	10 Nov 2022	-	-	-	0.0019	0.0181	0.0784	0.0015	-	0.068	<0.00002	-	0.021	<0.0002	0.00009	0.00058	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215947	24 Nov 2022	-	-	-	0.0014	0.0192	0.0819	0.0014	-	0.067	<0.00002	-	0.020	<0.0002	0.00009	0.00050	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2217105	08 Dec 2022	-	-	-	0.0016	0.0201	0.0808	0.0016	-	0.066	<0.00002	-	0.019	<0.0002	0.00008	0.00043	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0017	0.0201	0.0841	0.0012	0.00005	0.063	<0.00002	<0.001	0.025	<0.0002	0.00007	0.00041	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0021	0.0187	0.0699	0.0016	0.00003	0.069	<0.00002	<0.001	0.022	<0.0002	0.00008	0.00042	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2301296	02 Feb 2023	-	-	-	0.0031	0.0228	0.0854	0.0016	-	0.072	<0.00002	-	0.025	<0.0002	0.00005	0.00034	-	<0.001	-
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0029	0.0208	0.0817	0.0011	0.00002	0.084	<0.00002	<0.001	0.026	<0.0002	0.00005	0.00032	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2302667	02 Mar 2023	-	-	-	0.0027	0.0261	0.0996	0.0013	-	0.183	<0.00002	-	0.024	<0.0002	<0.00002	0.00029	-	<0.001	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2303327	16 Mar 2023	-	-	-	0.0044	0.0266	0.0963	0.0010	-	0.207	<0.00002	-	0.021	<0.0002	0.00004	0.00026	-	<0.001	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0078	0.0219	0.0901	0.0008	0.00004	0.199	<0.00002	<0.001	0.017	<0.0002	0.00004	0.00026	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304866	13 Apr 2023	-	-	-	0.0076	0.0207	0.0943	0.0008	-	0.183	<0.00002	-	0.018	<0.0002	0.00004	0.00029	-	<0.001	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0012	0.00951	0.0532	0.0030	0.00019	0.245	0.00010	<0.001	0.022	<0.0002	0.00054	0.00068	<0.001	<0.001	<0.001
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306239	11 May 2023	-	-	-	0.0095	0.0222	0.0907	0.0007	-	0.197	<0.00002	-	0.014	<0.0002	<0.00002	0.00020	-	<0.001	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306959	25 May 2023	-	-	-	0.0156	0.0240	0.0852	0.0005	-	0.209	<0.00002	-	0.013	<0.0002	<0.00002	0.00028	-	<0.001	-
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2307721	08 Jun 2023	-	-	-	0.0089	0.0169	0.0720	0.0005	-	0.215	<0.00002	-	0.010	<0.0002	0.00002	0.00006	-	<0.001	-
Mixed Drum 1	M1 D1 B4 Leachate	2022EP2308375	22 Jun 2023	-	-	-	0.0092	0.0166	0.0770	0.0004	-	0.211	<0.00002	-	0.010	<0.0002	<0.00002	0.00014	-	<0.001	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2313151	21 Sep 2023	-	-	-	0.0155	0.0215	0.0794	0.0005	-	0.215	<0.00002	-	0.013	<0.0002	<0.00002	<0.00005	-	<0.001	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2314662	19 Oct 2023	-	-	-	0.0249	0.0223	0.0895	0.0005	-	0.312	<0.00002	-	0.015	<0.0002	<0.00002	0.00026	-	<0.001	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2316387	16 Nov 2023	-	-	-	0.0223	0.0186	0.0909	0.0004	-	0.27	<0.00002	-	0.012	<0.0002	<0.00002	0.00021	-	<0.001	-
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2317814	14 Dec 2023	-	-	-	0.0710	0.0185	0.112	0.0007	-	0.28	<0.00002	-	0.019	<0.0002	0.00004	0.00113	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.012	0.052	0.009	<0.001	0.05	0.0001	<0.001	0.049	<0.001	0.007	<0.001	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.006	0.008	0.025	0.002	<0.05	0.0014	<0.001	0.054	<0.001	0.554	0.003	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211675	08 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.011	0.018	0.010	<0.001	<0.05	0.0005	<0.001	0.037	<0.001	0.194	<0.001	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212096	15 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.016	0.041	0.010	<0.001	<0.05	0.0005	<0.001	0.042	<0.001	0.209	0.002	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212853	29 Sep 2022	-	-	-	<0.01	0.011	0.020	0.006	-	<0.05	0.0003	-	0.032	<0.001	0.072	<0.001	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2213555	10 Oct 2022	-	-	-	<0.01	0.014	0.029	0.006	-	<0.05	0.0002	-	0.033	<0.001	0.037	<0.001	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2214520	27 Oct 2022	-	-	-	<0.01	0.013	0.030	0.007	-	0.08	0.0003	-	0.031	<0.001	0.038	<0.001	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2215141	10 Nov 2022	-	-	-	0.0008	0.0108	0.0375	0.0055	-	0.062	0.00020	-	0.030	<0.0002	0.0279	0.00071	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2215947	24 Nov 2022	-	-	-	0.0006	0.0110	0.0398	0.0049	-	0.066	0.00019	-	0.028	<0.0002	0.0194	0.00068	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2217105	08 Dec 2022	-	-	-	0.0007	0.0117	0.0460	0.0058	-	0.068	0.00021	-	0.028	<0.0002	0.0128	0.00077	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0310	0.0119	0.0507	0.0052	0.00020	0.06	0.00020	<0.001	0.034	<0.0002	0.00969	0.00084	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0016	0.00904	0.0260	0.0079	0.00042	0.078	0.00035	<0.001	0.031	<0.0002	0.0265	0.00123	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2301296	02 Feb 2023	-	-	-	0.0010	0.0114	0.0576	0.0074	-	0.087	0.00028	-	0.041	0.0003	0.0116	0.00099	-	<0.001	-
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0088	0.0113	0.0630	0.0044	0.00011	0.074	0.00018	<0.001	0.037	<0.0002	0.00504	0.00084	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2302667	02 Mar 2023	-	-	-	0.0004	0.0115	0.0646	0.0050	-	0.19	0.00018	-	0.032	<0.0002	0.00379	0.00091	-	<0.001	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2303327	16 Mar 2023	-	-	-	0.0011	0.0108	0.0526	0.0045	-	0.204	0.00018	-	0.029	<0.0002	0.00361	0.00087	-	<0.001	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0012	0.00862	0.0478	0.0038	0.00030	0.204	0.00015	<0.001	0.024	<0.0002	0.00241	0.00092	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2304866	13 Apr 2023	-	-	-	0.0015	0.00808	0.0506	0.0037	-	0.194	0.00015	-	0.026	<0.0002	0.00223	0.00094	-	<0.001	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0103	0.0244	0.0951	0.0007	0.00005	0.246	<0.00002	<0.001	0.017	<0.0002	0.00002	0.00031	<0.001	<0.001	<0.001
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2306239	11 May 2023	-	-	-	0.0013	0.00722	0.0448	0.0025	-	0.212	0.00008	-	0.018	<0.0002	0.00035	0.00049	-	<0.001	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2306959	25 May 2023	-	-	-	0.0021	0.00963	0.0507	0.0025	-	0.22	0.00009	-	0.018	<0.0002	0.00031	0.00071	-	<0.001	-
Mixed Drum 2	M2 D1 B3 Leachate	2022EP2307721	08 Jun 2023	-	-	-	0.0010	0.00548	0.0353	0.0018	-	0.23	0.00008	-	0.012	<0.0002	0.00051	0.00043	-	<0.001	-
Mixed Drum 2	M2 D1 B4 Leachate	2022EP2308375	22 Jun 2023	-	-	-	0.0012	0.00551	0.0413	0.0016	-	0.225	0.00005	-	0.013	<0.0002	0.00027	0.00051	-	<0.001	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2313151	21 Sep 2023	-	-	-	0.0125	0.00676	0.0240	0.0042	-	0.242	0.00035	-	0.019	<0.0002	0.00852	0.00304	-	<0.001	-
Mixed Drum 2	M2 D1 B5 Leachate	2022EP2314662	19 Oct 2023	-	-	-	0.0009	0.00777	0.0511												



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

					als																				
					Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)	
					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQL					0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.001	0.001	0.001	0.00001	0.0002	0.000005	0.0002	0.0001	0.001	0.0005	
Talison Greenbushes Site-specific WQG, Drinking Water						0.007	0.5		0.05	0.002	0.014							0.00004		0.017		0.0002		3	
Talison Greenbushes Site-specific WQG, Freshwater Ecological						2	1.9		0.034	0.08	0.017							0.00003		0.0005		0.0006		0.06	
Talison Greenbushes Site-specific WQG, Irrigation						2.5	0.2		0.01	0.2								0.001		0.01		0.1		2	
Talison Greenbushes Site-specific WQG, Livestock						0.82	10		0.15	1	0.39							0.13		0.2		0.1		20	
Talison Greenbushes Site-specific WQG, Recreational						0.14	10		1	0.4	0.28							0.0008		0.34		0.004		80	
Location Code	Field ID	Lab Report Number	Date		<0.001	0.300	0.011	<0.0001	0.002	0.005	0.082	0.008	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.014	<0.01	<0.001	<0.005	
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2210938	25 Aug 2022		<0.001	0.379	0.011	<0.0001	<0.001	0.007	0.099	0.018	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.029	<0.01	<0.001	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211329	01 Sep 2022		<0.001	0.463	0.012	<0.0001	<0.001	0.006	0.096	0.021	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	<0.01	<0.001	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2211675	08 Sep 2022		<0.001	0.436	0.006	<0.0001	<0.001	0.004	0.095	0.018	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.091	<0.01	<0.001	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212096	15 Sep 2022		-	0.414	0.003	-	<0.001	0.002	0.066	0.012	-	-	-	<0.001	-	<0.001	-	0.021	-	-	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2212853	29 Sep 2022		-	0.555	0.004	-	<0.001	0.003	0.077	0.014	-	-	-	<0.001	-	<0.001	-	0.063	-	-	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2213555	10 Oct 2022		-	0.250	0.001	-	<0.001	0.001	0.058	0.008	-	-	-	<0.001	-	-	-	0.044	-	-	<0.005		
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2214520	27 Oct 2022		-	0.209	0.00112	-	0.00034	0.0010	0.059	0.00728	-	-	-	<0.001	-	-	0.00038	-	0.000056	0.0770	-	0.0006	
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215141	10 Nov 2022		-	0.213	0.00218	-	0.00197	0.0011	0.048	0.00752	-	-	-	<0.001	-	-	0.00032	-	0.000053	0.0717	-	<0.0005	
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2215947	24 Nov 2022		-	0.219	0.00052	-	0.00040	0.0011	0.052	0.00803	-	-	-	<0.001	-	-	0.00035	-	0.000060	0.0670	-	<0.0005	
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2217105	08 Dec 2022		<0.00005	0.25	0.00104	-	0.00059	0.0013	0.063	0.00686	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.001	0.00043	<0.0002	0.000064	0.159	0.0008	<0.001	<0.0005
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2300690	19 Jan 2023		<0.00005	0.242	0.00044	-	0.00042	0.0010	0.053	0.00914	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.001	0.00050	<0.0002	0.000058	0.0969	0.0008	<0.001	<0.0005
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2301296	02 Feb 2023		-	0.256	0.00015	-	0.00042	0.0005	0.062	0.00779	-	-	-	<0.001	-	-	0.00052	-	0.000056	0.0933	-	-	0.0006
Mixed Drum 1	M1 D1 B2 Leachate	2022EP2302018	16 Feb 2023		<0.00005	0.197	0.00012	-	0.00042	0.0005	0.064	0.00685	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.001	0.00036	<0.0002	0.000056	0.0853	0.0010	<0.001	0.0008
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2302667	02 Mar 2023		-	0.244	0.00005	-	0.00041	0.0006	0.055	0.00689	-	-	-	<0.001	-	-	0.00040	-	0.000039	0.0975	-	-	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2303327	16 Mar 2023		-	0.261	0.00010	-	0.00046	0.0005	0.052	0.00559	-	-	-	<0.001	-	-	0.00036	-	0.000043	0.0702	-	-	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304234	30 Mar 2023		<0.00005	0.208	0.00009	-	0.00042	0.0005	0.046	0.00502	0.0004	<0.00005	<0.001	<0.001	<0.001	<0.001	0.00027	<0.0002	0.000039	0.0757	0.0009	<0.001	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2304866	13 Apr 2023		-	0.189	0.00009	-	0.00040	0.0007	0.049	0.00541	-	-	-	<0.001	-	-	0.00028	-	0.000037	0.0677	-	-	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2305524	27 Apr 2023		<0.00005	0.279	0.00216	-	0.00016	0.0223	0.052	0.0173	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.001	0.00043	<0.0002	0.000058	0.0480	0.0006	<0.001	0.0104
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306239	11 May 2023		-	0.192	0.00009	-	0.00036	0.0006	0.035	0.00406	-	-	-	<0.001	-	-	0.00021	-	0.000037	0.0434	0.0008	-	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2306959	25 May 2023		-	0.167	0.00013	-	0.00034	0.0005	0.032	0.00352	-	-	-	<0.001	-	-	0.00019	-	0.000046	0.0318	-	-	<0.0005
Mixed Drum 1	M1 D1 B3 Leachate	2022EP2307721	08 Jun 2023		-	0.157	0.00019	-	0.00029	0.0006	0.026	0.00315	-	-	-	<0.001	-	-	0.00014	-	0.000035	0.0533	-	-	<0.0005
Mixed Drum 1	M1 D1 B4 Leachate	2022EP2308375	22 Jun 2023		-	0.141	0.00005	-	0.00030	0.0007	0.025	0.00307	-	-	-	<0.001	-	-	0.00013	-	0.000034	0.0322	-	-	<0.0005
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2313151	21 Sep 2023		-	0.139	<0.00005	-	0.00036	<0.0002	0.032	0.00370	-	-	-	<0.001	-	-	0.00016	-	0.000030	0.0429	-	-	<0.0005
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2314662	19 Oct 2023		-	0.14	0.00006	-	0.00030	0.0004	0.035	0.00302	-	-	-	<0.001	-	-	0.00018	-	0.000030	0.0430	-	-	<0.0005
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2316387	16 Nov 2023		-	0.124	<0.00005	-	0.00038	0.0004	0.029	0.00306	-	-	-	<0.001	-	-	0.00019	-	0.000029	0.0255	-	-	<0.0005
Mixed Drum 1	M1 D1 B5 Leachate	2022EP2317814	14 Dec 2023		-	0.143	0.00017	-	0.00054	0.0009	0.047	0.00396	-	-	-	<0.001	-	-	0.00036	-	0.000102	0.504	-	-	0.0025
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2210938	25 Aug 2022		<0.001	0.524	0.080	<0.0001	0.001	0.051	0.140	0.036	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.021	<0.01	<0.001	<0.005	
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211329	01 Sep 2022		<0.001	0.576	0.114	<0.0001	<0.001	0.067	0.159	0.070	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	0.002	<0.01	<0.001	0.022	<0.01	<0.001	0.081
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2211675	08 Sep 2022		<0.001	0.511	0.468	<0.0001	<0.001	0.273	0.105	0.036	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	0.001	<0.01	<0.001	0.026	<0.01	<0.001	0.024
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212096	15 Sep 2022		<0.001	0.594	0.475	<0.0001	<0.001	0.284	0.121	0.039	<0.01	<0.005	<0.001	0.001	<0.001	<0.001	0.001	<0.01	<0.001	0.052	<0.01	<0.001	0.026
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2212853	29 Sep 2022		-	0.460	0.255	-	<0.001	0.125	0.082	0.025	-	-	-	<0.001	-	<0.001	<0.001	<0.001	0.012	-	-	-	0.011
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2213555	10 Oct 2022		-	0.481	0.211	-	<0.001	0.084	0.087	0.025	-	-	-	<0.001	-	<0.001	<0.001	<0.001	0.037	-	-	-	0.006
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2214520	27 Oct 2022		-	0.400	0.240	-	<0.001	0.084	0.080	0.026	-	-	-	<0.001	-	-	-	<0.01	<0.001	0.043	-	-	0.012
Mixed Drum 2	M2 D1 B2 Leachate	2022EP2215141	10 Nov 2022		-	0.288	0.188	-	0.00027	0.0661	0.082	0.0226	-	-	-	<0.001	-	-	0.00078	-	0.000085	0.0400	-	-	0.0122
Mixed Drum 2	M2 D1																								



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Inorganics		Acidity & Alkalinity				Major Ions										Nutrients		Organic Indicators
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
EQL	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L
Talison Greenbushes Site-specific WQG, Drinking Water	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Freshwater Ecological												250							
Talison Greenbushes Site-specific WQG, Irrigation												429							
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</
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Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

EQL	Me																		
	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Talison Greenbushes Site-specific WQG, Drinking Water	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002
Talison Greenbushes Site-specific WQG, Freshwater Ecological				0.2	0.003	0.01				0.002		0.08	0.05		2				
Talison Greenbushes Site-specific WQG, Irrigation				0.055	0.09	0.013				0.0016		0.1	0.007		0.0014				
Talison Greenbushes Site-specific WQG, Livestock				5		0.1				0.01			0.1		0.2				
Talison Greenbushes Site-specific WQG, Recreational				5	0.15	0.5				0.01		2	1		0.5				
					0.06	0.2				0.04		1.6	1		40				

Location Code	Field ID	Lab Report Number	Date																				
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.026	0.099	<0.001	<0.001	0.08	<0.0001	<0.001	0.018	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.043	0.186	<0.001	<0.001	0.09	<0.0001	<0.001	0.020	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.024	0.138	<0.001	<0.001	0.10	<0.0001	<0.001	0.014	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.028	0.125	<0.001	<0.001	0.06	<0.0001	<0.001	0.013	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.036	0.136	<0.001	-	<0.05	<0.0001	-	0.012	<0.001	<0.001	<0.001	-	<0.01	<0.05	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.024	0.135	<0.001	-	<0.05	<0.0001	-	0.014	<0.001	<0.001	<0.001	-	<0.01	<0.05	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.030	0.126	<0.001	-	0.06	<0.0001	-	0.010	<0.001	<0.001	<0.001	-	<0.01	<0.05	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.028	0.132	<0.001	-	0.10	<0.0001	-	0.011	<0.001	<0.001	<0.001	-	<0.01	<0.05	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	-	-	0.0020	0.0225	0.125	0.0002	-	0.073	0.00003	-	0.010	<0.002	0.00005	0.00014	-	<0.001	<0.002	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2216484	01 Dec 2022	-	-	-	0.0032	0.0240	0.132	0.0002	-	0.073	<0.0002	-	0.010	<0.002	0.00004	0.00027	-	<0.001	0.002	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	-	-	0.0035	0.0253	0.139	0.0002	-	0.079	0.00002	-	0.010	<0.002	0.00004	0.00016	-	<0.001	<0.002	-	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0036	0.0267	0.157	0.0002	0.00005	0.077	0.00003	<0.001	0.012	<0.002	0.00004	0.00019	<0.001	<0.001	<0.01	<0.002	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0060	0.0204	0.13	<0.002	0.00004	0.086	0.00003	<0.001	0.010	<0.002	0.00004	0.00014	<0.001	<0.001	0.004	<0.001	
Pegmatite Drum 1	P1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	-	-	0.0088	0.0253	0.156	<0.002	-	0.083	0.00003	-	0.012	<0.002	0.00004	0.00018	-	<0.001	-	0.003	-
Pegmatite Drum 1	P1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0100	0.0254	0.148	<0.002	0.00004	0.075	0.00003	<0.001	0.014	<0.002	0.00004	0.00018	<0.001	<0.001	0.002	<0.001	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	-	-	0.0098	0.0249	0.144	<0.002	-	0.259	<0.0002	-	0.010	<0.002	<0.0002	0.00024	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	-	-	0.0168	0.0233	0.132	0.0004	-	0.275	0.00003	-	0.009	<0.002	0.00002	0.00018	-	<0.001	-	0.002	-
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0155	0.0205	0.123	<0.002	0.00006	0.244	<0.0002	<0.001	0.008	<0.002	<0.0002	0.00023	<0.001	<0.001	<0.01	<0.002	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	-	-	0.0220	0.0209	0.14	<0.002	-	0.246	<0.0002	-	0.009	<0.002	0.00002	0.00038	-	<0.001	-	0.002	-
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0198	0.0246	0.138	<0.002	0.00005	0.296	<0.0002	<0.001	0.007	<0.002	<0.0002	0.00026	<0.001	<0.001	<0.01	0.002	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2306239	11 May 2023	-	-	-	0.0213	0.0200	0.12	<0.002	-	0.247	<0.0002	-	0.006	<0.002	<0.0002	0.00020	-	<0.001	-	0.002	-
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2306959	25 May 2023	-	-	-	0.0188	0.0236	0.12	<0.002	-	0.241	<0.0002	-	0.006	<0.002	<0.0002	0.00033	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	-	-	-	0.0137	0.0135	0.0826	0.0002	-	0.274	<0.0002	-	0.004	<0.002	<0.0002	<0.0005	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B4 Leachate 2023	EP2308375	22 Jun 2023	-	-	-	0.0109	0.0135	0.0863	<0.002	-	0.248	<0.0002	-	0.004	<0.002	<0.0002	0.00032	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	-	-	-	0.0186	0.0187	0.102	<0.002	-	0.271	<0.0002	-	0.006	<0.002	<0.0002	<0.0005	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	-	-	-	0.0246	0.0218	0.119	<0.002	-	0.358	<0.0002	-	0.007	<0.002	<0.0002	0.00035	-	<0.001	-	0.003	-
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	-	-	-	0.0216	0.0169	0.106	<0.002	-	0.306	<0.0002	-	0.006	<0.002	<0.0002	0.00029	-	<0.001	-	<0.002	-
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	-	-	-	0.0258	0.0161	0.1	<0.002	-	0.295	<0.0002	-	0.006	<0.002	<0.0002	0.00012	-	<0.001	-	<0.002	-
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.032	0.125	0.002	<0.001	0.08	0.0002	<0.001	0.030	<0.001	0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.040	0.145	0.001	<0.001	0.09	0.0001	<0.001	0.024	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.025	0.142	<0.001	<0.001	0.10	0.0001	<0.001	0.019	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.021	0.135	<0.001	<0.001	0.05	0.0001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05	<0.001	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	-	-	<0.01	0.025	0.162	<0.001	-	<0.05	<0.0001	-	0.012	<0.001	<0.001	<0.001	-	<0.001	<0.05	-	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	-	-	<0.01	0.017	0.143	<0.001	-	<0.05	<0.0001	-	0.009	<0.001	<0.001	<0.001	-	<0.001	<0.05	-	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	-	-	<0.01	0.026	0.141	<0.001	-	<0.05	<0.0001	-	0.010	<0.001	<0.001	<0.001	-	<0.001	<0.05	-	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	-	-	<0.01	0.023	0.159	<0.001	-	0.08	<0.0001	-	0.010	<0.001	<0.001	<0.001	-	<0.001	<0.05	-	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	-	-	0.0022	0.0208	0.17	0.0002	-	0.081	0.00004	-	0.010	<0.002	0.00009	0.00016	-	<0.001	<0.002	-	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	-	-	0.0030	0.0162	0.152	<0.002	-	0.079	0.00004	-	0.007	<0.002	0.00005	0.00013	-	<0.001	-	0.002	-
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	-	-	0.0064	0.0189	0.168	0.0002	-	0.077	0.00004	-	0.009	<0.002	0.00006	0.00031	-	<0.001	-	0.004	-
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.001	<0.001	<0.001	0.0044	0.0214	0.208	0.0002	0.00005	0.079	0.00005	<0.001	0.011	<0.002	0.00008	0.00024	<0.001	<0.001	<0.01	<0.002	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2300690	19 Jan 2023	<0.001	<0.001	<0.001	0.0071	0.0304	0.221	0.0002	0.00004	0.088	0.00006	<0.001	0.014	<0.002	0.00005	0.00028	<0.001	<0.001	0.002	<0.001	
Pegmatite Drum 2	P2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	-	-	0.0083	0.0185	0.198	<0.002	-	0.078	0.00006	-	0.012	<0.002	0.00004	0.00033	-	<0.001	-	0.002	-
Pegmatite Drum 2	P2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0103	0.0204	0.186	0.0003	0.00003	0.081	0.00007	<0.001	0.013	<0.002	0.00005	0.00026	<0.001	<0.001	0.003	<0.001	
Pegmatite Drum 2	P2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	-	-	0.0102	0.0210	0.209	<0.002	-	0.252	0.00009	-	0.010	<0.002	0.00005	0.00032	-	<0.001	-	<0.002	-
Pegmatite Drum 2	P2 DI B3 Leachate 2023	EP2303327	1																				



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.001	0.001	0.001	0.00001	0.0002	0.000005	0.0002	0.0001	0.001	0.0005
Talison Greenbushes Site-specific WQG, Drinking Water	0.007	0.5	0.05	0.002	0.014									0.00004	0.017	0.0002	3			
Talison Greenbushes Site-specific WQG, Freshwater Ecological	2	1.9	0.034	0.08	0.017									0.00003	0.0005	0.0006	0.06			
Talison Greenbushes Site-specific WQG, Irrigation	2.5	0.2	0.01	0.2										0.001	0.01	0.1	2			
Talison Greenbushes Site-specific WQG, Livestock	0.82	10	0.15	1	0.39									0.13	0.2	0.1	20			
Talison Greenbushes Site-specific WQG, Recreational	0.14	10	1	0.4	0.28									0.0008	0.34	0.004	80			

Location Code	Field ID	Lab Report Number	Date																					
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	0.285	0.071	<0.0001	<0.001	0.002	0.047	0.006	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.016	<0.01	<0.001	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	0.274	0.011	<0.0001	<0.001	0.002	0.050	0.008	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.032	<0.01	<0.001	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	0.171	0.019	<0.0001	<0.001	0.001	0.033	0.004	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.021	<0.01	<0.001	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	0.169	0.022	<0.0001	<0.001	0.001	0.031	0.004	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.035	<0.01	<0.001	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	0.146	0.015	-	<0.001	<0.001	0.027	0.003	-	-	-	<0.001	-	<0.001	-	<0.001	0.028	-	-	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	0.171	0.016	-	<0.001	0.001	0.029	0.003	-	-	-	<0.001	-	<0.001	-	<0.001	0.010	-	-	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	0.116	0.011	-	<0.001	<0.001	0.021	0.002	-	-	-	<0.001	-	<0.001	-	<0.001	0.026	-	-	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	0.126	0.014	-	<0.001	<0.001	0.021	0.002	-	-	-	<0.001	-	<0.01	-	<0.001	0.036	-	-	<0.005	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	0.0888	0.00746	-	0.00006	0.0004	0.022	0.00165	-	-	-	<0.001	-	-	0.00008	-	0.000156	0.0328	-	0.0008	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2216484	01 Dec 2022	-	0.0970	0.00407	-	0.00027	0.0004	0.018	0.00185	-	-	-	<0.001	-	-	0.00008	-	0.000160	0.0540	-	0.0031	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	0.0963	0.00358	-	0.00006	0.0004	0.019	0.00182	-	-	-	<0.001	-	-	0.00007	-	0.000174	0.0425	-	0.0012	
Pegmatite Drum 1	P1 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.00005	0.103	0.00870	-	0.00007	0.0004	0.022	0.00172	0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00009	<0.00002	0.000146	0.0669	0.0004	<0.001	0.0022	
Pegmatite Drum 1	P1 DI B2 Leachate 2023	EP2300690	19 Jan 2023	<0.00005	0.0871	0.0101	-	0.00006	0.0005	0.020	0.00208	<0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00010	<0.00002	0.000141	0.0592	0.0004	<0.001	0.0016	
Pegmatite Drum 1	P1 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	0.0834	0.0122	-	0.00007	0.0005	0.022	0.00154	-	-	-	<0.001	-	-	0.00011	-	0.000130	0.101	-	0.0027	
Pegmatite Drum 1	P1 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	0.0774	0.0115	-	0.00006	0.0005	0.024	0.00177	<0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00010	<0.00002	0.000126	0.0889	0.0004	<0.001	0.0036	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	0.0745	0.00897	-	<0.00005	0.0004	0.018	0.00126	-	-	-	<0.001	-	-	0.00008	-	0.000133	0.0804	-	0.0025	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2303327	16 Mar 2023	-	0.0843	0.00725	-	<0.00005	0.0003	0.016	0.00105	-	-	-	<0.001	-	-	0.00007	-	0.000139	0.0579	-	0.0039	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2304234	30 Mar 2023	<0.00005	0.0759	0.00355	-	0.00006	0.0003	0.014	0.00107	<0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00006	<0.00002	0.000126	0.0659	0.0003	<0.001	0.0031	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2304866	13 Apr 2023	-	0.0790	0.00362	-	<0.00005	0.0002	0.015	0.00109	-	-	-	<0.001	-	-	0.00007	-	0.000123	0.0524	-	0.0027	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2305524	27 Apr 2023	<0.00005	0.0827	0.00119	-	<0.00005	<0.0002	0.013	0.00090	<0.0001	<0.00005	<0.001	<0.001	<0.001	<0.00006	<0.00002	0.000109	0.0496	0.0003	<0.001	0.0015	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2306239	11 May 2023	-	0.0650	0.00100	-	<0.00005	<0.0002	0.011	0.00077	-	-	-	<0.001	-	-	0.00005	-	0.000107	0.0452	0.0002	0.0017	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2306959	25 May 2023	-	0.0662	0.00057	-	<0.00005	<0.0002	0.011	0.00084	-	-	-	<0.001	-	-	0.00005	-	0.000098	0.0468	-	0.0017	
Pegmatite Drum 1	P1 DI B3 Leachate 2023	EP2307721	08 Jun 2023	-	0.0522	0.00140	-	<0.00005	<0.0002	0.008	0.00062	-	-	-	<0.001	-	-	0.00004	-	0.000076	0.0276	-	0.0018	
Pegmatite Drum 1	P1 DI B4 Leachate 2023	EP2308375	22 Jun 2023	-	0.0486	0.00039	-	<0.00005	<0.0002	0.007	0.00061	-	-	-	<0.001	-	-	0.00002	-	0.000095	0.0274	-	0.0013	
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2313151	21 Sep 2023	-	0.0524	0.00026	-	<0.00005	<0.0002	0.010	0.00090	-	-	-	<0.001	-	-	0.00004	-	0.000095	0.0396	-	0.0014	
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2314662	19 Oct 2023	-	0.0555	0.00020	-	<0.00005	<0.0002	0.011	0.00063	-	-	-	<0.001	-	-	0.00004	-	0.000074	0.0332	-	0.0012	
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2316387	16 Nov 2023	-	0.0469	0.00018	-	<0.00005	<0.0002	0.010	0.00058	-	-	-	<0.001	-	-	0.00004	-	0.000072	0.0352	-	0.0009	
Pegmatite Drum 1	P1 DI B5 Leachate 2023	EP2317814	14 Dec 2023	-	0.0374	0.00027	-	<0.00005	<0.0002	0.010	0.00044	-	-	-	<0.001	-	-	0.00005	-	0.000075	0.0396	-	0.0018	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	0.327	0.122	<0.0001	<0.001	0.006	0.060	0.012	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.079	<0.01	<0.001	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	0.277	0.045	<0.0001	<0.001	0.003	0.046	0.009	<0.01	<0.005	<0.001	<0.001	<0.001	-	<0.01	<0.001	0.084	<0.01	<0.001	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	0.233	0.050	<0.0001	<0.001	0.003	0.037	0.007	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.061	<0.01	<0.001	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2211329	01 Sep 2022	<0.001	0.170	0.041	<0.0001	<0.001	0.004	0.029	0.005	<0.01	<0.005	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	0.052	<0.01	<0.001	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2212096	15 Sep 2022	-	0.162	0.022	-	<0.001	0.002	0.024	0.003	-	<0.001	-	<0.001	-	<0.001	-	<0.001	0.037	-	-	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2212853	29 Sep 2022	-	0.123	0.018	-	<0.001	0.001	0.016	0.002	-	<0.001	-	<0.001	-	<0.001	-	<0.001	0.020	-	-	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2213555	10 Oct 2022	-	0.127	0.021	-	<0.001	<0.001	0.017	0.002	-	<0.001	-	<0.001	-	<0.001	-	<0.001	0.071	-	-	<0.005	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2214520	27 Oct 2022	-	0.111	0.018	-	<0.001	<0.001	0.016	0.002	-	<0.001	-	<0.001	-	<0.001	-	<0.01	-	0.074	-	-	<0.005
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2215141	10 Nov 2022	-	0.0910	0.0151	-	0.00005	0.0007	0.017	0.00171	-	-	-	<0.001	-	-	0.00007	-	0.000160	0.104	-	0.0020	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2215947	24 Nov 2022	-	0.0814	0.00952	-	0.00172	0.0005	0.012	0.00124	-	<0.001	-	<0.001	-	-	0.00005	-	0.000111	0.0701	-	0.0009	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2217105	08 Dec 2022	-	0.0871	0.0108	-	0.00007	0.0007	0.014	0.00169	-	<0.001	-	<0.001	-	-	0.00007	-	0.000209	0.116	-	0.0040	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2217545	22 Dec 2022	<0.00005	0.0978	0.0150	-	0.00006	0.0007	0.018	0.00149	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.00008	<0.00002	0.000157	0.14	0.0006	<0.001	0.0060	
Pegmatite Drum 2	P2 DI B2 Leachate 2022	EP2300690	19 Jan 2023	<0.00005	0.118	0.00752	-	0.00009	0.0009	0.021	0.00244	0.0002	<0.00005	<0.001	<0.001	<0.001	<0.00012	<0.00002	0.000152	0.132	0.0008	<0.001	0.0060	
Pegmatite Drum 2	P2 DI B2 Leachate 2023	EP2301296	02 Feb 2023	-	0.0756	0.0111	-	<0.00005	0.0006	0.018	0.00161	-	<0.001	-	<0.001	-	-	0.00010	-	0.000185	0.161	-	0.0069	
Pegmatite Drum 2	P2 DI B2 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	0.0747	0.00908	-	0.00006	0.0007	0.020	0.00160	0.0003	<0.00005	<0.001	<0.001	<0.001	<0.00008	<0.00002	0.000166	0.169	0.0006	<0.001	0.0105	
Pegmatite Drum 2	P2 DI B3 Leachate 2023	EP2302667	02 Mar 2023	-	0.0801	0.0146	-	<0.00005	0.0006	0.015	0.00126	-	<0.001	-	<0.001	-	-	0.00008	-	0.000182	0.154			



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

	Inorganics		Acidity & Alkalinity				Major Ions										Nutrients		Organic Indicators
	pH (Lab)	Electrical conductivity (lab)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Hydroxide as CaCO3)	Alkalinity (total as CaCO3)	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Chloride	Sulfate (filtered)	Fluoride	Cations Total	Anions Total	Ionic Balance	Phosphorus (Total)	Phosphorus (Total) (filtered)	Sulfur as S (filtered)
	pH units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	%	mg/L	mg/L	mg/L
EQL	0.01	1	1	1	1	1	1	1	1	1	1	1	0.1	0.01	0.01	0.01	0.01	0.01	1
Talison Greenbushes Site-specific WQG, Drinking Water												250							
Talison Greenbushes Site-specific WQG, Freshwater Ecological												429							
Talison Greenbushes Site-specific WQG, Irrigation																			
Talison Greenbushes Site-specific WQG, Livestock												1,000							
Talison Greenbushes Site-specific WQG, Recreational																			

Location Code	Field ID	Lab Report Number	Date																	
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2215645	17 Nov 2022	7.85	188	<1	57	<1	57	5	3	2	26	<1	38	0.2	1.68	1.93	6.97	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	7.92	176	<1	69	<1	69	3	2	2	22	<1	36	0.2	1.32	2.13	23.4	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	8.01	178	<1	78	<1	78	2	1	3	30	<1	21	0.4	1.56	2.00	12.1	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	7.89	196	<1	79	<1	79	1	<1	3	33	2	32	0.6	1.56	2.30	19.1	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210272	04 Aug 2022	7.71	2,740	<1	554	<1	554	105	57	22	352	460	224	0.6	25.8	28.7	5.33	5.98
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210362	11 Aug 2022	8.19	3,130	<1	585	<1	585	114	56	16	427	511	342	0.6	29.3	33.2	6.31	11.9
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210698	18 Aug 2022	8.26	3,000	<1	552	<1	552	98	55	17	414	486	365	0.6	27.8	32.3	7.44	5.18
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210938	25 Aug 2022	8.26	2,740	<1	470	<1	470	86	49	15	404	473	374	0.5	26.3	30.5	7.46	4.86
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2211675	08 Sep 2022	8.11	2,080	<1	323	<1	323	59	34	12	304	314	351	0.7	19.3	22.6	7.99	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2212289	15 Sep 2022	6.97	28	<1	9	<1	9	<1	<1	<1	6	<1	4	0.2	0.26	0.26	0.40	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2213223	03 Oct 2022	7.53	149	<1	40	<1	40	3	2	2	23	<1	30	0.2	1.36	1.42	2.08	2.33
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2214021	20 Oct 2022	7.64	202	<1	53	<1	53	6	3	2	31	<1	52	0.2	1.94	2.14	4.79	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2214715	03 Nov 2022	7.77	201	<1	59	<1	59	6	3	3	29	<1	43	0.2	1.88	2.07	4.79	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2216484	01 Dec 2022	7.78	172	<1	47	<1	47	4	2	2	22	<1	37	0.2	1.42	1.71	9.37	-
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2217143	15 Dec 2022	7.78	165	<1	46	<1	46	4	2	2	22	1	27	0.2	1.37	1.51	4.76	-
Tailings Drum 1	T1 D1 B2 Leachate	2023EP2301296	02 Feb 2023	7.59	177	<1	30	<1	30	4	2	2	19	<1	55	0.2	1.24	1.74	-	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2302018	16 Feb 2023	7.47	179	<1	26	<1	26	3	2	2	20	<1	65	0.2	1.24	1.87	20.5	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2302667	02 Mar 2023	7.28	172	<1	17	<1	17	4	2	2	17	<1	62	0.2	1.15	1.63	-	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2303327	16 Mar 2023	7.26	162	<1	15	<1	15	4	2	2	17	<1	57	0.2	1.15	1.49	12.6	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2304234	30 Mar 2023	7.07	155	<1	14	<1	14	3	2	2	14	<1	44	0.2	0.97	1.20	10.2	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2304866	13 Apr 2023	7.08	146	<1	13	<1	13	3	2	2	14	<1	41	0.2	0.97	1.11	6.66	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2305524	27 Apr 2023	7.08	136	<1	11	<1	11	1	<1	1	13	<1	42	0.1	0.64	1.09	26.1	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2306239	11 May 2023	7.07	119	<1	10	<1	10	2	1	<1	10	<1	34	<0.1	0.62	0.91	19.0	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2306959	25 May 2023	6.93	105	<1	10	<1	10	1	<1	1	10	<1	35	0.2	0.51	0.93	29.0	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2307721	08 Jun 2023	7.17	94	<1	10	<1	10	2	1	<1	9	<1	32	0.2	0.57	0.87	20.3	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2308375	22 Jun 2023	7.04	85	<1	9	<1	9	<1	<1	<1	8	<1	28	0.2	0.35	0.76	37.3	-
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2313151	21 Sep 2023	7.18	92	<1	16	<1	16	2	<1	1	10	<1	23	0.2	0.56	0.80	-	-
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2314662	19 Oct 2023	6.90	94	<1	7	<1	7	3	1	1	7	<1	30	0.2	0.56	0.76	-	-
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2316387	16 Nov 2023	7.00	77	<1	11	<1	11	2	1	<1	6	<1	24	0.2	0.44	0.72	23.8	-
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2317814	14 Dec 2023	7.30	92	<1	15	<1	15	3	1	<1	7	<1	21	0.1	0.54	0.74	15.7	-
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2301024	25 Jan 2023	7.56	182	<1	36	<1	36	3	2	1	14	<1	48	0.2	0.95	1.72	-	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2215645	17 Nov 2022	7.86	239	<1	82	<1	82	2	1	3	42	6	33	0.8	2.08	2.49	8.93	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210272	04 Aug 2022	7.69	683	<1	103	<1	103	16	8	8	97	113	71	0.2	5.88	6.72	6.69	2.25
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210362	11 Aug 2022	8.20	1,030	<1	138	<1	138	27	12	8	132	163	118	0.3	8.28	10.4	11.2	1.79
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210698	18 Aug 2022	8.15	1,150	<1	164	<1	164	30	14	10	161	220	150	0.2	9.91	12.6	12.0	1.67
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210938	25 Aug 2022	8.18	1,390	<1	178	<1	178	40	20	11	202	260	186	0.2	12.7	14.8	7.47	1.60
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2211675	08 Sep 2022	8.09	1,760	<1	217	<1	217	48	26	13	251	315	266	0.4	15.8	18.8	8.61	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2212289	15 Sep 2022	8.31	1,370	<1	220	<1	221	28	15	10	209	190	190	0.6	12.0	13.7	6.82	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2213223	03 Oct 2022	8.35	725	3	169	<1	172	12	6	6	116	67	92	0.9	6.29	7.24	7.02	3.96
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2214021	20 Oct 2022	7.95	423	<1	122	<1	122	5	3	4	74	26	64	0.9	3.82	4.50	8.24	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2214715	03 Nov 2022	7.91	306	<1	102	<1	102	3	2	3	54	11	40	1.0	2.84	3.18	5.67	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2216484	01 Dec 2022	7.69	198	<1	60	<1	60	1	<1	2	34	3	31	0.7	1.60	1.93	9.37	-
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2217143	15 Dec 2022	7.68	177	<1	53	<1	53	<1	<1	2	31	<1	22	0.6	1.40	1.52	4.03	-
Tailings Drum 2	T2 D1 B2 Leachate	2023EP2301296	02 Feb 2023	7.93	197	<1	60	<1	60	2	1	2	31	2	36	0.5	1.58	2.00	-	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2302018	16 Feb 2023	7.93	200	<1	55	<1	55	<1	<1	3	32	<1	39	0.5	1.47	1.91	13.1	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2302667	02 Mar 2023	7.59	203	<1	51	<1	51	2	1	2	29	1	41	0.4	1.49	1.90	-	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2303327	16 Mar 2023	7.58	204	<1	54	<1	54	3	1	3	32	<1	41	0.5	1.70	1.93	6.38	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2304234	30 Mar 2023	7.64	214	<1	55	<1	55	3	1	2	31	<1	38	0.3	1.63	1.89	7.34	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2304866	13 Apr 2023	7.78	215	<1	61	<1	61	4	2	3	31	2	38	0.3	1.79	2.07	7.18	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2305524	27 Apr 2023	7.80	228	<1	58	<1	58	2	<1	2	32	<1	43	0.3	1.54	2.05	14.2	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2306239	11 May 2023	7.83	230	<1	58	<1	58	4	2	2	29	<1	45	0.2	1.68	2.10	11.1	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2306959	25 May 2023	7.72	230	<1	62	<1	62	2	1	2	31	<1	52	0.3	1.58	2.32	19.0	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2307721	08 Jun 2023	7.80	233	<1	39	<1	39	5	2	2	30	<1	52	0.2	1.77	1.86	2.52	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2308375	22 Jun 2023	7.84	236	<1	57	<1	57	3	1	2	31	<1	55	0.3	1.63	2.28	16.7	-
Tailings Drum 2	T2 D1 B5 Leachate	2023EP2313151	21 Sep 2023	7.81	240	<1	58	<1	58	4	2	3	32	<1	56	0.2	1.83	2.32	-	-
Tailings Drum 2	T2 D1 B5 Leachate	2023EP2314662	19 Oct 2023	7.72	250	<1	52	<1	52	6	3	3	30	1	56	0.2	1.93	2.23	-	-
Tailings Drum 2	T2 D1 B5 Leachate	2023EP2316387	16 Nov 2023	7.71	236	<1	58	<1	58	5	2	2	27	<1	64	0.2	1.64	2.49	20.6	-
Tailings Drum 2	T2 D1 B5 Leachate	2023EP2317814	14 Dec 2023	7.78	247	<1	51	<1	51	5	2	3	26	<1	65	0.2	1.62	2.37	18.8	-
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2301024	25 Jan 2023	7.81	201	<1	58	<1	58	2	<1	2	27							



Appendix C
Kintetic Leach Analytical Results

Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

EQOL	Niobium (filtered)	Rhenium (filtered)	Tantalum (filtered)	Aluminium (filtered)	Antimony (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Cadmium (filtered)	Cerium (filtered)	Caesium (filtered)	Chromium (III+V) (filtered)	Cobalt (filtered)	Copper (filtered)	Gallium (filtered)	Germanium (filtered)	Hafnium (filtered)	Iron (filtered)	Lanthanum (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Talison Greenbushes Site-specific WQGL Drinking Water	0.001	0.001	0.001	0.0002	0.00005	0.0001	0.0002	0.00002	0.001	0.00002	0.001	0.001	0.0002	0.00002	0.00005	0.001	0.001	0.01	0.002	0.001
Talison Greenbushes Site-specific WQGL Freshwater Ecological				0.2	0.003	0.01				0.002		0.08	0.05		2					
Talison Greenbushes Site-specific WQGL Irrigation				0.055	0.09	0.013				0.0016		0.1	0.007		0.0014					
Talison Greenbushes Site-specific WQGL Livestock				5		0.1				0.01		2	1		0.5					
Talison Greenbushes Site-specific WQGL Recreational				5	0.15	0.5				0.01		2	1		0.5					
					0.06	0.2				0.04		1.6	1		40					

Location Code	Field ID	Lab Report Number	Date																	
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2215645	17 Nov 2022	-	-	-	0.0836	0.0185	1.83	0.0007	-	0.104	<0.00002	-	0.028	<0.0002	0.00013	0.00053	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	-	-	-	0.124	0.0132	1.43	<0.0002	-	0.09	<0.00002	-	0.032	0.0002	0.00005	0.00017	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	-	-	-	0.103	0.00943	3.72	0.0002	-	0.094	<0.00002	-	0.033	<0.0002	0.00007	0.00040	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2300352	12 Jan 2023	-	-	-	0.1	0.112	12.1	<0.0002	-	0.088	<0.00002	-	0.037	<0.0002	0.00007	0.00061	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210272	04 Aug 2022	<0.001	<0.001	<0.001	-	0.024	18.1	0.022	<0.001	0.20	0.0002	<0.001	0.184	0.001	0.004	0.002	<0.001	0.002
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.035	10.8	0.005	<0.001	0.16	<0.0001	<0.001	0.175	<0.001	0.002	<0.001	<0.001	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.034	12.1	0.004	<0.001	0.21	<0.0001	<0.001	0.176	<0.001	0.002	<0.001	<0.001	0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.021	10.6	0.003	<0.001	0.21	<0.0001	<0.001	0.124	<0.001	<0.001	<0.001	<0.001	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2211675	08 Sep 2022	-	-	-	<0.01	0.025	8.99	0.002	-	0.14	<0.0001	-	0.130	<0.001	<0.001	<0.001	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2212289	15 Sep 2022	<0.001	<0.001	<0.001	0.04	0.114	1.73	<0.001	<0.001	0.05	0.0002	<0.001	0.005	<0.001	<0.001	0.006	<0.001	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2213223	03 Oct 2022	-	<0.001	-	0.08	0.038	3.72	<0.001	-	<0.05	<0.0001	-	0.020	<0.001	<0.001	0.002	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2214021	20 Oct 2022	-	-	-	0.08	0.025	3.96	<0.001	-	0.12	<0.0001	-	0.026	<0.001	<0.001	<0.001	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2214715	03 Nov 2022	-	-	-	0.0676	0.0150	2.54	0.0002	-	0.106	<0.0002	-	0.027	<0.0002	0.00013	0.00025	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2216484	01 Dec 2022	-	-	-	0.0912	0.0160	1.61	0.0002	-	0.098	<0.0002	-	0.028	<0.0002	0.00009	0.00031	-	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2022EP2217143	15 Dec 2022	<0.001	<0.001	<0.001	0.104	0.0131	1.29	<0.0002	<0.00002	0.098	<0.0002	<0.001	0.028	<0.0002	0.00007	0.00025	<0.001	<0.001
Tailings Drum 1	T1 D1 B2 Leachate	2023EP2301296	02 Feb 2023	-	-	-	0.0700	0.0150	0.788	<0.0002	-	0.114	<0.0002	-	0.032	0.0002	0.00005	0.00020	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0743	0.0166	0.626	0.0002	<0.00002	0.12	<0.0002	<0.001	0.037	<0.0002	0.00006	0.00021	<0.001	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2302667	02 Mar 2023	-	-	-	0.0821	0.0237	0.506	<0.0002	-	0.132	<0.0002	-	0.030	<0.0002	0.00004	0.00022	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2303327	16 Mar 2023	-	-	-	0.109	0.0319	0.408	<0.0002	-	0.159	<0.0002	-	0.028	<0.0002	0.00006	0.00023	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0821	0.0362	0.289	<0.0002	<0.00002	0.172	<0.0002	<0.001	0.025	<0.0002	0.00007	0.00038	<0.001	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2304866	13 Apr 2023	-	-	-	0.106	0.0449	0.236	<0.0002	-	0.184	<0.0002	-	0.024	<0.0002	0.00017	0.00024	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2305524	27 Apr 2023	<0.001	<0.001	<0.001	0.0986	0.0620	0.212	<0.0002	<0.00002	0.241	<0.0002	<0.001	0.021	<0.0002	0.00013	0.00029	<0.001	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2306239	11 May 2023	-	-	-	0.0805	0.0680	0.181	<0.0002	-	0.218	<0.0002	-	0.017	<0.0002	0.00016	0.00021	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2306959	25 May 2023	-	-	-	0.0979	0.0862	0.194	<0.0002	-	0.23	<0.0002	-	0.017	<0.0002	0.00016	0.00026	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2307721	08 Jun 2023	-	-	-	0.0748	0.0732	0.159	<0.0002	-	0.252	0.00003	-	0.013	<0.0002	0.00023	0.00009	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2308375	22 Jun 2023	-	-	-	0.0719	0.0844	0.164	<0.0002	-	0.253	<0.0002	-	0.013	<0.0002	0.00019	0.00029	-	<0.001
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2313151	21 Sep 2023	-	-	-	0.0667	0.0167	0.26	<0.0002	-	0.25	<0.0002	-	0.012	<0.0002	0.00009	<0.00005	-	<0.001
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2314662	19 Oct 2023	-	-	-	0.0774	0.0688	0.214	<0.0002	-	0.321	<0.0002	-	0.022	<0.0002	0.00007	0.00022	-	<0.001
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2316387	16 Nov 2023	-	-	-	0.14	0.0620	0.26	<0.0002	-	0.299	<0.0002	-	0.017	<0.0002	0.00003	0.00027	-	<0.001
Tailings Drum 1	T1 D1 B5 Leachate	2023EP2317814	14 Dec 2023	-	-	-	0.138	0.0508	0.366	<0.0002	-	0.314	<0.0002	-	0.024	<0.0002	0.00004	0.00014	-	<0.001
Tailings Drum 1	T1 D1 B3 Leachate	2023EP2301024	25 Jan 2023	-	-	-	0.0414	0.0112	0.8	<0.0002	-	0.079	<0.0002	-	0.024	<0.0002	0.00006	0.00018	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2215645	17 Nov 2022	-	-	-	0.107	0.511	10.9	0.0003	-	0.13	<0.00002	-	0.033	0.0002	0.00005	0.00174	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210272	04 Aug 2022	<0.001	<0.001	<0.001	-	0.476	5.47	0.011	<0.001	0.10	0.0001	<0.001	0.080	<0.001	<0.001	0.004	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210362	11 Aug 2022	<0.001	<0.001	<0.001	-	0.679	4.79	0.002	<0.001	<0.05	0.0001	<0.001	0.098	<0.001	<0.001	0.003	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210698	18 Aug 2022	<0.001	<0.001	<0.001	-	0.645	4.98	0.002	<0.001	0.13	0.0002	<0.001	0.112	<0.001	<0.001	0.003	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2210938	25 Aug 2022	<0.001	<0.001	<0.001	-	0.499	4.66	0.002	<0.001	0.14	<0.0001	<0.001	0.130	<0.001	0.001	0.004	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2211675	08 Sep 2022	-	-	-	<0.01	0.473	3.76	0.004	-	0.09	0.0002	-	0.165	<0.001	0.003	0.004	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2212289	15 Sep 2022	<0.001	<0.001	<0.001	<0.01	0.601	4.16	0.002	<0.001	0.11	<0.0001	<0.001	0.120	<0.001	0.003	0.002	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2213223	03 Oct 2022	-	<0.001	-	0.09	0.521	6.83	<0.001	-	0.10	<0.0001	-	0.074	<0.001	<0.001	0.002	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2214021	20 Oct 2022	-	-	-	0.08	0.840	10.4	<0.001	-	0.13	<0.0001	-	0.049	<0.001	<0.001	0.001	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2214715	03 Nov 2022	-	-	-	0.0906	0.616	10.2	0.004	-	0.118	<0.0002	-	0.037	0.0002	0.00005	0.00139	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2216484	01 Dec 2022	-	-	-	0.137	0.539	11.4	0.002	-	0.108	<0.0002	-	0.028	0.0003	0.00005	0.00132	-	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2022EP2217143	15 Dec 2022	<0.001	<0.001	<0.001	0.127	0.498	13.3	0.0002	0.00005	0.102	<0.0002	<0.001	0.025	0.0003	0.00004	0.00100	<0.001	<0.001
Tailings Drum 2	T2 D1 B2 Leachate	2023EP2301296	02 Feb 2023	-	-	-	0.0616	0.1	11.4	0.0002	-	0.119	<0.0002	-	0.039	0.0003	0.00004	0.00036	-	<0.001
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2302018	16 Feb 2023	<0.001	<0.001	<0.001	0.0907	0.0958	11.6	<0.0002	0.00002	0.122	<0.0002	<0.001	0.050	<0.0002	0.00003	0.00027	<0.001	<0.001
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2302667	02 Mar 2023	-	-	-	0.0698	0.0513	11.9	<0.0002	-	0.113	<0.0002	-	0.038	<0.0002	<0.00002	0.00023	-	<0.001
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2303327	16 Mar 2023	-	-	-	0.0609	0.0577	10.5	<0.0002	-	0.127	<0.0002	-	0.042	<0.0002	0.00002	0.00023	-	<0.001
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2304234	30 Mar 2023	<0.001	<0.001	<0.001	0.0378	0.0399	9.82	<0.0002	<0.00002	0.117	<0.0002	<0.001	0.041	<0.0002	0.00002	0.00018	<0.001	<0.001
Tailings Drum 2	T2 D1 B3 Leachate	2023EP2304866	13 Apr 2023	-	-	-	0.0320	0.0341	9.43	<0.0002	-									



Appendix C
Kintetic Leach Analytical Results

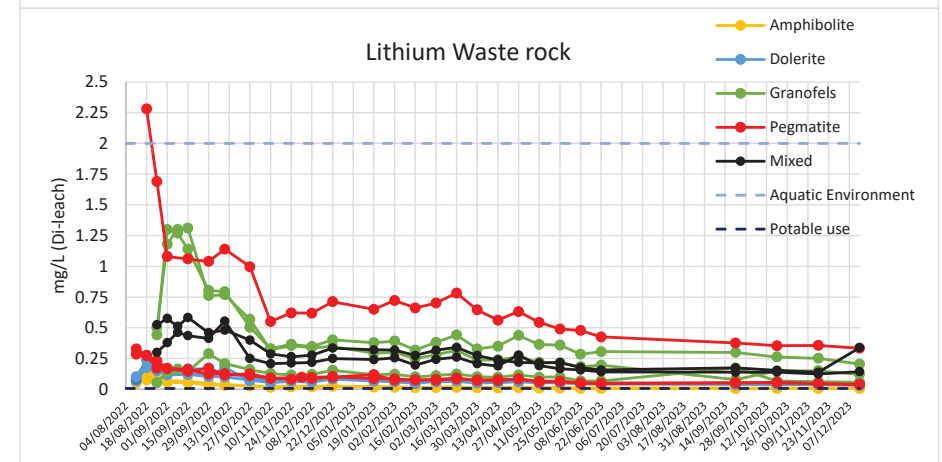
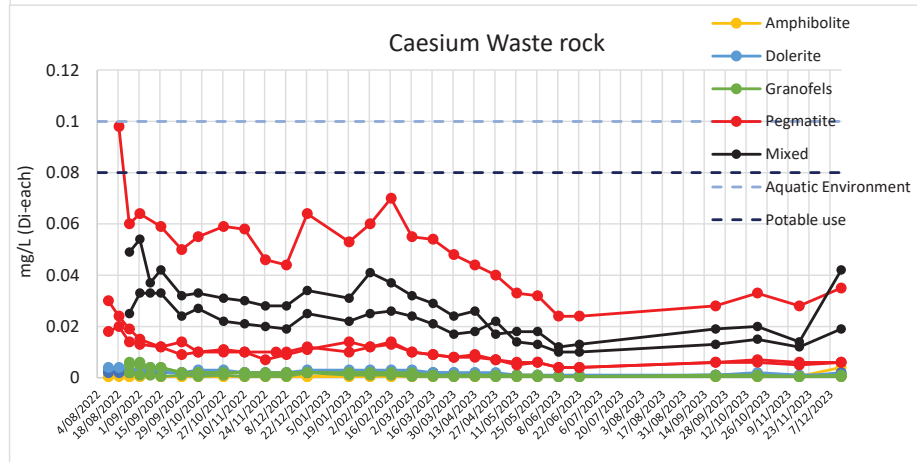
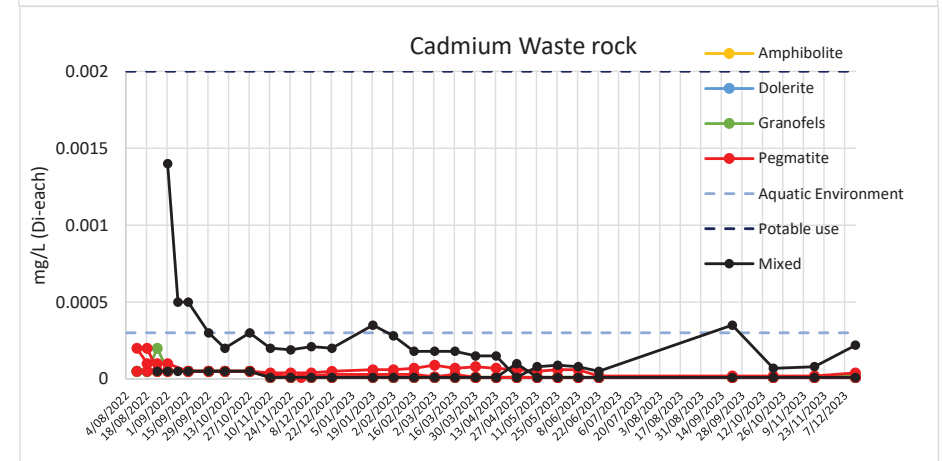
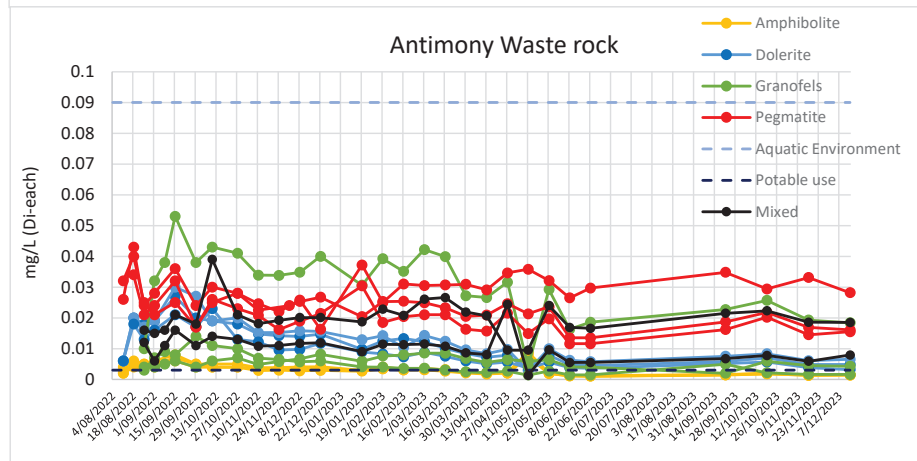
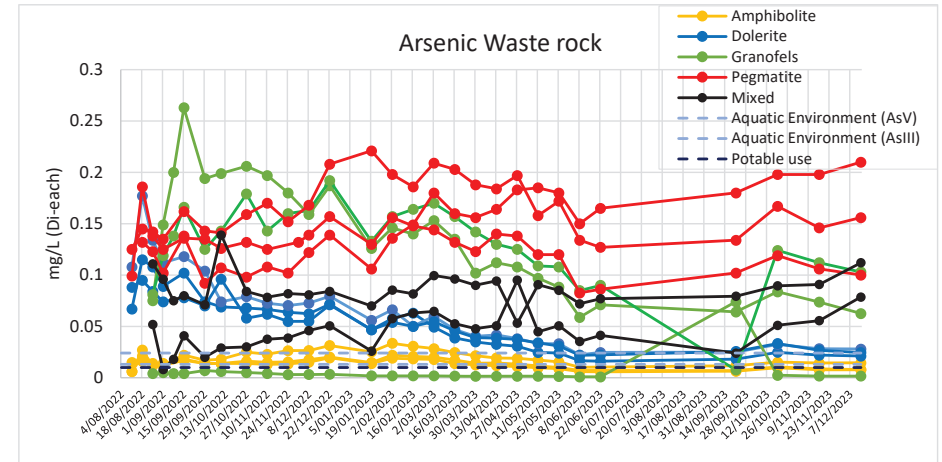
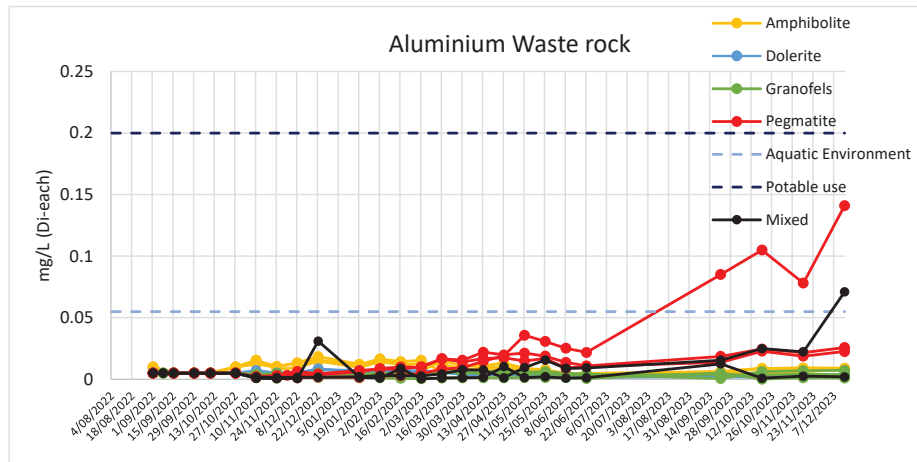
Talison Lithium
Talison Greenbushes
Talison Waste Rock Leachi

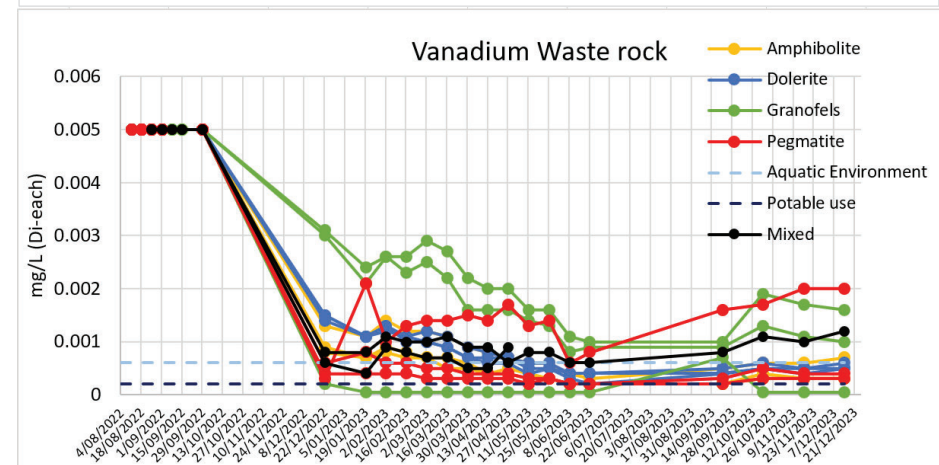
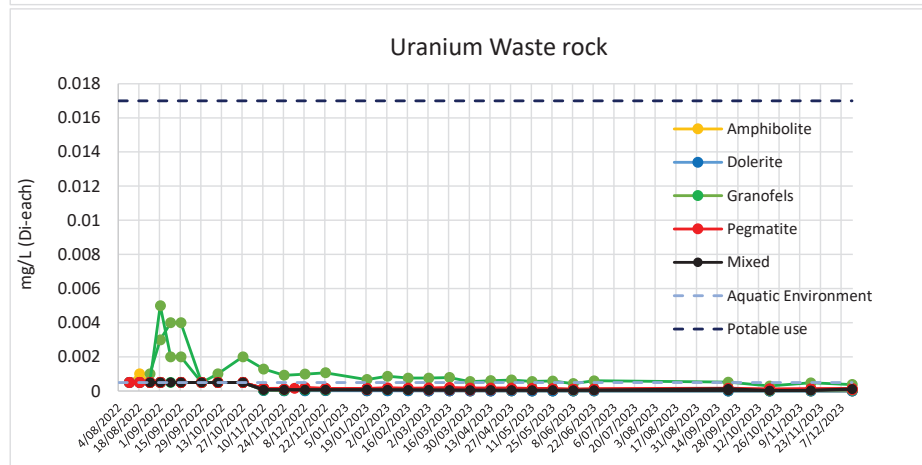
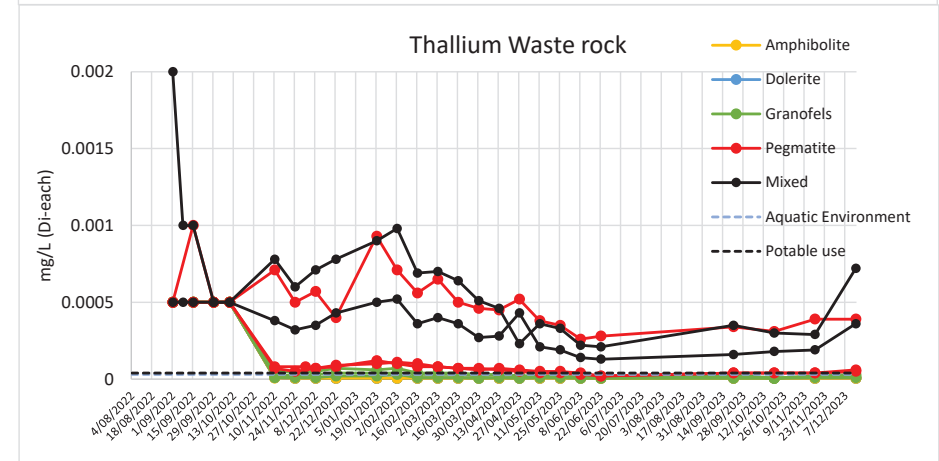
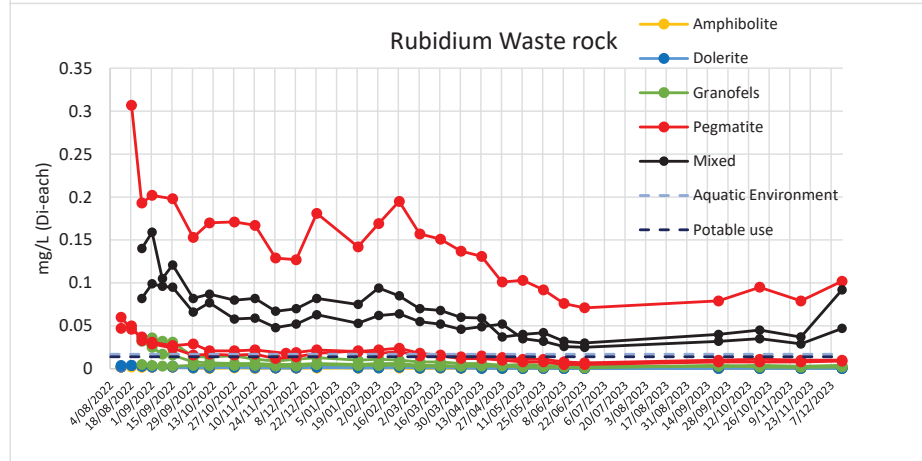
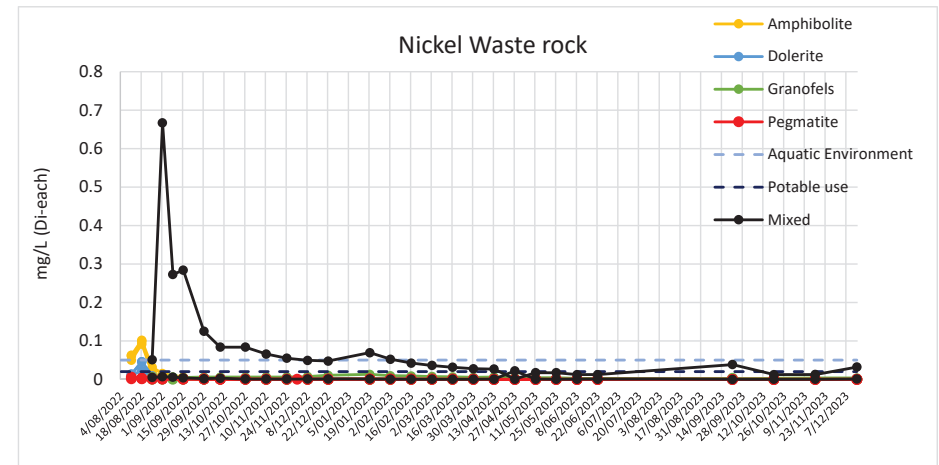
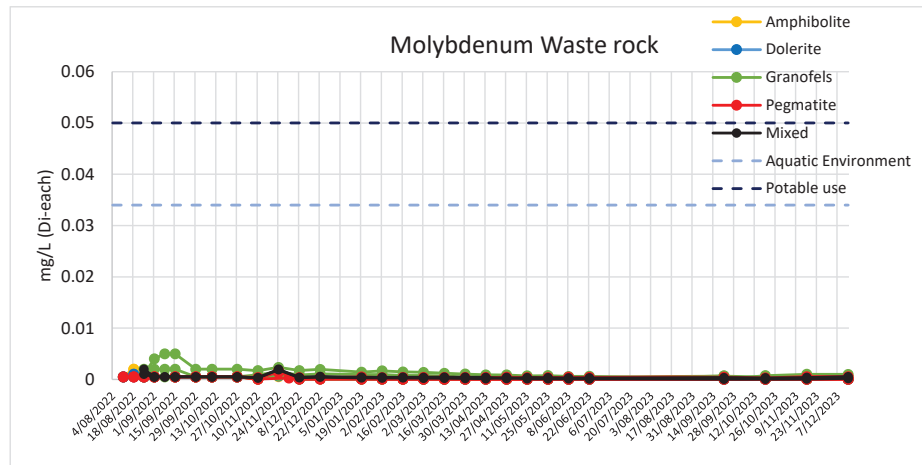
EQ/L	Lead (filtered)	Lithium (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Rubidium (filtered)	Strontium (filtered)	Selenium (filtered)	Tellurium (filtered)	Silver (filtered)	Tungsten (filtered)	Thorium (filtered)	Thallium (filtered)	Titanium (filtered)	Uranium (filtered)	Tin (filtered)	Vanadium (filtered)	Yttrium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Talison Greenbushes Site-specific WQ/G, Drinking Water	0.00005	0.00002	0.00005	0.0001	0.00005	0.0002	0.001	0.00005	0.0001	0.00005	0.001	0.001	0.001	0.00001	0.0002	0.000005	0.0002	0.0001	0.001	0.0005
Talison Greenbushes Site-specific WQ/G, Freshwater Ecological		0.007	0.5		0.05	0.002	0.014							0.00004	0.017	0.0002		0.0002		3
Talison Greenbushes Site-specific WQ/G, Irrigation		2	1.9		0.034	0.08	0.017							0.00003	0.0005	0.0006		0.0006		0.06
Talison Greenbushes Site-specific WQ/G, Livestock		2.5	0.2		0.01	0.2								0.001	0.01			0.1		2
Talison Greenbushes Site-specific WQ/G, Recreational		0.82	10		0.15	1	0.39							0.13	0.2			0.1		20
		0.14	10		1	0.4	0.28							0.0008	0.34			0.004		80

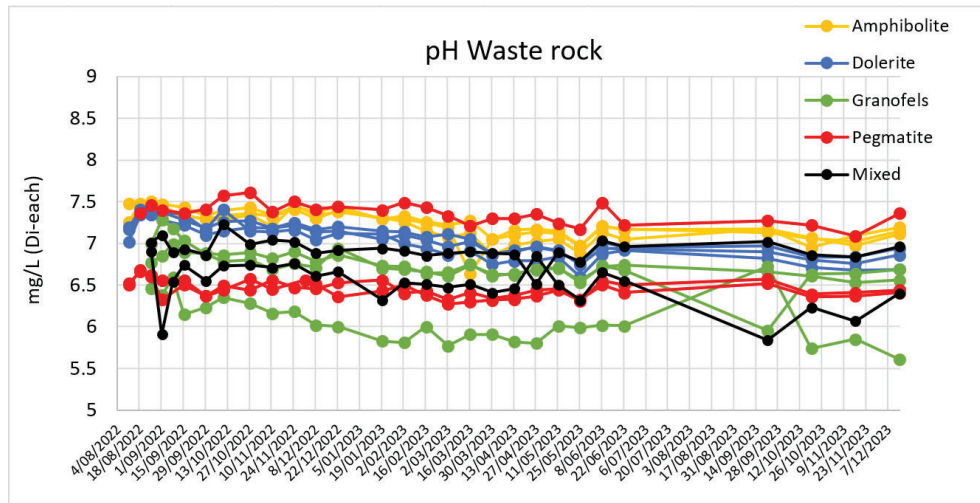
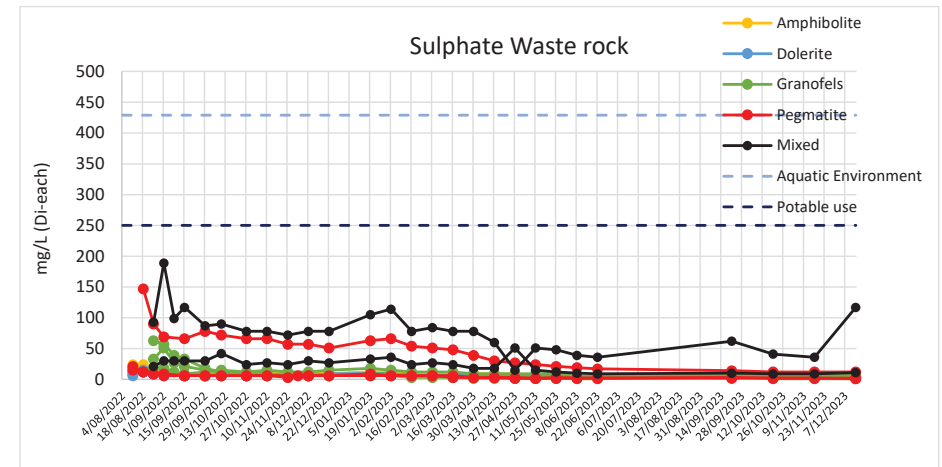
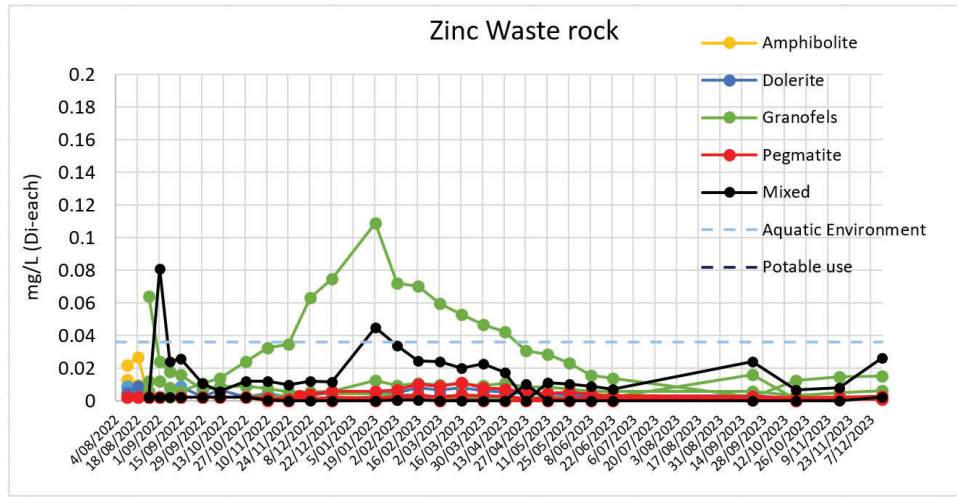
Location Code	Field ID	Lab Report Number	Date																					
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2215645	17 Nov 2022	-	1.57	0.867	-	0.00592	0.0002	0.119	0.0171	-	-	-	0.001	-	0.00009	-	0.000370	0.0226	-	-	-	0.0009
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2300352	12 Jan 2023	-	2	0.446	-	0.00538	0.0003	0.124	0.0125	-	-	-	0.002	-	0.00010	-	0.000189	0.0485	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2300352	12 Jan 2023	-	1.25	0.248	-	0.00774	0.0003	0.127	0.0101	-	-	-	0.004	-	0.00010	-	0.000109	0.151	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2300352	12 Jan 2023	-	2.15	0.00784	-	0.00806	0.0007	0.130	0.00627	-	-	-	0.005	-	0.00020	-	0.000690	0.936	-	-	-	0.0010
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2210272	04 Aug 2022	<0.001	20.8	12.0	<0.0001	0.057	0.008	0.641	0.344	<0.01	<0.005	<0.001	0.004	<0.001	-	<0.01	0.065	0.063	<0.01	<0.001	<0.005	
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	30.4	11.9	<0.0001	0.047	0.006	0.662	0.346	<0.01	<0.005	<0.001	0.002	<0.001	-	<0.01	0.023	0.006	<0.01	<0.001	<0.005	
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	26.7	10.8	<0.0001	0.057	0.004	0.679	0.349	<0.01	<0.005	<0.001	0.003	<0.001	-	<0.01	0.012	0.013	<0.01	<0.001	<0.005	
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	28.0	7.32	<0.0001	0.056	0.002	0.500	0.249	<0.01	<0.005	<0.001	0.003	<0.001	-	<0.01	0.010	0.020	<0.01	<0.001	<0.005	
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2211675	08 Sep 2022	-	19.0	7.49	-	0.058	0.002	0.508	0.214	-	-	-	0.004	-	<0.001	-	0.005	0.018	-	-	-	<0.005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2212289	15 Sep 2022	<0.001	0.274	0.124	-	0.002	<0.001	0.020	0.002	<0.01	<0.005	<0.001	0.002	<0.001	<0.001	<0.01	<0.001	0.003	<0.01	<0.001	<0.005	
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2213223	03 Oct 2022	-	0.976	0.524	<0.0001	0.006	0.001	-	0.011	-	-	-	0.005	-	<0.001	-	<0.001	0.033	-	-	-	<0.005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2214021	20 Oct 2022	-	1.80	0.931	-	0.007	<0.001	0.127	0.019	-	-	-	0.003	-	-	<0.01	0.015	-	-	-	-	<0.005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2214715	03 Nov 2022	-	1.21	0.826	-	0.00628	0.0004	0.108	0.0159	-	-	-	0.002	-	0.00007	-	0.000344	0.0236	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2216484	01 Dec 2022	-	1.69	0.779	-	0.00574	0.0003	0.108	0.0148	-	-	-	0.002	-	0.00008	-	0.000286	0.0286	-	-	-	0.0006
Tailings Drum 1	T1 D1 B2 Leachate 2022	EP2217143	15 Dec 2022	<0.00005	1.61	0.728	-	0.00530	0.0003	0.105	0.0140	<0.0001	<0.00005	<0.001	0.001	<0.001	0.00008	<0.0002	0.000272	0.0322	<0.0001	<0.001	<0.0005	
Tailings Drum 1	T1 D1 B2 Leachate 2023	EP2301296	02 Feb 2023	-	2.07	0.698	-	0.00317	<0.0002	0.119	0.0140	-	-	-	0.001	-	0.00006	-	0.000117	0.0591	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	2.32	0.839	-	0.00277	0.0003	0.133	0.0153	<0.0001	<0.00005	<0.001	0.002	<0.001	0.00006	<0.0002	0.000090	0.0611	<0.0001	<0.001	0.0009	
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2302667	02 Mar 2023	-	2.58	0.85	-	0.00223	0.0003	0.112	0.0140	-	-	-	<0.001	-	0.00006	-	0.000061	0.0545	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2303327	16 Mar 2023	-	2.99	0.688	-	0.00190	0.0003	0.107	0.0116	-	-	-	<0.001	-	0.00008	-	0.000062	0.0487	-	-	-	0.0039
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2304234	30 Mar 2023	<0.00005	2.43	0.648	-	0.00169	0.0004	0.095	0.0106	<0.0001	<0.00005	<0.001	<0.001	<0.001	0.00006	<0.0002	0.000042	0.0378	<0.0001	<0.001	<0.0005	
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2304866	13 Apr 2023	-	2.17	0.653	-	0.00160	0.0007	0.088	0.0119	-	-	-	<0.001	-	0.00008	-	0.000058	0.0307	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2305524	27 Apr 2023	<0.00005	2.62	0.49	-	0.00154	0.0008	0.081	0.00958	<0.0001	<0.00005	<0.001	<0.001	<0.001	0.00007	<0.0002	0.000063	0.0356	<0.0001	<0.001	<0.0005	
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2306239	11 May 2023	-	2.16	0.52	-	0.00138	0.0010	0.063	0.00854	-	-	-	<0.001	-	0.00006	-	0.000054	0.0255	<0.0001	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2306959	25 May 2023	-	1.86	0.415	-	0.00149	0.0009	0.061	0.00753	-	-	-	<0.001	-	0.00007	-	0.000073	0.0249	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2307721	08 Jun 2023	-	1.8	0.406	-	0.00124	0.0010	0.048	0.00632	-	-	-	<0.001	-	0.00007	-	0.000085	0.0178	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2308375	22 Jun 2023	-	1.62	0.339	-	0.00125	0.0011	0.047	0.00659	-	-	-	<0.001	-	0.00005	-	0.000082	0.0170	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B5 Leachate 2023	EP2313151	21 Sep 2023	-	1.66	0.305	-	0.00055	0.0002	0.056	0.00812	-	-	-	<0.001	-	0.00005	-	0.000096	0.124	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B5 Leachate 2023	EP2314662	19 Oct 2023	-	1.36	0.156	-	0.00059	0.0008	0.071	0.00634	-	-	-	<0.001	-	0.00005	-	0.000022	0.0384	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B5 Leachate 2023	EP2316387	16 Nov 2023	-	1.29	0.0506	-	0.00100	0.0009	0.052	0.00716	-	-	-	<0.001	-	0.00011	-	0.000053	0.0351	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B5 Leachate 2023	EP2317814	14 Dec 2023	-	1.39	0.0833	-	0.00102	0.0008	0.073	0.00840	-	-	-	<0.001	-	0.00012	-	0.000057	0.0300	-	-	-	<0.0005
Tailings Drum 1	T1 D1 B3 Leachate 2023	EP2301024	25 Jan 2023	-	1.6	0.628	-	0.00254	0.0002	0.081	0.0121	-	-	-	0.002	-	0.00002	-	0.000107	0.103	-	-	-	<0.0005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2215645	17 Nov 2022	-	2.19	0.00180	-	0.00970	0.0006	0.133	0.00749	-	-	-	0.006	-	0.00023	-	0.00240	0.0538	-	-	-	0.0005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2210272	04 Aug 2022	<0.001	6.06	0.777	<0.0001	0.012	0.008	0.291	0.058	<0.01	<0.005	<0.001	0.003	<0.001	-	<0.01	0.013	0.026	<0.01	<0.001	<0.005	
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2210362	11 Aug 2022	<0.001	10.7	0.774	<0.0001	0.014	0.009	0.358	0.081	<0.01	<0.005	<0.001	0.002	<0.001	-	<0.01	0.023	0.036	<0.01	<0.001	<0.005	
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2210698	18 Aug 2022	<0.001	11.6	0.757	<0.0001	0.021	0.012	0.446	0.109	<0.01	<0.005	<0.001	0.001	<0.001	-	<0.01	0.034	0.070	<0.01	<0.001	<0.005	
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2210938	25 Aug 2022	<0.001	15.2	0.692	<0.0001	0.036	0.015	0.500	0.135	<0.01	<0.005	<0.001	0.002	<0.001	-	<0.01	0.058	0.050	<0.01	<0.001	<0.005	
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2211675	08 Sep 2022	-	16.2	1.03	-	0.052	0.019	0.626	0.179	-	-	-	0.003	-	0.001	-	0.153	0.032	-	-	-	0.006
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2212289	15 Sep 2022	<0.001	13.7	1.37	-	0.034	0.011	0.490	0.108	<0.01	<0.005	<0.001	0.008	<0.001	<0.001	<0.01	0.110	0.028	<0.01	<0.001	<0.005	
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2213223	03 Oct 2022	-	7.36	0.679	<0.0001	0.016	0.004	-	0.040	-	-	-	0.007	-	<0.001	-	0.025	0.039	-	-	-	<0.005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2214021	20 Oct 2022	-	4.54	0.004	-	0.013	0.001	0.201	0.016	-	-	-	0.007	-	-	<0.01	0.008	0.017	-	-	-	<0.005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2214715	03 Nov 2022	-	2.83	0.0138	-	0.0106	0.0009	0.138	0.00958	-	-	-	0.007	-	0.00023	-	0.00535	0.0380	-	-	-	<0.0005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2216484	01 Dec 2022	-	2.4	0.0209	-	0.0107	0.0006	0.103	0.00469	-	-	-	0.005	-	0.00022	-	0.00107	0.0849	-	-	-	0.0005
Tailings Drum 2	T2 D1 B2 Leachate 2022	EP2217143	15 Dec 2022	0.00005	1.9	0.00418	-	0.00749	0.0006	0.098	0.00433	0.0001	<0.00005	<0.001	0.005	<0.001	0.00017	0.0006	0.00106	0.0904	0.0002	<0.001	<0.0005	
Tailings Drum 2	T2 D1 B2 Leachate 2023	EP2301296	02 Feb 2023	-	2.09	0.00528	-	0.0103	0.0004	0.133	0.00766	-	-	-	0.002	-	0.00014	-	0.000742	0.447	-	-	-	0.0012
Tailings Drum 2	T2 D1 B3 Leachate 2023	EP2302018	16 Feb 2023	<0.00005	2.37	0.00116	-	0.0114	0.0004	0.169	0.00882	<0.0001												

Appendix D

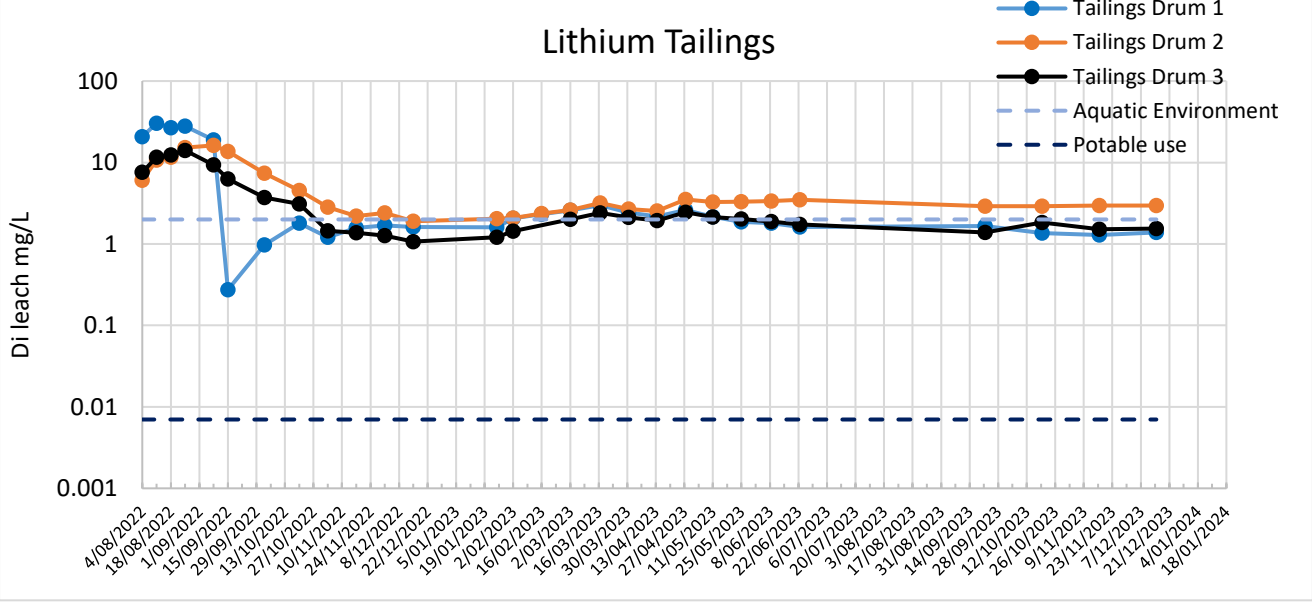
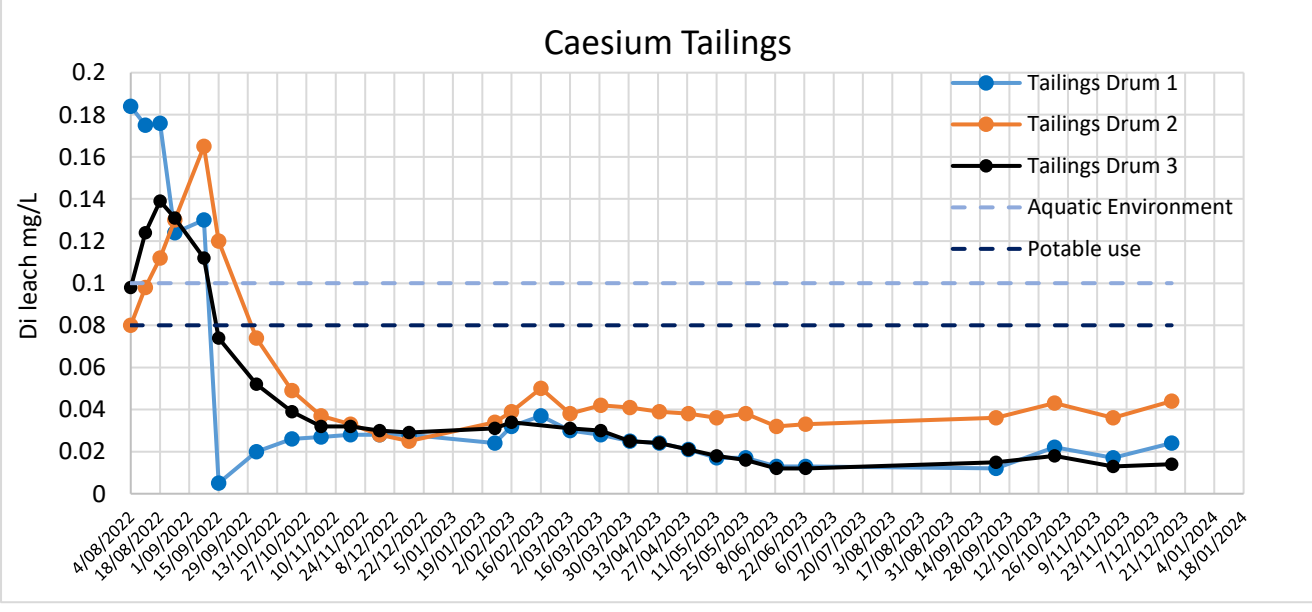
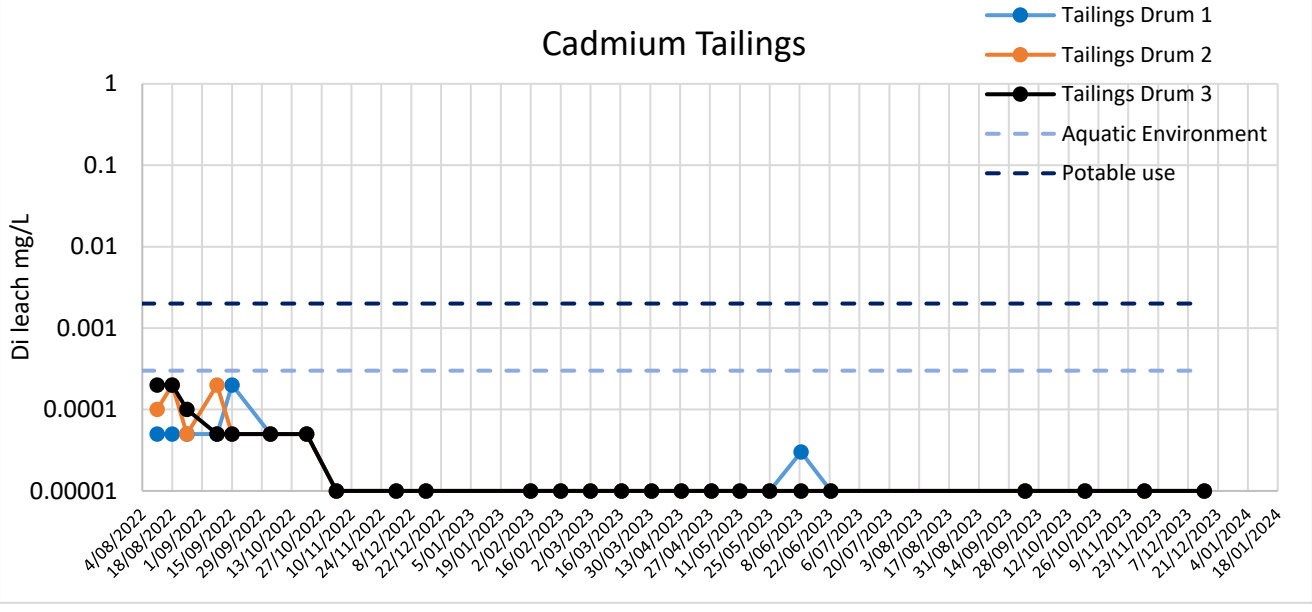
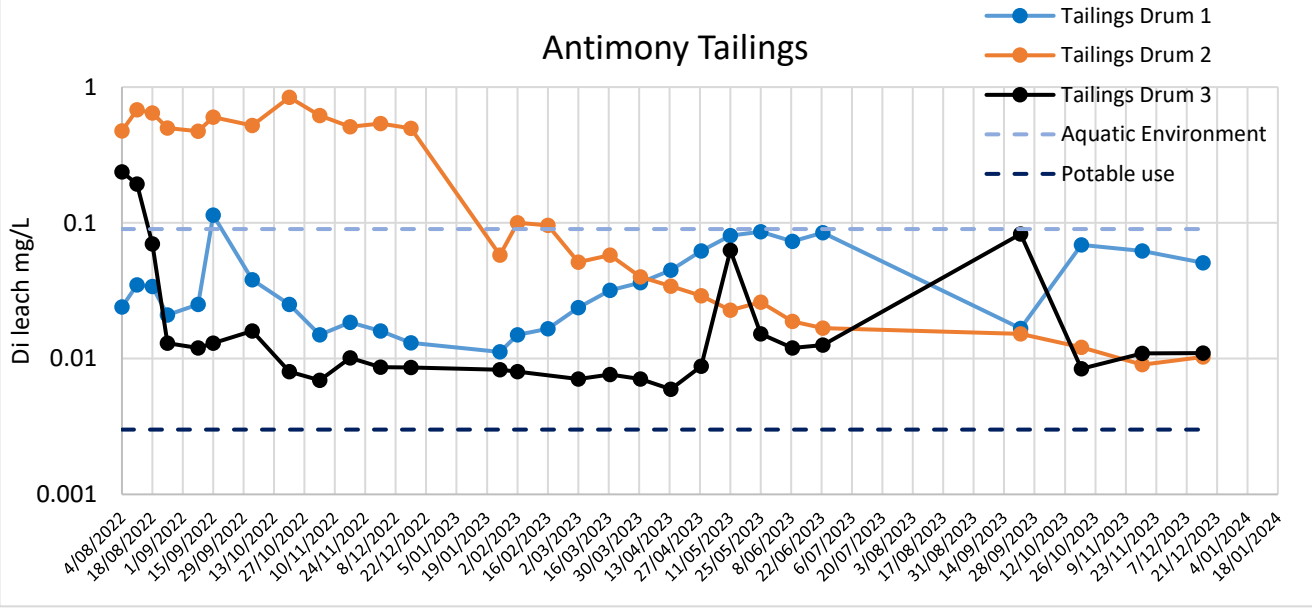
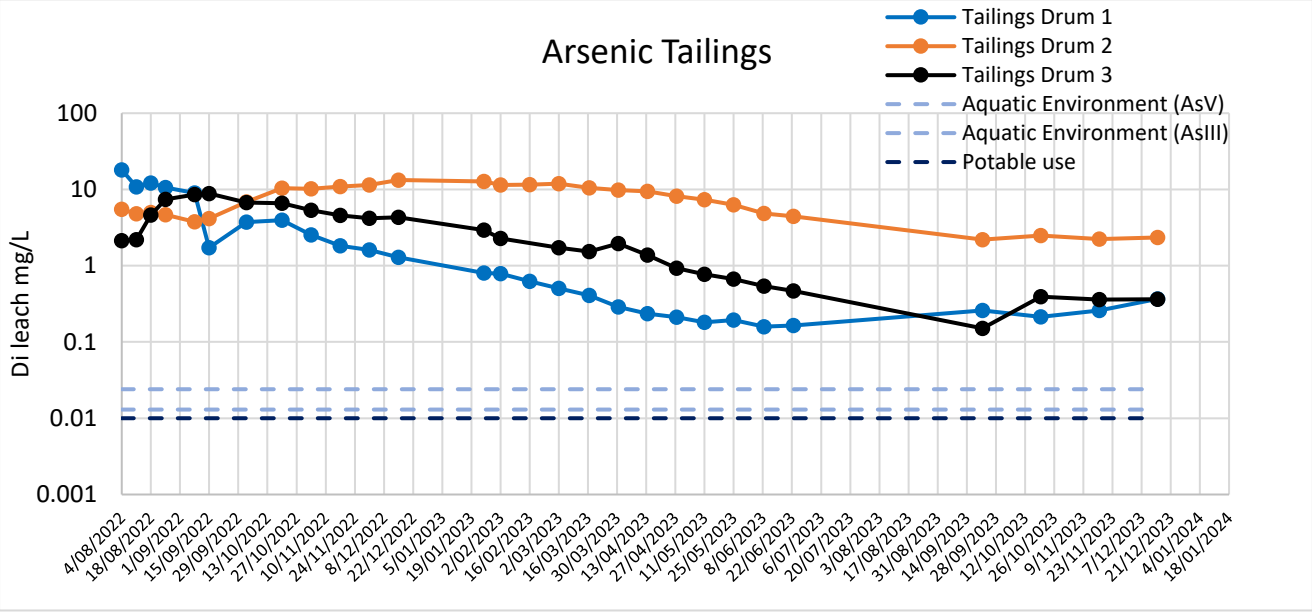
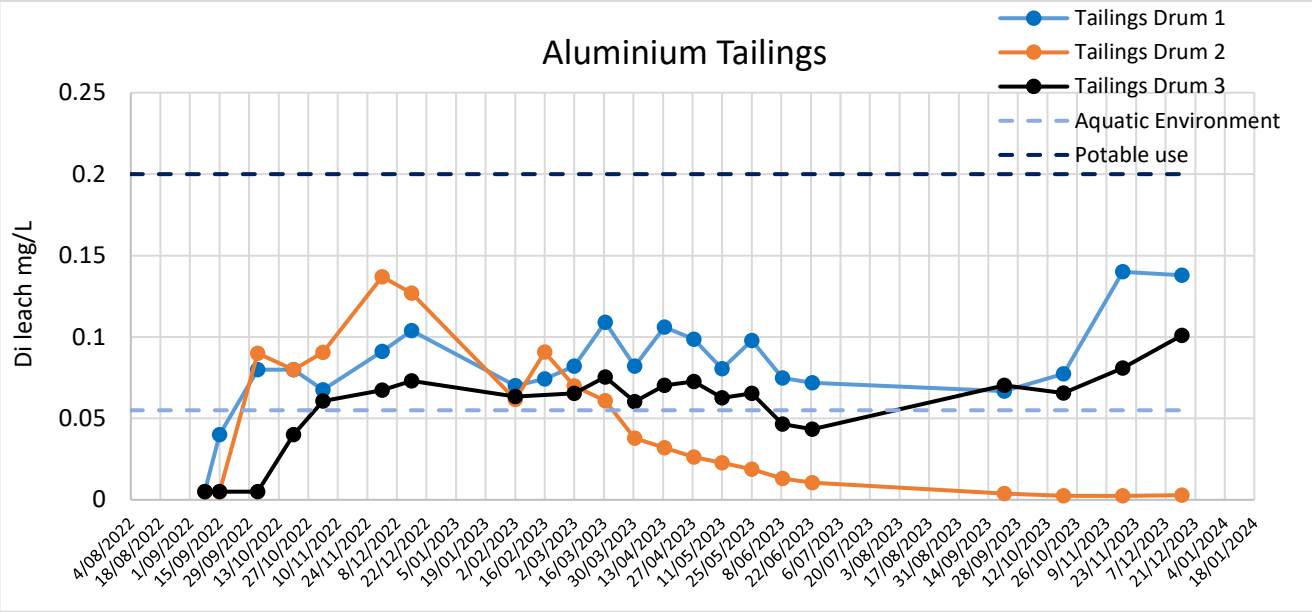
Graphs of Kinetic Leaching Results

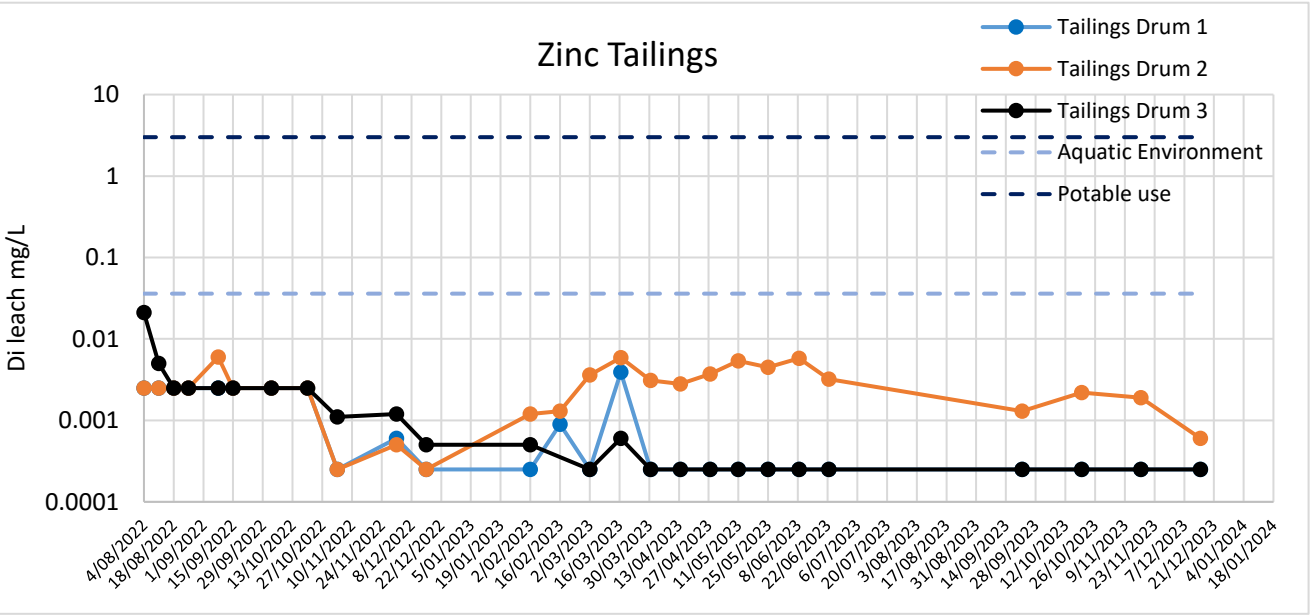
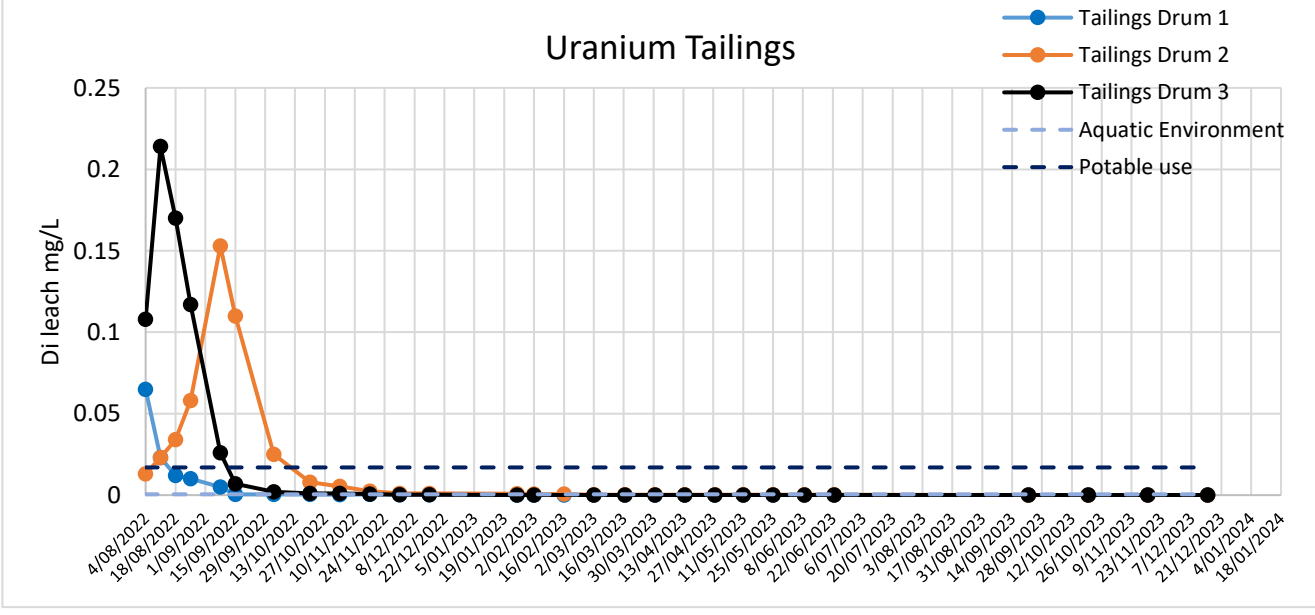
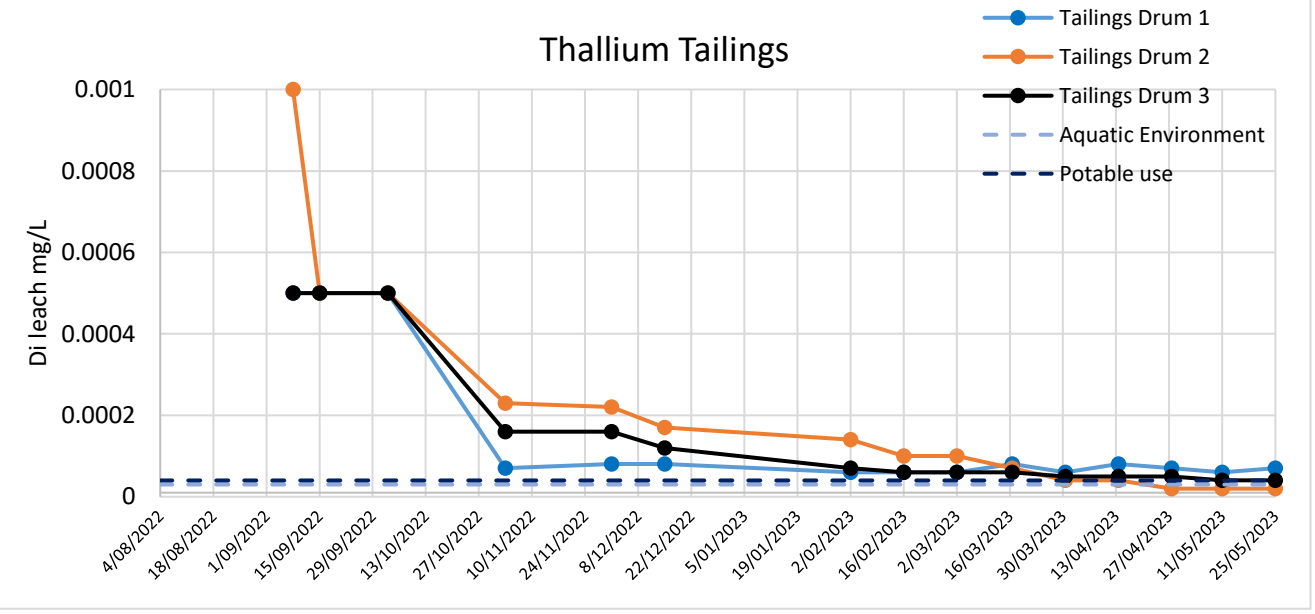
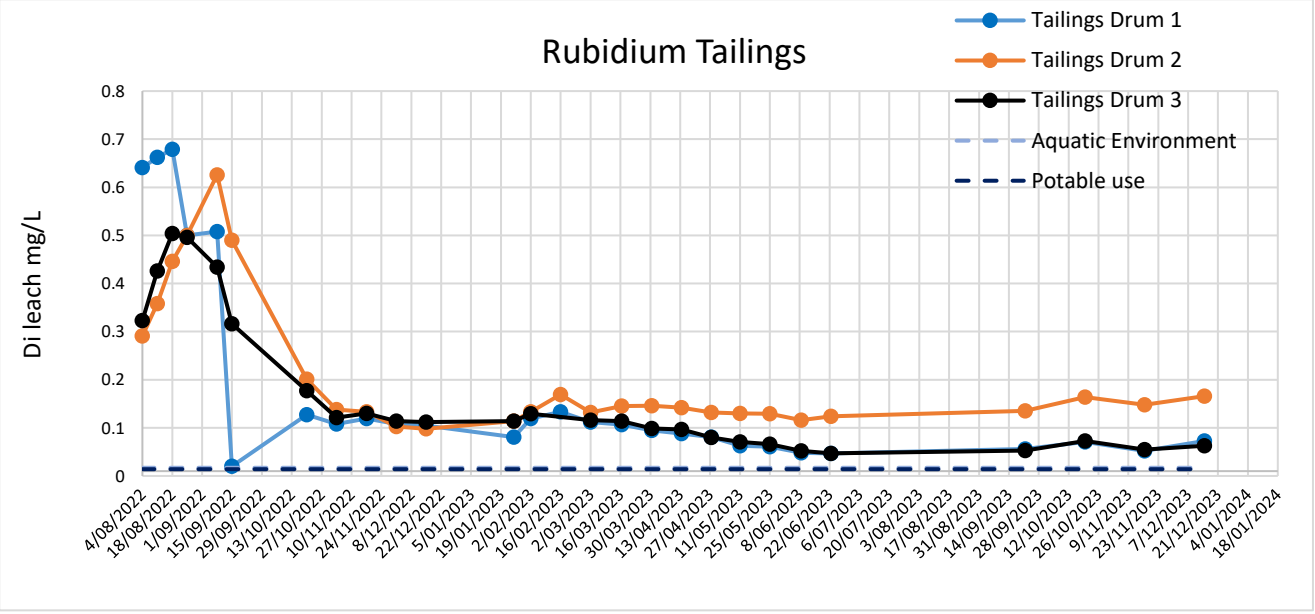
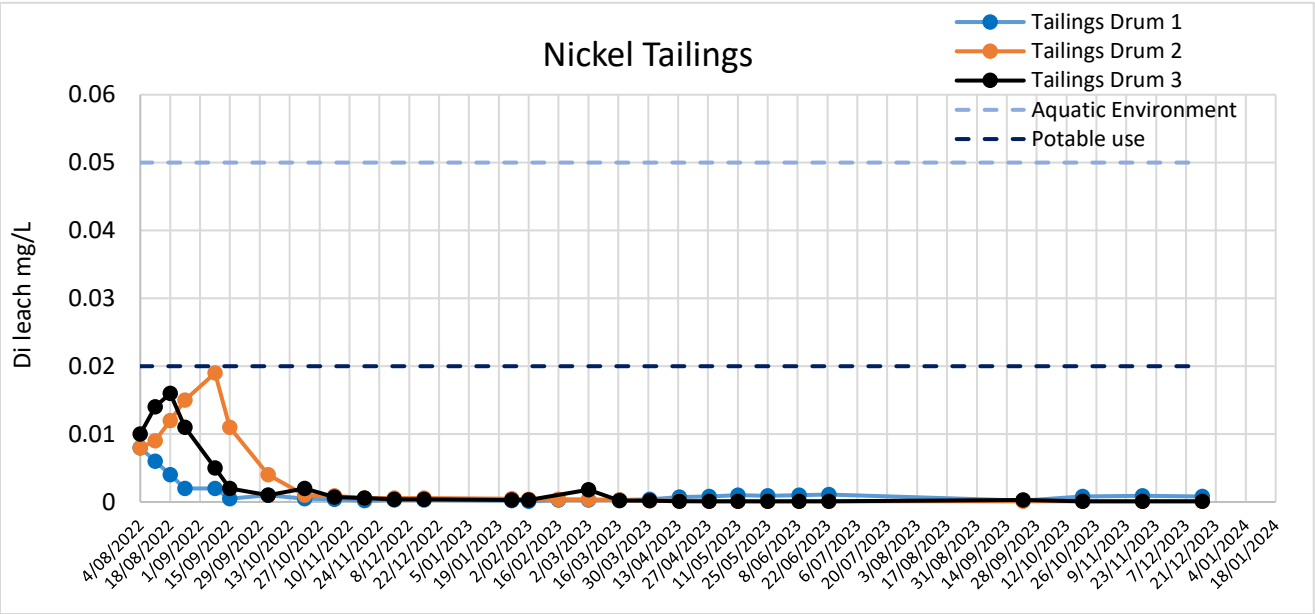
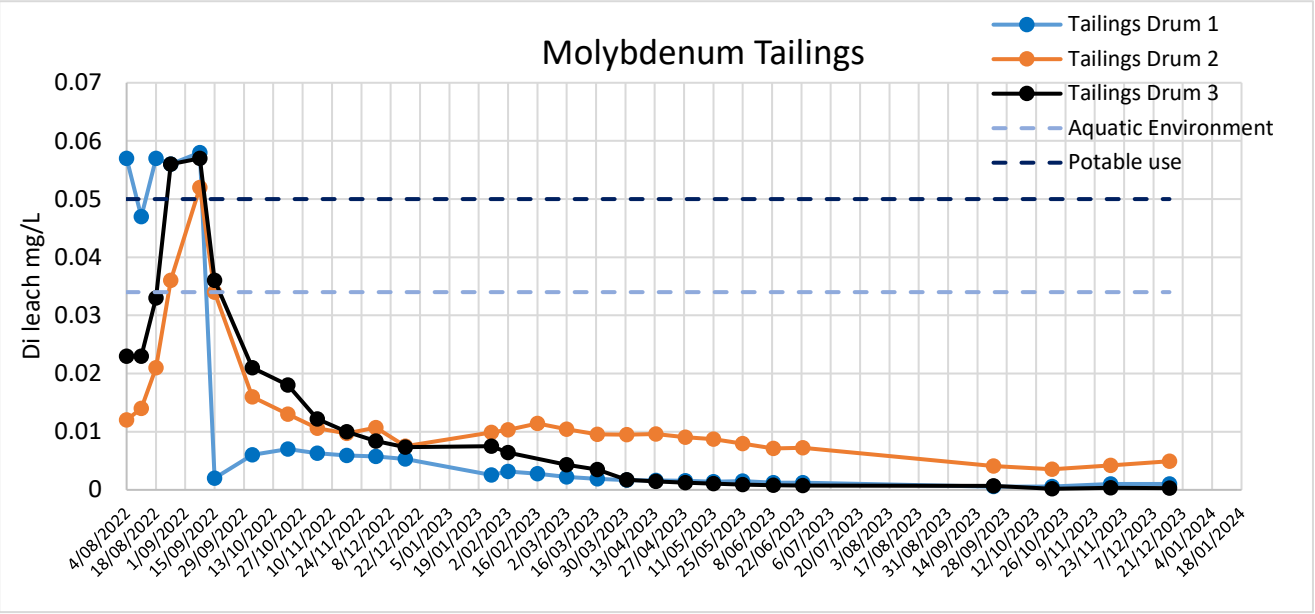


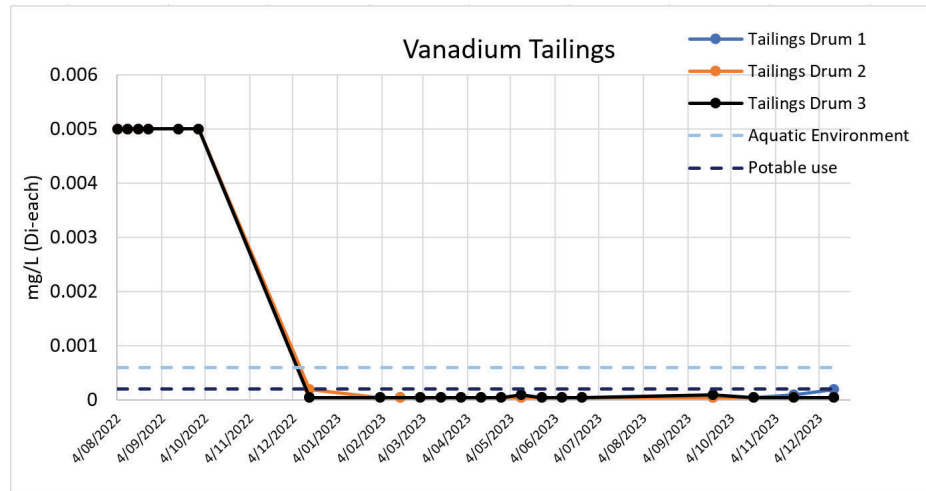
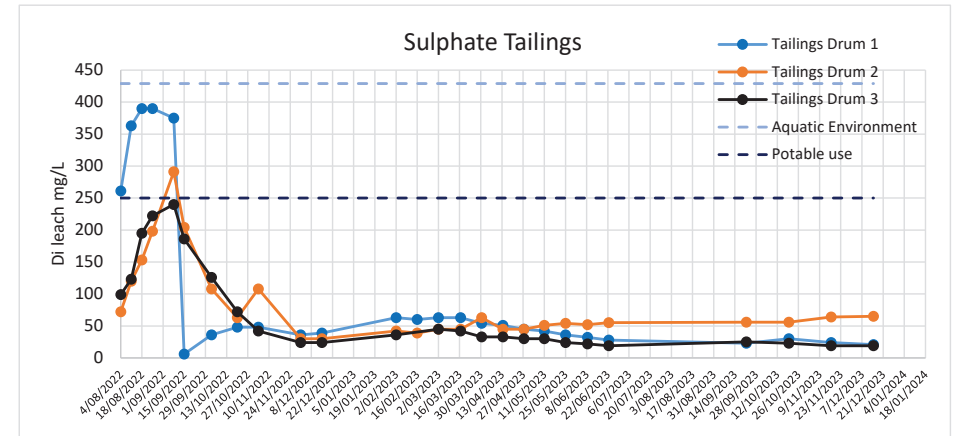
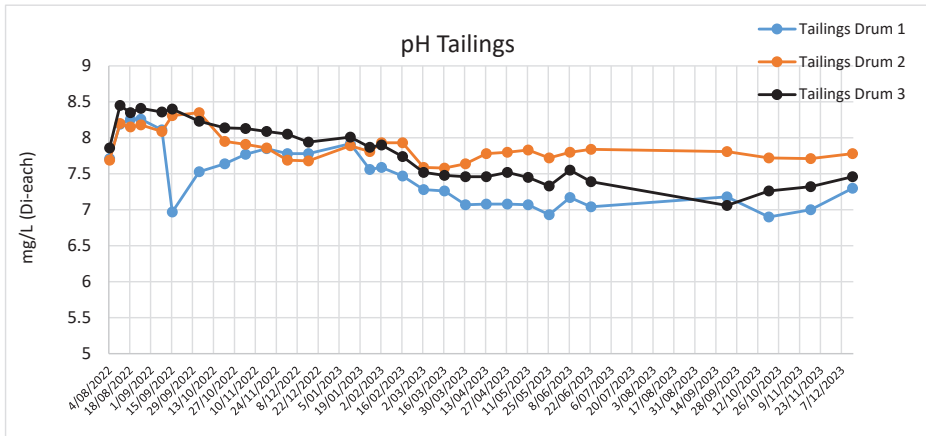




Tailings kinetic leaching results up to 12/2023









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